Challenges of urban environmental governance. Participation and partnership in Nakuru Municipality, Kenya

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door

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geboren te Murang’a, Kenia
Challenges of Urban Environmental Governance

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Amsterdam, July 2002.
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Introduction

The World Commission on Environment and Development (WECD) predicted in 1987 that the future will be predominantly urban and that the most immediate environmental concerns of most people will be urban ones. This prediction has come true and frequent reports on the situation in cities by UNCHS (Habitat) – now UN-Habitat – and other bodies have been examining the different responses and initiatives that are being tried all over the world to meet the urban challenge. This study is about the challenges of urban environmental governance, focusing specifically on participation and partnerships in Nakuru municipality, Kenya. Nakuru is a town with an estimated population of nearly 300,000 inhabitants. In the public/private interface, members of civil society, governments and the private sector are all participants in a joint effort to solve urban environmental problems. People all over the world are searching for new and creative ways of working together to tackle society’s increasingly complex challenges. The partnerships that they are forging represent one of our greatest challenges for a more sustainable future. This dissertation is about such partnerships and about the people and institutions that make them happen. It is acknowledged from the onset that these partnerships are not an answer to all environmental problems, nor that they are easy to form. They require a difficult balance of idealism, pragmatism, creative vision and practical hard work, strong commitment and willingness to compromise (Bennet and Krebbs, 1991).

We argue that partnerships are built through a participatory process. For some societal groups, these partnerships are formed with ease along traditional lines of responsibility. Yet, for others, it requires a lot of awareness creation and training on the needs of working together to achieve a specific goal. We acknowledge that, even though local participation and partnerships have for decades been recognised as important ingredients for successful problem solving, putting the concepts into operation has proven to be a formidable challenge.

Rapid changes and institutional challenges being experienced in urban areas demand that urban managers rely on a new approach to ensure that urban populations, especially in the low-income neighbourhoods, get the desired services. Nearly

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1 In this study, the term “public-sector” refers to all the administrative agents of the government, as well as the services and civil servants of the central or local governments. As opposed to the public sector, the private sector designates the totality of the enterprises and socio-cultural associations who are stakeholders in urban development.
half of the world’s population live in cities and the rapid increase in urban population is expected to continue, mainly in developing countries. Currently, three-quarters of global population growth occurs in the urban areas of the developing countries, causing hyper-growth in the cities least capable of catering for such growth (UNCHS, 2001). At least 600 million are estimated to live in “life and health threatening homes and neighbourhoods” (Hardoy, et al., 2001) because of the inadequacies in the quality of the housing and the provision of infrastructure and services associated with housing and residential areas. This implies serious shortfalls in the investment in the homes and neighbourhoods of the urban population, such as those in piped water supplies, provision for sanitation, garbage collection, site drainage, paved roads and pavements, schools and health clinics.

Already, Africa’s urban population is growing at an annual rate of 4%, the highest of any world region. For some individual cities, this growth rate is significantly higher. Currently, Africa is still the most rural continent, with only about 38% of its population living in cities and towns (United Nations, 1991). But within the next decades, it is estimated that more than half of all Africans will be living in urban areas. Some of this urban growth is a result of natural population increase, but most comes from rural-to-urban migration. Drought, environmental degradation, rural poverty and wars continue to push many young villagers towards cities in search of jobs and other economic and social opportunities (WRI, 1996).

In most cities and many smaller urban centres, there have been very serious environmental problems, which are a result of the inadequate provision of urban basic services. There has been serious environmental degradation in areas surrounding the cities and damage to natural resources – for instance to soils, crops, forests, freshwater aquifers and service water and fisheries (Hardoy et al., 2001). Hardoy et al. continue to state that environmental problems arise from the demand for natural resources, changes brought to water flows and the air, and water pollution and solid waste generated by urban enterprises and consumers. It should be noted that much of the environmental problems can be prevented or much reduced at relatively low cost (ibid.). In many nations, both central and local governments have failed to appropriately address these environmental problems.

Environmental problems can be broadly divided into two major categories: those directly affecting the state of the global and local natural and physical environment and those that are related to human health and living conditions. The first kind of environmental problems, which affect the global and local resource base, increases with growing levels of development. The second kind of environmental problems refers to unsatisfied human needs for basic services, so may decline with economic wellbeing and also socio-political development. The problems arise due to the gap
between the rate of population growth and the environmental and public health services necessary to maintain a healthy and clean living environment. A great range of problems within the urban environment can therefore be categorised under three broad headings: urban pollution (air, water, soil and waste); urban basic infrastructure (roads, sanitation, water supply and solid waste management); and natural resources (ecosystems, groundwater, green spaces and wildlife within the city). There is a complex combination of the above issues and, given this context, it is almost impossible to solve the problems of environmental deterioration by adopting a sectoral approach. Effective management of the urban environment requires that urban managers adopt a strategy based on an overview of the urban system as a whole and that they also look beyond the city boundaries.

Rakodi (1999) indicates that economic liberalisation and structural adjustment programmes may have improved urban economic growth prospects in many countries, but that they have undoubtedly widened the gap between the rich and the poor. The conditions for the urban poor have worsened in many cases, particularly in Africa. Structural adjustments, privatisation and deregulation have reduced the scope for government intervention on behalf of the poor, or have made the intervention more indirect. Rakodi further observes that the range of actors and initiatives has increased, with NGOs, community-based initiatives and the private sector playing more significant roles. The poor have had to find ways to survive, often in the face of increased pressure, whether official or unofficial, from both governmental institutions and the private sector. There is now some understanding of the characteristics and roles of NGOs, community-based organisations (CBOs), local government and the private sector in the improvement of the quality of life in the urban environments. However, until recently, there has been little understanding of how such institutions could undertake joint activities and what challenges they face to improve the urban environment.

The debate on the transition to sustainable development in cities has been going on, particularly since the Earth Summit in 1992 and its demand for Local Agendas 21 (LAs 21). Various approaches have been tried to achieve it. Attempts to achieve sustainable development in urban areas tend to involve actors from the public, the private and civil society sectors. The present study examines participation of these sectors in partnerships as one of the approaches currently getting a lot of attention in both theory and practice. Participatory approaches, co-management, partnerships, participatory planning and social networks are some of the concepts that have been gaining ground in the area of urban environmental management. Examples can be drawn from all over the world where collaborative working arrangements have succeeded in improving the urban environment and paving the way towards sustainable livelihoods in these areas.
Challenges of Urban Environmental Governance

Solutions to many of the problems of African cities critically depend on the legitimacy, competence and capabilities of municipal governments and institutions. As UNCHS (2001) points out, efforts to achieve secure tenure for poor residents and to include as many urban actors as possible in upgrading programmes require local government institutions that are efficient, open and transparent. Observers note that in most African countries, political and administrative power is highly centralised. Though some countries have moved towards decentralisation over the past decades, this has not always been followed by the necessary fiscal power to enable local governments and communities to raise the revenues needed to finance investments and meet other costs (Africa Recovery, United Nations, 2001).

The problems outlined above can also be found in Kenya. At the time of independence in 1963, Kenya had less than 10% of the total population living and working in the urban areas. This situation has since changed much. Currently, the figure is approaching 30%. With such a change, Kenya's position represents an uncomfortable high position in Africa in terms of rising rates of urbanisation (see also Gilbert and Gugler, 1992). The overall urban population is increasing at a rate two to three times that of the rural population. In the Sessional Paper No. 1 of 1986 on Economic Management for Renewed Growth, population growth rates were estimated at 7.1 and 8.0% per annum. Later, the National Development Plan 1989-93 projected that the major towns, including Nakuru, had their growth rates at 7.5% per annum as a result of rural-urban migration, while 0.6% per annum accounted for a natural growth rate between 1979 and 1992 (DURP, 1999). This trend in urbanisation was foreseen in 1994 in the 3-year National Development Plan (1994-1996). At that time, the Plan pointed out that the rural-urban migration alone would contribute to urbanisation at an average growth of 6.5% per annum during the planning period (DURP, 1999). This trend is presenting serious challenges to urban planning and management. The unprecedented rapid urban population increase has come with a corresponding increase in the demand for basic services and infrastructure. In addition, urban populations are spilling out into areas outside the municipal boundaries, thereby posing a constraint to orderly urban development. Consequently, the capacity of the local authorities to provide services to the urban populations is stretched to the limit, and in most cases a larger portion of the urban population lives in substandard housing with no basic infrastructure or services such as water and sanitation.

The present study focuses on three major areas of urban environmental management in Nakuru town, Kenya, viz. solid waste management, sanitation and water supply and will analyse the existing institutional procedures in addressing these issues. Nakuru town is the fourth largest town in Kenya. The rapid and dramatic increase in population implies that the available basic facilities are overstretched.
and inadequate and this may lead to various environmental problems. The physical location of the town presents some limitations to its expansion, as a consequence of which there is a lot of land-use conflict. Several industrial investments, most of which are agro-based, provide employment for Nakuru's residents. Some industries emit toxic effluents, which find their way to Lake Nakuru in the South, thus creating an important environmental problem. The town's standards of urban services and infrastructure have fallen rapidly, hence compromising the quality of the living environment. The contradiction between the need for urban expansion and the need to protect the fragile nature results in a complexity that poses vast challenges to urban sustainable development. Various interventions have been experienced in the town aimed at improving the service provision and conserving the fragile ecosystem. Until recently, these interventions were not coordinated and their impacts were hardly felt. The process of creating the LA 21 that was introduced in the town in 1995 gave a new impetus to collaborative working relations and there is evidence of emerging partnership arrangements between different actors.

This study examines the forms and functions of different partnership arrangements and aspects of local participation in the municipality. The study contributes to the current debate on urban sustainable development through partnerships. Little is known thus far about the working of participation and institutional partnerships in the process of LA 21 in developing countries. What exist are macro-descriptions of cases where success can be recorded. These descriptions fail to address the challenges, risks and obstacles that such relations may encounter, especially in the areas of water supply, sanitation and solid waste management in a specific locality.

Organisation of the book
This book consists of eight chapters organised in the order of introduction, theoretical framework, methodology, background information, empirical findings and, finally, the conclusions, recommendations and areas for further research. In the first chapter, we examine the central concepts that are critical in this study. Here, we critically examine the challenges of the urban environment, urban management, urban environmental management and urban governance and the concept of sustainable development as it is applied in urban areas. Urban environmental management and urban governance are also discussed. In this chapter, we further explore the meaning and challenges of collective action, as well as the concepts of partnerships and participation. Information on the various types of institutional partnerships and the prospects they hold for successful formulation and implementation of urban environmental policy will be presented. Finally, the Agenda 21 concept and the LA 21 process are examined, with a focus on the formation of new partnerships.
In Chapter 2, the background to the research problem is set. The research problem, objectives and the central research questions are presented, as well as the methodological framework adopted for this study and the rationale of this study. Chapter 3 examines the present local government institutions and environmental management issues in Kenya. It concludes by examining emerging initiatives in the field of environmental management throughout the country.

Chapter 4 presents some background information on the study area. Issues examined include the historical background of the municipality, the natural environment, population dynamics, economic activities and settlement structure, which all influence the process of urban environmental management examined in the preceding chapter. It also introduces the current environmental initiatives within the framework of developing a local agenda 21.

The empirical findings are presented in Chapters 5, 6, and 7. Chapter 5 discusses environmental issues and problems related to water supply, sanitation and solid waste management. It also discusses the roles played by the local authority, the central government agencies, the private sector and non-governmental organizations in urban environmental management. Further, the factors responsible for urban environmental problems are analysed before examining the household responses to environmental problems. Finally the role played by community-based organizations (CBOs) is presented and conclusions drawn.

The emerging partnerships are examined in Chapter 6. The different partners in each arrangement are identified, as well as partnership activities, levels of intervention, arrangements and the challenges faced by each arrangement. The LA 21 process has been going on in Nakuru and it emphasises the use of the partnership process. Chapter 7 introduces the application of the partnership principle under LA 21. The innovative activities of the process are presented and their possible impacts assessed. The lessons learnt are distilled and an evaluation of the process done to examine its possible contribution to sustainable development. Chapter 8 presents a summary, conclusions, recommendations and areas for further future research.
The urbanisation process has many impacts that can be classified in three major groups. One group includes impacts on the physical form and socio-cultural character of urban areas. These affect, for example, the growth of mega cities, the fragmentation of urban areas, the formation of national and international urban systems and diversification of social behaviours and lifestyles within cities. A second group includes impacts that are notable for their negative effects. These are revealed as growth of insecurity in urban areas, lack of affordable housing or secure tenure, increasing social exclusion, traffic congestion, environmental pollution, shrinkage of the formal economy and crisis in urban management. There is a third group of impacts that seem to be mainly positive. These include the spread of urban democracy and increase in urban productivity, particularly in the informal sector (Urban Observatory, 1999).

This study focuses on institutional responses to some negative impacts of urbanisation and intends to show how some innovative responses through partnerships may lead to positive impacts. In many cities and towns in the developing world, access to basic services such as water provision, sanitation, solid waste collection and drainage is inadequate for a majority of the residents, especially those living in low-income urban areas (UNCHS, 2001). The rapid rate at which the population in these areas is increasing compounds this situation and often leads to environmental and living conditions that endanger the health of the residents, with consequent losses in productivity and quality of life. Many governments have come to realise that with conventional strategies they will not be able to extend services to all urban residents. Innovative approaches are therefore being introduced; not only technical ones, but also with regard to the participation of different stakeholders.

Devas (1999) notes that recent empirical research on urban issues tends to focus on two areas: the analysis of urban government and management and the analysis of urban poverty and the survival or livelihood strategies of poor households and communities. The former is generally characterised by a top-down approach with an emphasis on performance, efficiency and enabling strategies. Devas observes that the information generated by such studies, especially if they are done by donor

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agencies, tends to be normative or prescriptive, concentrating more on what ought to happen that describing what actually happens (Devas, 1999). The analysis of livelihood strategies of low-income households and communities is stronger in the analysis of what actually happens, but is weaker in practical policy implications. Devas concludes that both these sets of analytical perspectives tend to look at one part of the system only. This study is concerned with the middle ground between the top-down management delivery model and the bottom-up household/community access-demand model, thus analysing both aspects. In other words, we study both the partnership arrangements and their outcomes at the community level, and the processes at the urban management level, using examples from LA 21 in Nakuru.

Recently, there has been a lot of interest in urban environmental issues and the responses to various urban challenges by different actors. There is also a growing concern by researchers and practitioners on the impacts of rapid urbanisation, especially in the developing world. We note, however, that a well-developed theoretical framework for analysing initiatives that deal with the impacts of rapid urbanisation does not exist, though several attempts have been made recently (Hordijk, 2000; Frijns and Mengers 1999; McGranahan et al., 2001b; Hardoy, et al., 1993, 2001). In this chapter we therefore make an attempt to develop a theoretical framework that helps us analyse participation and partnership arrangements and their contribution to sustainable development. We first examine the urban environmental problems common to many cities in developing countries and later discuss the concepts of urban environment and urban management. We examine the meaning of sustainable development, linking it to the debates on urban environmental management and partnerships. Next, we explore the meaning of urban environmental management, its objectives and various approaches and the meaning of urban governance. The meaning of the concepts of collective action and participation receive specific attention, since they are utilised in solving urban environmental problems.

Partnerships have been proposed as a way towards improving the urban management process and urban governance. Proponents of partnerships also see them as mechanisms of achieving sustainable development. We examine the concept of partnerships and the forms that they take and assess the current consequences of recent partnership activities. There have been different approaches directed at improving the quality of life in cities especially those in low-income countries. Since 1992, there is a global tendency to adopt a Local Agenda 21 aimed at reconciling development and environmental concerns, while at the same time improving the livelihood of the people. At the end of this chapter, we examine the LA 21 process and the way partnerships have been formed within it.
1.1 Urban environmental problems

As centres of population and human activities, cities consume natural resources from both near and distant sources. In this process, urban areas generate environmental problems over a range of spatial scales: the households and workplace, the neighbourhood, the city, the wider region and the globe (Hardoy, et al., 1993; 2001). Urban environmental problems have a range of social impacts: they may impair human health, cause economic and other welfare losses or damage the ecosystems on which both the urban and rural areas depend. It is well known that environmental problems vary from city to city and region to region and are influenced by such variables as a city’s size and rate of growth, income, local geography, climate and institutional policies and capabilities. Environmental problems can be divided into two sets of issues or ‘agendas’. The first set of issues, the so-called ‘green agenda’ deals with problems such as resource depletion, climate change, ozone depletion, increase of urban production, consumption, waste generation and their interference with ecosystems. These environmental problems have impacts that are more global and delayed, and often threaten long-term ecological sustainability (McGranahan et al., 2001b). ‘Green agenda’ problems are the prime environmental worries in the developed countries.

The ‘brown agenda’ focuses on environmental hazards at the household, neighbourhood and workplace level, which are the effect of pollution. It deals directly with the health risks and threats that emerge from the local environment. Common problems are poor housing, low availability and quality of drinking water, insufficient waste water disposal, bad drainage, waste accumulation and uncontrolled waste disposal, and urban air pollution. Especially in the large cities of developing countries such problems are a major threat to human health (McGranahan et al., 2001b). It can be argued that at the household and neighbourhood level, environmental health issues (the brown agenda) predominate, whereas issues of ecological sustainability (the green agenda) are more important at the city and higher levels.

Many studies of water and sanitation, solid waste services and urban environmental issues identify institutional failure as the principal source of environmental problems. The speed with which the urban populations have grown in

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3 Bartone, et al. (1994) define the brown agenda as: “... the immediate and most critical environmental problems which incur the heaviest costs on current generations, particularly the urban poor in terms of poor health, low productivity and reduced incomes and quality of life: lack of safe drinking water, sanitation and drainage, inadequate solid and hazardous waste management, uncontrolled emissions from factories, cars and low grade domestic fuels, accidents linked to congestion and crowding, and the occupation of environmentally hazard-prone lands, as well as the interrelationships between these problems.”
Challenges of Urban Environmental Governance

Third World nations has far outpaced the institutional capacity to manage. Arrossi et al., 1994, indicate that the central characteristic of the problems experienced in urban areas is not the scale of population but the scale of mismatch between demographic change and institutional responses. This mismatch is between the speed with which population has concentrated in particular urban centres and the very slow pace with which societies have developed institutional capacity to cope with this. The provisions of infrastructure services (water supply and sanitation) along with solid waste and wastewater disposal are among the areas of great concern in human settlements, especially in the developing countries. Failure to provide these services adequately results in many of the well-known costs of rapid urbanisation: threats to human health, urban productivity and environmental quality (WRI, 1996). Deficient services manifest themselves most obviously in the form of pollution, disease and economic stagnation. The most common benefits arising from improvements in service provision are better health, improved quality of life and time savings, which can be allocated to other activities (ibid., 1996).

In informal and illegal settlements, the provision of sanitation is inadequate and the majority of the households rely on pit latrines or bucket toilets. The number of urban residents who had no access to adequate sanitation increased by almost 25% to 400 million between 1980 and 1990 (Drakakis-Smith, 1996). Limited water supplies to urban areas also affect the disposal of household waste. In these often overcrowded and under-resourced areas the health consequences resulting from inadequate sanitation can be significantly worse than in other urban areas or rural areas. All over the world, different countries are exploring different methods of providing adequate sanitation at a cost significantly lower than that of investing in conventional water-borne sewerage systems.

An estimated 30-50% of the solid waste generated within urban centres of developing countries is left uncollected or dumped on any available waste ground. Piles of garbage serve as breeding grounds for disease vectors and rubbish blocks open drains (Arrossi, et al., 1994). At times of heavy rain, the blocked drains may result in flooding with loss of life and property. Many municipal authorities in the cities of the South are unable to cope with the ever-increasing heaps of garbage (Hardoy, et al., 2001). There are sufficient examples of alternative ways in which the relatively poor households can be serviced at affordable per capita cost to suggest that garbage collection services could be greatly improved. Some of these alternatives not only improve the solid waste

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4 In some towns they are called “night soil”.

5 The Orangi pilot Project in Karachi is a good example of a cheap and affordable sanitation system in low-income settlements.
these alternatives not only improve the solid waste services, but also are a source of employment through recycling and trading of recycled waste.

Seeking solutions to the many urban environmental problems in many cities is not a purely technical issue. The threats to environmental quality in urban areas, to a large extent, are the result of human activities, and the solutions opted for are also human solutions, involving the choice from suggested solutions and their implementation through values, institutions and practices. Finding those solutions and implementing them are the challenges of urban environmental governance. New debate of urban environmental governance has been spurred by increased public awareness of the adverse environmental consequences and the fact that environmental issues transcend sectoral boundaries. It is clear that there are environmental challenges faced by the urban environments all over the world and urban managers have been looking for approaches to deal with the urban environment. In the following section we examine the concepts of urban environment and that of urban management and link them to the sustainability debate.

1.2 The urban environment and urban management

1.2.1 The urban environment

In a very broad sense, the urban environment consists of human and other resources, processes that convert these resources into various usable products and services, and the effects of these processes, which may be negative or positive. The quality of the urban environment is influenced by its geographical setting, the scale and nature of human activities, the structures within it, and the waste, emissions and ecological disruptions that these generate. The competence and accountability of the institutions elected, appointed or delegated to manage it also play a role (Nunan and Satterthwaite, 1999). It is therefore helpful to look at the urban environment from three viewpoints: the natural environment, the built environment and the socio-economic environment. The natural environment encompasses the resources and processes related to flora and fauna, human beings, minerals, water, land air, etc. Built environments are resources and processes related to buildings, housing, roads, railways, electricity, water supply, gas, etc. The socio-economic environment (sometimes also called the human environment) includes resources and processes related to human activities, such as education, health, arts and culture, economic and business activities, heritage and urban lifestyles in general. It is the intersection and overlay of these three dimensions that constitutes the ‘urban environment’ (Haughton and Hunter, 1994).

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6 We will examine the concept of governance as it relates to urban environment in the following sections.
Bossel (1999) sees a city as a system and proposes to analyse urban environments in terms of three major systems and their sub-systems. As major systems he distinguishes the human system, the support system and the natural system (Hordijk, 2000). Bossel divides the human system into three sub-systems: the individual system that encompasses elements such as norms and values, autonomy and development aspiration and such characteristics as gender, class, health, education and material standards of living. The social system includes income distribution and class structure, demographic characteristics, social groups and organisations and, finally, the governance system with the government institutions and other public bodies (Hordijk, 2000).

As to the support system, Bossel (1999) argues that the society has created two subsystems to provide the necessities for human sustenance: an economic system and an infrastructure system. The economic system comprises the modes of production and consumption and the economic and financial institutions. Many elements of the infrastructure system form part of what is usually referred to as ‘built environment’. But the infrastructure system goes beyond this, encompassing the social infrastructure and the systems created to ensure supply of water and energy, disposal of liquids and transport and communication. The natural system includes all characteristics related to natural resources and the ecosystem, such as the physical structure, climate, soil, flora and fauna, air, land and other resources.

1.2.2 Urban management

Urban management is concerned with policies, plans, programmes and practices that seek to ensure that population growth is matched by access to basic infrastructure, shelter and employment. Such access will very much depend on the demand and supply of the different items involved, which, in turn, are critically affected by the public sector policies and functions that only the government performs. Urban management is now a key approach in urban development. The literature on urban development has given significant attention to the increasing need to manage the growth of cities in the developing world and its related problems (Werna, 1995). According to Werna, international theories and policies about urban development have shifted from projects in the 1960s and 1970s to the concern of long term, citywide processes. Emphasis is now being put on local capacity building and institutional strengthening for the management of the urban development process. The major reasons for the shifts in approach are failure of the previous approaches to tackle escalating problems in the urban areas. The main problems mentioned in the literature are poverty, the informal sector, illegal settlements and environmental hazards and degradation (Hardoy et al., 2001; Stren, 1992). Although these specific issues are valid, it is important to give attention to problems, which are of an en-
Theoretical Framework

environmental nature, because of their interconnectedness and linkages with all other sorts of urban problems.

According to Sharma (1989), urban management aims to ensure that the components of the system are managed in a way that enables the daily functioning of a city. This will both facilitate and encourage all kinds of economic activity and enable residents to meet basic needs for shelter, access to utilities and services, and income-generating opportunities. McGill (1998) indicates that urban management should seek to achieve the simple but fundamental twin objective of planning, providing and maintaining a city’s infrastructure and services, and making sure that the city’s local government is in an organisationally and financially fit state, so that provision and maintenance are possible. Local government is therefore seen as the necessary driving force to integrate all the players in the city building process. By integrating all the players, one harnesses the urban development process itself (ibid.).

Mattingly (1994) distinguishes between three dimensions of the process of urban management: the object, the objectives and the actions. According to him, the object is the collection of activities that take place in the urban arena. The objectives are not concerned, he argues, with effectiveness, transparency or accountability. It is important to note that the choice of objectives is a political activity and is therefore open to conflict and debate. The principle of urban management, according to Post (1997), includes deciding on priorities. Taking actions is the third dimension of urban management. Actions tend to differ from one area to another and from time to time. Objectives should determine what sort of actions should be undertaken. Actions may include tasks such as providing water, drainage, garbage collection, policing and health care, as well as the operation and maintenance of public services, land development and planning (ibid.).

Wekwete (1997) argues that urban management refers to the political and administrative structure of cities and the major challenges they face to provide both social and physical infrastructure services. These, according to Clarke (1991), include managing urban economic resources, particularly land and the assets of the built environment, creating employment, and attracting investment in order to improve the quality and quantity of goods and services available. The traditional view associates urban management primarily with municipal and central governments. This is largely the supply-driven model, whereby the state and its agencies have statutory responsibilities for management. The provision and maintenance of services are viewed as rights that citizens expect, partly because some of them pay tax and partly because of the political legitimacy that they give to the local and central governments. In many countries, there are local government statutes or decrees
that define local responsibilities and articulate centre-local relationships (Wekwete, 1997). Agenda 21, the global plan of action for achieving sustainable development, identifies local governments as important players for local level initiatives and actions directed at achieving sustainable development. In chapter 28 of the Agenda 21, local authorities in each country are therefore called upon to undertake consultative processes with their populations in order to achieve a consensus on a local Agenda for their communities. The International Council for Local Environmental Initiatives (ICLEI) has since 1992 been undertaking surveys on local government’s response to Agenda 21 (see ICLEI 1997; 1998; 2002). In the following section we examine the concept of sustainable development and the different pathways that can be followed to achieve it.

1.3 Sustainable development and urban sustainable development

A major shift in thinking has embraced sustainable development as an organising principle that allows reconciliation between economic development and environmental protection. Much of this policy advocates taking local action to implement sustainable development, with particular emphasis on the role of local authorities as delivery agents. The World Commission on Environment and Development (WCED) used the term sustainable development in its 1987 final report, ‘Our Common Future’, and defined it as: “...development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987). This definition contains two concepts: the concept of needs, in particular the essential needs of the world’s poor, to which overriding priority should be given, and the idea of limitations imposed by the state of technology and social organisation on the environment’s ability to meet present and future needs (WCED, 1987). This well-known definition of sustainable development recognises that we need to link development and protection of the environment in order to protect and manage ecosystems and natural resources which are essential to fulfil basic human needs and improve living standards for all.

There is a wide range of scholarly and popular literature with competing and often contradictory definitions of sustainable development. These perspectives differ primarily in terms of their implicit assumptions with respect to what is to be sustained, variously invoking biological systems, development trajectories, investment profitability, power relations, levels of material consumption and cultural lifestyles (see for example, Satterthwaite and Mitlin, 1994). The lack of a conceptual consensus in part explains the lack of clarity regarding sustainable development within the scholarly and popular literature, as well as susceptibility of the concept to political or ideological co-option (Selman, 1996; 1999). In some instances, the concept has been adopted as a policy to guide future development.
According to Miller and Roo (1999), sustainable development refers to the long-term viability of human activity. Many countries have adopted this principle as the cornerstone of their efforts to address environmental challenges (Bührs and Aplin, 1999). With the rise of the concept to political prominence, governments have followed different courses with regard to its translation into their policies, institutions and practices. Given that the term is open to many different interpretations, and perhaps should be categorised more as a discourse than a definable concept, it is not surprising that its introduction has led to different approaches by governments and communities. Countries all over the world seem to follow different paths towards sustainable development (Bührs and Aplin, 1999; Church, 2000).

There is a wide body of literature focusing on different approaches that could lead to sustainable development. One branch of literature focuses primarily on environmental policy with an emphasis on greening (see the work of Falloux and Talbot, 1993; Johnson, 1995; Dalal-Clayton, 1996). Another approach concentrates more on how it could be achieved through institutional reform (OECD, 1990; Pugh, 1996; O'Riordan and Voisey, 1998). A third pathway is that of social mobilisation. Rather than relying on governments to take the lead, or to expect much of institutional change at the national level, advocates of social mobilisation put their faith and hope on communities. As communities are closest to the action when it comes to putting sustainable development into practice, this approach can be seen as a more direct means of effecting real change (Bührs and Aplin, 1999). These three approaches are based on different rationales and foci: on the idea of the need for policy integration; on the idea that changing institutions may be more effective way to influence behaviour and on a belief in the power of the people and the importance of practice as a guide for policy (ibid.).

These approaches may be seen as complementary to each other. Since they are chosen for different reasons and operate in different realms of governance (policy, institutional, local), it is unlikely that any of them on its own will achieve sustainable development. Green planning without supporting institutional reforms and practice amounts to nothing more than symbolic policy (Bührs and Aplin, 1999). Bührs and Aplin further argue that institutional reform does not automatically produce good policies or outcomes, in spite of claims to the contrary. Local and practical action, directed at achieving sustainable development might be frustrated or undone by institutional obstacles and conflicting policies. However, all this will depend on several factors in each specific setting, which calls for empirical research and analysis of the specific settings.

Applied to urban areas, sustainable development seeks to guide urban growth in a manner that does not close options for the long-term future, nor generates inter-
generational inequity (WCED, 1987). Sustainable development hence ensures that economic and social aspects of change in addition to environmental features are all taken into account (Barrow, 1995). The economic dimension calls for increasing employment opportunities through expansion and attraction of firms, which complement rather than have negative implications for social and environmental improvements. The social dimension includes contributing to a sense of community and to social justice among groups within the urban population (Miller and Roo, 1999). The environmental dimension seeks to conserve biodiversity for economic, ethical and aesthetic reasons, and to pursue stewardship of environmental services, which provide both valuable resources and absorb wastes in a continuing manner (Rees, 1992). So, sustainable development has emerged as a new agenda for planning programmes in societies at various stages of economic development. Its requirement that long-term urban growth should balance the three dimensions demands knowledge and commitment greater than city planning has evolved in the past (Atkinson, 1999). It calls for a systematic treatment of the three dimensions in a manner which we currently only partly understand: we must supplement scientifically based approaches with judgment where knowledge is still only partial (Drakakis-Smith, 1996). The urban environmental management process seeks to address the challenges of urban growth and eventually the process should lead to urban sustainable development. In the following section we explore the meaning of urban environmental management and the challenges that the process seeks to address.

1.4 Urban environmental management

Environmental management as it is conventionally understood refers to a formal body of techniques, rules and practices for planning, organisation, and social and technical control of the human utilisation of, and interaction with nature and natural resources (Emmett, 1998). Urban environmental management is best seen as a subsidiary process, taking place within the overall process of urban management. It is an all-embracing concept covering not only the physical environment, but also aspects related to the urban ecology, incomes, infrastructure, investments and institutions, all of which must be seen in relation to the political, social and cultural environment in any urban area (Edelman et al., 2000). Conceptually, all basic principles of urban management also hold for urban environmental management. When examining and analysing the urban environmental management process, we need to understand what are the aims and objectives of the urban environment management approach; who are the actors involved; what activities have been identified, agreed upon and prioritised; how the implementation of these activities is done and what the results of these activities are.
Urban environmental management (UEM) emphasises that environmental impacts of a city are widespread and that management should take a holistic approach. Urban environmental management involves the planning, design, operation and development of related urban environmental policies, procedures and technologies to address urban environmental problems. Barton et al. (1994) state that UEM aims to:

- identify urban environmental issues;
- agree on strategies and actions to resolve these issues among all those whose cooperation is required; and
- implement these strategies though coordinated public and private actions.

In time, therefore, the process should improve health and profitability in cities, reduce environmental hazards and protect natural resources so as to sustain economic and social development (ibid.).

Effective urban environmental management should seek to address various urban challenges. First, strategies are to be developed for reconciling economic growth with environmental protection. According to UNCHS (1996; 2001), some of the worst forms of environmental hazards found in many cities are a result of economic growth proceeding without adequate concern for its environmental impact. Cities need to find ways to both encourage economic development and satisfy an increasing demand for energy, water and other resources, in ecologically sound ways. The dynamism and creativity that cluster in cities could provide a source of solutions to the wide range of environmental problems (WRI, 1996).

Secondly, successful UEM seeks to forge coordination and collaboration between different actors, sectors and jurisdictions. The management of the urban environments in the developing countries has faced serious problems because of lack of understanding of the dynamics of the forces and actions within the urban environment. This has complicated the implementation of many urban environmental policies in the urban areas. Jurisdiction complexity further complicates the implementation of other urban environmental policies. By their very nature, urban environmental problems often require strategies that span jurisdictions and sectors (Emmett, 1998). This is true whether the issue is delivering water and sanitation services to low-income communities or solid waste management. An example: without adequate solid waste management, urban drainage systems will not work, because garbage is the most common cause of blockage (UNCHS 1996, 2001; Hardoy et al., 2001). Still, in most towns in the third world, responsibilities for urban environmental management tend to be fragmented among different agencies and jurisdictions.
Challenges of Urban Environmental Governance

Thirdly, UEM needs to identify actors from the public, private and civil society spheres to undertake joint activities aimed at addressing urban environmental problems. Arrossi et al. (1994) note that the public/private conventional model, which identifies certain activities to be undertaken by the public sector and others by the private sector, has failed in dealing with urban environmental problems. The failure of public authorities to meet their responsibilities means there is either no provision or a combination of formal and informal private provision. There is also failure of the local and the central government to develop responses that mesh with local peoples’ needs and priorities and build on the resources that are available. On the part of the private sector, there has been the problem of lack of incentives for making long-term investments in solid waste management, water supply and sanitation and drainage improvement. The problem is exacerbated in the low-income settlements where land tenure is uncertain or illegal, since any investment may be lost if the inhabitants are evicted and their shelters demolished. Due to the failure of the public/private conventional model, UEM is expected to adopt new approaches to the management of the urban environment. We require synergistic approaches between the two – the state and the markets – to meet the challenges of the urban environment (Safier, 1992). Safier (1992) argues that the challenge taken by the new approach to urban management is to define “appropriate roles and responsibilities of key actors involved in water supply, sanitation and solid waste management: the public sector, the private sector and the popular sector: NGOs and CBOs”. UEM aims to create a situation in which the private sector takes the initiative, while the government primarily coordinates and facilitates (Post, 1997).

Fourthly, UEM seeks to gear the entire development into a desired direction ensuring that there are appropriate institutions that identify issues and problems and agree on strategies and actions that are to be undertaken. These institutions should also set priorities and devise ways in which resources, both financial and human, will be mobilised to ensure that implementation of prioritised actions is done.

Finally, UEM needs to ensure that prioritised actions will have impacts even beyond the city limits as environmental problems within the city are interlinked with the hinterland.

We note that therefore the urban governments cannot effectively manage the urban environment on their own and that they need to work in collaboration and in consultation with a wide variety of actors. A more recent view of urban management articulates a broader urban governance view that brings to the fore the role that civil society plays and expands the range of stakeholders to include private sector agencies, non-governmental organisations (NGOs), community-based organisations (CBOs) and a variety of interest groups (Wekwete 1997). This ap-
approach implies that urban management in the governance perspective has to be more participative, broader in outlook, more transparent and less bureaucratic. In the next section we will examine the concept of urban governance and link it with the process of urban environmental management.

1.5 Urban governance

The term governance is given a variety of meanings by different users and has progressively become a component of ‘aid-speak’ and a political ‘sing song’. It is a word characterised more by its widespread use than its clarity or singularity of meaning, just like ‘sustainable development’, ‘partnerships’ and ‘poverty alleviation’. Paproski (1993) explains the concept of governance as the process of interaction between the public sector and the various actors or groups of actors in civil society. The crucial distinction between government and governance is the notion of civil society, which can be defined as the public life of individuals and institutions outside the control of the state (Harpham and Boateng, 1997). Urban governance refers to a shift from state sponsorship of economic and social programmes and projects to the delivery of these through partnership arrangements, which usually involve both the governmental and non-governmental organisations (NGOs). In effect, good governance is about governmental agencies and NGOs working together (Stoker, 1997) in non-hierarchical and flexible partnerships (often characterised as ‘networks’, Rhodes, 1995). The emergence of partnerships as key mechanisms of urban governance ensures the inclusion of new partners in the delivery of policies and services. According to Harding (1996), these partners are established institutional actors who have ‘positional strengths’ to deliver the required resources. The significance of this is held to be the new role for the state as the coordinator and manager of these partnerships (ibid.).

Young (1994 provides one of the most pertinent formulations in the field of governance. He argues that governance arises as a social or societal concern whenever members of a group find that they are interdependent in the sense that the actions of each impinge on the welfare of others. Interdependence gives rise to collective action problems in the sense that actors left to their own devices in an interdependent world frequently suffer joint losses as a result of conflicts or are unable to reap joint gains because of an inability to cooperate. Young further states that governance involves the establishment and operation of social institutions capable of resolving conflicts and/or facilitating cooperation.

We argue that in any form of good urban governance, new institutional arrangements have to come into being that promote partnerships and forms of ‘government at a distance’ (Murdoch and Abram, 1998). The state needs to seek out those external agencies, which seem most appropriate to the delivery of particular govern-
mental objectives and programmes and aims, at least in principle, to coordinate and manage complex relations in line with some notion of the ‘public interest’. Although the ‘public interest’ is hard to define, one mechanism that is frequently employed to inject some notion of ‘public good’ into the functioning of governmental institutions is public participation. It is hoped that government can be kept in tune with public aspirations through the enrolment of citizens, either as individuals or as groups (ibid.).

The recent concern with governance in urban areas stems from a more general attention being paid to ‘good governance’ as a development issue. One approach sees urban governance as essentially preoccupied with questions of financial accountability and administrative efficiency (Badshah, 1997; Sampford, 2002). An alternative approach that is relevant to our study, is one more interested in broader political concerns related to democracy and popular participation (Robinson, 1995). Good governance is a concept that has recently come into regular use in political science, public administration and, more particularly, development management. It appears alongside such concepts and terms as democracy, civil society, popular participation, partnerships, human rights and sustainable development. In recent years, it has been closely associated with public sector reform (Okot-Uma, 2001). Many authors have noted that good governance should, among other things, be participatory, transparent and accountable. Good governance may therefore be defined as comprising the processes and structures that guide political and socio-economic relationships, with particular reference to ‘commitment to democratic values, norms and practices, trusted services and just and honest business’ (ibid.). Hence, good governance should ensure that political, social, environmental and economic priorities are based on a broad consensus in society and that the voices of the poorest and the most vulnerable are heard in decision-making over the allocation of development resources. UNCHS (2001) sees good governance not in terms of money or technology, not even expertise, but in terms of a well-managed and inclusive city.

UNCHS (now UN-Habitat) sees good urban governance as an efficient and effective response to urban problems by accountable local governments working in partnership with civil society. Good urban governance is therefore a powerful tool in helping make cities better places to live and work in (UNCHS, 2001). It not only benefits citizens, but also brings benefits to the economies. More specifically, it assists in fighting corruption, maintaining democracy, improving the quality of life and life chances for all citizens while at the same time improving opportunity for people to manifest their desires and wishes in life. It also promotes security, equity and sustainability (ibid.).
According to the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) good urban governance has eight major characteristics: it is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law. It assures that corruption is minimised, views of minorities are taken into account and the voices of the most vulnerable in society are heard in decision-making. It is also responsive to the present and future needs of the society. Hence, good urban governance seeks new ways to be creative, to build strengths and to access and utilise resources. This is particularly true at the scale of the locality and the neighbourhood. It is at this level that we find attempts to identify and utilise local knowledge, to build local institutional capacity and to develop social capital, all as means by which local problems can be solved, local needs met and employment created with minimum state intervention (Kearns and Paddison, 2000).

Institutional frameworks are relevant at a variety of levels. They include international organisations and national governments with roles and action plans in the governance of urban areas. Institutional frameworks can have widespread effects upon incentives and disincentive structures, which can operate for environmental management. Pugh (1996) argues that various institutions, firms, households, governmental agencies, CBOs and NGOs each have characteristic comparative advantages. He goes on to argue that firms have a comparative advantage in entrepreneurship, including the development of environmental technologies, while governments have a comparative advantage in policy making, selling property rights and in institutional reforms, NGOs and CBOs have a comparative advantage in mobilising household efforts for pro-environmental purposes. Finally, households have a comparative advantage in some aspects of personal and social development. It is therefore important to consider the appropriate institutional combination in urban environmental management.

Although institutional reforms facilitate good urban governance, the local government has a special role to play since it is the democratic level closest to the citizen. Governance solutions are rightly felt to belong to the local level and so, after years of being side-lined and ignored, local government now finds itself at centre stage. It is being encouraged to innovate, to be close to the citizens and to develop partnerships. The key challenges that the local government now faces include meeting the demand for increased transparency and participation from citizens, modernising its administration and services, fitting into other levels of governance and dealing with the new technologies and taking advantages of their benefits. Local governments are not the only organisations to take decisions that can bring about im-

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7 See article on: http://www.unescap.org/huset/gg/governance.htm
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Improvements in people's lives. In many cases, it is other institutions, be they in the private sector or civil society, that are in a better position to bring about such changes in people's quality of life. For instance, communities in many low-income neighbourhoods have been responding to environmental challenges in various ways. Urban environmental management requires that there is cooperation between all the actors (from the public, private and civil society sectors) in the urban areas. These actors possess different qualities and this is the point at which it is strongly linked with the concept of urban governance. However, urban governance is not limited to issues related to the improvement of urban environment, but encompasses the broader poverty reduction initiatives. This is where it gets very close to the concerns of sustainable development. One of the ways, which we examine in the following section, is through collective action between different actors.

1.6 Collective action and the community

Many theorists have sought to explain the periodic eruptions of collective action through such phenomena as inequality, the reform of bad government and class conflict (for example Karl Marx), social disintegration and anomie, (Emile Durkheim), shared religious values (Max Weber), relative deprivation and (Gurr, 1968) among many other theoretical arguments. Other theorists have attempted to combine some of the above theories to form more sophisticated theories of collective action (Berejikian (1992), Mason and Krane (1989), Tilly (1978)). Each of these theories has some explanatory power and each has contributed to our understanding of collective action. Yet we can distil from the theories some aspects that can best explain the emergence of collective action in urban areas.

In many instances, collective action is spontaneous and the result of a well-known crisis: misuse of resources or missing services. Collective action may also be driven by incidences of relative deprivation. Collective action is action directed towards the achievement of a common goal or a common interest that cannot be obtained by acting alone. Many of the solutions to urban environmental problems can only be successful, especially in the low-income neighbourhoods, when the communities participate. In many instances, collective action by poor households in urban areas to organise shelter, basic services, employment and security becomes widespread, especially where there is minimal government assistance and where the government faces numerous constraints (Rakodi, 1993). The evolution of endogenous solutions to collective action problems, when these are considered viable, is often attributed to the existence of a 'community'. It is considered that a community will more easily be able to overcome constraints to collective action such as the costs for monitoring and enforcement (Mearns, 1995). Already existing and varied relations within the community-based environmental management issues facilitate collective action (Baumann and Sharan, 2000).
People join together to form collective organisations because they believe that greater benefits are achievable through collective action than when they act alone. People might desire collective action to control negative externalities or to encourage the production of positive externalities and public goods. The motivation for collective action is to do things that benefit people in the collective organisation. Collective action is therefore successful to the extent in which it improves the welfare of those who participate in it. It is worth noting that although groups must make collective decisions and determine what they think is the best action for the group, groups themselves do not have preferences. Rather, individuals within groups have preferences, and there are methods for aggregating those preferences, of which voting is an example, that can lead to group decisions. Groups also do not typically make decisions by giving every member an equal chance to participate in every decision. Even groups of modest size tend to elect representatives who make decisions on behalf of the group.

Wade (1988) argues that collective action is based on a moral capacity to recognise the claims of others, empathy for their position and a norm of fairness, which can lead to unselfish behaviour. It has been suggested that the more homogenous the community is, the more likely it is that these factors will support collective action (Ostrom, 1990). Despite the positive aspects of ‘community’, several authors recognise that the community alone is insufficient as an explanation for collective action (Baumann and Sharan 2000; Baud 2000; Mearns, 1995; Ostrom, 1990). Most recognise the need for sanctions to back agreements, whether these are internal or external to the community. There is little evidence for the claim that collective action in urban environmental management is a tradition, sustained by voluntary and moral commitments. Wade (1988) further shows that those members of the community in positions of power may be able to induce and support collective action, which could benefit the community as a whole.

Most studies on collective action emphasise the centrality of incentives to individual decision-makers to make cooperation attractive (Ostrom, 1990; Wade, 1988). The perceived benefits from cooperation are usually conditional on clearly defined boundaries to the resources and rights that are socially recognised, and which can be monitored (Oakerson, 1986). In this connection, Ostrom suggests that collective action is most likely if the results can easily be seen and the participating group is small. Evidence suggests that collective action is likely when members of the community are mutually vulnerable and mutually dependent (Mearns, 1995). The former, applied to the situation in the low-income settlements in urban areas, refers to a situation where, there is lack of urban basic services and the provision cannot be realised and sustained without cooperation from others. In such a situation of missing services, members of the community realise there is a higher risk in non-
cooperation and there is greater likelihood for collective action (Baumann and Sharan, 2000). CBOs have been known to be effective in tackling environmental problems at the neighbourhood level, but their resources and local base usually do not allow them to do more (Lee, 1994; Baud, 2000). They have to enter into partnerships with other actors. Baud (2000) noted that current knowledge on community-based collective action is limited to certain regions and large cities, with a focus on successful cases. There is therefore need for a better understanding of the conditions, which both allow and prevent effective CBO/NGO/local government combinations to emerge.

Recent scholarship has seized on the concepts of ‘social capital’ and ‘trust’ to explain collective action on cooperative communities (see works of Putman, (1993); Fukuyama (1995); and Bowlers and Gintis (1998). ‘Trust’ explains how the calculations of rational maximizers might change, based on their perception of how others will behave. The term social capital describes a relationship of equilibrium between norms of reciprocity, networks of civic engagement and trust. Norms, networks and trust reinforce each other to produce social capital, which inheres in the structure of relations among people (Putnam, 1993; Coleman, 1990). We however observe that the definitions of social capital are methodologically problematic because they assume and hide what should be causal and falsifiable relationships among the variables that supposedly produce it. Another problem with the concept of social capital is that it is defined by its function, as some aspect of social structure that facilitates the concerted actions of individuals (Coleman, 1990). Studies on the role of social capital in collective environmental action have also been on the rise recently (see for example those by the World Bank’s Social Capital Initiative Group).

In so far as collective action in urban areas has the potential of improving environmental quality, especially in the low-income neighbourhoods, there are a number of difficulties that might make collective action impossible. Such difficulties include interactions among similar partners and the problem of ‘free riding’. One way of dealing with the problem of free riding involves institutional design whereby larger groups can promote cooperation by organising themselves into small subgroups. If group size leads to free riding, the use of small sub-groups therefore makes sense, since individual action is more readily recognised at each sublevel where the group is small. However we note that it is not only the group size that matters, but also the degree of homogeneity of the group. In the following section we examine the concept of participation and the difficulties of realising effective participation, especially in urban areas.
1.7 Participation and urban environmental management

At the outset, the 1991 Human Development Report emphasised that people must be at the centre of development. In addition to development of the people and development for the people, UNDP advocates development by the people, that is, "through appropriate structures of decision making, people must participate fully in the planning and implementation of development strategies" (UNDP, 1991: 13). For the purpose of this study, participation is defined as 'taking part in the formulation, passage or implementation of environmental management initiatives' (Klugman, 1994). It is necessary, however, to be more specific as to the nature of participation in a particular context, and identify who takes part in what, when and how, and with what results. Participation is an effective means of raising awareness, without which there is neither political will nor individual motivation to protect or improve the environment. Participation is used and advocated as a means to motivate and organise the essential multiplicity of actors. It is used to obtain better information about conditions and potentials. Participation by both men and women is a cornerstone of good governance. Participation could be either direct or through legitimate intermediate institutions or representatives. It is important to point out that representative democracy does not necessarily mean that the concerns of the most vulnerable in society would be taken into consideration in decision-making. Participation needs to be informed and organised. This means freedom of association and expression on the one hand, and an organised civil society on the other hand.

The notion of participation is very close to that of interest. Thus, for people living in cities, participating in a cleaning campaign means taking part in a collective action directed at the general interest of their neighbourhood. The participation dynamism is therefore dependent on the notion of interest. There are several degrees of participation that are relevant to our study. These include individual responsibility, collective responsibility, material or financial contribution, and assuming responsibility in community-based management. Participation is used or advocated as a means to motivate and organise the essential multiplicity of actors. It is employed to draw out priorities, which have widespread support across departments and levels of government and among interests outside government in the business and community sectors (Mattingly, 1999). Participation can help build long-term capacity and enhance the ability of local people to manage and negotiate development projects. Participatory planning can help raise the status of vulnerable groups, such as women, by providing the opportunity to play a role in the development process. It also brings users and service providers, both governmental and private, into a direct relationship and this may have a greater impact on the accountability of these suppliers.
More and more, sustainable development is presented as the sensible response to the increasingly worrying situation and conditions in cities. Embedded in most interpretations of this broad concept is the need for more participatory approaches to environmental decision-making. Such a call can be found in many discourses on sustainable development emerging from a variety of sources. Analysts of sustainable development also agree on the necessity of participatory approaches. O'Riordan (1996) for instance, suggests “that the sustainability transition is a profoundly radical combination of ecological imperatives, social redistribution and political empowerment which will involve global management regimes, the limitation of national sovereignty and greatly enhance local involvement and self-reliance”. Similar calls for more consultative, participatory and deliberate approaches are made by analysts and actors in the environmental field who argue that stakeholders’ involvement in decision-making is needed to tackle environmental problems. Many justifications to such calls for participatory approaches to environmental problems relate to the characteristics of environmental issues. Hove (2000) argues that environmental problems frequently present four major characteristics: complexity, uncertainty, large temporal and spatial scales and irreversibility. Participation of a wide range of actors in the problem-solving process can make the process easier. Looking for extended participation is the most obvious way of involving actors in the process. It can potentially guarantee a higher degree of legitimacy to the decisions taken since a wider range of social forces will have been allowed to influence the process instead of it being imposed ‘from above’.

While participation can be thought of as the yarn that binds together actors in the public/private interface, many scholars and practitioners argue that there are drawbacks to participatory approaches. For one thing, participatory approaches can be time-consuming and require a considerable investment of resources, which can present a challenge to projects that operate with limited resources. Participation can be a source of tension and sometimes even a destabilising force in that it can inappropriately unbalance existing socio-political relationships (Haughton, 1999). This can undermine the very relationships that the participatory process seeks to foster between actors in the public/private interface. Often, motivations for participatory approaches need to be made clear as poorly targeted participatory schemes run the risk of promoting an ideological perspective in development, even at the expense of securing direct benefits for people from development projects. In some instances, participatory strategies that are conceived without sufficient inquiry into how burdens are distributed in a particular society can result in a shifting of undue burdens onto the poor, while relinquishing national governments of their responsibility to promote development and equity.
As seen above, the challenge lies in the practical design and organisation of a participatory problem-solving process. Questions such as the legitimacy and representativity of the interest groups that participate in the process tend to arise. Blowers (1997), commenting on the participation of social movements, notes that the idea that environmental or urban social movements are given space to operate in a vigorous civil society does not adequately deal with the problem of legitimising and implementing decisions. Environmental movements are not representative, nor are they accountable, and consequently, their influence must be secured ultimately through the formal political process.

This lack of representativity and accountability also holds true for community organisations and business actors acting on environmental problem-solving process. A second question stems from the selection of participants. Legitimacy can be gained, provided there is some legitimacy content in the selection itself. Thirdly, the procedures for dispute resolution and power balancing need to be carefully designed if the process is to sensibly articulate different value judgements and logistics in a manner that respects quality and equity criteria. In order to gain some insight into how the participation of different actors could be effective in environmental decision-making and action, we examine the concept of partnership and the evolution of participatory and partnership approaches in development in the following section.

1.8 Partnerships

Effective urban management processes and good urban governance require the formation of partnerships between different organisations and actors in the urban areas. A partnership is a form of participation. Since the UNCED conference in Rio, where the idea of Agenda 21 was mooted, and the subsequent process of developing LAs 21 by local authorities, culminating later in the Habitat agenda, the idea of partnerships has become common. In the area of urban environmental management, the usefulness of partnerships between local authorities and other actors and how this could lead to urban sustainable development has gained wide recognition in theory (see the works of Squires, 1989; OECD, 1990; Bennet and Krebbs, 1991; Serageldin et al., 1994; Harding, 1996; Badshah, 1996; Hastings (1996, 1999); Schubeter, 1996; Katajima, 1997; Syrett, 1997; Selman, 1996, 1999; Hordijk, 2001; Baud et al., 2001a; Baud and Post, 2001). The adoption of effective partnerships as a means of attaining sustainable development in urban areas can only be assessed by empirical research and analysis. We argue that while partnerships are being promoted at the international level, they are difficult to form and when formed, they do not always function properly. Their outputs are sometimes difficult to identify, especially in the developing countries. The emphasis on partnerships for effective urban environmental management has been.
gaining a lot of attention and interest. We will examine the evolution of participatory and partnership approaches in development since the 1960s in the following section.

1.8.1 The evolution of participatory and partnership approaches in development

Prior to the 1960s, many strategies to promote growth in developing countries were capital and technology intensive. These strategies were often promoted by international and multilateral organisations that designed development interventions in centralised units of decision-making, and implemented them in a ‘top-down’ fashion. People at the receiving end of the plans were at most ‘passive participants’ (Mangal, 1998). By the late 1950s and 1960s, it was recognised that many projects did not result in significant benefits for their target groups because of their mechanistic nature and the way in which they systematically excluded the input of local people. This suggested that input from local people was an important ingredient for success. The result was a paradigm shift towards the concept of ‘community development’ in project planning. Community development focused on developing skills in local communities and supporting CBOs. In many projects, local people were sought out for labour mobilisation and cost reduction in the implementing phase, but their participation was limited in the planning phase. Though the paradigm of community development promoted people’s involvement in projects, people were still at the ‘receiving end’ of plans that were generated and directed by the national agenda. Community input in problem identification and solving was generally not sought and local people essentially participated as ‘active recipients’ (Cernea, 1991; Chambers, 1994).

Initially, more attention was given to rural community development than urban community development, as poor people in rural areas were essentially seen as ‘producers’ of products, whereas the beneficiaries of urban projects were seen as mere ‘users’ (Mangal, 1998). Users were accorded a less role and were often excluded from the decision making process. Yet, the dynamic growth of informally constructed residential areas and squatter settlements in cities of developing countries indicated that people in urban areas exert a concerted effort to manage many activities to meet their basic needs. Soon community development planning in urban areas became focused on building infrastructure in developing countries particularly in Asia and Africa (ibid.). Local people were encouraged to develop the needed skills and to take responsibility for supporting and assisting in implementing a range of physical infrastructure works.

In the 1970s and 1980s, analysts argued that communities had inherent capacities, knowledge and beliefs about the systems in which they constructed their daily lives – the very systems development planners wished to ‘improve’ (Cohen and
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Uphoff, 1980). It was argued that genuine attempts at local participation should not exclude the knowledge and beliefs of communities, but rather involve people actively in every stage of the project cycle. This meant that local people had an important role to play in the planning, decision-making and implementation of the plans, and that they take an active role in the evaluation (ibid.). Since some of the best-intended decisions yielded harmful outcomes, it was recognised that more attention had to be given to how the risks of undesired project consequences were distributed among different stakeholders, particularly among vulnerable groups, in order to determine whether people were benefiting equitably from programmes (Chambers, 1994).

At the same time that ‘people-centred planning’ advocated a more inclusive process, a rethinking of the causes of poverty suggested that people’s ‘non-participation’ was linked to the larger structural contexts in developing countries. This led to the political and economic marginalisation of certain groups, which prevents them from sharing equitably in society’s resources (Schubeter, 1996). Analysts argued that not only did people need to be an integral part of the decision-making process, but also that poor people and vulnerable groups such as women, who were often the most excluded and marginalised from society, needed to be brought directly into development initiatives. Since a power differential caused people in the lower rungs of the power ladder to be excluded from access to, and control over, the resources they need to sustain and improve their lives, empowering them was an essential step toward increasing their influence in decision-making (Cernea, 1991; Mangal, 1998).

It is now widely recognised that, from the late 1970’s onwards, governments in more advanced economies and some in the South sought to reconfigure their relationship with society and the various sectors and actors, redefining their spheres of influence vis-à-vis economic forces and with citizens, and their mechanisms for accountability and legitimacy (Magalhães et al., 2002). With the beginnings of massive structural adjustments programmes throughout the developing world during the 1980s, it was clear that large parts of urban populations were going to be affected by the whole range of measures that were meant to liberalise economic management (Rakodi, 1999). It was common for structural adjustment ‘packages’ to attempt to reduce the size of the public sector, together with the public services offered at low cost. Such measures have had adverse effect on the quality of life of both poor and lower middle-income urban dwellers. These effects have coincided with an overall political activity, a strengthening of the texture of the civil society and widespread urban protest. Many people living and working in cities have responded to these changes by demanding high quality services, which the municipal governments cannot afford to continue offering alone.
The democratising forces emerging in the late 1980s and early 1990s in most of the developing world further expanded the scope and meaning of collective action in urban management. Baumann and Sharan (2000) observe that civil society expanded on the more pluralistic approach to participation, which emerged in the 1970's by arguing for more plural forms of political and economic participation, not only on a local level, but also on a societal level as a whole. These movements saw the re-emergence of civil society not only as a political force, but also as a complement to the state and market in charting the course of development (Mangal, 1998). This idea was reinforced and even formalised at UNCED 1992, which officially recognised that the challenges to development could only be overcome by greater collaboration between governments, the private sector and civil society. The UNCED signalled the start of a new era in the area of environmental management, in particular urban environmental management. The conference adopted Agenda 21, a far-ranging programme of reform. After the conference it was clear that the tasks ahead were too much and too important for governments alone. New partnerships had to be forged and the business community and civil society organisations were to get involved. Agenda 21 spoke broadly about new roles through partnerships: “business and industry should be full participants” and “the private and public sectors should strengthen partnerships to implement the principles and criteria for sustainable development”. The public sector should establish procedures to allow an expanded role of the private sector (Gomez-Echeverri, 1997) and of other stakeholders.

The UNCED’s urgent insistence that the private sector and the civil society should have an expanded role in LA 21 processes in collaboration with the private sector, provided the key to a different approach: the concept of public-private partnerships (PPP). The immediate challenge from Rio was to translate the PPP principle into action. UNDP has been very instrumental and has initiated efforts to create the framework to allow partnerships to happen and developed a Public-Private Partnership model. However, the PPP model developed by the UNDP cannot be generalised as it treats all developing countries as one block. It is here argued that there is no one single model that can be replicated in different cities. There are, however, some real institutional barriers to forging partnerships in the areas of urban environmental management. Institutional barriers and the apparent lack of political will to reform them remain the most stubborn and powerful obstacles to real change.

1.8.2 Defining partnerships

Recently, there is a growing volume of literature about the concept of partnerships and practitioners, researchers and observers are developing greater insights into the prospects of partnerships, especially as a solution to the provision of urban basic
services. From the existing literature on partnerships, definitions of what constitute partnerships in urban environmental management are characteristically generalised and its malleability and lack of precise definition have undoubtedly sponsored the rise of partnerships on the political agenda.

According to Hordijk (2001), general characteristics that most partnerships have in common are that: (a) a partnership involves two or more actors and some authors add that at least one should be public; (b) each partner is a principal, i.e. each is capable of bargaining on its own behalf, rather than having to consult with other forms of authority; (c) a partnership is an enduring relationship between these actors (based on a written or verbal agreement, informal or formal in nature, with some continuing interaction); (d) each of the participating organisations and actors bring something to the partnership. Each partner transfers some resources – both tangible and intangible – and the partnership should be mutually beneficial (without assuming equality between actors); (e) a partnership finds its expression in concrete activities (including planning initiatives); (f) a partnership implies a shared responsibility for the outcomes of the activities; (g) partnerships are meant to serve a public interest. Gonzalez et al., 2000 distinguish these partnerships from other commercial enterprises and they are now sometimes called public interest partnerships.

Given the above characteristics of partnerships, we are able to highlight some of the preconditions that have to be fulfilled before a partnership can be effective. First, according to Hordijk (2001) there has to be a certain degree of mutuality of interest between the actors concerning the specific goal the partnership must pursue. Secondly, partnerships can only function if there is trust among the partners, as well as mutual accountability and transparency (Baud, 2000). Thirdly, effective and able leadership is an important precondition for the functioning of any partnership arrangement. Most partnerships have come to being especially there where a common crisis exists, affecting all the actors concerned. However, the existence of a crisis will not lead to actors coming together and undertaking activities to address the crisis if there is not a “champion” to initiate discussions. Finally, a strong political will is needed to support partnership activities in the long run.

In this study we define partnership arrangements as any co-operative working arrangement between business (formal or informal), non-profit organisations (CBOs and NGOs) and government (local and central), in which resources and skills are shared in projects that benefit each partner as well as the community. We also see partnerships as any voluntary commitments by a wide range of actors in the urban environment to make a contribution to the improvement of the quality of
the living environment. This definition stresses the voluntary nature of relationships; the wide range of participants, from the community to the private sector, the local government, central government departments, NGOs and CBOs, and the need for a shared strategy and agreed contributions of resources to the process. Thus, partnerships are those arrangements that involve at least two or more actors; represent a more or less enduring relationship between actors; are mutually beneficial (without assuming equality between the actors); address public interest issues and concerns; and find their expression in activities related to improving the quality of the environment (Baud, et al., 2001a, b).

Partnerships appear to offer a mechanism for bonding together multiple interests and perspectives necessary to implement integrated programme strategies responsive to diverse local socio-economic and environmental concerns (Hastings 1999). The use of partnerships between public and private sector actors designed to achieve public policy objectives is in general not a new phenomenon. What is new is the emphasis and the political willingness by the government in different countries to encourage these initiatives. From a policy perspective, partnerships can be mechanisms for merging the objectives, experiences and resources of multiple institutional and individual actors necessarily involved in an integrated, territorial approach to environmental management. If properly structured, partnerships are capable of providing the flexibility necessary to identify and respond more efficiently and effectively to the diverse local socio-economic, political and environmental circumstances. They can also help organise and enhance complementarity of urban environmental programme purposes vertically (among levels of government) and horizontally (across governmental units at the same level). Finally, partnerships can provide a means to organise and capitalise on the advantages of pragmatic public and private sector cooperation (OECD, 1990; Hastings, 1996; 1999).

1.8.3 Types of partnerships

Partnerships can take many forms, can be used for many purposes and involve complex legal, political, organisational and financial interrelationships among the partners (Axelrod and Dion, 1988). The purpose of each partnership is an orchestration of policy and execution, based on shared objectives and priorities. An important change has recently been taking place in the conception and implementation of urban environmental development programmes in the framework of LA 21.

In this context, four types of partnerships have become prominent:

1. In response to the pulling out of national state activities, there has been a growth of activities by NGOs and CBOs, which often act in partnerships with government agents to take on tasks previously performed solely by the state.
2. A variety of public/private partnerships.
3. Partnerships between various levels of state authorities and state-sponsored agencies.
4. Partnerships between individual households and private service providers, which may take the form of private/private partnerships.

We contend that the type of partnership arrangements that emerges in a concrete situation highly depends on the local actors, local circumstances and, to a larger extent, the local political environment. For instance in countries where the central state has been withdrawing from certain areas of activity through reductions in public service provision and selective reductions in public spending, several innovative approaches are emerging. Miller and Roo (1999) argue that former urban services provision has been replaced or complemented by new policies, which attempt to stimulate individual action and partnership with private, voluntary and community groups.

1.8.4 Components of partnerships

This section considers the components of partnerships in urban environmental management, covering what they seek to do, who is involved, how they are to be implemented, how they may change over time and what are the preconditions for success. Therefore, when studying partnerships, we first need to examine their aims and objectives, the activities they engage in, the actors involved, the nature of the relationships, the socio-economic and political context and the outcomes of the partnerships (Baud and Post, 2001). McQuaid (1994) stresses the importance of three components in this respect: the mandate, including the aims and objectives of the partnership arrangement; the arrangement within each partnership; and the various outcomes. The aim of a specific partnership may involve a range of activities or programmes, focusing on a single project or on a series of programmes affecting a range of factors which influence the ‘quality of life’ of residents in an area (McQuaid, 1994). The aims may concern a specific geographical area or a particular client group within an area. The range of activities may be narrow or wide.

As regards the arrangements within each partnership, we need to consider the range of actors, which may include key agencies such as central and local government, voluntary sector bodies, the local community (groups and individuals), the private sector (formal or informal) and influential individuals. It is important to identify precisely the types of actors and their respective contribution to a partnership. Another aspect to be considered is the formal or informal structure of the partnership, which may range from formal legally binding contracts, to non-bidding public agreements or informal relations based on trust and mutual benefit.
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With respect to the third component – the outcomes – we need to examine the process-outcomes and substantial outcomes of these partnership arrangements. Issues like financial viability, legitimacy, accountability, effectiveness, inclusiveness and exclusiveness of an arrangement and political will are important outcomes to be considered. Given the huge diversity and ever changing nature of partnerships in urban environmental management, we will get better understanding by narrowing the focus down to some partnerships along the dimensions discussed above. The components of partnership arrangements that need to be studied are summarised in Table 1.1.

Table 1.1 Components of partnership arrangements

<table>
<thead>
<tr>
<th>Component of partnership</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANDATE</td>
<td></td>
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<tr>
<td>Aims</td>
<td>Reduction of solid waste generated, visioning, consultations</td>
</tr>
<tr>
<td>Range of activities</td>
<td>Encourage recycling activities; clean-ups; strategic planning</td>
</tr>
<tr>
<td>Scale of intervention</td>
<td>Neighbourhood level</td>
</tr>
<tr>
<td>ARRANGEMENTS</td>
<td></td>
</tr>
<tr>
<td>Actors involved and excluded</td>
<td>Who does what, how and when</td>
</tr>
<tr>
<td>Nature of relationships</td>
<td>Formal or informal</td>
</tr>
<tr>
<td>Decision-making structure</td>
<td>Organisational structure</td>
</tr>
<tr>
<td>Division of tasks</td>
<td>Related to organisational structure</td>
</tr>
<tr>
<td>Inputs of various actors</td>
<td>What do different partners bring to the partnership</td>
</tr>
<tr>
<td>Financial arrangements</td>
<td>What financial resources are available to the partnership</td>
</tr>
<tr>
<td>Monitoring and evaluation</td>
<td>Review of progress made; lessons and replicability</td>
</tr>
<tr>
<td>Outcomes</td>
<td>What actual benefits (tangible or intangible); value-added</td>
</tr>
</tbody>
</table>

Source: Adapted from Mcquaid R.W (1994)

1.8.5 Strengths and weaknesses of partnerships

The essential quality that partnerships embody is that of complementarity in which the relative strengths and weaknesses of each partner are offset against each other to produce developments that combine the best contributions. In practical terms, these developments are economically efficient, socially responsive and environmentally sustainable (UNCHS, 2001). Partnerships therefore offer each party benefits that cannot be achieved while operating independently. This requires actors from each sector to understand and acknowledge the legitimate interests of the other. Successful partnerships should provide (a) an efficient way of identifying different and changing needs; (b) adequate trust between the partners; (c) clarity concerning the purpose of the partnership and the individual roles of partners within it; (d) adequate leadership; (e) possibilities for all partners to fulfil their roles; (f) adequate access by all partners to essential information; (g) necessary financial and other resources (h) compatibility with the prevailing political and
nancial and other resources (h) compatibility with the prevailing political and legal climate; and finally (i) potential for wider application. These issues make it possible to assess the organisational structure through which a partnership is to operate at each relevant stage and the roles of the central and local government together with other stakeholders, developers, NGOs, CBOs and local residents (ibid.).

However, there is the question of whether partnerships as such are effective in seeking solutions to urban environmental problems. Although partnerships can be effective in helping address urban management problems, they are inappropriate for addressing issues the solution of which requires democratic decision-making. Their action is piecemeal and contributes to the already existing fragmentation of the territory, either because they focus on a specific area or because they concentrate on a single policy, sector or both. Partnerships are often short-lived and have a fluctuating membership. Private enterprises frequently opt out of participation. The civil society is often not a stable partner with changing representation through CBOs that tend to represent particular interests and lack knowledge or skills. Partnerships are useful and necessary but they are more appropriate for solving management problems (in urban services for instance) than for addressing issues that require democratic decision-making (UNCHS, 2001).

According to Pugh (1996), urban environmental management requires the use of effective multi-institutional or multi-organisational structures. He argues that coherence and effective partnering in multi-organisational contexts are not assured or guaranteed. Since most partnerships are directed at improving the provision of a ‘public good’, several problems may arise. In the terminology of game theory, there may be some self-interest in ‘free-riding’ (i.e. gaining the benefits of environmental improvement without making any contributions oneself) and potential partners may face a ‘prisoner’s dilemma’ (i.e. each wanting the benefits of others cooperation but individually having an incentive to abstain). Coase, cited in Pugh, recognises that goods with social benefits and ‘publicness’ (i.e. they offer externality and third party enjoyment of benefits) pose dilemmas for their optimal provision. Pugh observes that ‘free-rider’ and ‘prisoner’s dilemma’ situations can be broken by some form of social cooperation which could be achieved by a CBO organising households collectively into self help mediating between households and policy makers

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8 A variant of the ‘free-riding’ and ‘prisoner’s dilemma’ more applicable to urban areas is the case of a householder in a street where all his/her neighbours paint their houses, so raising the value of all houses in the street. However, for each individual householder the extra value to his house of painting is less than the cost of the paint, although the house will increase in value due to his neighbour’s efforts. So his maximum personal benefit is gained by not painting his house, although this means a lower total welfare for the community. The end result may be that no one paints his or her house.
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and between government environmental and infrastructure agencies. These possibilities also have some reasoned support in theory of how social cooperation can arise in 'free-rider' and 'prisoner's dilemma' circumstances (Mwangi, 2000).

We argue that the operational dimension of partnerships is complicated by a wide array of factors that need to be investigated. Helmsing (2000) argued that, while the partnership approach may assist in resolving some of the 'old problems' related to service provision in urban areas, it presents us with a new class of problems. Issues of how to resolve considerable inequalities between different actors, coordination between various actors and their activities, financial viability of some initiatives, capability of the public sector to work with others, and so on, are some of the new challenges facing the partnership approach. We now examine the potential partners and discuss their strengths and weaknesses.

1.8.6 Actors and organisations in partnerships for urban environmental management

As said, several groups can be identified that can play a role in partnerships for urban environmental management: the government at the national, regional and local level; the formal private sector; the informal private sector; NGOs, CBOs and external support agencies. Incidentally, households have often been left out in analyses of partnerships. Devas (1999) argues that it is questionable whether individual households should be included in urban governance, since governance implies collective action rather than individual action. However, households clearly are part of the picture, since they are participants in the urban environmental management. If we are to have a complete picture of collaboration between different actors in the urban arena, households cannot be left out. We contend that households are actively involved in partnership arrangements for urban environmental management as members of the CBOs and also on their own. The present study focuses on partnerships between the public, the formal and informal private sector, and participation by households and community groups.

The public sector: local and central governments

Although there is generally a major shift towards a more decentralised way of planning, still most urban authorities in countries, whether industrialised or developing, receive their powers and obligations from a central government authority. The allocation of powers and responsibilities is to protect the rights of the citizens, to provide services and facilities which are not specific to an individual, but are for the common good, or to provide a service or facility which cannot be provided in any other way (Gidman, et al., 1994).
Local governments still have to influence the developments in towns, because of the persistence of problems such as inadequate housing, infrastructure and services (education and health) for the low-income population, as well as traffic congestion and pollution. In order to enhance the road towards sustainable development in cities, there is a need to make changes in the organisation and structure of local governments. The right kind of government is that kind that redefines its traditional role to be a catalyst and facilitator (Osborne and Gaebler, 1993). Osborne and Gaebler refer to a reinvented government as one that separates its functions of policy decision-making (steering) from its function of service delivery (rowing). In other words, today’s governments have to do less and to lead more (ibid.). Only governments have the legitimacy and capability to steer and integrate the activities of multiple stakeholders by acting beyond single purposes. Steering means bringing different stakeholders around the table and moderating differences and negotiating cooperation.

The primary strength of the public sector stems from its legal authority, law-making power, monitoring and regulatory function, and the mandate that it has to act directly with (or delegate responsibility to) other stakeholder groups. It is the primary decision-maker with regard to the public good and is expected to represent its constituencies. The public sector also has the responsibility to work holistically in coordinating urban environmental management initiatives with other community development needs.

UNCHS (2001) notes that the presence of the state varies greatly from one country to the other, between strong states and weak states. Even in countries where the state is still strong, as in France and the UK, it no longer has the political and economic resources needed to carry out the traditional functions of societal governance on its own. In developing countries, for instance, local governments are not able to offer even basic services to many of the citizens living within their jurisdiction. They are also poorly resourced and in many instances poorly managed. Therefore one of the weaknesses of the public sector is that it lacks reliable funding and technical resources. Political interference and corruption, high staff turnover and significant inefficient and inflexible bureaucracy are other weaknesses of the public sector.

The new role of the government has become to create frameworks and to facilitate collective action, rather than to intervene directly (ibid.). As a result of institutional failure in many urban areas, the public sector has not managed to deliver and there have been policies directed at decentralisation of urban infrastructure management. The management of urban environmental problems presents complex institutional challenges. The factors that cause managerial complexity include a large number of organisations involved, cross-jurisdictional conflicts and
overlaps, central-local conflicts and tensions between centralisation and decentralisation. Although local government has nominal responsibilities for the provision of urban environmental infrastructure, central government entities retain much of the authority and financial resources to implement services. Considerable ambiguity exists about the roles of various institutions working in the area of urban management and the provision of urban environmental infrastructure lacks coordination. The behaviour of bureaucracies that face few incentives to perform well underlies many of these institutional problems. Helmsing (2000) observes that an important issue is that greater involvement of other parties in the provision of infrastructure and services would in fact require not a reduced but an expanded regulatory capacity on the part of the government. He further states that new modalities of infrastructure provision need new and complex regulatory and monitoring capacity of the government and especially so in the new partnership arrangements (ibid., 2000).

The private sector

‘Private’ does not only stand for firms, but also individuals, communities and households. In many countries, under pressure of constraints on government resources, there is an incremental process of unintended privatisation: as public services fail, enterprises and households find their own solutions. This is especially the case in the spheres of essential personal services (transport, education, health) and basic infrastructure (water and fuel). The other form of privatisation is programmed: here governments make policy decisions to sell assets, to franchise or concede the whole operation or to contract out aspects of it (Batley, 1997).

The private sector can either be formal or informal, and — in the sphere of urban environmental management — ranges from small, individual garbage collectors or water vendors to large companies, which operate or develop large segments of water supply, sanitation and solid waste management (UNDP, 1996; UNCHS, 1996; Davidson and Peltenburg, 1993; Faulkener, 1997). Employees within the private sector are concerned about issues of job security, working conditions, and the particular social status that would be associated with certain jobs. Private sector involvement increases employment, and can also offer an element of security and improved working conditions to groups of non-formal workers who are often exposed to health hazards.

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9 The private sector can either be formal or informal. The term formal is used to signify those organizations and actors that are officially recognised and accepted, and those processes which conform to official rules and regulations. Informal actors are those who do not have full, official recognition or do not comply in some way or other with official rules or procedures. What is referred to as informal private sector is simply unregulated and un-taxed.
Theoretical Framework

The formal private sector refers to institutions, firms and individuals who may be active in many different aspects of infrastructure management but whose main objective and organisation is to generate a profit on their investments. They can, because of their access to financial resources and/or their potential ability to operate more efficiently, play a role in the financing and/or provision of certain infrastructure services and in construction operations and the maintenance of relevant facilities (Faulkener, 1997). Because a private concern mostly has a much narrower focus than its public sector counterpart, it will frequently be able to offer innovative technical and financial solutions and provide a benchmark price for the provision of a service. In the literature, the private sector is endowed with qualities such as political independence, economic rationality, efficiency, dynamism and innovation; qualities that make it measure up favourably to public sector enterprise (Post, 2002). Empirical evidence on how privatisation works is still rather flimsy and largely drawn from experiences in the North. In many developing countries, there is often a strong political opposition to privatisation from groups afraid to lose from such reforms.

The private sector has strengths in transparency, its ability to innovate and replicate and its customer focus (Caplan, 2001). It is able to respond quickly to the need to improve and deliver services and has limited exposure to political interference. It is also responsive to competitiveness. However, since the private sector is not politically accountable, there is still a strong need for regulation by the public sector (Gentry, 1997). Related to this is the overall concern to ensure that the low-income population will benefit from such formal private sector participation. In most instances, the private sector tends to primarily serve the higher income segments of society. The private sector tends to leave low-income areas because the profit margins may be too low and the poor households may not be able to pay for the services provided by the private sector.

Much of the literature on the role of the private sector overstates its potential and ignores the fact that effective private sector participation requires strong, competent and representative local government to set conditions, oversee the quality and control the prices charged. The private sector lacks vision regarding community development, largely due to their distance from the community and also from the customer. As seen above, many governments in developing countries have institutional weaknesses to regulate the private sector. The private sector also lacks financial transparency and is not able to perceive other sectors as equals (rather than taking the lead). It is rigid and propagates hierarchical management styles Caplan, 2001).

It is important for urban governments to also recognise the informal private sector and develop partnerships with this group. The informal sector is an important
source of income and employment for the poor in urban areas and this group can often bridge the gap between the urban poor and the formal sector when it comes to the provision of less profitable urban services or services with standards below these of the formal sector. Schubeter (1996) argues convincingly that residents are producers of infrastructure services in the informal market, that is, persons may earn their livelihood by such activities as hiring themselves to weed parapets, digging drains and selling water in areas where it is scarce.

Informal and formal service providers are often in direct competition with each other and strategies for reconciling the interests of these groups are an important part of problem solving (Gidman et al., 1994). The main obstacle for partnerships with the informal sector is the common tendency in favour of the formal sector and the negative attitude among urban planners and managers and policy makers against the informal sector (ibid). Informal sector activities are considered as being transitional, and are supposed to disappear automatically with economic growth (Mangal, 1998). This is frequently accompanied by ignorance of the informal sector and local authorities and urban managers, and leads to its marginalisation in spite of the major role actually played by this group in the cities and towns of developing countries.

Community-based organisations (CBOs)
There is a huge variety of different types of CBOs, which include self-help, local, grassroots, and community management organisations in addition to village or small town councils. Members are often motivated by self-interest, but this should be channelled in a way to promote the broader interests and development goals of the community. Generally, CBOs involve “any voluntary action undertaken by a group of persons which aims at the satisfaction of individual or collective needs or aspirations” (Arrossi et al., 1994). The distinctive feature of a self-help initiative or activity is the substantial contribution made from the individual’s or group’s own resources in terms of labour, capital, land and/or entrepreneurial skills.

Despite frequent mention in several major policy documents of the importance of CBOs, understanding of environmental CBOs in the urban areas is equally inadequate. The CBOs may be seen as potentially important actors in public/private and public/civil society partnerships, particularly in urban low-income communities. These groups often play a crucial role in catalysing and/or facilitating the active participation of communities in infrastructure development. The CBOs, the nearest we come to voluntary action for environmental improvement, are normally funded by the community itself. They represent the community or member interests, and enjoy popular support. An effective community organisation is a precondition for undertaking collective initiatives. In most instances, intermediary or-
ganisations and institutions can demonstrate alternative solutions to meeting collective social needs through specific projects.

One of the major weaknesses of CBOs is that they are prone to internal fighting and power struggles and their lack of resources and a broader perspective make them vulnerable to external influences (Maina et al., 1998). CBOs also face some leadership problems. Moreover, they cannot solve most community-level environmental problems without interventions from local authorities and other actors. The provision of infrastructure and basic services is an element of habitat improvement that generally cannot be tackled by a community or an NGO in isolation. According to a framework developed by Lee (1994), water supply, sewerage, drainage and garbage disposal are environmental management activities that are more closely conducted at the community level, and they need to be linked to the larger framework of urban administration to be viable and effective.

We argue that, although in the current literature a lot of emphasis has been laid on the role of the CBOs, we need to ascertain whether CBOs are effective and whether they have their resources to control. In most instances, CBOs have a weak resource base and they tend to be influenced by powerful partners. We further need to know whether the CBOs in low-income settlements are representatives or they are just membership organisations for house-owners only. These issues and many more can only be proved by empirical data that the current study has attempted to collect in the Kenyan context, using the Nakuru case study.

Non-governmental organisations
Arrossi et al., (1994) provide a concise definition of an NGO which refers to “all non-state, non-profit making organisations and as a specific term for indigenous and/or Northern-based organisations, which support self-help, grassroots, community or people’s organisations and individuals as needed”. Generally, NGOs seek partnerships with CBOs so as to gain sustained and integrated results within the communities they want to intervene. NGOs provide complementary skills and knowledge, working together towards a shared overall goal related to the livelihoods of the communities where they are operational. NGOs are under pressure from donors to enter into partnerships with CBOs and other actors and this is nowadays being used as criteria for funding.

It has been acknowledged that the NGO sector is making a significant contribution to the promotion, production and improvement of shelter in various regions of the developing world (UNCHS, 2001). NGOs operate according to the principle that all people have a right to control their own destiny, with a preference for shelter solutions based on their own community or neighbourhoods. In many countries,
NGOs play the role of enablers and implementers of new ideas and models when working with CBOs and helping such organisations' development efforts. In many instances, NGOs have succeeded in demonstrating alternative solutions to meeting shelter and service needs through specific projects and these, in turn, have sometimes pointed to approaches that have wider applications (ibid.). NGOs therefore are enablers alongside CBOs, mediators between people and the authorities which control access to resources or goods and services, advisors to state institutions on policy changes and, finally, they can be advocates who can put community concerns on the national or international policy agenda.

We intend to indicate in this study that, although the roles of NGOs have been emphasised in literature, they may not remain in a locality for so long especially when external funding is ended. Experience has shown that some NGOs may not be necessarily serving the interests of the residents of the areas in which they operate (UNCHS, 2001). They also tend to implement the funding agencies’ projects and needs with too little concern for the locals. Another major weakness of NGOs is that they are normally not accountable to the communities that they work with, especially those in developing countries. NGOs lack sufficient and predictable funding and they also lack power to influence decision-making. Moreover, they tend to play their ‘own rules’. NGOs may also compete directly with local political representatives selected by the communities themselves.

External support agencies
Huge capital investments in urban infrastructure such as a citywide water reticulation system, sewerage rehabilitation and extension require some form of assistance from external agencies outside the municipality. There are also administrative constraints experienced by donor agencies, especially the lack of trained personnel working within the recipient countries and a need to keep the staff costs down. This often results in a bias against smaller programmes, under which category many housing, basic services and infrastructure projects fall.

We argue that interventions by external support agencies that seek an efficient implementation of ‘their’ projects may sometimes inhibit innovative local solutions that are cheaper than the solutions designed by foreign agencies. External agencies rarely stay for long and only continue their local presence to guarantee the maintenance and expansion of new projects. Many international donors withdraw support from the community after completing one ‘successful’ project, just when this should have laid the basis for expanding the scale and extending the scope of their work. Still, many donors operate on a ‘project by project’ basis when what is needed is a long-term process to strengthen institutional capacity, overseen by democratic governance (UNCHS, 2001).
Theoretical Framework

It is necessary for international agencies to ensure that their funding reaches a significant proportion of those in need. Still, most funding agencies retain cumbersome procedures for funding. This means long delays before a particular community knows whether it can go ahead with an initiative it has planned and for which it had obtained funding. International agencies need to strengthen support for the institutional processes by which low-income groups organise and develop their own action plans and programmes (UNCHS, 2001). New approaches must be found if aid is to be effective in supporting a diversity of community level initiatives that permit low-income groups to address their self-chosen priorities.

Households

The household is the key unit of production, reproduction and consumption, and the unit where decisions on pooling and allocating labour and resources are made (Hordijk, 2000). So, we cannot analyse actors in the process of urban environmental management without studying households and their roles. Poor households spend considerable amounts of physical, economic and social energies to maintain access to environmental resources, and manage these resources in an effort to minimise the negative impacts of their use on household members. According to Lee (1994), households not only manage environmental resources on their own, but are also actively engaged with other households and in CBOs in addressing common environmental management problems. Households in low-income urban areas experience problems like the lack of safe and sufficient water supply, inadequate sanitation, inadequate housing and inadequate solid waste collection. These environmental problems have a great impact on the daily life of households and their practices. The perception of the environmental problems and related health risks is an important factor determining the undertaking of activities related to solving some of the environmental problems. Other factors that determine whether households undertake environmental management initiatives are the composition of the household, the tenure of the household and the duration that the household has stayed in a specific neighbourhood.

From the foregoing we observe that there are several actors and as many viewpoints in a given society. These actors have both their strengths and weaknesses. Good urban governance requires mediation of the different interests in society to reach a broad consensus in society on what is in the best interest of the whole community and how this can be achieved. It also requires a broad and long-term perspective on what is needed for sustainable human development and how to achieve the goals of such development. The recognition of the different roles that are going to be undertaken by different actors collaborating to improve the quality of the environment is almost meaningless unless they have the capacity to act effectively. For instance, a local authority with adequate capacity has adequate
Challenges of Urban Environmental Governance

powers and autonomy, appropriate boundaries, and sufficient personnel, management, technical and fiscal resources. Many cities in the South are faced with inadequate manpower, limited jurisdictional responsibilities, unstable political systems, interfering rather than supporting governments and a chronic shortage of fiscal resources (Gilbert et al., 1996). There is therefore need to build capacities of all the actors discussed above if the strive to sustainability through partnerships and good governance is to succeed. Secondly, financial, human and technical resources should be availed and mobilised to support prioritised actions. In the following section we examine the Agenda 21 and the Local Agenda 21 process and indicate the strengths and weaknesses of this approach in putting cities on the path towards attaining sustainable development.

1.9 The local agenda 21 process

Agenda 21, the global plan of action to achieve sustainable development in the 21st century, outlines the key initiatives that need to be undertaken by governments in collaboration with other key actors. Running to around 500 pages, there are 40 chapters covering topics from poverty to deforestation and from health to waste management. A novel feature of the Agenda 21 document was the explicit recognition of the roles of ‘major groups’ like women, youth and business. UN conferences since 1992 have increasingly built inputs from such groups into their programmes, in contrast to earlier practice of excluding all, save national governments and a few favoured observer organisations. Agenda 21 provides a powerful practical and conceptual framework to towns and their communities through the steps required to create and implement a programme for achieving long-term economic and environmental sustainability (Kivell et al., 1998). In short, it assists in the preparation of a strategy to take a community forward in a manner, which brings positive, desirable and predictable results.

The onus of implementing the key objective of Agenda 21, that of sustainable development, has been placed clearly on local governments and its constituent communities. The real roots of Agenda 21’s success therefore lie at the micro, local level. Agenda 21 recognises this by pointing out in Chapter 28 that local authorities construct, operate and maintain economic, social and environmental infrastructure, oversee planning processes, establish local environmental policies and regulations, and assist in implementing national and sub-national environmental policies. As the level of governance closest to the people, they play a vital role in educating, mobilising and responding to the public to promote sustainable development (UNCED, 1992). A major assumption here is that ‘all’ local governments have the capability of promoting sustainable development initiatives. However, we note that local governments in some developing countries are extremely weak financially and their
decisions are highly influenced and controlled by the central governments, as it is the case in Kenya.

UNCED proclaimed Local Agenda 21 (LA 21) as the mandate to local governments to translate Agenda 21 to the local level. Ideally, LA 21 programmes are based upon the creation of appropriate local government systems to integrate planning and policy making, with a focus on long-term outcomes and involving all sectors of the community. For the purposes of this study, LA 21 is defined as a participatory, multi-stakeholder process to achieve the goals of Agenda 21 at the local level through the preparation and implementation of a long-term, strategic plan that addresses priority local sustainable development concerns. The LA 21 programme seeks to be both visionary and practical, identifying both long-term and short-term goals. LA 21 cannot exist in isolation from other activities of a local authority and to be meaningful it must address issues of local government reform, budgetary constraints and economic and environmental issues (ICLEI, 2002). It emphasises the need to build upon many local council programmes and strategies already in place and stresses flexible outcomes.

According to Selman (1996), the concerns of LA 21 are not confined solely to those of environmental stewardship, but embrace much wider issues of active citizen participation and ‘quality of life’ – which is perhaps a more friendly term to describe its primary goal. It is a process that asks those in local government to work in partnership with the local community to develop a strategy comprising a series of action plans, which will set out how we will work together towards the goal of sustainable development in the 21st century and beyond (UNCED, 1992; Malbert, 1998; ICLEI, 1997).

The Habitat Agenda (Instanbul, 1996) has reconfirmed the LA 21 framework as a valuable approach to harmonise urban development and environment. The two agendas emphasise the role of cities in development and their potential contribution to sustainable development. They also stress the need to look at urban development articulating social, environmental and economic performance and to strike a balance in the pursuance of reducing urban poverty, improving environmental conditions in the short and long term and enhancing urban economic productivity. Finally, the two agendas also emphasise that local actors (both state and non-state actors) are the key managers of the urban development process. Conceptually, the two agendas highlight the need to institutionalise a new approach to urban development planning and management that articulates environmental issues with social and economic development concerns for the present and future generations. Both agendas call for a shift of emphasis from local government and environment to one of local governance and sustainability (Selman and Parker, 1999). An appropriate
LA 21 seeks to integrate the goals of the Habitat Agenda and Agenda 21 and to devise a strategy for their implementation, which articulates the brown and green agenda. LA 21 attempts to bring long-term environmental sustainability considerations into current issues affecting the quality of life and livelihoods of urban dwellers (particularly the poor). Some scholars have called this objective “greening the brown agenda” (McGranahan, et al., 2001a; Wanderer, et al., 2002).

Agenda 21 does not embrace a set of programme or stipulate objectives, nor are local governments under any compulsion to participate in Agenda 21 or utilise the tools it offers. All local governments aim at providing a healthy and progressive environment for their residents and for local businesses and industry – both now and for future generations (Badshah, 1996). Despite the commonality of this aim, the Agenda 21 programme recognises that each community has unique needs, resources and aspirations, which will be reflected in both the format and content of a plan. The diffusion of Agenda 21 concepts and increasing interest and implementation at local level make it impossible that this style of planning and policy implementation is considered advantageous. When deployed with commitment and community involvement, the LA 21 tools help ensure that the resulting integrated environmental, economic and social strategy will be effective and sustainable.

Proponents of LA 21 programmes argue that they are not starting from scratch, but are rather building on existing programmes, activities and policies (UNCHS, 1996, 2001; ICLEI, 1997). For local authorities that have already undergone integrated strategic planning, LA 21 are concerned with the application of sustainable development principles to that framework. LA 21 principles include: (a) multi-sectoral engagement in the planning process through a local stakeholder group, which serves as the coordination and policy body for moving towards long-term sustainable development; (b) consultation with community partners such as community groups, NGOs, businesses, churches, government agencies, professional groups and unions, in order to create a shared vision and to identify proposals for action; (c) participatory assessment of local social, environmental and economic needs; (d) participatory target setting through negotiations among key stakeholders or community partners in order to achieve the vision and goals set out in a community action plan; and (e) monitoring and reporting procedures, such as local indicators, to track progress and allow participants to hold each other accountable to a community action plan (ICLEI, 1997). We need to note that there is no commonly agreed recipe for developing LA 21s. Local circumstances and national and local institutions dictate the approach to be used.
1.9.1 Evaluation of LA 21 processes

Woolfe (1995) points out that successful local authorities around the world are approaching LA 21 in several ways, depending on their circumstances. They develop documents known variously as a LA 21, an environmental strategy, a sustainable development strategy, or other names. They usually encompass a series of interrelated strategies and/or the incorporation of LA 21 principles into council policies, programmes and practices. LA 21 requires local interpretations of sustainable development for practical applications. As Wilks and Hall (1994) explain, LA 21 is both non-statutory and recent, and some councils not only suffer from lack of awareness of the principles of sustainable development, but also operate in a context of greatly reduced funding. They recommend that local authorities require the powers and resources to implement initiatives such as LA 21, and these are best developed by a regional and national commitment to sustainable development.

It has been argued that, at their best, LAs 21 can provide a means by which environmental issues become more integrated in the planning and management of an urban area. The consultation process, with its potential to secure more cooperation between the different government agencies, private sector, NGOs and CBOs is very important for the successful implementation of various proposals and plans. A critical outcome of this process should be agreement on priorities and actions, and on the partnerships to implement them. LA 21s can also integrate what is often termed the ‘brown’ environmental agenda with the broader ‘green’ or ecological concerns, which has generally proved difficult within conventional, local government-directed environmental plans (McGranahan et al., 2001a).

McGranahan et al. (2001a) correctly note that perhaps the main worry with regard to LA 21 is the relatively few instances of success. It should be expected that all those governments that fully endorsed Agenda 21, thereby undertaking to support the development of LAs 21 in each settlement, are actively involved in its design and implementation. However, there are only very few LAs 21 in the world and most of them are in the developing countries. Another worry, according to these authors, is that by being ‘local’, they may not deal with the transfer of environmental burdens across each locality’s boundaries. Cities can also develop very high quality environments by transferring their environmental costs to other people and other ecosystems (Hordijk, 1999; 2000).

Although LA 21 can ensure better use of limited resources, they do not themselves increase investment capacity. Most urban governments in low and middle-income nations remain weak and ineffective; many have little accountability to their citizens. This means less scope for LAs 21 to become the vehicle for real consultative processes (McGranahan et al., 2001a). Few local governments have enough re-
sources available to fund LA 21 initiatives and action plans. A survey done by ICLEI in 2001 revealed that while municipalities recognise the importance of integrating LA 21 processes into their governance structure, the actual change has not yet occurred throughout the entire municipal system.

In the mid 1990s, about 1,800 cities and towns had developed a LA 21 (Mega and Pederson, 1998). In these towns, however, many questions still arise about the documents prepared. Most seem to represent promises and it is doubtful whether implementation will correspond to any degree of the desired goals. Nevertheless, there is some progress. A recent study by ICLEI revealed that as of December 2001, 6,416 local governments in 113 countries were involved in LA 21 activities. Of these, 44% of municipalities were actively undertaking LA 21 programmes while the remaining were committed to the process, but may not have moved beyond this stage (ICLEI, 2002). This is a significant increase since 1997, when the survey reported 1,812 LA 21 processes in 64 countries (ICLEI, 2002, see also Box 1.1). Implementation of LA 21 in many towns, especially those in the developing countries, is complicated by many socio-political, institutional, legal and financial issues that need to be studied carefully. However, few studies have examined how LA 21 activities are being undertaken and what challenges they face. Moreover, the utilisation of the concepts of partnership and its operationalisation in developing countries have received little attention from researchers (Selman, 1996; 1999). In this study we seek to examine how the process of LA 21 has progressed in Nakuru, in order to elucidate the innovative activities within the process and how the process is utilising the partnership principles. We now re-examine the concept of sustainable development as it is applied to urban areas.

1.9.2 LA 21 and urban sustainable development

One of the main questions that this section attempts to answer is: what is the specific added value of LA 21 with regard to achieving or contributing to the transition to urban sustainable development? The experimental, learning-by-doing approach in the LA 21 indicates that the process has a ‘demonstration’ rather than a ‘pilot’ function. Localising sustainable development is mainly a question of doing the groundwork at the local level and working its way up to the national level. There are numerous examples (also outside LA 21) that confirm this. According to LA 21, spatial planning provides a more comprehensive umbrella for all aspects relating to urban sustainable development.

Given its demonstrative value, LA 21 should be viewed as a learning process. This process should not be unduly extended, but work towards a finality. This finality should certainly include a strategy that permits to reflect on lessons learnt, put them in a comparative perspective and disseminate them. Finality could also include
transition to another status or integration into a broader set of interventions. At a project level, the question of sustainability revolves around the capacity to incite stakeholders to take responsibility and claim ownership of the project (Wandeler et al., 2002). If we go by the definition that LA 21 capacity building interventions are targeting local authorities, then they should claim ownership. However, elected officials stay in power for a limited time only. As the planning and management capacities of team members and council officers increase, they may be promoted to higher levels of government or move to senior positions in partner institutions. If ownership is to be claimed by a wider range of stakeholders, the problem of sustained participation has to be considered.

Box 1.1 LA 21 for poverty alleviation in Africa

In Africa, LA 21 processes have been undertaken by at least 151 municipalities in 28 countries. Only South Africa has established a national campaign to support local governments in undertaking LA 21. Municipalities are adopting LA 21 to best fit their local situations. In Africa, according to a survey of 36 municipalities by ICLEI, municipalities are using a 'sustainable development' approach in their planning process. In this approach, economic, ecological and social considerations are all taken into account in development decisions. Economic development is of particular concern to African municipalities. Local governments identified economic development as both a common overarching approach to LA 21 and as a specific priority (ICLEI, 2002). It is notable that 90% of local government respondents reported poverty alleviation as a priority and 80% identified economic development as such (ibid.). Stakeholder groups are included in 78% of the processes reported by municipalities. There are still groups that generally have not been included in the process. The ICLEI survey results indicate that women groups and youth are included in less than half of the processes reported in Africa and ethnic minorities are included in only 3%. In all, LA 21 processes are in the early stages in many municipalities, but some achievements have already been reported. LA 21 in Africa, as elsewhere, has not been without obstacles. Lack of financial support has been a serious problem for many municipalities. Local governments also have identified insufficient support from national governments and insufficient linkages with international organisations and processes as an important barrier. Lack of expertise was also felt to be a problem by many municipalities. Along with an increase in financial support, local governments identified increased national commitment to and political support for LA 21 and sustainable development as essential to furthering their success.

Source: ICLEI, 2002

While considering the contributions of the LA 21 towards sustainable development, we need to examine specific aspects of the partnerships formed. Partnership building therefore should be one of the LA 21’s major achievements. It is also the area in which LA 21 will need to invest its best efforts in the future. However, sustaining these arrangements is one of the major challenges of the entire process and could also be its weakest point. In a process that revolves around creating
multi-stakeholder forums, dialogue and inter-sectoral collaboration, cross-city communication appears an obvious tool for steering away from local (business) interests, latent conflicts, etc.

1.9.3 Review of attempts to assess outcomes of partnership arrangements in LAs 21

This study focuses on the process and outcomes of building partnerships. To analyse these aspects, we use indicators derived from various studies that aimed to assess the outcomes of partnership arrangements. The first of these is the work of Baud et al. (2001a) who conducted various case studies to examine the contributions of new partnerships in urban solid waste management systems to the quality of life in situations where the provision of this basic service was effectively improved. These authors assessed the contributions made by public-private, public-community, community-private and private-private partnerships to the goals of sustainable development. They developed a criterion for their assessment based on the multiple goals of sustainable development as developed by Satterthwaite in 1997. Using a nine-point indicator system, their assessment showed contributions of different partnerships to urban sustainable development. The indicators that they used in the analysis were minimisation of the amount of waste, maximisation of reuse and recycling, disposal of waste in a controlled fashion, financial viability, employment providing a living wage, legitimacy from the perspective of the authorities and the public, better coordination, cleaner environment and minimisation of occupational health hazards. This assessment dealt only with partnerships within the solid waste management system, while the present study also examines partnerships that have been emerging in water supply and sanitation and under the LA 21 process. Some indicators are also relevant for this study such as financial viability, legitimacy, better coordination and cleaner environment. We go further to assess not only the outcome-type indicators, but also the process-type indicators of the partnership arrangements such as the existence of political will, legitimacy, inclusiveness and accountability.

A second attempt to assess the outcome of partnership arrangements was made by Russel and Anjum (2001), who evaluated the sustainability of an NGO model involved in the provision of urban transport in Pakistan. They indicated that the performance and future development of the NGO will depend on legality, fares review, corruption, representation and training. We will also use some indicators from this model such as legality, wider representation and training as important components that will affect the contributions of partnerships for urban environmental management to sustainable urban development. Given the fact that the emerging partnership initiatives are in an early stage, we have not covered issues
related to corruption, though this aspect also affects the sustainability of initiatives.

Jones and Pisa (2000), in their assessment of the performance of partnership arrangements in land acquisition and their effect on the supply of land for housing, observed that performance measures for partnerships are lacking and that this has had negative implications. They note that one of the factors that has been cited often as affecting the performance of partnerships is political interference (Jones and Pisa, 2000). They observe that without a reasonable set of performance measures and a candid appraisal of existing practice, advocacy of partnerships for urban environmental management will continue to represent a victory of hope versus expectations. Although our study is based on partnerships for urban environmental management, we share the same observation that there is an urgent need to develop criteria of assessing the performance of partnerships and their possible contribution to sustainable development. However, we go further to assess the contribution of LA 21 to sustainable development in terms of processes and outcomes.

Margerum (1996) has proposed a model for measuring the success of integrated environmental management (IEM) and this framework is relevant to our analysis. The model, that he terms "a framework for success" for IEM consists of three features: structure, process and outputs. Within the structure, he argues that we need to examine (i) the laws and policies that allow an integrated approach; (ii) whether the approach is led by stakeholders through a process deemed legitimate; (iii) whether stakeholders are willing to share power and collaborate; (iv) if there is an entity that can initiate and convene the effort; and finally (v) if there are people with time, resources and skills to lead the effort. In terms of the process, he states that the stakeholders should develop clear and effective communication processes, make decisions by consensus, effectively identify and manage conflicts, consult with the general public and clearly identify roles and responsibilities. Regarding outputs, we need to find out if the stakeholders develop familiarity, common goals and mutual understanding; whether the management scope is expanded to involve the full array of actors and factors; whether the stakeholders develop a focused and flexible strategy to guide implementation; whether stakeholders develop processes for monitoring and measuring effectiveness and if stakeholders create structures and mechanisms for coordinated decisions. We use these features and adopt them for the current study together with some that have been developed by Church, 2000 (Table 1.2, see page 52).

Church (2000) has discussed what needs to be considered when assessing the success or failure of LA 21. He contends that one consideration must be the result
of capacity-building processes. There are also issues related to the participation of all those actors whose cooperation is needed, especially the marginalised groups, including youth and women. He indicates that whilst sustainable development might be the ultimate goal of LA 21 processes, environmental improvements should be the first evidence to emerge. If there is no evidence of such improvements, then the value of LA 21 must be questioned. Further, he convincingly puts that any assessment should also consider the nature and quality of consultation, the ideas and proposals that result from it, and the ways in which these have brought about genuine lasting change. He sums up some fourteen issues that need to be considered under what he calls the process, projects and policies. Although his criteria go further to assess the policies, our study on partnerships does not use policy indicators, as policy making remains a domain of the public sector. The criteria that are relevant to our study are shown in Table 1.2.

<table>
<thead>
<tr>
<th>Issues to be considered</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policies</td>
<td>Existence of goals and targets with measurable objectives</td>
</tr>
<tr>
<td></td>
<td>Adoption of the targets by the local authority</td>
</tr>
<tr>
<td></td>
<td>Existence of an anti-poverty strategy</td>
</tr>
<tr>
<td></td>
<td>Presence of a set of indicators linked to targets and funded programmes to meet the targets</td>
</tr>
<tr>
<td>Process</td>
<td>Involvement of many actors and increase in the number of participants and organisations over time</td>
</tr>
<tr>
<td></td>
<td>Existence of political will</td>
</tr>
<tr>
<td></td>
<td>Are partnerships relations legitimate both socially and legally?</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Are the initiatives financially viable?</td>
</tr>
<tr>
<td></td>
<td>Existence of action plans and/or contracts</td>
</tr>
<tr>
<td></td>
<td>Effectiveness in terms of a cleaner environment</td>
</tr>
</tbody>
</table>

*Adapted from Church (2000)*

Church does not undertake an assessment of LA 21. The present study presents such an assessment, though based on the limited information that is available. In our study of partnerships, we will concentrate on indicators that are related to process and outcomes only. These include: broader public involvement indicated by the number of actors in any partnership, capacity-building initiatives, existence of political will, better coordination, financial viability, legitimacy, whether the partnerships lead to a cleaner environment and, finally, whether awareness has been created.
Figure 1.1 Conceptual framework

The physical environment (the natural system) → URBAN ENVIRONMENT

The built environment (the infrastructural system) → URBAN ENVIRONMENT

The socio-economic environment (the human and support system) → URBAN ENVIRONMENT

SOCIO-ECONOMIC PROBLEMS → URBAN ENVIRONMENTAL PROBLEMS → URBAN MANAGEMENT

SUSTAINABLE DEVELOPMENT

PUBLIC SECTOR

PRIVATE SECTOR (commercial and social) → CIVIL SOCIETY

COLLECTIVE ACTION: household responses and CBO activities

URBAN ENVIRONMENTAL MANAGEMENT (UEM) → PARTNERSHIPS IN LA 21 PROCESS

CO-MANAGEMENT

PARTNERSHIPS IN UEM

COMPONENTS OF PARTNERSHIPS: objectives, activities, actors, internal arrangements and outcomes

ASSESSMENT OF PARTNERSHIPS PROCESSES AND OUTCOMES
1.10 Conclusions

In this chapter we reviewed the main concepts employed in this study and presented an overview of the emerging initiatives in urban environmental management. This results in the theoretical framework as visualised in Figure 1.1 (page 53). We observed that there are various approaches to deal with the negative effects of urbanisation as they affect the various components of the urban environment (i.e. the physical environment, the built environment and the socio-economic environment (Bossel, 1999)). One of these negative effects is the deficient provision of basic infrastructure services, such as water, sanitation, solid waste collection and drainage. This deficiency forms one part of the urban environmental problems, i.e. the ‘brown’ agenda, which deals with the health risks and threats that emerge from the local environment. In addition to these ‘brown’ agenda issues, there is growing concern with the ‘green’ agenda or environmental problems that threaten long-term ecological sustainability. This concern can be placed against the background of the sustainable development debate, which seeks to reconcile economic development with ecological protection for the sake of present and future generations.

Our examination of the concept of sustainable development showed that definitions of the concept differ widely, but most of them suggest a balance between the environment, the economy and socio-cultural resources. From the environmental or ecological point of view, the emphasis is on the management of the environment in order to maintain the integrity of ecosystems and resources. From the economic point of view, the goal is to maximise human welfare within the constraints of existing capital stock and technologies. From the social point of view, the emphasis is on human actors and the roles played by their relationships and patterns of social organisation (Emmett, 1998). With the rise to political prominence of the concept of sustainable development, urban managers have followed different courses with regard to its translation into their policies, institutions and practices. Attempts to attain sustainable development in urban areas have led to different approaches. In general terms, urban sustainable development means that urban growth is guided in a manner that does not close options for the future. Urban environmental management then seeks to address the challenges of urban growth in such a way that the process can lead to sustainable development.

By aiming to reconcile economic growth with environmental protection, urban environmental management bears a close relation with sustainable development. We have seen that urban environmental management also seeks collaboration between various actors, sectors and jurisdictions and as such is related to the concept of governance. We operationalised the concept of urban governance as the sum of many
ways in which, public and private institutions, civil society organisations and individuals, plan and manage the common affairs of a city. It is a continuous process through which diverse and even conflicting interests may be accommodated and collective action can be undertaken. It includes formal as well as informal arrangements and the social capital of citizenry. We observed that citizens, communities and other actors from the popular sector cannot simply be left to go ‘their own way’ within a partnership and that they need to be linked together into some form of co-ordination and mediation, to prevent a partnership from falling apart. This means that all other actors from the public and private sectors must participate to ensure that good urban governance is maintained.

Urban environmental management is also related to the concept of partnerships. Forming partnerships with a wide array of public, private and civil society actors and making them function is not so easy as has been proposed. There is need to acknowledge the operational difficulties and the strengths and weaknesses of different actors. This implies that collective action aimed at solving different urban environmental problems through collaboration needs to be supported by appropriate institutional changes and responses. We argued that not all actors – be they citizens or communities – have the intentions, abilities and/or resources to take on the responsibilities that partnerships entail. The state should therefore retain such mechanisms as ‘safety nets’ and compensatory mechanisms to protect the least active citizens and communities. Another issue that we need to highlight here is that an increase of the local dimension in new partnerships arrangements gives rise to complicated problems of coordination: how can some broad notion of the public interest be delivered if citizens and communities are left to go their own way? This implies that the state still has a key role to play in the delivery of strategic policy and governmental coordination. We observed that the existing literature on partnerships lays more emphasis on the process of forming partnerships rather than on the substantial outcomes that these structures achieve. We concluded that there is an urgent need to examine the outcomes of different partnership arrangements and how they really lead to value-added outcomes, before we can advocate their formation.

The present study examines emerging partnership arrangements as an approach being used as a means of attaining sustainable development goals. A parallel approach that we examine is the LA 21 process, which applies the partnership principle as well. The process of developing LAs 21 has been going on since 1992 and several attempts have been made to study the process. A key feature of LA 21, which distinguishes it from many other processes, is that it attempts to encourage the active involvement of the community to determine and implement actions for local sustainable development. There has been a dramatic growth of LA 21 proc-
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esses in the past five years and this indicates the continued relevance of this participatory, multi-stakeholder planning process to address local issues of global concern. The success of these local initiatives is evidenced by the integration of LA 21 into municipal systems in some countries and improvement in specific areas such as air quality, water resources management and public participation.

Some (though few) studies have attempted to assess the contributions of partnerships to urban sustainable development and we will utilise some process-type and outcome-type indicators derived from them to do such an assessment for Nakuru, Kenya. It is our contention that once such an assessment is done, it would be easy to identify the weak areas and improve them in the future. Now that the theoretical framework of the study has been set, the following chapter will present the research problem and methodology selected to undertake this study.
2 Methodology

This chapter presents the methodological procedures that were used in this study. We first discuss the research problem, main objectives and relevance of the study. Next, we formulate the research questions and discuss the methods utilised.

2.1 Problem statement

The Municipal Council of Nakuru (MCN) is in charge of providing basic services and the necessary environmental infrastructure. However, the demand for these services – especially water, garbage collection and sanitation facilities – is exceeding the available supply because of the rising urban population and informal settlement. It is of utmost necessity to examine how the role of the MCN has been changing from that of provider to that of facilitator and coordinator of different actions by a wide variety of actors in the provision of water, sanitation and solid waste management services. It is important to study how new partnerships between different actors emerged and operate and what problems they are facing in these three areas of urban environmental management. Partnership between different actors, municipal authorities, central government agencies, NGOs, CBOs, households and the private sector is not a new phenomenon. What is new is the commitment by local authorities to work with ‘other sectors’ to ensure adequate provision of urban basic services.

Our study identifies some problems associated with partnership arrangements, using the case study method. The MCN, in its attempts to solve some environmental problems and improve the service delivery process, has been looking for a new approach. The 1990s saw interventions in the areas of environmental management by NGOs, which mobilised local communities to participate in environmental improvement initiatives. Most of the existing self-help groups were sensitised about environmental management issues through barazas and community environmental education organised by the NGOs with support from the MCN. Today, various community-based-organisations (CBOs) are undertaking joint activities with the MCN and NGOs. There has also been a rise in the number of small-scale private enterprises offering services related to solid waste management and water supply to households.

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10 This is a Swahili name for public meetings. They are normally used to pass specific messages and government policies to the public.
While the principles of local participation and partnerships are now quite widely accepted and promoted, there is relatively little documentation on the strengths and weaknesses of different models and structures of partnerships and forms of participation or on their outcomes. Researchers and practitioners fail to assess the performance of partnerships. Because of the unequal power relations between different partners, the performance may be mandated or coerced by one party on the other. The public-civil society-private partnerships may not always be effective or should not always be sought. The goals and core objectives of various actors are always different. Clarity about the allocation of roles and identification of the core objectives is critical to successful partnerships. Little is still known, however, about the functioning of partnerships.

The LA 21 in Nakuru has re-emphasised the need for increased partnership between different actors in the area of urban environmental management. There is need to study the initiatives being undertaken through partnership arrangements between different actors. The operational dimension of the partnerships is complex and an examination of partnership outputs and an assessment of their contribution to urban sustainable development are therefore important. The constraints that these innovative approaches are facing need to be identified and clarified. For instance, only limited resources have been available for distribution into the LA 21 programmes. Local communities and their organisations are quickly incorporated into the process without having their roles specified. The effectiveness of this process largely depends on whether the communities will identify themselves with the initiated activities. This study examines how these new initiatives are being incorporated in the existing local institutions and organisations and what perceptions the community has towards them.

2.2 Research objectives

The recently emerging importance of participation and partnerships in urban environmental management calls for empirical analysis of the actual roles that these approaches can play in a specific setting. Most proponents of participation and partnership approaches assume that they will be put in practice with ease given the appropriate preconditions for their success. We contend that, until recently, studies aimed at establishing the actual performance of partnerships in urban environmental management were limited to large cities, mainly in developed countries or to success cases in the South. It is now necessary to understand the dynamics of these new forms of governance to distil lessons that can be learnt and to identify the factors that affect the effectiveness of partnerships. We therefore define as the main aim of this study:
to examine the realities, possibilities, problems and constraints of partnership arrangements in urban environmental planning and management between the municipal government, central government authorities, households, CBOs, NGOs and the private sector.

More specific objectives are:

1. To identify, analyse and compare the various actors involved in solving environmental problems related to water supply, sanitation and solid waste, thereby examining the roles played by the different actors.

2. To identify different kinds of partnership arrangements, and their specific outcomes, between two or more of the following actors: local communities and their organisations, NGOs, local governments, the private commercial sector and other private organisations, and external support agencies.

3. To critically examine the process of LA 21 and its specific outcomes and assess how it has utilised the partnership principles.

4. To assess the process and substantial outcomes of the partnership arrangements studied in order to inform policy makers about the factors that affect the formation and functioning of partnership arrangements and the constraints that need to be addressed to ensure good urban governance.

5. To recommend appropriate measures in the legal and regulatory framework and the institutional, political, environmental and financial contexts.

Addressing these objectives, we expect that the results of the study will help the government, NGOs and other interested actors working in Nakuru in their attempts to improve the environmental quality and the health status of the town. With this study we also aim to contribute to the ongoing debates on urban management and urban governance, state-civil society relationships and sustainable development.

2.3 The central research question

The central research question addressed in this study is: how do partnerships in urban environmental management, particularly those in the LA 21 process, contribute to sustainable development in terms of processes and outcomes? From this main research question we derived some specific research questions that guide the present research:

1. Who are the actors involved in the urban environmental management process in Nakuru, what problems are they dealing with and under what institutional framework do they operate?

2. What kind of partnership arrangements in urban environmental management has been developed and what are their major characteristics and outcomes?
3. What does the LA 21 process in Nakuru entail, to what extent it utilises the partnership approach and what are its specific outcomes?

4. What are the process and substantial outcomes of each of the various partnerships observed in Nakuru?

2.4 Methodology

Although there have been an increasing number of case studies of urban communities and environmental management, in general very little emphasis has been placed on methodology. What is evident from the existing literature is a wide range of macro-descriptions of cases in the developing world and some few evaluation studies on partnerships in the developed world, especially the UK (Selman, 1996). According to Selman (1996), two approaches can be distinguished in studies concerning local environmental conditions and responses: those which provide firm information about the environment, which is used as a basis for designing policy options, and those which focus on citizen involvement in debates and decisions. The methodology utilised in this study borrows much from the second approach. Some methods relate mainly to environmental data and trends, while others refer to partnerships, awareness and participation.

The main methodology used in this study is based on the case-study approach. This generated a wealth of information concerning responses of households to environmental problems, the role of various actors and organisations and specific examples of partnership arrangements. The data were collected primarily through in-depth interviews with a wide range of key actors in Nakuru (see Section 2.4.1).

Focusing on the research questions, the research design was geared to local circumstances. As a preliminary step, an extensive survey of existing information was carried out to identify community groups, NGOs and private organisations dealing with water supply, sanitation and solid waste management. A rapid urban appraisal was done to identify different settlement structures, actors and other organisations in the areas of water supply, sanitation and solid waste management. It became clear that collective actions in these areas were concentrated in the low-income, high-density settlements and were dealing mainly with water supply and solid waste management. From this initial appraisal, it was possible to identify areas where the MCN was still supplying services and areas where the private sector had intervened.
2.4.1 Operationalisation of the research questions

1. Who are the actors involved in the UEM process in Nakuru, what problems are they dealing with and under what institutional framework do they operate?

The actors studied were those that have been identified by Agenda 21 and those examined by Davidson and Peltenburg (1993) and UNCHS (1996; 2001). For purposes of convenience we focused on those actors (a) who control the relevant implementation instruments and powers; (b) who possess relevant information and expertise for the formulation and implementation of strategies; and (c) whose interests are affected by environmental management strategies and actions. It is important to note that these categories are not mutually exclusive and that there is overlap between them. On the basis of these criteria, groups of people representing low-income and private sector groups and interests (especially from the informal private sector) at both the city and neighbourhood levels were studied. The actors can broadly be classified in the following categories: the MCN and those government agencies, formal and informal private sector organisations, CBOs, NGOs and households that work together in one or more areas.

The Municipal Council of Nakuru (MCN)
This is the elected government of the town and the level of government with direct contact with the people through their representatives. The MCN fulfils many different functions. It is the major governmental organisation for the provision of local services and the first point of contact with government for most citizens. We focused on how different institutions and organisations have formed cooperative working relations with the council in the areas of water supply, sanitation and solid waste management. Other working relations forged by other actors without necessarily incorporating the MCN were also of great importance for this study.

Government agencies
The government agencies that are represented in Nakuru were also selected to be interviewed on specific issues. The Provincial physical planning officer, the District physical planning officer, District Environmental officer, the Lake Nakuru national park warden and an officer with the Department of Social Services were all interviewed. In the follow-up interviews, officers within the Ministry of Environment and natural Resources were also interviewed.

Private sector organisations
The private sector ranges from small, individual garbage collectors or water vendors to large local companies, which operate or develop large segments of water supply, sanitation and solid waste management (UNDP, 1996; UNCHS, 1996; Davidson and Peltenburg, 1993; Faulkner, 1997). Participating firms are normally concerned with the profitability of the enterprise. Employees within the private sector are...
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concerned with issues of job security, working conditions and the particular social status associated with certain jobs.

Community-based organisations (CBOs)
The definition of CBOs adopted for this study is borrowed from Davidson and Peltenburg (1993) who define CBOs as the types of organisations, formal or informal, that are based on a group of people living or working together and who associate to pursue common interests. They are characterised by being local in focus and being directly accountable to their constituents.

Non-governmental organizations (NGOs)
NGOs are defined as associations established to pursue developmental objectives on a non-profit basis. They are associations of people, often professionals, who provide support to certain population groups. NGOs of major interest for this study are the World Wildlife Fund (WWF) and the Intermediate Technology Development Group (ITDG), which are active in the areas of solid waste management and shelter improvement, respectively.

Households
Households are defined as a person or a group of persons generally bound by ties of kinship who live together under single roof or within a single compound and who share community life in that they are answerable to the same head and share the same food (Casley and Kumar, 1988). This definition captures the spirit of extended family that is still very common in Kenya.

Involvement is defined here as an organised opportunity for all stakeholders to voluntarily take part of and have their voices heard in urban environmental management and the decision-making process, in order to improve the process and the quality of the living environment. In participatory decision-making, decisions should be made as closely as possible to the people primarily affected. We operationalised this by measuring (i) attendance to and participation in decision-making meetings by different groups and actors; (ii) contributions in terms of money or labour to environmental management initiatives; (iii) attendance to and participation in clean-up exercises; and (iv) the frequency with which an actor is consulted on specific issues or with which he has a function and role in the planning process.

With respect to the level of involvement (as defined above) different levels of activity can be filtered out: the household level (see working definition below), the neighbourhood level and the town level. We defined the neighbourhood level as composed of a number of households sharing similar socio-economic and environmental conditions and having socially constructed boundaries. In Nakuru, neigh-
bourhoods correspond to estates that are either planned or unplanned. We collected data from unplanned and informal low-income neighbourhoods. The town level refers to the entire municipality.

The quality of any urban environment is affected by many factors, including the physical environment and location, historical background, population dynamics, the scale and nature of human activities and the structures within it. A documentary analysis of all these factors was done mainly on the basis of recent studies by the Department of Urban and Regional Planning (DURP) and related literature.

The role of local government in the provision of urban basic services and other infrastructure has been emphasised in scholarly and popular literature. For our study on partnerships we need to identify how the local government institutions and the legal framework will affect the formation and functioning of emerging partnership arrangements. To get this information, secondary sources and documents from the Ministry of Local Government were consulted. The Local Government Act (Cap. 265 of the Laws of Kenya) was studied to examine the powers of the local authorities. To identify the different institutions dealing with environmental management in Kenya, we referred to several policy documents such as sessional papers and development plans. Research reports and literature on the legal framework were also used. We further examined the laws that affect environmental management in Kenya and captured the recent legislation and its implications for emerging partnership arrangements.

2 What kinds of partnership arrangements in urban environmental management have been developed, what are their major characteristics and what are their outcomes?

We developed a framework for analysing partnership arrangements\(^\text{11}\) between two or more actors, taking into account a number of aspects, such as who are the partners, what do they seek to achieve, how is the partnership implemented, how will it change over time, what are the challenges and obstacles and the options available for effective functioning of the partnership. These aspects will be discussed under three headings (cf. Table 1.1):

- *The mandate*, i.e. the sphere of activity and level of intervention, including aims, range of activities and the scale of intervention.

\(^{11}\) Because of the overlapping nature of partnership arrangements observed in Nakuru, this framework is meant to indicate the general differences between these arrangements. It is not totally inclusive of partnership aspects and a more detailed framework may be developed for other situations.
- **Arrangements**, including the range of actors included and excluded, the nature of relationship (formal or informal), the decision-making structure, the division of tasks in the partnership arrangements and the monitoring and evaluation mechanisms.

- The **outcomes** of the partnership arrangements.

3 **What does the LA 21 process in Nakuru entail, to what extent does it utilise the partnership approach and what are its specific outcomes?**

The aims, goals and reasons for starting the LA 21 process need to be identified. This was done through a series of interviews with officers who have been involved in the process and also though the perusal of documents and progress reports. Other data required to answer this research question refer to the consultation process: how was it done and with whom? What did this process manage to produce? Information was generated through a series of interviews and a workshop organised to assess the views of stakeholders on the LA 21 process. Another issue of interest is the question of the partners involved in the process and their major characteristics. Interviews were held with the programme coordinator, while the minutes of frequent meetings during the process also provided some of the information required. Other documents and research reports by DURP were consulted as well.

4 **What are the process and substantial outcomes of each of the various partnerships observed in Nakuru?**

To answer this question, we build on the three pathways to sustainable development as identified by Bührs and Aplin (1999): one based on environmental policy, another one based on institutional reform and the third one on social mobilisation. These pathways refer to policy, process and outcome, respectively. It is a difficult task to assess whether the stated aims of partnerships result in specific output or outcomes and what factors make them effective. This is because some partnership outcomes take long to be seen, especially those that are related to the improvement of environmental quality. Some scholars and practitioners argue that despite a call from the UNCHS that different forms of partnerships in different contexts should be monitored effectively, there is still no agreed set of performance indicators to guide such an assessment. Actually, some confusion exists about whether the assessment should be based on the normative potential of partnerships or on their practical output. Without clear performance measures, studies tend to combine preconditions and the outcomes of partnerships to assess the failure or success of such initiatives. The absence of performance measures for a policy that features so prominently on the international agenda is worrying enough, but is heighten by observations that “very few partnerships in either industrialised or developing countries have managed to achieve results on a significant scale” (Jones and Pisa, 2000).
In terms of both processes and outcomes, the partnerships have the potential to offer significant benefits. However, there is considerable difficulty in disentangling what partnerships produce as opposed to what some of the individual programmes and projects of different actors or agencies participating in the partnership produce.

As regards the process, important questions to be answered are:
- Have all the stakeholders been consulted?
- Is there political will and support for the process?
- Are the partnership arrangements socially and legally legitimate?
- Have accountability mechanisms been put in place?

With respect to the outcomes, the following questions need to be addressed:
- Are financial resources available to support different joint activities?
- Have action plans been developed?
- How effective are partnership activities in terms of a cleaner environment and improved service provision?

To answer these questions, we use the process-type and outcome-type indicators listed in Table 2.1.

Table 2.1 Process and substantive outcomes

<table>
<thead>
<tr>
<th>Issues to be considered</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>The number of actors involved and increase in the number of participants</td>
</tr>
<tr>
<td></td>
<td>and organisations over time</td>
</tr>
<tr>
<td></td>
<td>Existence of political will</td>
</tr>
<tr>
<td></td>
<td>Are partnership relations socially and legally legitimate?</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Are the initiatives financially viable?</td>
</tr>
<tr>
<td></td>
<td>Existence of action plans and contracts</td>
</tr>
<tr>
<td></td>
<td>Effectiveness in terms of a cleaner environment</td>
</tr>
</tbody>
</table>

2.4.2 Research methods

We started with an inventory survey, in order to identify the various actors involved in water supply, sanitation and solid waste management. During this time it was possible to negotiate entry points and get familiarised with the current situation in the delivery of services in the town. Having been a resident in Nakuru for close to six years and also involved in the training of local authorities in integrating environmental issues in the local authority development programme, the researcher had an advantage in accessing some basic information about the growth of the town and the changing environment in the delivery of basic environmental infrastructure.
Challenges of Urban Environmental Governance

The changing role from trainer to researcher had its own limitations. However, when approaching community leaders and CBO officials at the local level, the researcher took advantage of having interacted with them at a different level for a long time. It was therefore easy to establish rapport with the respondents after a brief introduction. The respondents rapidly understood the importance of the study and they were ready to offer the information needed.

A variety of information sources was used to provide different perspectives on similar issues, applying a combination of qualitative research techniques. This included direct and participant observation, secondary sources of data, open interviews with household heads and interviews with key informants. Focused group discussions were used especially when interviewing CBOs.

Firstly, we employed direct observation during the entire fieldwork period. Both the principal researcher and the research assistants documented various issues through observation, such as clean-up exercises, garbage heaps, location and type of the toilet facilities and neighbourhood types. Direct observation is a means for certifying, challenging, complementing or extending local knowledge and opinion, rather than a technique to be used in isolation (McGranahan, et al., 1997). This research also benefited much from secondary sources of data; information collected from a wide variety of the institutions that are operating in Nakuru. Several research reports and survey reports were sources of information. Written sources included, among other ones, the Urban Pacts I and II, research reports by the Department of Urban and Regional Planning (DURP) and the Housing and Building Research Institute (HABRI), consultative workshop reports and sectoral studies done by DURP and HABRI during the preparation of the Nakuru Strategic Structure Plan (SSP), various research and survey reports and the MCN Annual reports. The secondary sources were used mainly as background information on Nakuru and to determine the gaps that this study intends to fill.

We utilised semi-structured interviews during the household survey and the institutional surveys, combining some predetermined questions or activities with more open-ended discussions. Three types of interviews were held: with households, with community leaders and representatives of CBOs at the community or neighbourhood level and with key informants with specialised knowledge of some topics of interest. The household survey employed in this study was designed to generate information on household profiles, environmental conditions, as well as on inter- and intra-household partnership and group membership in four low-income neighbourhoods. Focusing on water supply, sanitation and solid waste management, the survey illustrated important aspects of environmental problems in these neighbourhoods. Formal and informal institutions between the households.
and the utilities have an important role to play in environmental management to compensate for the fact that these utilities rarely reach the individual households. Collecting data on a variety of household characteristics makes it possible to analyse important relationships between different aspects that make up the quality of life (see Box 2.1). The sampling procedure for selecting households in four low-income neighbourhoods was simple random sampling whereby 120 households in each of the four neighbourhoods were selected for interviewing (see Section 2.4.3).

Box 2.1 Topics covered by household interview schedules

<table>
<thead>
<tr>
<th>Background information: household size and age structure; indicators of income and wealth; gender of household head; education; migratory status; type and quality of residence; size of residence; tenure of residence; neighbourhood characteristics.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water supply: sources and provider of water; type of water supply by use; ease of access to drinking water supply; water storage practices; water supply disruptions; frequency of payments.</td>
</tr>
<tr>
<td>Sanitation: form of sewage disposal; provider of the same; reliability; payment practices; toilet sharing; flow of sewed water into drains.</td>
</tr>
<tr>
<td>Solid waste: amount of solid waste; solid waste storage practices; waste disposal practices; waste picking and recycling; who collects waste; frequency of collection; dumping behaviour; location of serious solid waste problem; household waste separation.</td>
</tr>
<tr>
<td>Group membership: group membership; frequency of meetings; average time spent in meetings; group activities; contributions; functions and roles played.</td>
</tr>
<tr>
<td>Perceptions on CBOs, NGOs, MCN and private sector: perception of the provision of services, the actors and the roles they play, etc.</td>
</tr>
</tbody>
</table>

Another 90 households benefiting from private solid waste collection were purposively selected and interviewed. These households were selected from a list provided by three small-scale private companies operating in Nakuru. These companies – Salvage Services, Nakuru Hygiene services and Parrots –have entered into contractual agreements with households in the middle-income settlements of Fehold, Shaabab, Section 58 and Racecourse.

In order to limit the length of the household questionnaire, information on local conditions that are similar for all households in the area was gathered through interviews with community leaders and officials of the CBOs. The information collected at community level included the condition of local infrastructure such as refuse receptacles and the sources and availability of water and sewerage; the presence and nature of community organisations; and the relationship between different actors.
Key information interviews were held with selected key informants, such as the MCN departmental heads, officers involved in the LA 21, private sector executives like waste pickers and their organisations, leaders of four CBOs and officials of the World Wildlife Fund (WWF) and Intermediate Technology Group (ITDG). In the inventory study we had identified 41 respondents from the public, private and civil society sector, who were actively involved in some form of partnership arrangement and were all interviewed. The distribution of the key respondents over the various organisations is given in Table 2.2. More information about the way they were selected is given in Section 2.4.3.

Table 2.2 Distribution over various organisations and sectors of respondents interviewed

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCN</td>
<td>5</td>
</tr>
<tr>
<td>NGOs (WWF and ITDG)</td>
<td>5</td>
</tr>
<tr>
<td>4 CBOs</td>
<td>8</td>
</tr>
<tr>
<td>3 industries</td>
<td>3</td>
</tr>
<tr>
<td>NAQWASS</td>
<td>2</td>
</tr>
<tr>
<td>LA 21</td>
<td>2</td>
</tr>
<tr>
<td>Provincial physical planner</td>
<td>1</td>
</tr>
<tr>
<td>District environmental officer</td>
<td>1</td>
</tr>
<tr>
<td>District physical planner</td>
<td>1</td>
</tr>
<tr>
<td>Ministry of Social Services</td>
<td>1</td>
</tr>
<tr>
<td>KWS</td>
<td>1</td>
</tr>
<tr>
<td>Informal private sector</td>
<td>8&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Private sector representatives</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
</tr>
</tbody>
</table>

<sup>a</sup> Includes three respondents engaged in water supply; one in sanitation and four in solid waste management.

Data were also collected through focused group discussions. In these discussions, small groups of representatives from CBOs were brought together to discuss a specific issue. Focused group discussions were chosen because they are relatively cheap and quick to conduct, while the interaction between participants leads to relatively spontaneous responses and creates a high level of involvement. The participants share a pool of experiences, and the discussions provide a consensus on the most typical experiences, but also less typical experiences, differences of opinion, and examples may come to the fore. The questions and discussions are open-ended, thus preventing interviewers' preconceived ideas and biased results, and placing more emphasis on the participants' points of view. It is also possible to purposively select subgroups of the population (i.e. those that are going to
provide the most meaningful information) and to make selected comparisons. In such a case one should be aware, however, that the results are biased and should not be interpreted as representing the full spectrum of opinions (Rakodi, 2000). Most of the groups with which focused group discussions were held comprised 5-10 participants and discussions lasted for less than two hours. The participants were encouraged to discuss freely and all members were encouraged to contribute. In most instances, the researcher acted as a moderator of the discussion, while a group member acted as the facilitator. A secretary recorded all the important facts verbatim in a notebook. Most of the data presented in Chapter 7 was enriched through a two-day workshop with all the stakeholders involved in the LA 21 process, during which the focused group discussion methodology was also employed. The International Institute for Environment and Development (IIED) availed funds for this workshop.

Fieldwork was carried out between April 1999 and March 2000. Due to an outbreak of cholera in Lakeview, Kaptembwo and Rhonda in April 1999, we had to reschedule the interviews in these three settlements for the first weeks of May 1999. The situation was soon arrested, however. This outbreak was a good indicator of the environmental health problems being experienced in the selected study areas. It did not, however, affect the output of our interviews and enriched the information that we were looking for. We used the SPSS statistical package to analyse the household survey, the results of which are presented in Chapter 5. The sequence of activities and presentation of the findings is given in Figure 2.2.

**Figure 2.1** Sequence of activities and presentation of the findings

![Diagram of sequence of activities and presentation of findings](image)

**2.4.3 Sampling techniques**

*The household survey*

The household survey was carried out in four low-income neighbourhoods, viz. Lakeview, Mwariki, Kaptembwo and Ronda. The four settlements were selected
because there is hardly any regular collection of garbage, because they use the same mode of sanitation and because they are faced with regular disruptions of water supply. Many community-based organisations and communal activities are concentrated in these areas. The neighbourhoods border Lake Nakuru National Park, which explains the intervention of the World Wildlife Fund (WWF) in the Lake Nakuru Development and Conservation project. The Green Towns project is also active in these neighbourhoods, with its Environment and Urban Development Training programme. These two outside agencies were instrumental in the formation of the community groups and organisations that can be found in these communities.

A pilot survey conducted during the inventory study revealed that the population in the settlements was highly heterogeneous, but that most of the activities related to environmental management in low-income settlements were homologous. Households were selected using simple random sampling. We used the municipality clusters as defined by the Central Bureau of Statistics (CBS) to select a representative sample of 120 respondents from four out of the 15 clusters distinguished by the CBS. All the clusters have about 1,400 households and we take the 481 households from the four clusters as representative.

<table>
<thead>
<tr>
<th>Cluster name</th>
<th>Estate name</th>
<th>Housing density</th>
<th>Number of households in the sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lakeview</td>
<td>Lakeview</td>
<td>medium/high</td>
<td>121</td>
</tr>
<tr>
<td>2. Mwariki</td>
<td>Mwariki</td>
<td>high</td>
<td>120</td>
</tr>
<tr>
<td>3. Ronda/Pondamali</td>
<td>Kvaronda</td>
<td>high</td>
<td>120</td>
</tr>
<tr>
<td>4. Ronda/Kaptembwo</td>
<td>Kaptembwo</td>
<td>high</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>481</td>
</tr>
</tbody>
</table>

We need to point out that the 15 CBS clusters cover only the built up areas within the old municipal boundaries prior to the 1972 and 1992 boundary extensions. There are no clusters in the newly settled areas or what is now referred to as the peri-urban areas of the municipality. Some of these areas are former rural agricultural areas that were incorporated into the municipality after the review of municipal boundaries in 1972 and 1992.

**The selection of key respondents**

Interviews with selected key informants within the MCN were held on a continuous basis during the entire fieldwork period. Appointments were made with Heads of departments and the interviews were guiding by pre-arranged interview schedules. These interviews were designed to generate information on the institutional set-up
of the council, the process of urban environmental management and the structure of services that are central to this study. One of the major problems with these interviews was that the appointments were rarely honoured because of the tight schedules of the chief officers. We continued re-scheduling the appointments, however, and managed to get all the information required. In addition, there were frequent strikes within the MCN as a result of delayed salaries between October 1999 and February 2000 and this kept on interrupting the interviews. This did not, however, have any serious impact on the data collected.

Interviews were also conducted with the officials involved in the LA 21 process.

Formal and informal actors in the private sector were important for our study, in order to be able to analyse the degree to which they are involved in water supply, sanitation and solid waste management. The private sector was found to be actively involved in the collection, recycling and disposal of solid waste. Three private companies are involved in the collection and disposal of garbage in middle-income areas. We studied Nakuru Hygiene Services, Salvage Services and Parrots garbage collectors. Nakuru Hygiene Services was also involved in other cleansing services in a number of institutions. The other two – Parrots and Salvage –specialise in house-to-house garbage collection and its disposal in a designated dumping site. Informal private sector actors included the water vendors, waste pickers, as well as their networks.

An up-to-date inventory of CBOs was generated from the Municipal records. Most of the CBOs are registered with the Department of Social Services. We selected the CBOs operating in the settlements where a household survey was conducted and crosschecked the list with one from the MCN. We collected information about the activities the CBOs were undertaking, the areas in which they were operational, the projects undertaken, the partners, the problems they face while undertaking their activities, leadership and the relationship of the CBOs with the MCN. Most of the CBOs are involved in self-help activities, while a few of them are also involved in clean-up exercises in their neighbourhoods.

The World Wildlife Fund (WWF) and the Intermediate Technology Development Group (ITDG) are the two major NGOs dealing with environmental management issues. WWF has been involved in solid waste management and environmental awareness campaigns, while ITDG has been involved in the upgrading of the housing stock in Rhonda and Kaptembwo.

The interviews with key informants were conducted in two separate rounds, the first of which took place between July and December 1998 and the second between
August 1999 and January 2000. The interviews were open-ended to allow generation of additional information and structured by a set of pre-prepared lead questions, which were revised from time to time to capture some specific aspects. Follow-up discussions were also held from time to time. The respondents were selected through purposive sampling: only those people who were actively involved in partnership arrangements were interviewed. They were selected from the departments most engaged in water supply, sanitation, solid waste management and the LA 21 programme.

2.5 Conclusions

In this chapter, we made it clear that there is an urgent need to undertake a study of partnership arrangements in urban environmental management. It was observed that there is a knowledge gap in understanding the forms and functions of new partnership arrangements that have been coming up in Nakuru and also how the concept of partnership has been utilised in the LA 21. In this study we intend to capture environmental initiatives and responses by combining process-based and outcome-based approaches. To this end, the study addresses actors involved in urban environmental management at three levels of analysis: the household level, the settlements and CBOs at neighbourhood level and the municipality level. We further clarified that we employed a combination of several methods such as surveys, interviews, observations and focused group discussions. This means that we make an ambitious attempt to analyse partnerships at different levels, indicating the challenges that they face in their attempt to improve the quality of the living environment in Nakuru. With this study we hope to contribute to the ongoing debates on local level environmental initiatives, partnerships and attempts to achieve urban sustainable development.
3 External Conditions for Local Partnerships

In this chapter, we explore urban challenges and the political structure, local government and institutional framework for environmental management that provide the context to address these challenges. We also present the legal framework for environmental management and examine the attempts that have been made towards the implementation of Agenda 21.

3.1 Three decades of rapid urban growth

In the 1960s and 1970s, Kenya was experiencing a polarised urban development with Nairobi and Mombasa as the two main cities, with more than half of the urban population (Kiamba, 1994). To counter this trend, the government adopted a regional development strategy, which emphasised the promotion of selected principal urban growth centres (Kiamba, 1994; Obudho, 1994). The national development policy that evolved in 1969 was outlined and became effective in the second national development plan (1970-1974). This plan aimed at the diffusion of population from the two main cities and targeting it to secondary towns by channelling investment and improving their physical infrastructure as well as social amenities. Commenting on this spatial development policy and its implications for urban areas, Obudho (1994) states that:

"the results of the 1969 census showed that Kenya has been relatively successful in diverting urban growth to secondary urban centres, thus promoting regional equity and avoiding excessive population concentration in Nairobi and Mombasa" (Obudho, 1994: 204).

In 1969, the urban population was estimated at 1.8 million (Republic of Kenya, 1981) and by 1989, it had reached 3.9 million. Between 1979 and 1990, the population living in the urban areas in Kenya increased from 15.1 to 18.9% of the total population (Republic of Kenya, 1994 a). The 1999 census interim results show that urbanisation has continued in the country. A total of 9.9 million persons were counted in municipalities, towns and other urban centres that reported a population
of 2,000 and above (Republic of Kenya, 2001). This is a very rapid increase in the urban population over a very short period: 6 million in a period of only 10 years, implying that there will be a lot of pressure on the existing services in the urban areas. There is therefore a need to re-direct policy to deal with the challenges posed by rapid urbanisation, which is due to a serious waves of rural-urban migration and the deliberate upgrading of rural service centres into town councils. This has resulted in rapid urban changes and the rise of spontaneous slum developments, a dramatic increase in street urchins, unemployment and high rates of crime in most urban centres in the country (Obura, 1996). Table 3.1 and Figure 3.1 shows the proportion of urban population of the total population in Kenya for the years 1979, 1989, 1995 and 2001. The figures referring to 1979 and 1989 are based on censuses, while the 1995 and 2001 figures are estimates.

Table 3.1 Population statistics showing urban population growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Total population (in millions)</th>
<th>Growth rate (%)</th>
<th>Average population density (per km²)</th>
<th>Urban population (in millions)</th>
<th>Total fertility rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>16.2 (census)</td>
<td>3.9</td>
<td>26.0</td>
<td>2.3</td>
<td>7.8</td>
</tr>
<tr>
<td>1989</td>
<td>23.2 (census)</td>
<td>3.4</td>
<td>37.0</td>
<td>3.9</td>
<td>6.7</td>
</tr>
<tr>
<td>1995</td>
<td>27.5 (estimates)</td>
<td>2.9</td>
<td>43.0</td>
<td>5.3</td>
<td>5.4</td>
</tr>
<tr>
<td>2001</td>
<td>31.9 (projected)</td>
<td>2.5</td>
<td>49.9</td>
<td>7.4</td>
<td>4.8</td>
</tr>
</tbody>
</table>


Despite the growth centre strategy, the 1979 census showed that the seven main towns in Kenya – Nairobi, Mombasa, Kisumu, Nakuru, Eldoret, Machakos and Meru – still held well over 68% of the country’s total urban population (Obudho, 1994). In the 1980s there was need to redress the seemingly ineffective regional development approach. Attention shifted to focus on diversification of the economies of small-scale and medium-sized towns, in conjunction with rural development and the promotion of non-farm employment activities in rural areas.

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12 The East African Standard of 30 January 2001 reported the preliminary results of the 1999 census. It is not clear why the census considered such centres with a population of 2,000 as urban areas. Recently, in attempts to get political support in some localities, the ruling party (read: “president”) upgraded rural service centres and even urban councils into municipalities without taking into consideration all the necessary factors. This also follows the creation of over 20 districts since the 1990s.

13 Though the figure of 6 million seems improbable to observers, we note that the census covered towns and urban centres with a population of 2,000 people and more, indicating that more urban centres were included in the 1999 census than previously.
(Barkan and Chege, 1989). This led to the establishment of the District Focus for Rural Development Strategy (DFRD) in 1983, under which the Rural and Trade Production Centres (RTPCs) were instituted. As a result of this, urban centres mushroomed in most parts of the country (Obudho, 1994).

Figure 3.1 Urban population growth versus total population growth

In 1979, there were only three towns with populations of over 100,000 in Kenya and by 1993 the number of such urban centres had increased to six (MCN/Republic of Kenya/UNCHS/ABOS-BADC, 1999). As noted above, the government, through its successive national development plans, embarked on regional and urban development strategies which were intended to diffuse the population from these principal towns for what Evans (1989) refers to as ‘equitable distribution of resources’ or ‘rural-urban balance’ (Kiamba, 1994). This caused a mushrooming of towns throughout the country and the expansion of existing ones at alarming rates as shown in Table 3.2 (see next page).
Rapid urbanisation is not inherently negative and it can be argued that it has advantages related to the growth of economic activities and increased productivity. Large population can provide the consumer and taxable base to support an efficient local administration with its own cluster of functions ranging from housing, sewerage and drainage, street lighting, ambulance, fire fighting, water supply, street maintenance and, in some cases, primary education and health care. The cause for concern today is the manner in which urbanisation is taking place. There is a range of intertwined forces that work against the above economic development argument: the large populations are largely unskilled labour forces; the municipal councils which started off as colonial institutions were never fundamentally transformed to cater for a growing African urban population and the revenue development and collection machinery has been ineffective and what little is collected tends to be mismanaged (Ichoya, 1997).

Rapid urban growth in Kenya is causing serious strain on the existing urban infrastructure and social services. Urban areas face many environmental problems as a result of uncontrolled and uncoordinated developments including inadequate sanitation, uncollected garbage, pollution of water sources, vehicular pollution, inadequate shelter and overcrowding, indoor air pollution and inadequate drainage. Most of these problems are found in low-income and unplanned settlements, affecting the environmental health of the poor. Regarding water supply in many towns in Kenya, most are experiencing a water supply deficit, amounting to 75,826 m$^3$ in Nairobi, 17,656 m$^3$ in Mombasa, 26,211 m$^3$ in Kisumu and 45,982 m$^3$ Nakuru. Eldoret is the only municipality which has a surplus water supply (see Figure 3.2). Attempts by the government to solve various environmental problems and provide services in urban areas have been inadequate. Apparently, the transformation of towns had not been followed by a corresponding increase in existing facilities and sufficient power for the respective local authorities to effectively handle growth, which

### Table 3.2 Urban size distribution in Kenya, 1948-1993

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<tr>
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<tr>
<td>Over 1,000,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>100,000 and above</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>20,000-99,999</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>21</td>
<td>31</td>
</tr>
<tr>
<td>10,000-19,999</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>11</td>
<td>24</td>
<td>33</td>
</tr>
<tr>
<td>5,000-9,999</td>
<td>3</td>
<td>11</td>
<td>11</td>
<td>23</td>
<td>44</td>
<td>60</td>
</tr>
<tr>
<td>2,000-4,999</td>
<td>10</td>
<td>16</td>
<td>26</td>
<td>42</td>
<td>79</td>
<td>110</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td>34</td>
<td>48</td>
<td>91</td>
<td>172</td>
<td>240</td>
</tr>
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*Estimates

*Source: Kiamba (1994)*
stretched the capacity of the authorities that govern and deliver services in these towns to levels beyond their control. With regard to the institutional arrangements, the local governments, entrusted with the provision of urban basic infrastructure, have been unable to perform their duties as a result of institutional weaknesses, lack of resources and lack of adequate capacities.

Figure 3.2 Coverage of water supplies in selected municipal councils (1995)

The situation will continue unchanged in the future despite the government’s efforts to improve infrastructure and service delivery, as the projected capabilities will not meet the projected needs. To date, government’s efforts directed at solving serious urban environmental problems in Kenya have not mobilised the private sector, non-governmental organisations and community initiatives at the planning and management levels. A wide gap still remains between the needs that are highlighted in policy and the actual implementation and performance of programmes and projects that address environmental issues in urban areas (Mwangi, 1997). The government will have to become more proactive in developing policies that promote the required changes and support local initiatives.

Like most other developing countries, the management and provision of urban basic services in Kenya is assumed to be the responsibility of local government authorities. However, owing to the centralised top-down structure of the govern-
Challenges of Urban Environmental Governance

ment, this function has remained elusive, at best, and at worst, unattainable as the central bureaucracy constraints local government autonomy in decision-making (Wekwete, 1997). Local authorities' roles and effectiveness in solid waste management has been declining. For instance, in Nairobi, about 1,000 tons of garbage are generated daily. The City Environment Department of Nairobi is only able to collect and dispose of 400 tons of garbage per day. The private sector firms operating in the city are able to collect and dispose of 500 tons daily, leaving 100 tons to accumulate in empty lands and unused roads in the residential areas (Ichoya, 1997). The situation is the same in most other towns. Box 3.1 shows the desperate situation in Mombasa as an example.

In response to the forces of globalisation and other internal and external pressures, Kenya has embarked on decentralisation and economic liberalisation. This process is rapidly transforming secondary towns into critical points of contacts for local, regional, national and global capitalist systems of trade, communication and capital investments. These externally induced phenomena, coupled with rapid internal population growth, have added new responsibilities to local governments that manage these towns on a day-to-day basis, even though they lack the institutional flexibility to address these challenges.

Sustainable development calls for a predictable and transparent framework of rules and institutions for the conduct of private and public business. The ideal outcome is one where local authorities can deploy enough governance capacity to overcome political resistance and other special interests, design and implement appropriate adjustment policies, and sustain the course of economic reform (Ichoya, 1997). The challenge is the reorientation of policies and strategies of municipal management in order to improve the delivery of urban basic services, especially in the low-income areas. Meeting this challenge will require the adoption of appropriate policies aimed at ensuring that community-based organisations (CBOs), non-governmental organisations (NGOs), individual households, the private sector and informal sector are encouraged to participate in environmental management initiatives and contribute to the provision and maintenance of those services.

Existing government policy as depicted in sessional papers, the development plans and the recent Poverty Reduction Strategy Paper acknowledge the roles that can be played by different actors in collaboration with each other and the government, but putting these policies into practice becomes a formidable challenge in Kenya. This is the result of the current government system that is not accountable or responsive to the needs of the majority of the citizens. Most representatives of the state are understandably reluctant to implement some policies that threaten to undercut existing privileges (Post, 2002). In the next sections, we discuss the political environment and
municipal government system in Kenya and the weaknesses that affect policy implementation.

**Box 3.1 Mombasa city managers must tackle garbage**

The hurdles facing our local authorities are a legion and we have no intention to downplay them though it must be pointed out that a number of such drawbacks are self-created and might have been well avoided. The malignant thread that courses through all our local authorities, incapacitate them to the point of irrelevance in both planning and service delivery is rooted in the massive numbers they must cater for. Rural poverty and the fallacy that prospects for jobs and thus an economic life line and other opportunities are exclusively out there in our towns and cities has led to a rural-urban migration that has almost crippled the ability of urban planners to cope with the demands. Pictorial evidence of mountains of garbage, spilling onto and cutting off Mensatfu Kombo Road in Mombasa just behind the council’s parking yard is a stinging indication and a humbling statement of impotence on the part of the city authority’s capacity to cope with garbage and refuse disposal. But since we do not intend to make apologies for the city authority, we will push a side the argument that it is simply overweighted by the weight of numbers and hence the state of decay. The city reportedly has about 11 refuse collection vehicles. Of these, apparently only three are operational while the rest are in different stages of decay catalysed by neglect and vandals who see in the incapacitated machines parked in the yard as they remove functional parts to fulfil selfish instincts. If Mombasa city fathers want to plead being overwhelmed by numbers and hence inability to cope, then what do they have to say about such obviously self-inflicted damages indicated by the state of refuse collection vehicles? There was a highly visible and even painful campaign as Coastal leaders pushed for the elevation of Mombasa to city status. Kiosks and numerous illegal structures, which were the economic lifelines to hundreds of Kenyans were pulled down to create a facade of order and as aesthetic validation. Seemingly and this is judging from the mounds of refuse which today litter the city, the exercise might have been all in vain. This is a pity for Mombasa has potential to wear a more cheerful and more pleasant face as the short spell of Mayor Najib Balala in 1999 proved. Balala certainly did not come to the then municipal hall with bags of cash. But he had ideas and included these ideas to marshal the goodwill of Mombasa businessmen and residents to contribute to the cleanliness of their town. We need not stress that as a vital gateway to this country and as the nerve centre of the crucial but highly perishable tourism industry, the city cannot afford to allow itself to be drowned in muck. The financial and other resource shortfalls notwithstanding, the city authorities must just do more, think harder and utilise what is available to make the city cleaner. That is the challenge that the city managers must live up to.

*Source: Kenya Times Online Newspaper posted on 19/7/2002*

### 3.2 The political environment

Kenya is a unitary state with political power centred on one dominant figure, the president. It holds a republican constitution adopted in 1964\(^\text{14}\) with the president

\(^{14}\) Currently there is a constitutional review commission involved in collecting and collating views from the public in order to re-write the country’s constitution.
as the head of state. The country has three main organs of government: the executive (the office of the president and the cabinet), the legislature (parliament) and the judiciary (the law courts). As a parliamentary democracy, Kenya adopted a multi-party political system in 1991 with the winning party forming the government. The president of the ruling party appoints ministers to head various government ministries, while the members of parliament from other parties form the opposition. The presidential, parliamentary and local government elections are held simultaneously every 5 years. The country is divided into eight provinces, each of which is headed by a provincial commissioner (PC). The provinces are further divided into districts, headed by the District Commissioners (DCs). The PCs and DCs are appointed directly by the president to assist him in the administration of the country. The districts are further divided into divisions headed by District Officers (DOs). Finally, the divisions are divided into locations and sub-locations headed by chiefs and sub-chiefs in a descending order. A Ministry of Local Authorities headed by a cabinet minister has been created to supervise the activities of the local authorities countrywide.

Kenya gained independence from Great Britain in 1963. For the next 15 years the country was led by President Jomo Kenyatta, the foremost leader of the independence movement, and by his political party, the Kenya African National Union (KANU). The Kenyatta government rapidly Africanised the civil service and other public sector appointments in order to consolidate national sovereignty. He also centralised decision-making authority in the Office of the President. From a policy-making standpoint, the most significant political factor in the first years of independence was the concentration of decision-making authority in the central government and, in particular, in the Office of the President (Throup and Hornsby, 1998). Since the president’s ethnic group, the Gikuyu, had been the main beneficiaries of education and employment in the formal sector during the colonial period, they were the logical candidates for appointments to public sector jobs (Barkan, 1994).

In 1969 Kenya became a de facto single-party state (Throup and Hornsby, 1998). Nevertheless, within this single-party framework Kenyan politics was relatively democratic, with parliamentary and presidential elections on a regular five-year cycle, open and competitive primary races at the district level and a high turnover of parliamentary seats. Normally, some two-thirds of sitting members of Parliament and one-third of those holding cabinet posts, were voted out of office at each election, a trend that has continued throughout Kenya’s history.

Kenyatta’s successor, Daniel arap Moi, who took office in 1978 and has been president since then, has maintained, if not increased, the concentration of power in
the executive branch (Ng’ethe and Owino, 1998). Since 1978, a gradual shift in the balance of power began within the ruling party that is reflected in the framework of Kenyan politics to the present day. An unsuccessful coup attempt against the Moi government in 1982 severely disrupted political and economic affairs for a time, but did not weaken the president’s grip on the reins of authority. A constitutional amendment was adopted in 1982 making Kenya a *de jure* single-party state. In 1988 the constitution was further amended to give the president power to remove members of the Public Service Commission, the Judicial Service Commission, and the law courts, although these provisions were later modified (Barkan, 1994).

President Moi also used his authority to reduce the predominance of civil servants from the Gikuyu tribe, especially in the higher ranks of the public service. His argument was that the Gikuyu domination of institutions was undermining social cohesion and that their replacement, even with less qualified candidates, was necessary to ensure stability in the country. However, this policy had the unfortunate effect of further undermining efficiency in the public sector and, to a degree, replacing one group of rentseekers with another, many of whom lacked the experience to run the organisations they inherited (Throup and Hornsby, 1998). National elections under the single-party regime were held in 1979, 1983, and 1988, but with greater party control over the selection of candidates than in the Kenyatta era. Still, a high rate of turnover of parliamentary seats at each election continued. To further consolidate party control over the election process, the secret ballot was replaced in the 1988 election by a system of queue voting. This proved so unpopular that only 23% of all voters participated. Following a process of nationwide consultations led by the Vice President in 1990, the government decided to give up the queue voting system and to restore the independence of the judiciary.

There was, nevertheless, growing domestic discontent with the political situation, essentially with the monopoly of political power held by KANU, and this culminated in riots in July 1990. The internal pressure for multiparty politics received strong support from the donor community, in particular the then outspoken US ambassador, Smith Hempstone (Hempstone, 1997). The desire to see a democratic system introduced in Kenya was one of the principal reasons for the unanimous decision by the donor community in November 1991 to suspend balance of payments support. While the leaders of the government and of KANU appeared to be adamantly opposed to multi-partyism, a KANU national convention and the all-KANU Parliament took the decision in early December 1991 to amend the constitution to allow for the formation of multiple political parties. Whether this move was made in response to donor pressures or domestic political protests can be endlessly debated; it probably resulted from a combination of forces, but the timing
Challenges of Urban Environmental Governance

undoubtedly bore some relationship with the outcome of the November 1991 donor meeting. This constitutional opening led to the first genuine multiparty election in Kenya’s history.

The elections were held a year later, on 29 December 1992, following a full year of frantic political campaigning. In the end, President Moi was re-elected with a plurality of 37% of the votes (Throup and Hornsby, 1998). Three reasons account for this:

- the opposition split into three major and several minor parties essentially along ethnic lines,
- the government controlled access to the media and
- KANU had easier access to financial re-sources.

KANU also kept control of the Parliament with an initial margin of 112 seats to 88 (100 elected plus 12 nominated by the president). In the second multiparty election in December 1997, Moi was re-elected with a slightly higher plurality, but KANU gained only a narrow majority of parliamentary seats over an even larger number of still-divided opposition parties. In this new era of multiparty politics, the political parties have evolved almost entirely along ethnic lines. The inability of contending opposition factions to unite behind a single candidate, whether for the presidency or for parliamentary seats, has been the primary reason for the ruling party’s continued hold on power. Also, personalities have been much more important than ideology or any other set of issues.

Whereas the governing party, KANU, had in the past always captured seats in both the urban wards (councillors) and the constituencies (Members of Parliament), in the two multi-party elections the opposition parties won most of the parliamentary seats in the major urban areas, and took control of most municipal councils, including Nairobi. The new mayors of Nairobi, Nakuru and Kisumu (elected by the sitting councillors) have not been members of the governing party of the country. Political differences between the central government and the newly elected municipal councils soon surfaced, with the Minister of Local Government issuing a series of directives that curtailed the powers of the mayors. For the government, these councils have been a political force to be reckoned with and for the emerging middle-class, the councils should become vehicles by which to achieve a greater measure of local autonomy.

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15 The party has now absorbed its junior one year-partner National Development Party (NDP) and held joint elections in March 2002.
Since then, there have been calls for constitutional and legal reforms to separate the legislative and executive arms of the government. With the opening of political dialogue and increasing awareness by citizens of their political and civil rights, there has been growing pressure for a system of government that is more participatory, transparent and accountable, and which promotes an impartial legal system. The mere presence of government is certainly not an automatic cure-all to redress problems arising from the rapid rates of urbanisation. A key element that we need to emphasise here is that of political leadership. Good leadership, a supportive institutional and legal framework and appropriate political will are conditions that will encourage participatory approaches to urban environmental management.

With these changes in the political environment, there has been a sudden rise in environmental NGOs and CBOs, and the civil society has been active in influencing the direction of decisions affecting the urban environment, though with limited success. The civil society organisations and residents in urban areas have also been seeking new ways to improve the living environment and security measures. The civil society organisations have also been involved in protests against land development in public spaces such as parks. The recent protests against the excision of Karura forest near Nairobi and its allocation to politically corrected people show the strength of the civil society organisations. Today, there are various examples of citizens groups coming up to protest and stop private developers grabbing environmentally sensitive areas.

3.2.1 Attempts at decentralisation

The heritage of the British colonial administration was that of a relatively high degree of local autonomy characteristic of the ‘indirect rule’ of British colonial policy. It was under president Kenyatta that nation-building and state planning led to a centralised administration with powerful Provincial and District Commissioners being the ‘local arm’ of the Office of the President. The First national development plan (1966-70) set the establishment of decentralised planning as an objective, recommended that the district become the basic unit of planning and stimulated the emergence of the externally funded Special Rural Development programme (1967-77). In spite of these decentralisation initiatives undertaken under Jomo Kenyatta, it was not until under President Moi in 1978, that a more persistent and comprehensive effort towards decentralisation was initiated.

There seems to be some consensus among observers and researchers (e.g Gatheru and Shaw, 1998; Ichoya, 1997) that the policy and strategy laid down in the various documents and policy statements have basically not been implemented and that the outcomes have been a more centralistic and controlling, rather than more decentralised and democratic state. Some do, however, have a more positive view (Kiamba,
1994; Akivaga, et al., 1985) if not of the actual outcome so far, then of the foundations laid for a more meaningful decentralisation in the future. The District Focus for Rural Development (DFFRD) strategy, for instance, is considered promising in terms of organisational changes, trained manpower, district planning and budgetary procedures. We need to indicate, however, that the ‘district’ encompasses both urban and rural areas, but that the focus in this strategy was more on rural than urban development.

The aim of the DFFRD strategy was to involve the people in identifying and prioritising projects to be undertaken in their areas. This was intended to make planning participatory, and responsive to local needs, with more control over resources and the development process by the people. The District Development Committees (DDCs) were to receive prioritised project proposals from the communities through the location and divisional development committees. This planning machinery is still dominated by sectoral planning which affects spatial planning in terms of resource allocation. The DDCs are chaired by District Commissioners and comprise District Departmental heads, the local Member of Parliament, mayors, chairmen and clerks of the local authorities and parastatal heads. All the development projects of the local authorities, especially the LADPs, are subject to the DDCs decisions. Social dimensions of development were launched in 1994 (Republic of Kenya, 1997) to address the needs of the poor sections of the community adversely affected by structural adjustment programmes and are implemented through the DFFRD strategy.

The District Focus Strategy has turned out to be an increased-control-deconcentration strategy and not a devolution type of decentralisation. There is, however, still a local government structure with local representative bodies and County Councils with borders coinciding with those of districts and municipalities for the urban centres. These local government bodies fall under the Ministry of Local Government and they originally had important functions with respect to primary education, health and roads, including the funding to carry out these tasks. However, at the beginning of the 1970s, the funding of local government decreased, as did the jurisdiction of local authorities. Some observers have, however, pointed out that local government has survived in Kenya despite these adverse conditions (Smoke, 2000; Akivaga, et al.) and that it is possible that local governments could play a larger role in the future through the DDC.

3.3 The municipal government in Kenya: structure and organisation

Local authorities in Kenya form part of what is referred to as the local government system, which is an elaborate system of public administration set up under the Local Government Act, Chapter 265 of the Laws of Kenya. The concept of local authorities was inherited from the British colonial period especially to manage
local issues. The system was, however, weakened and heavily controlled by the centre in the post-independence period, primarily in the name of national unity (Smoke, 2000). As a result, local political mechanisms and incentives to perform are greatly undermined. There have been many attempts during the 1980s and 1990s to re-strengthen local governments. Most of these were donor-driven and were not taken particularly seriously by the national authorities. As a result, the performance of local governments in terms of revenue generation and service delivery deteriorated to very low levels (Smoke, 2000). Local authorities in Kenya provide a system of administration concerned predominantly with the provision of community services within defined local areas. The rural local authority areas normally coincide with district administrative boundaries and are referred to as county councils. In large urban centres, we have either town councils or municipalities, depending on the complexity and size of the area concerned. Municipalities cater for the larger urban centres, including the city of Nairobi. They are corporate bodies with their own assets, staff, budgets and property, and they can sue or be sued (Republic of Kenya, 1998).

These local bodies are expected to submit to the control and supervision of the Ministry of Local Government over matters of policy. Akivaga et al. (1985) describes this relationship as follows:

"Local government authorities are set up to implement central government policies. These policies change from time to time. The central government influences the activities of local authorities from time to time by bringing them in line with new policies, which reflect the needs of the public" Akivaga et al. (1985: 31)

For this reason, the Minister is empowered by the Local Government Act to make orders, directives and rules, so that the purposes and provisions of the Act are better carried out. The Act contains 186 clauses conferring powers on the minister to intervene in the operation of local authorities. The panoply of controls exercised by the central government is formidable. Some of the powers given to the minister are the power to veto the appointment of, or dismiss the mayor or chairpersons; the power to dissolve councils or suspend individual members; approval of budgets, taxes, fees, loans, contracts and individual projects; approval of physical development and land-use plans; approval of development plans for services; approval of laws and by-laws; and audit and reserved power to take over the administration of particular services or to discharge of specific duties (Republic of Kenya, 1998).

The local government system in Kenya comprises four types of local authorities formed under the Local Government Act as amended in 1978, 1979, 1982, 1984,
The internal structure of local authorities, their functions, powers and scope of responsibility differs from one level to the other (Koti, 2000).

Currently, there are 165 local authorities: 1 city council (Nairobi)\(^{16}\), 44 municipal councils, 60 county councils, and 60 town councils. All urban councils have been upgraded to town councils in 1998. At the policy level, these councils are managed by a total number of 3,704 councillors (elected and nominated) and employ over 57,000 people, including those hired by the Public Service Commission.\(^{17}\) The number of local authorities has been increasing rapidly and has somewhat outrun the capacity to administer the local areas effectively because of shortage of personnel and revenue shortfalls. This has also impacted on the supervision and coordination capacity of the ministry of Local Government (Suzuki, 1998). As corporate legal entities, local authorities are perceived to be autonomous and independent. Their independence is compromised, however, by many problems: constant political interference, unplanned and political establishment of additional local authorities, lack of clear strategies for resource mobilisation, deficient financial management, an inordinately close relationship with the provincial administration\(^{18}\), and excessive interventionist powers from the central government (Gatheru and Shaw, 1998).

The Ministry of Local Government controls all local authority activities in revenue collection, expenditure, borrowing, staff employment and the decision making process. In addition, the District Commissioner sits in the municipal council as an ex-officio member with veto power. The District Commissioner is the central

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\(^{16}\) Mombasa and Kisumu have recently been upgraded to the city status following recommendations by the Omamo Commission.

\(^{17}\) Information from the offices of the Ministry of Local Authorities, Nairobi.

\(^{18}\) In the year 2000, for example, local authorities countrywide had many wrangles. There were coups and counter coups against mayors and chairmen of various councils and infighting involving civic leaders and officers. A number of local authorities raised public concern throughout the year on issues ranging from political bickering among the civic leaders and officers to deplorable service delivery and workers' protests over delayed salaries.
government representative in the municipal and county councils with the function of explaining the government policy to the councils. The power of the local authorities is seriously compromised by the constant interference of the provincial administration working through government-appointed Provincial Commissioners, District Commissioners and District Officers and chiefs that are primarily loyal to the president and the ruling party (Gatheru and Shaw, 1998; Post, 2002). The state, on its part, has failed to achieve international and national goals aimed at meeting basic needs of the population (United Nations, 1998). As a result, municipal services and infrastructure, which are centrally controlled, have seriously declined due to the mismanagement of financial resources and the lack of skilled human and material resources and maintenance.

3.3.1 Weaknesses of the current local government institutions
Most local authorities have demonstrated inefficiency in the delivery of services, failure to pay staff salaries, lack of expenditure control and inability to manage sources of revenue (Gatheru and Shaw, 1998). This can be attributed to the organisational structure of most local authorities, which comprises councillors in the various committees and the full council meeting as the decision-making organs. Chief officers, led by the Town Clerk, make up the executives of the councils, which are only answerable to the Minister for Local Government. Due to the weaknesses of democratic control within many local authorities, there have been a lot of disagreements between the civic leaders and chief officers, stemming from the fact that councillors', as policy-makers, have no powers to enforce the decisions passed through council resolutions. The management of civic bodies has been poor, forcing the government to intervene. The principal reason for failure and non-performance of the councils is linked to the fact that the government-appointed chief officers and the councillors have spent most of the time fighting each other rather than serving the interests of the residents. This, coupled with lack of accountability between the councillors and the chief officers appointed by the Public Service Commission, contributes greatly to the problems afflicting the local authorities.

Civic leaders have pointed out at different forums that, although councils are supposed to operate as independent bodies, the government has usurped most of

19 Throughout the country, many local government officials and councillors have been involved in corrupt deals, especially acquisition of public land and properties.

20 In Nairobi, Mombasa, Kisumu and Nakuru, for instance, full council meetings are rarely conducted peacefully, as different factions tend to disrupt them.

21 The government has been sending inspection teams to conduct investigations in the councils and change the administrative structures in several civic bodies countrywide.
their powers. They attribute the administrative lapses in the local authorities to the inordinate powers given to chief officers and the Minister for Local Government by the Local Government Act. For this reason, councillors and the Association of Local Government Authorities of Kenya (ALGAK) have called for amendments to the Act and more autonomy in running civic affairs within their jurisdiction, including budgets, which have to be approved by the Minister. It has been a common phenomenon for civic leaders to dismiss officers with whom they have differences from their offices. Similarly, civic leaders have staged coups in their councils against mayors and council chairmen, accusing them of various misdeeds, although such action is legally null and void, as the minister has put it occasionally.

Apart from the problems commonly shared by local authorities (the Nairobi City Council included), various councils (notably those of Mombasa, Kisumu, Thika, Nakuru, Kakamega and Embu) have had their own unique cases. The overall picture of urban governance in Kenya is in a systemic crisis. Some of the problems afflicting these councils, such as the suspension of mayors, are the result of external political interference by Members of Parliament and senior citizens operating within the municipal authorities. The Local Government Minister has tried to enforce the law, to ensure that wrangles involving mayors, councillors, chief officers and even the workers do not paralyse operations in local authorities. Currently, the Rift-valley Provincial Commissioner (PC) has ordered investigations into the operations of the Municipal Council of Nakuru and a number of chief officers. Some councillors have been arrested and are being questioned on corrupt deals. In principle, the PC, who represents the central government, should not interfere with the running of the council affairs, but he insists that he cannot condone corrupt practices within the province in which the municipality is.

Another issue that is important when discussing local government problems in Kenya has been the inadequate management of finances and funding. Municipalities lack financial independence and often rely for survival on assistance from

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22 This information is from different sources: discussions with sitting and former councillors in Nakuru and council officers and officials of the Ministry of Local Government.

23 We need to mention here that most civic leaders have very low educational backgrounds and rarely understand the management of local government functions.


25 The Government Sessional Paper No. 12 of 1967 recommended the revitalisation of local authorities with reliable sources of revenue, including grants in aid, because the local authorities were finding it difficult to finance and manage their rapidly growing urban populations. In 1969, the Transfer of Functions Act transferred major services such as primary schools, health services and road maintenance, together with the associated financial resources, to the central government.
the central government. Currently, local authorities are cash-strapped since they
don't have the powers to control funds - which are released piecemeal and at the
Ministry's convenience. The central government only started sharing its revenue
with local authorities through the Local Authorities Transfer Fund (LATIF) and
the Road Maintenance Fuel Levy (RMFL) a few years ago. However, civic bod-
ies are not responsible for the use of LATIF proceeds since the treasury controls
them. Even on matters such as procurement and tendering, the Local Govern-
ment Act does not allow local authorities to make their own decisions on, say,
the best contractor to hire without approval from the minister. All controls and
payments of contracts are also made through the Ministry.

Most of the local authorities lack appropriate capacities and tools to plan and moni-
tor local investment. When the capacity to deliver public services is weak, the
prospects for urban sustainable development are poor (Ichoya, 1997). This is due to
poor revenue collection and expenditure control, constant deficits, ineffective pro-
fessional staff who lack the capacity to design and implement policies that generate
an enabling environment. But even with the capacities, such initiatives can only
succeed when communities participate in setting priorities, planning and
implementation. These initiatives will improve their living environments and
enhance economic opportunities.

Gatheru and Shaw (1998) suggest that there is clearly need for greater decentralisa-
tion of power to the local authorities so as to make them the focal points of develop-
ment, democratisation and good governance. Kenya has just emerged from an era
in which the initiative, the impulse and the driving force behind development was
the state (or powerful individuals within the state). Consequently, the considerable
initiative and creativity of the people were destroyed by paternalism and patronage.
Individuals whose major activities are controlled by a central authority ultimately
become increasingly dependent on such authorities and agencies in all spheres of
life. The local government should be regarded as the machinery through which
the energy of a community is translated into action, whereby a community takes
upon itself a certain independent existence for the achievement of common goals
and aims.

This means that those who govern at the local level must identify with the commu-
nities they serve. They need to have faith in the people and have hope for their
community's future, rather than be motivated merely by a perception of their tenure
as a way to earn a living (ibid.). Theoretically, the government recognises the signifi-
cance of empowering local authorities. Since 1986 a number of initiatives have been
undertaken to find ways and means of strengthening and empowering local au-
thorities. The Sessional Paper No. 1 of 1986 (Economic Management for Renewed
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Growth), for example, outlined specific policy steps to improve the performance of local authorities (p. 51-54). In 1990 and 1991 there were numerous studies and consultative meetings between the Ministry of Local Government, the World Bank and other donor agencies geared towards finding clear strategies for empowering local authorities. The country is currently undertaking a major exercise on constitutional review and a variety of sectoral reforms, including local government and civil service reforms. It becomes critically important at this time that a machinery and modalities be put in place to harmonise the stated recommendations and policy guidelines. The Kenya Local Government Reform Programme will need to address the issues raised.

In sum, we find that, though there are laws that provide for the functions of the local authorities in Kenya, the reality on the ground is different. Urban local authorities exercise limited influence over the urban environments within their jurisdictions, and this can be attributed to the following reasons:

(a) inadequate capacity to carry out some specific functions as physical planning, land valuation and rating environmental impact assessments and monitoring;
(b) lack of autonomy to act independently;
(c) limited resource base;
(d) lack of means to carry out activities; and
(e) the top-down system under which they operate.

All these factors and issues will definitely affect the effective functioning of any partnership that is formed with the local authorities. We contend that, even when the local authorities on their own enter into partnerships with other actors in the areas of their jurisdiction, there are external factors that will affect the functioning of such partnerships. Owing to the unbalanced relationships between the local authorities and the central government, arenas of conflicts between different stakeholders are set in the urban environment (Evans, 1989; Stren, 1992).

While local authorities have been seen as the authority nearer to the people, political and economic power is still controlled by the central government. This affects all the local level initiatives that are started by the local authorities in partnership with other stakeholders. Devolution of development responsibilities and the deconcentration of development activity are essential in creating an enabling environment

26 The Kenya local government finance study of September 1990 by the World Bank and the Report of consultative meetings between the Ministry of local authorities and the local authorities, November 1990-July 1991, made extensive recommendations on how to enhance performance in local authorities. Little has been done to put the recommendations and policy intentions embodied in these documents into action, however. The budget speech for the fiscal year 1997/98 revisits in strong terms the necessity for reforms in the local government and issues further policy guidelines.
for local authorities as key actors in urban environmental management. Administration reform and partnerships formations will remain utopian and cannot have any positive impact on the quality of life of citizens unless the local governments possess the legitimacy, credibility and ability to perform their functions effectively and have appropriate institutional structures in place (Hentic, 1997). In the following section we examine the current efforts directed at strengthening the local authorities in Kenya.

3.3.2 Current efforts to strengthen the local authorities in Kenya

According to Smoke (2000), the government of Kenya has shown commitment to local government reforms in the last two decades. This has been done through the Local Government Reform Programme (LGRP), which is part of the Civil Service Reform Programme. Through the LGRP, the local authorities have been recognised as actors (although sometimes under-emphasized) in the local economy in the bid to improve service delivery. The evidence from this commitment is seen in several government policy documents and instances of legislation, which have emphasised the significance of local authorities. These policy documents include the sessional Paper No. 1 of 1994 on ‘Recovery and Sustainable Development to the year 2010’, the Letter of Sectoral Policy for the Urban Transport Infrastructure Project (UTIP), the National Budget speeches of the 1996, 1997 and 1998 fiscal years, the Omamo Commission Report, 1998 and the Small Towns Development Projects and its Urban Water and Sanitation Project funded by the Society for German Technical Cooperation. To carry out these policy goals and to positively influence their implementation, the government adopted some precise mechanisms, among them the Local Authority Development Programmes (LADP). Through the LADPs, eight pilot towns and their associated county councils were selected to develop and test the reforms. These include Embu, Kakamega, Kisumu, Nakuru, Naivasha, Nyeri, Athi River and Thika. However, all these reforms have remained only on paper and the extent to which they have been implemented and the degree to which local authorities have been empowered to exercise discretion especially in urban development and the provision of services remains questionable.

According to Kenya’s interim Poverty Reduction Strategy Paper (PRSP) 2000-2003, the local government will become an increasingly important focal point for poverty-reducing activity. There are strong links between devolution, accountable local government and the quality of services at the local level. There will be a deliberate shift towards increasing the functional responsibilities of local authorities, by increasing their revenues and strengthening their delivery capacities (Republic of Kenya, 2000). The paper states that the Kenya Local Government Reform Programme will focus on reforming the legal framework of local authorities and
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reducing the government’s role; developing a decentralisation policy; strengthening local government finances through the implementation of revenue-sharing programmes; strengthening local revenue mobilisation capacity; strengthening financial management, accounting, control and audit mechanisms; and developing capacity to deliver services and plan and implement infrastructure projects, using more community-based participatory planning.

The PRSP indicates the government’s commitment to allow different actors within the areas controlled by the local authorities (especially the urban areas) to influence some decisions. The government is also committed to enacting legislation for the establishment of a permanent financial and management control board mechanism, which assists in resolving the particular problems of fiscally distressed local authorities. We note, however, that these proposals remain commitments on paper and that they have not been realised in practice. The government continues heavy control over the activities of the local governments. Notwithstanding, it should be noted that the poverty reduction paper outlines a very clear government policy and that it is a good paper to attract donor funding. The actual implementation of these policies is inadequate, however, due to political interference, corruption and lack of commitment on the part of the implementing agencies. As will be discussed later, even as the government was submitting the PRSP with good intentions and commitments, it took over the management of water supply and sanitation services from a company that had been formed in the Municipal council of Nakuru, which is just an example of the level of interference with local authority decisions.

3.3.3 Proposals for strengthening the local authorities in Kenya

For local authorities to achieve autonomy and democratic self-government, the Local Government Act, Chapter 265 of the Laws of Kenya should be totally reviewed. For example, Section 5 of the act confers powers on the minister to establish and extinguish local authorities. In exercising such powers to establish, alter and extinguish local authorities, the minister is not accountable to any institution or to the residents concerned. Such powers should be conferred on a committee appointed by the parliament or the electoral commission. The reduction and redistribution of the powers of the minister will mean that there is reduced political interference with the local authorities and that they can make autonomous decisions.

Local authorities should consider the privatisation of some services, such as cleansing and garbage collection, as a matter of priority. Political appointments must be heavily resisted if local authorities are to regain their credibility. Most of the
Local authorities are over-staffed, particularly at the lower cadres. This puts a heavy strain on the authorities' ability to pay. There is need to freeze recruitment of non-essential services staff and offer incentives for early retirement. Local authorities should promote the growth and development of the informal sector as a revenue base, e.g. by licensing many of the hawkers who trade on the streets instead of harassing them (Gatheru and Shaw, 1998). By-laws should be made to protect these traders. In the urban areas, it is important that the local authorities recognise the roles that the informal sector could play, especially in the solid waste management.

3.4 The legal framework for environmental management

There are more than 70 laws and regulations referring to the management and conservation of the environment in Kenya (Jensen, 1997). There was need for a single institution within the legal framework to coordinate the management of environmental resources. At the same time, it was also realised that legislation needed to be reviewed and updated. The drafting of the Environmental Management and Coordination Bill was then started by a group of stakeholders from the public, private and civil society sectors. The United Nations Development Programme (UNDP) and UNEP, under the UNEP/UNDP project ‘Environmental Law and Institutions in Africa’ provided technical assistance to the legislation process.

Kenya’s Environmental Management and Coordination Bill of 1999 received Presidential assent, translating it into an Act on 6 January 2000, and it was gazetted on 14 January 2000. This law is expected to be the strategic planning pillar for Kenya’s sustainable environmental management. It establishes an appropriate legal and institutional framework for the management of the environment and natural resources. In the past, planning for development activities has not taken environmental impact assessment (EIA) seriously, due to lack of legal instruments to ensure compliance (Republic of Kenya, 1999). The uncoordinated planning had, inter alia, resulted in poor waste management, too many slums, high poverty levels and unclean production. The new Act harmonises all sectoral Acts and is expected to address the issue of sustainable development, which is critical in recognition of Kenya’s policy aimed at becoming industrialised by the year 2020.

The Act embodies the concept of sustainable development, inter- and intra-generational equality, and the ‘polluter pays’ principle. The Act includes, among other issues, regulations governing fiscal incentives to encourage environmental management; a national land-use policy; environmental management measures with respect to coastal zones, lakes, rivers and wetlands; protection of biological diversity and conservation measures; wildlife conservation and management;
management of waste and air pollution; and regulations with regard to EIA and environmental risk assessment (Republic of Kenya, 1999). The drafting of the Act involved the active participation of the government, universities, industries, NGOs and local communities. The Kenya Association of Manufacturers has played an active role in the process.

The Act establishes the National Environmental Council, the National Environmental Management Authority (NEMA) and the provincial and district environmental committees to monitor pollution and other environmental issues. It also creates an environmental ombudsman or tribunal to handle cases and complains on environmental degradation. The Act gives the Minister for Environment and Natural Resources sweeping powers to safeguard the environment and compels local authorities, industrialists and individuals to seek licenses for waste disposal. Industries and councils must apply for effluent discharge licenses, which can be approved only if an applicant has installed necessary disposal equipment.

Section 28(1), (2) and (3) of the Act establish provincial and district environmental committees. The provincial and district environmental committees are responsible for the proper management of the environment within the province or district where they are appointed. The provincial environmental committee is to consist of the provincial commissioner (the chairman), the provincial director of environment (the secretary), one representative from each ministry at the provincial level and a representative of every local authority whose area of jurisdiction falls wholly or partly within the province. The Minister will also appoint two representatives of farmers or pastoralists from the province, two representatives of the business community operating in the district concerned, two representatives of NGOs and a representative of every regional development authority whose area of jurisdiction falls wholly or partially within the province.

Similarly, every District Environmental Committee (DEC) shall consist of the District Commissioner, who is the Chairman, the district environmental officer, who is the secretary, one representative of the ministries at the district level, a representative of every local authority whose area of jurisdiction falls wholly or partially within the district, four representatives of farmers, women, youth and pastoralists in the district and two representatives of the business community. The committee consists of two representatives of NGOs and two representatives of CBOs engaged in environmental management programmes operating in the district (Republic of Kenya, 1999). This new act therefore provides for popular participation of different actors in the public, private and civil society sectors.

27 These committees are already functional in all the districts.
The main law that governs spatial planning in Kenya is the Physical Planning Act of 1996. It provides the legal basis for the preparation and enforcement of different physical development plans and requirements. The Director of physical planning is responsible for the preparation of all physical development plans in accordance with the Act. The Physical Planning Act empowers the local authorities to regulate and exercise control over physical development decisions and activities. Section 25 of the Act outlines the contents of a development plan, while sections 26, 27 and 28 stipulate the plan preparation process from concentration to approval. The Act calls for a comprehensive planning approach, stressing the need to involve all stakeholders and the general public in the planning process. Once approved, the plan becomes a reference for all development and development control decision-making.

Other laws that relate to planning include those laws that establish and define the roles, functions and operations of planning and development control institutions, such as local authorities, regional development authorities, etc. The Local Government Act (cap 265) provides for the establishment of local authorities as legislative bodies and as key development control agencies, a role further emphasised in the Physical Planning Act. There are laws that provide for the efficient management of land and other key resources such as water and forests. Some of these are the Government Lands Act (Cap. 280), the Trust Land Act (Cap. 288) and so on. There are also laws that provide the framework for the provision, production, operation and maintenance of key utilities and services such as electricity, water, sewerage and roads, with a view to ensuring safe and sustainable living environments. These include the Local Government Act, the Public Health Act and the Adoptive Building and Planning by-laws.

3.5 The institutional framework for environmental planning and management

There are two types of planning that are being undertaken in Kenya. First, there is the development planning that deals mainly with the organisation of various sectors related to social and economic development. Secondly, there is the physical planning that mainly deals with the different aspects of land use and attempts to achieve a rational and efficient spatial organisation of human developmental activities. These two activities are undertaken by different government agencies. Presently, they work independently from each other, as a result of which their outputs may not be integrated, thus disconnecting the spatial and non-spatial aspects of development. Sector-based planning is mainly carried out by the Ministry of Planning and National Development and at two different levels: the national and the regional level. National planning is articulated through the national development plans and various parliamentary sessional papers that are also prepared by this Ministry. At the
regional level, the District Development Office prepares the five-year development plans. The plans incorporate the contributions of key stakeholders, including the private sector and NGOs. Problems are identified at the grassroots level and then debated upwards through a hierarchical committee structure established under the District Focus for Rural Development Strategy. The specific ministries and relevant departments implement the proposals in the plan with the funding from the central government. At the local level, the Ministry of Local Government, through the Urban Development Department, also guides the local authorities in the preparation of the Local Authority Development Plans (LADPs). The aim of the LADPs is to develop medium-term investment plans, which are later turned into development projects. LADPs have been useful in the decentralisation of planning activities and in increasing the local authorities' capacity to plan the efficient use of their resources. The LADPs have also been used to promote the integration of environmental issues and as such function as a sort of LA 21 programme (see Section 3.6.1).

Spatial planning is the undertaking of the Ministry of Lands and Settlements, with contributions from other related ministries. Like sectoral planning, spatial planning activities are carried out at the national, regional and local levels. The Physical Planning Department in the Ministry is charged with the preparations of physical development plans for all towns in Kenya. It prepares regional physical development plans, structure plans and short-term physical development plans in the country. The department is represented at provincial and district levels. It works closely with local authorities in matters related to physical planning within municipal council boundaries. In its attempts to address environmental considerations in their physical plans, the Department has started an Environmental Planning and Management unit (EMU). The Physical Planning Department was very much involved in the LA 21, especially in the consultative process and the preparation of the Nakuru Strategic Structure Plan that is the only plan of this kind in Kenya at the moment.

Under the country's planning laws, local authorities may initiate and undertake plan preparation activities. The performance of this role is, however, not clearly explained. The legally sanctioned role of the local authorities is that of implementing the plans and ensuring that the conditions for implementation are met. Under the Local Government Act and the Public Health Act, local authorities have wide-ranging powers to control and guide development in their areas of jurisdiction. The Physical Planning Act (1996) gives local authorities more power regarding the implementation of physical planning proposals and decisions.

However, as noted earlier, most local authorities do not have the technical capacity to play their role effectively due to lack of skilled personnel and an inadequate
enforcement machinery. They frequently rely on the office of the director of Physical Planning to undertake the preparation of physical development plans for their trade and service centres. A key issue appears to be the complexity of the organisational structure and the ambiguity in the division of roles and responsibilities for environmental management between the central and local government. Another issue has been the absence of a coordinating authority. The coordination of environmental conservation and sustainable utilisation of natural resources has been weak, with different institutions generally working in isolation and often creating conflicting policies and programmes.

In order to improve this situation, the government prepared the national development plan for 1994-96 immediately after UNCED in June 1992. The theme for Kenya’s National Plan was ‘Resources Mobilisation for Sustainable Development’ (Republic of Kenya 1994 b). The government was determined to move towards national and local development: i.e. economic, social and environmental sustainable development aimed at securing renewed economic growth with greater self-reliance and improved health, income and living conditions for the majority of Kenyans; and ensuring that the key economic and sectoral policies support development that is sustainable (Jensen, 1997). The national development plan directs all major development activities in Kenya and, since environmental issues have been given such high priority, all ministries are well versed on the ultimate goals.

One of the main steps in the UNCED follow-up process was the adoption of the National Environmental Action Plan (NEAP). This plan aims to provide a broad framework for the coordination of environmental management activities. In the development and review process for this Plan, some 150 people from the government, industry, private sector, NGOs and local communities identified various environmental concerns that were addressed and incorporated in the final proceedings. Nine task forces, whose membership reflected a broad representation of institutions and sectors, including the public sector, the private sector, NGOs and local communities, prepared the plan. This process went through several drafts with an active participatory approach. At the same time, the final report was presented and thoroughly debated at five regional workshops by partners from all levels of society.

Among the recommendations to mitigate the negative environmental impacts are plans to develop standards equivalent to current international standards; to train and educate the industrialists; to form a national policy on the disposal of waste and to establish a national database on environment-related issues. The NEAP recommends the implementation of a national policy based on the principle that no one has the right to pollute the environment and proposes that a strategy should be
prepared to control pollution by effluents, requiring that all polluting industries have liquid waste treatment facilities. In addition, the NEAP recommends to create incentives to encourage waste treatment and recycling. Apart from recommending enforcement of legislation and a review of the penalty system, it is also recommended that environmental impact assessments become mandatory before any industrial or other project is approved for implementation.

The NEAP also recommends the development of an environmental policy for all local authorities, the provision of adequate waste storage facilities, the promotion of recycling programmes, the involvement of communities in solid waste management and the incorporation of solid waste disposal needs in all future developments. At the district level, all 59 districts have District Development Committees and sub-committees. One of their tasks is to make environmental impact reports. Environment and development issues have not yet, however, been effectively integrated at the planning and management level. Environmental impact assessments have not been implemented as a matter of routine and are often only being carried out when required by donor agencies. Furthermore, the District Development Committees have been criticised for their lack of focus on environmental matters and in most districts, the sub-committees on environment hold a low status.

In 1989, District Environment Officers, under the Ministry of Planning, were posted to all the districts, with training provided by the Ministry of Environment and Natural Resources and the Ministry of Planning. One of the main points of criticism on this arrangement, however, has been that these officers did not have enough knowledge on environmental issues and were therefore not able to adequately integrate environmental issues at the planning and management level. As a result, District Environment Protection Officers, under the Ministry of Environment and Natural Resources, were posted to some districts in 1993. These officers previously worked at ministerial headquarters and have a thorough knowledge of environmental issues.

The five-year national development plan of 1997-2002 stipulates that the local authorities are expected to develop sound urban planning and land development and to efficiently manage and provide urban services. The plan notes that the major constraints in the provision of urban basic facilities are limited institutional capacity in both the central government ministries and local authorities and the inadequate coordination of activities of multiple actors, leading to duplication of efforts. To address these constraints, the government prepared a plan of action in 1995 in con-

28 The Environmental Impact statements (EIS) have not been publicised as required by law. It is hoped that the new Act will enforce this requirement.
sultation with local authorities, the private sector, NGOs, CBOs and other stakeholders in urban areas. The action plan incorporates support programmes for capacity building, enhanced participation of communities and civic engagement. To deal with the problems of lack of institutional capacity at both the central and the local government, the plan states that the public sector will be reorganised to allow the NGOs and communities to fill in institutional gaps. The action plan also recognises the role of the private sector (Republic of Kenya 1997).

3.6 Human settlements and the development of a LA 21 in Kenya

Local authorities were identified as key actors in both the Agenda 21 and the Habitat Agenda as the level of government closest to the people and they had a crucial role in the implementation of the two agendas. In this section we examine how a local agenda and ideals have evolved in Kenya. We first note that there does not exist a national campaign for the adoption of Local Agenda 21. In a study recently released by ICLEI, there are 11 towns that are engaged in LA 21 activities, though we observe that the number is higher if we consider the towns involved with ‘LA 21-type activities’. Kenya was an active participant in the formulation of both the Agenda 21 and the Habitat Agenda.

An analysis of human settlement policy since independence in 1963 indicates a definite attempt towards the creation of a participatory framework in decision-making. Some of the major policies and actions show these attempts: the 1965 sessional paper No. 10 of 1965 on African socialism and its application to planning in Kenya (Republic of Kenya, 1965) and the subsequent 1970-74 and 1974-78 national development plans, which stipulated ways and means of curbing regional development imbalances in order to attain sustainable and equitable development in the country.

With regard to human settlements, the sessional paper No. 10 proposed a ‘Growth Centre Strategy’ of which the main aim was the selection of strategically located centres in different regions of the country, which were to act as magnets for development. The centres were selected on the basis of their administrative, agricultural, tourism and industrial potential, their proximity to the major population centres, the existing infrastructure and the accessibility to services. These centres progressively received additional investment to make them attractive to the growing urban population, thus avoiding excessive concentration of people in the main towns (Mochache, 1998).

In the 1980s, the Growth Centres Strategy was strengthened by implementation of an industrial policy addressing each growth centre. Although most of these activities aimed at employment generation at the lower rank urban levels, they
subconsciously improved rural environment. This is a positive action stipulated in the Agenda 21 and the Habitat Agenda. Through the District Focus for Rural Development (DFFRD) approach, professionals of different disciplines were posted to the district level to join the DDCs in articulating their departmental needs. Important for Agenda 21 implementation was the posting of the District Environmental Officers (DEOs) to the districts to spearhead implementation of the National Environmental Plan (NEAP), to address and make urgent remedial decisions on local environmental problems, and to improve awareness on environmental issues. Subsequently, a 1990 evaluation concluded that the programme had neither coordinated responsibilities nor shifted them to the districts, but instead had developed into an administrative tool to ensure central control. Moreover, the massive expansion of most municipal boundaries has increased demand for infrastructure services due to the inclusion of large low-income rural populations.

The 1984-1988 national development plan which, among other things, devised a framework for localising administration and development, further indicated the need for mobilising domestic and local resources for equitable development. It called upon local communities to strengthen the Harambee\textsuperscript{29} effort, which really is the local terminology indicating the pooling of resources for development from both the weak and the strong. Both the Agenda 21 and the Habitat Agenda advocate local action and this fits well in the national aspirations of Kenyans as demonstrated in the national motto of “pulling together for development”. Harambee was popularised by the founding father and the first president of the republic of Kenya, Mzee Jomo Kenyatta. It is a uniquely Kenyan institution, rooted in the African tradition of mutual social responsibility. So intertwined is it with the nation’s history that the word appears on Kenya’s national coat of arms. As an institution, Harambee predates the birth of independent Kenya 38 years ago. In fact, Harambee was integral to the rise of African nationalism: the country’s first President was sent to England on Harambee funds to petition the British Government for the return of African lands. Following independence, Harambee became integrated into the nation’s development strategy, as a form of cost-sharing between the Government and project beneficiaries (the latter initially contributing their labour to road building or water pipe projects and the like). Soon, the communities themselves began to initiate projects such as fundraising for schools and health centres, among other things. However, the passage of time has seen Harambee evolve from a community re-

\textsuperscript{29} The Harambee movement is the closest approach to partnership initiatives in that it requires people to work together to address a specific felt need. However, the concept has now been misused by politicians and people are apathetic about its relevance. Harambee is both the institution and the act of community fund raising. Harambee normally takes one of two forms: a public or private Harambee.
source mobilisation vehicle to a theatre of political contest. As Harambee projects have proliferated, the projects themselves have become larger. Where the original projects were typically grassroots-oriented (e.g. village polytechnics, dispensaries and primary schools), the institution had been taken over by local elites by the early 1970s. Fundraising for hospitals replaced Harambees for local health centres, post-secondary institutions replaced primary schools as a Harambee priority. What has proved problematic is to institutionalise local and community action in a nation where there are more than 40 ethnic communities, and where ‘international culture’ has infiltrated the system (Mochache, 1998). Mobilizing local action and collective action in the urban areas remains a formidable task in Kenya.

As clarified in the Sessional Paper No. 1 of 1986 entitled ‘Economic Management for Renewed Growth’, the government’s major goal was to seek ways and means of bringing improved incomes to the poor and those in the rural areas. The Sessional paper recognised the importance of the informal sector, the provision of basic needs to all Kenyans, and the equitable and sustainable management of resources, with land being given top prominence. The structural adjustment programmes (SAPs) of the mid-1980s significantly affected the degree of implementation of the proposals in the sessional paper. Among other things, the SAP significantly reduced the dependence on foreign aid and suggested greater mobilisation and use of local resources. The SAPs, together with the changing political climate towards multi-party democracy, greatly reduced collective action in decision making, as opposition to government mounted. In fact this period saw a significant level of mismanagement of resources, which denied the poor the equity they were meant to have in the share of resources. During the early 1990s, land-use planning also went down with planners concentrating their efforts on carrying out physical development plans (PDPs), which were done only to enable Government land allocation to be transferred to the private sector. This also shows clearly that this is the period when most state-owned land, enterprises, and resources were transferred to private owners, leaving the commissioner of lands and local authorities hardly anything to commit to public use. It is also the period when a level of politically instigated ethnic tensions started emerging, with large groups of rural communities being displaced from their economic activities in the late 1989 and in the early 1990s.

Although Kenya does not have a national campaign for the preparation and adoption of the Local Agenda 21, there have been several initiatives promoting LA 21-type activities. Since 1989, as a result of the intervention of a Dutch-funded Environment and Urban Development Programme, many local authorities were trained and encouraged to integrate environmental issues in their Local Authority Development
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Programmes (LADPs)\textsuperscript{30}. The Urban Development Department has been assisting local authorities to come up with LADPs in all towns in Kenya. The Urban Development Department has been actively involved in the LA 21 process as a partner in the process supporting environmental action groups and conducting a series of workshops. The Green Towns project uses the participatory environmental planning methodology and has assisted in the development of environmental development and action plans in more than 33 towns in Kenya. The end product of a three-day participatory environmental planning workshop attended by participants drawn from the local community, local and district officials, NGOs and CBOs, is a local action plan to be implemented by a voluntary action group. This action plan can be said to be an LA 21-type activity as it attempts to involve all the actors whose cooperation is needed. The programme is implemented through cooperative working relations between the Ministries of Local Authorities and the Ministry of Lands and Settlement, the government training Institute, Mombassa, NGOs and four public Universities. One of the major weaknesses of this approach is that some action groups are not able to influence local development interventions although they have developed area based action plans. There is need for the central government through the Ministry of Local Government to empower these organisations. Some groups like the ones in Malindi, Nanyuki and Elburgon have managed to stop some development projects along environmentally sensitive areas.

3.7 Conclusions

Local authorities constitute one of the most fundamental institutions for development in Kenya. Most of them are, however, in a dysfunctional state. They need to be democratised, professionally managed and empowered in order to function at the optimal level. As they are currently constituted, they are a hindrance to achieving the goals of sustainable development. A number of challenges need to be addressed if the local authorities are to be in a position to effectively address urban environmental management issues. The first challenge starts with the need to review what is ‘urban’ in the national development policy and programmes. A review of many national development plans and other policy documents shows that the focus on urban issues is very weak. The tendency is to focus on sectoral and rural development issues. It is like saying that ‘the urban’ takes care of it’s own. Mainstreaming the challenges of growing urbanisation and responding to urban environmental problems has therefore got to begin at central government levels. This also means addressing the issue of centre-local relationships in terms of decentralisation of resources to the municipal and city levels as a key policy priority. Related to this is

\textsuperscript{30} The LADP is a five-year capital expenditure plan containing a programme of infrastructure and investments in selected business enterprises meant to resuscitate the urban economy.
the need to reduce political interference by the central government with the local authority decision-making processes.

The second challenge is at the municipal level, where there is in many cases an urgent need for institutional reform of the traditional sectoral approach to urban development, emphasising the physical facets of the built environment. The sectoral model (which is used by the central government) has severe limitations in dealing with important cross-cutting themes like urban environmental management. The model is technocratic and top-down and does not allow for effective civic participation. The powers given to the Minister by the Local Government Act need to be reduced and a more decentralised approach should be adopted.

The third challenge relates to the need to build the local capacity of municipalities in terms of financial and technical expertise. The challenges of urban environmental management require viable and vibrant municipal governments, which are able to make local decisions. Seeking effective solutions to urban environmental problems calls for establishing close partnerships with community based organisations and the non-governmental sector. In many towns, the lack of coordination has severely hampered effective urban environmental management, because many projects do not learn from each other, and therefore compete with each other and duplicate activities, resulting in a waste of the scarce resources available.

Fourthly, the challenges of local governance call for a major review of methodologies and approaches. A new emphasis is being put on strengthening participatory approaches to urban planning and management, such as community participation, civic awareness and consultations. They all argue for the need to involve the citizens in decision-making, good governance, and to improve the livelihoods of the poor. Experience suggests that there is still a long way to go, that more needs to be done and that there is a need to strike more partnerships at the local and city levels. This is an important aspect that this study focuses on.

Finally, we note that the problem in Kenya is not so much the absence of laws or the lack of a clear policy or legal framework for environmental management, but rather corruption and inadequate capacity to enforce the rules and implement the policies. For example, the local authorities are frequently unable to execute their development control functions given under the Physical Planning Act due to inadequate finances, lack of skilled personnel and inappropriate enforcement machinery. There are also overlaps, as well as inconsistencies, contradictions and outright inadequacies in the laws. Among the main reasons for this are weak administrative structures, the absence of minimum performance standards, inadequate deterrents and incentives, the generally low levels of active and participatory awareness among
the majority of the population, the preference for short-term gains at the expense of more sustainable alternatives in policy-making, poor planning and gaps and overlaps in the institutional responsibilities which make enforcement difficult. Institutional arrangements need to be reviewed where they are weak and a hindrance to innovative interventions. We have seen that the local authorities are no longer able to provide urban basic services adequately on their own. This has led the municipal authorities to enter into cooperative working relations with non-state organisations. What remains to be studied, analysed and documented are the forms that these collaborative working relations take, how they function, the challenges they face and their eventual outcomes. In the following chapter, we will present the study area and examine its environmental issues, challenges and development options. We will also examine the factors that aggravate the environmental problems and introduce the LA 21 initiatives in the town.
4 Description of Nakuru Municipality

In an exhibition in Leuven, Belgium, in 1998, Nakuru town was described as Kenya in a nutshell. The percentage of all ethnic groups in Nakuru is almost the same as that of the country. All 42 ethnic groups are represented in Nakuru, with the Gikuyu as the majority and the largest tribe in Kenya. In Nakuru, people with diverse ethnic backgrounds, languages, religions and customs, both Kenyan and foreign, co-exist in one way or another (De Meulder, 1998). There are no exclusive neighbourhoods of particular ethnic groups. In this respect, there is need to emphasise the important role that church groups play both as a cohesive force and an important agent of change. As the large majority of Kenyans are Christians, the church is not merely another foreign implant, but has adapted to local cultures and lifestyles and developed deeper roots into the society (ibid.). In general terms, the larger Nakuru district is one of the most urbanised districts in Kenya and it is endowed with scenic sites, four beautiful lakes, a variety of hot springs and two dormant volcanoes. This makes Nakuru district a veritable tourist destination.

The quality of the urban environment is influenced by a number of factors related to the geographical setting and the physical environment in which a town is located (cf. the natural system of Bossel, 1999). Other factors are related to the size, growth and distribution of the population of the town (cf. the human system). The scale and nature of human activities and the settlement structures also affect the quality of the urban environment (cf. the support system). The waste and emissions into the environment disrupt the ecosystems and affect the quality of the town’s environment. Finally, the competence, capacity and accountability of the institutions elected, appointed or delegated to manage the town have a lot of influence on the quality of life and environment in any urban centre (Nunan and Satterthwaite, 1999). In the following sections, we will examine the factors and issues that affect the quality of environment, paying attention to the physical and natural environment, the population and economic activities and the settlement structure. The part of the infrastructure system that is designed for water supply, sanitation and solid waste management and the actors involved in the provision of these services will be discussed in the next chapter. We finalise this chapter with a brief introduction to the LA 21 process.
Pastoral communities, mainly the Maasai, used the area which today constitutes Nakuru as grazing land until the arrival of the railway in the beginning of the 20th century (MCN, 1999). They named the place Nakurro, the Maasai word meaning ‘a dusty place’. Like Nairobi and Kisumu, Nakuru originated as a railway station on the great East African Railway between the city-port of Mombasa on the In-
dian Ocean coast and Port Florence, presently Kisumu, on the Lake Victoria shore. Being located in the so-called ‘White Highlands’, Nakuru soon developed into an important regional trading and market centre and became the capital of the district with the same name and of Kenya’s largest province, Rift Valley Province. Nakuru was a very much planned settlement during the colonial period with a square grid cut in two by the railway (De Meulder 1998; MCN 1999; Foeken and Owour, 2000). The street pattern was as simple as it was efficient: with streets in an east-west direction called ‘avenues’ and streets with a north-south orientation called ‘roads’. In the zoning plan of 1929, Nakuru’s further expansion was laid down in accordance with the then generally accepted principles of functional zoning, i.e. with an industrial quarter, residential districts for the various social classes, a suitable location for a hospital and cemetery, recreational facilities, a site for the airport, etc. One of the special residential quarters, located to the southeast of the original grid, was Bondeni, meant for the Asian community (ibid.).

After independence, Nakuru municipality has undergone major extensions of its boundaries, namely in 1963, 1972 and 1992. The 1992 extension included the Lake Nakuru National Park within the municipality’s boundaries and a stretch of agricultural land to the northwest and north-eastern boundary of the Park. Due to the subdivision of former farms into small plots for residential use, this stretch is now largely a sub-urban area (Foeken and Owour, 2000). The total area of the municipality is about 292 km$^2$, of which the lake covers 44 km$^2$.

4.2 The natural system: the physical environment

As shown in Map 4.1, Nakuru town is located 160 km north-west of Nairobi and is the fourth largest urban centre in Kenya after Nairobi, Mombassa and Kisumu. It is situated at an altitude of 1,859 m above sea level and located in the region of the Great Rift Valley whose formation gave rise to a unique natural structure.

The town is located in an environmentally sensitive area. As shown in Map 4.2, the town is sandwiched between Lake Nakuru National Park in the south and the Menengai crater and its associated volcanic landscapes in the north. Further to the north-east of the town is the Bahati Escarpment, forming the western fringe of the Aberdares Escarpment. Unstable geological zones experiencing frequent local geological faulting characterise the western zone of the town. The most affected area of the municipality is on the western side of the Central Commercial District around Ngata, Kiamunyi and the Rift Valley Institute of Science and Technology.
Soils in these areas are young, poorly developed, porous, light and poorly structured. The area is characterised by very low run-off due to the porous nature of the soils. Lake Nakuru is the lowest point in the region rising to 1,758 metres above sea level. All rivers in the region therefore drain into the lake. As a result of the geological instabilities and the associated faulting, the Nakuru area and the Rift Valley region as a whole are highly vulnerable to earthquakes, land subsidence and land sliding. The
area west of Nakuru has already been identified with frequent land subsidence. Similar hazards could be expected in areas of the central part of the town where there is evidence of ground depressions and the disappearance of surface water into fissures.\footnote{Buildings are known to vibrate when heavy commercial vehicles pass nearby, indicating the presence of underground cavities.}
4.2.1 Landscape units

There are four major landscape units in Nakuru. A landscape unit in this case constitutes a set of visible physical factors in the formation of land, which presents opportunities and/or constraints for urban development. The landscape units identified indicate the basis for urban development considering the slope characteristics and the ease of drainage.

(i) The Menengai Crater Hilltop: 2,490 metres above sea level
This landscape unit constitutes all land and land-based resources on the Menengai Crater at and above 1,960 metres above sea level.

(ii) The Menengai Crater Slope and other environmentally sensitive slopes
This constitutes land that rises from 1,880 to 1,960 metres within a distance of about 1-2 km around the Menengai Crater. This landscape unit is more pronounced in the south-eastern slopes facing the central commercial district and the Kiamaina-Ngachura and Karunga-Bahati peri-urban areas, respectively. This landscape unit also consists of four main landforms that abruptly rise above the general ground.

(iii) The Lake Nakuru Basin, the Lower Njoro Channel and the Bottom of the Crater (1,760-1,780 metres above the sea level)
This landscape unit consists of the lake itself, the lakeshore and the section of the Njoro river channel in the Ronda-Kaptembwo and Baruti residential zones. In recent years, this landscape unit has suffered from pollution with solid waste from the surrounding residential areas, from industrial effluents discharged from the main industrial areas and siltation from storm water in the form of surface run-off originating at the slopes of the Menengai Crater, the Central Business District (CBD), and the industrial zone and East Njoro.

(iv) The Flat High Ground and well-drained landscape unit (1,800-1,860 metres)
This is the area of the present CBD and the industrial and residential sites. This landscape unit attains the highest prices in the market because the area is well drained. The residential areas covering Racecourse Estate, Langa Langa, Shabab and Freehold are all within this landscape unit.

4.2.2 The Lake Nakuru National Park

The Lake Nakuru National Park (LNNP) was gazetted in 1968, but since 1961 there was a bird sanctuary in the lake's south sector. With support of the World
Wildlife Fund, the Kenyan government started a plan to purchase the adjacent grounds in order to expand the protected areas. The park currently covers an area of 188 km$^2$ on the floor of the Rift Valley. The lake, situated at the centre of the park, occupies an area of 44 km$^2$ at an altitude of 1,759 metres above sea level. The lake is one of a series of alkaline-saline lakes in the eastern Rift Valley (Thampy, 1998). It is one of the main national parks of Kenya and famous worldwide for its birdlife and for spectacular assemblages of lesser flamingos that congregate on the lake. Beyond the lakeshore, 350 terrestrial bird species inhabit nine ecological niches within the national park. The park’s birdlife, together with 50 species of mammals, including the endangered black rhinoceros and the Rothschild giraffe and 500 species of flora make LNNP one of the most exciting and frequently visited concentrations of wildlife.

The park is located within MCN’s jurisdictional boundary, but the council does not get any of the revenue generated from tourism in the park. All the revenues generated from the park are managed by the central government through the Kenya Wildlife Service. This has implications because urban development within the town has a direct impact on the very survival of the lake ecology. It also means that Nakuru town’s residents do not gain directly from the tourism associated with Lake Nakuru. The lake ecology is constantly under environmental threat from pollution emanating from industrial and other urban development activities within the municipality. Agricultural activities and deforestation in the Lake’s catchment areas will have impacts on the ecosystem of Lake Nakuru National park. The urban and peri-urban population is increasing and this is accompanied by unplanned industrial, commercial, transportation, residential and agricultural development.

4.3 The human system: population growth and dynamics

Nakuru town has a population of nearly 300,000 people and the 1999 population census interim report puts it at 289,385, with a growth rate of over 5% per annum (Table 4.1). From a population of 38,181 in 1962, the population reached 163,927 in 1989. Nowadays, Nakuru is the fourth largest town in Kenya after Nairobi, Mombasa and Kisumu. By the year 2015, the population is projected to rise to 760,000 (MCN, 1999). The population growth has been influenced by the birth rates, rural-urban migration and boundary extensions. There is rapid ‘urban’ development at the periphery of the town because many people take refuge in those areas as a result of shortage of housing in the town centre. Most of these settlements originate from former farming lands as a result of subdivision. This makes planning complex, especially since residents demand inclusion in the municipal
boundaries (see Map 4.2 on the evolution of municipal boundaries) and benefit from urban services, which are being overstretched beyond their limits.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>49,301</td>
<td>87,003</td>
<td>92,088</td>
<td>122,333</td>
<td>162,511</td>
<td>215,885</td>
<td>286,788</td>
</tr>
<tr>
<td>West</td>
<td>22,826</td>
<td>40,282</td>
<td>42,636</td>
<td>56,639</td>
<td>68,574</td>
<td>99,953</td>
<td>132,781</td>
</tr>
<tr>
<td>Lanet</td>
<td>30,097</td>
<td>53,113</td>
<td>56,217</td>
<td>74,681</td>
<td>99,209</td>
<td>131,792</td>
<td>175,077</td>
</tr>
<tr>
<td>Baruti</td>
<td>61,300</td>
<td>108,178</td>
<td>14,501</td>
<td>152,106</td>
<td>202,063</td>
<td>268,427</td>
<td>356,588</td>
</tr>
<tr>
<td>LNNP</td>
<td>458</td>
<td>808</td>
<td>855</td>
<td>1,136</td>
<td>1,510</td>
<td>2,006</td>
<td>2,664</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>163,982</td>
<td>289,385</td>
<td>306,297</td>
<td>406,896</td>
<td>540,534</td>
<td>718,063</td>
<td>953,898</td>
</tr>
</tbody>
</table>

*Calculations based on a growth rate of 5.68% per annum


Currently, the population is concentrated within the old municipal boundaries, with the highest densities being found in the residential areas and the CBD. The other high population density is located close to Nakuru industries in the east and includes the Kiratina and Free areas. These areas have numerous informal housing units and small business outlets, often located at walking distance from residences.

As shown in Table 4.2, the population structure reveals a young and growing population with a low level of ageing population. This calls for the application of appropriate planning interventions aimed at meeting the needs of such population groups. Population distribution is influenced by factors such as the accessibility to basic infrastructure facilities and services like roads, public transport, water, sewerage and electricity. It also depends on the type of land tenure and the availability of opportunities for economic advancement. High population densities greatly compromise the principles of health, safety and environmental quality (MCN/ Republic of Kenya/ UNCHS/ABOS-BADC, 1999). We note that only a fraction of the labour force is actually employed in the formal sector. The implication is that there is a high dependency ratio, increasing unemployment and urban poverty. The rate of household formation and household sizes are also high, hence also the need for provision of shelter and other services.
Table 4.2  Nakuru town population structure by sex and five-year age group (1989-2020 based on a growth rate of 5.68% per annum)

<table>
<thead>
<tr>
<th>Age cohort</th>
<th>1989 Male</th>
<th>Female</th>
<th>1999 Male</th>
<th>Female</th>
<th>2010 Male</th>
<th>Female</th>
<th>2020 Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>31,520</td>
<td>32,208</td>
<td>55,624</td>
<td>56,919</td>
<td>103,899</td>
<td>106,316</td>
<td>183,355</td>
<td>187,619</td>
</tr>
<tr>
<td>15-29</td>
<td>32,057</td>
<td>31,138</td>
<td>56,572</td>
<td>53,186</td>
<td>105,670</td>
<td>99,344</td>
<td>186,478</td>
<td>175,316</td>
</tr>
<tr>
<td>30-44</td>
<td>17,683</td>
<td>10,064</td>
<td>31,382</td>
<td>17,760</td>
<td>58,618</td>
<td>33,174</td>
<td>103,445</td>
<td>58,544</td>
</tr>
<tr>
<td>45-59</td>
<td>5,425</td>
<td>2,325</td>
<td>9,574</td>
<td>4,102</td>
<td>17,883</td>
<td>7,664</td>
<td>31,558</td>
<td>13,525</td>
</tr>
<tr>
<td>60-74</td>
<td>903</td>
<td>742</td>
<td>1,593</td>
<td>1,309</td>
<td>2,976</td>
<td>2,446</td>
<td>5,253</td>
<td>4,316</td>
</tr>
<tr>
<td>75+</td>
<td>354</td>
<td>363</td>
<td>625</td>
<td>641</td>
<td>1,167</td>
<td>1,197</td>
<td>2,069</td>
<td>2,112</td>
</tr>
<tr>
<td>Total</td>
<td>88,042</td>
<td>75,885</td>
<td>155,371</td>
<td>133,917</td>
<td>290,213</td>
<td>250,140</td>
<td>512,148</td>
<td>441,430</td>
</tr>
</tbody>
</table>

Source: Central Bureau of Statistics, Nakuru

The enormous population increase implies an increased demand of urban services such as water, sanitation, housing, garbage collection, health, recreation facilities and other forms of infrastructure. This further strains the existing facilities. Currently, the population is concentrated within the municipal boundaries, with highest densities in the public housing triangle of Langa Langa, Freehold, Shaabab, Kenlands, Racecourse, Pangani and the Central Business District. These are well-established, serviced and accessible housing estates. Most community facilities are in these areas and they continue to attract more population. The population of the peri-urban areas of Ngata, Engashura, Mbaruk, Workers, Kiamunyeki, Wanyororo and Kiambogo will continuously increase. These areas presently lack essential community and infrastructure facilities. A huge proportion of the population is also concentrated in the low-income settlements around Kwaronda, Kaptembwo, Mwariki, Lakeview, Bondeni, Kivumbini and Frearea (MCN/Republic of Kenya/UNCHS/ABOS-BADC, 1999). These areas do not have adequate basic services and households have formed community-based groups to assist in the provision of some services.

4.4  The support system

4.4.1  The economic structure

It is important to examine the economic structure within the municipality as it affects the way of life of the residents. The major economic sectors of the Nakuru urban economy are commerce, industry, tourism, agriculture and tertiary services. The most dominant forms of business in the Nakuru economy include retail in hardware, general wholesale, outlets for agro-industrial machinery, motor
vehicle trade and spare parts, and servicing the agro-chemical retail and wholesale outlets. There is a significant network of financial institutions providing banking, insurance and credit services to the business community (MCN/Republic of Kenya/UNCHS/ABOS-BADC, 1999).

Currently, there are well over 100 industrial establishments in town, including grain milling and storage, processing of cooking oil from agricultural raw materials, agro-chemical production, soaps, blankets and dairying. There is currently a decline in locally produced goods, but growth in the industrial retailing of finished products. The economy largely depends on the rich agricultural hinterland. There is an increasing growth in small-scale agricultural activities within the metropolitan area, mostly located in the peri-urban areas of Bahati, Kiamunyi, Engashura, Kiamunyeki and Mwariki where the sub-division of large farms into smaller holder portions is rampant. The presence of key natural features such as Lake Nakuru, the Menengai Crater and archaeological sites like Sirikwa holes and Hyrax Hill gives the town some tourism potential. Employment increased from about 24,000 in 1986 to 41,000 in 1995 (MCN/Republic of Kenya/UNCHS/ABOS-BADC, 1999). The trend in earnings also changed from 43 million pounds (68 million USD) to 113 million pounds (178 million USD) in the same period.

Limited formal employment opportunities have resulted in the rapid increase of informal trading activities in the central business district, where every corner of town has been taken up by petty traders, food sellers and jua kali mechanics. Conflict in land use is especially felt at the bus and Matatu Park area, which encompasses the bus and Matatu Park, retail market, wholesale market, public garden and innumerable informal trading activities (MCN/Republic of Kenya/UNCHS/ABOS-BADC, 1999). Coupled with poor infrastructure this creates great concern. We need to note that the informal sector in Nakuru plays a very important role in generating employment to a large proportion of the population. The informal sector is also involved in the provision of services in the residential areas, like waste collection, water supply and the maintenance of sewerage systems. There are, however, a lot of conflicts between the informal workers and the municipal authorities since their activities are not licensed, they do not pay taxes and tend to operate anywhere in town. The MCN, assisted by the local police, has recently been demolishing what they term as “illegal business premises” and chased hawkers out of the CBD. Such actions will not achieve the desired objectives and they tend to create tension between the informal operators on the one side, and the municipal officers on the other. There is need to designate areas where the informal workers are al-

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32 'Jua kali' is a Swahili word meaning ‘hot sun’ and it refers to small-scale informal activities (usually in the open air).
lowed to operate freely as their role in generating incomes for the low-income population is very important.

4.4.2 Land tenure and land use

Most of the land within Nakuru municipality is either public or government/council leases, while the peri-urban zones are characterised by freehold land without development control. This makes it easy to subdivide and transfer the land in the peri-urban zones for speculative and development purposes without proper urban management. The various land uses within the municipality have developed over time on land allocated for urban use by the central government, local authority and cooperative initiatives (MCN/Republic of Kenya/UNCHS/ABOS-BADC, 1999). This has led to the existing patterns as shown in Table 4.3.

In Nakuru, public land constitutes public purpose and utility, while private land is either leasehold or freehold. Company and cooperative land in Kwarond a and Mwariki is in the process of being titled. Private ownership is pronounced. Apart from the land for rental council houses, offices, Kenya Industrial Estates, government houses, offices and schools, the rest of the land is private.

Table 4.3 Land use in Nakuru municipality

<table>
<thead>
<tr>
<th>Type of land</th>
<th>Main estate</th>
<th>Area (km²)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Racecourse, Langa Langa, Shaabab, Milmani, Kaptembwo, Kwaronda</td>
<td>35.73</td>
<td>70%</td>
</tr>
<tr>
<td>Commercial</td>
<td>CBD, KANU Street, Section 58 etc.</td>
<td>1.10</td>
<td>2%</td>
</tr>
<tr>
<td>Industrial</td>
<td>Blankets and west of the CBD</td>
<td>8.30</td>
<td>16%</td>
</tr>
<tr>
<td>Institutional</td>
<td>Hospitals (PGH), government and council offices, schools, etc.</td>
<td>3.20</td>
<td>6%</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>3.00</td>
<td>6%</td>
</tr>
<tr>
<td>Total built up area</td>
<td></td>
<td>51.33</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Lands office Nakuru, 1997

4.5 The settlement structure

The housing sector in the municipality can be said to have taken much of the space. From the provider perspective, there are two categories of housing: public and private. The former comprises the housing stock of the government, its corporations and municipal authorities for staff accommodation and council rental housing. The latter

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33 The settlement structure is part of the city's infrastructure system, which also encompasses the provisions for water supply, sanitation and solid waste management. We will deal with the latter part of the infrastructure system in the next chapter.
Challenges of Urban Environmental Governance

comprises the housing stock of individuals for rental purposes or their own habitation. There are at least 6,956 public housing units in town, 5,434\(^{34}\) of which are owned by the MCN and 1,522 by the central government departments and corporations (MCN/Republic of Kenya/UNCHS/ABOS-BADC, 1999). The rate of growth in the public housing sector is minimal. The private sector is the largest provider of housing in Nakuru. Apart from government leases, the sub-division of large farms (owned by cooperatives and land-buying companies) avails land for formal and informal private housing development. The rate of house formation in this sector is high, but has been declining in the recent past.

![Map 4.4. Settlement Structure and the Estates selected for the Household Survey](image)

The type of housing in town includes flats or other high-rise type housing, maionnettes, bungalows, semi-detached housing, terrace housing, row housing and informal housing. Private housing offers a wide range of such types. The spatial structure

\(^{34}\) Each of these units was designed to house one household, but they have so far been expanded without the necessary council’s approval and are very congested.
of housing and settlements in Nakuru has evolved from racially based differentiation to a zoning based on socio-economic status. This status tends to correspond with the income levels of the neighbourhoods, with high-income areas generally having low densities, and low-income areas having high densities (MCN/Republic of Kenya/UNCHS/ABOS-BADC, 1999). High income-low density is found in the north and northwest: Kiamunyi, Milimani, Sita centre and Section 58. Middle income, medium density neighbourhoods are found south of the A104 road: Racecourse, Shaabab, Koinange, Langa Langa, and the north-east neighbourhoods of Kiti and Workers. Low-income high-density neighbourhoods are found mainly in the south and southwest: Bondeni, Flamingo, Kaptembwo and Mwariki. This differentiation also corresponds with the level and quality of infrastructure facilities within each zone. Public housing areas are generally well planned with provision made for wider roads, open spaces and space for public utilities. Most private housing areas, especially those in low-income neighbourhoods, are poorly planned and have inadequate physical infrastructure and services. Since quite a large proportion of private housing is developed in the rural-urban interface areas, the municipality does not provide services there, and thus private initiatives are the only hope for servicing the areas.

Studies undertaken by DURP and HABRI in 1998 indicate that the majority (87%) of the residents are tenants, while a significant 13% occupy their own units. Owner-occupied housing has a lower plot coverage and tends to create relatively lower densities. Owner-occupied housing is minimal in low-income settlements. As will be seen later, this affects the tenants’ participation in the improvement of the environment. Private housing offers a wide range of accommodation types, including formal and informal single rooms in the low-income settlements, bungalows like those found in Milimani, maisonettes especially in the Kiamunyi area, and flats. Formal private housing for high and middle incomes is well served with water, sewer and septic tanks and electricity. Private informal housing in the low-income settlements faces a number of problems such as poor planning, inadequate support infrastructure like roads, drainage, garbage collection, water, security and electricity. Our household survey was conducted in such neighbourhoods and the communities have organised themselves to take initiatives aimed at environmental management.

In the low-income neighbourhoods, environmental problems are increasing, especially those that affect human health. The area to the west has a geological fault line running through the estates of Kaptembwo and Kwaronda, causing soil subsidence in the rainy season, resulting in deep gullies. Apart from the poor private housing in Kaptembwo, Kwaronda and other areas, the council public housing is in dire need of attention as it is uneconomically managed and in condition of disrepair (MCN/Republic of Kenya/UNCHS/ABOS-BADC, 1999). The inter-linkage between urban activities and the need to protect the lake and the park further compli-
cate the planning of the town. There is need for an integrated approach to make any intervention meaningful and this calls for collaboration between different actors and increased coordination on the part of the municipal authorities.

4.6 Opportunities for urban development

There are several factors that create opportunities for urban sustainable development in Nakuru. Some of these are: (a) the natural sites for tourism development, such as the Menengai crater and Lake Nakuru; (b) a rich agricultural hinterland for both farming and livestock; (b) extensive community resourcefulness; (c) cultural interpretation and self-help capacity; (d) the dual role of Nakuru as a district and provincial headquarter; (e) the well-defined transportation network at the national and international levels and recognition of Nakuru as a regional service centre; (f) the transit position of Nakuru on the transport link to the west of Kenya and the central African countries; and (g) the location of Nakuru in the centre of the rift valley, itself a tourist attraction. We also note that the council has numerous resources which can be exploited, such as an informed community that is willing to participate and good under-utilised land for urban development. Furthermore, the town has been able to realise greater involvement of CBOs, NGOs and the private sector in urban planning and management. These civil society organisations have been involved in solid waste management, greening, water provision and housing with financial, technical and institutional support of the council and with participation of local communities. The MCN is confronted, however, with both planning and institutional problems and other challenges that affect urban management. These problems and challenges emanate from the national and district level and the policy-making environment of the MNC (see Chapter 5).

4.7 Current environmental management initiatives: the LA 21 in Nakuru

The LA 21 initiative started in 1995 with Belgian funding. The initial activities were sensitisation and awareness creation through workshops on urban environmental management, and the development and implementation of broad-based environmental action plans that focus on context-specific aspects of municipal planning and management. Much of the LA 21 work has been done in partnership with UNCHS, WWF and other NGO partners such as ITDG and ICLEI.

Nakuru is one of the three secondary cities selected by the UNCHS (Habitat)’s Localising Agenda 21 programme for a case-study of the implementation of the LA 21 approach. The programme offers a multi-year support system for Nakuru (Kenya), Essaouira (Morocco) and Vihn City (Vietnam), where the programme provides con-

35 A detailed analysis of LA 21 processes in Nakuru is presented in Chapter 7, detailing how the partnership principle has been utilised.
centrated capacity building and management support. It is hoped that the dissemination of lessons learned to other cities in these regions will further build the capacity of local authorities to formulate and implement LA 21 programmes for and with their communities. The programme enjoys core-funding from the Belgian Administration Development Coordination (BADC/DGIC) and technical support from UNCHS (Habitat), the government of Kenya and a consortium of Belgian universities, the private sector and professionals.

Local teams run the day-to-day project activities and are supported by local advisers. Team members represent different partners and thematic areas of the project. Numerous activities have been planned within the framework of the ‘Urban Pact’ and the broad guidelines and the priorities of the council. All these activities are structured to run on three parallel tracts: vision, action and communication. In each track, substantive activities have been implemented and planned for the future. The long-term visions are being addressed through the creation of a ‘Strategic Structure Plan’. Partnerships with many organisations, including WWF and the University of Nairobi, have been formed. This is an ongoing activity and central to the entire process of LA 21. LA 21, including an up-to-date mapping of Nakuru and the establishment of an MCN Planning team, has supported supplementary activities. We will discuss this process in more detail in Chapter 7.

It appears that whilst a great deal of efforts were put into the LA 21 initiative, there has been relatively little take-up and follow-up by the MCN. The objective was to engender civic pride and develop planning capacity. The reality is that this initiative has not had much impact on decision-making and environmental management initiatives in Nakuru, as will be discussed in Chapter 7.

4.8 Conclusions

Nakuru’s location in an environmentally fragile ecosystem offers several limitations to its physical expansion, while at the same time challenges make the urban developers and managers look for ways to ensure that management is done in a holistic way. Nakuru has grown into a large urban centre in a very short period of time. When looking at the town today it is difficult to imagine that the town is less than 80 years old. For a town to have grown from scratch – literally the scratch of the railway line on the landscape – into an urban centre of close to 300,000 people in such a compressed space of time implies consequences for the condition of the city (De Meulder, 1998). De Meulder further notes that, urban forms, institutions and mechanisms evolve over a long time adjusting to the changing aspirations and voices of its citizens. The compressed history of Nakuru does not provide enough of these reference points. At the same time, the absence of historical reference also becomes an advantage as it reduces the burden of his-
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tory and impacts a sense of freedom for the interventions and visions, a freedom that many historically rooted cities in the world would vie for (ibid.)

The administrative boundaries of the town have continuously shifted outwards with the expansion of the town. It has been noted that the need for accommodating the ever-growing population into a more or less sustainable urban frame is overruled by political motives to jump to another, even more distant boundary line. The expanded municipal boundaries imply that there are more people to be catered for. As will be seen in the next chapter, the town faces many challenges in providing urban basic services in the entire municipality.

Some industrial enterprises generate wastes that eventually end up into Lake Nakuru, the lowest part in the municipality. The garages dotting the entire municipality neither dispose of their wastes adequately, which will eventually affect the quality of the environment in the Lake’s ecosystem. All these activities need to be coordinated in an organised way and the MCN needs to involve all actors whose cooperation is needed to ensure that the quality of the environment is improved.

In the Agenda 21, a historic blueprint for sustainable development, the main focus is on the need to improve the social, economic, and environmental quality of human settlements. In this regard the main challenge is to not only manage urban growth, but to develop a strategic vision on how to mobilise human, financial and technical resources for realising the needs mentioned above. Considering the limited effectiveness of current methods and approaches, innovative tools need to be devised, which are adaptable to society’s circumstances and which support the increased participation of all stakeholders. The following chapters examine the process of urban environmental management by examining the roles played by different actors and the partnerships that have been formed.
This chapter examines the urban environmental management as it is practised in Nakuru, focusing on the areas of water supply, sanitation and solid waste management. The major questions that this chapter addresses are related to the existing infrastructure, institutional arrangements and actors in the provision of urban services under focus, the problems associated with urban services delivery and the individual and collective responses to problems related to water supply, sanitation and solid waste management. Under the current set up of the municipal government in Nakuru (see Chapter 3) and the structure of the provision of services that will be discussed in this chapter, the low-income settlements do not have access to most of these services. This explains the expanded role of the private sector and NGOs in the provision of services as new actors in urban environmental management. It also implies that households respond to the perceived problems by either acting individually or in collective entities in order to ensure that they get these basic services. In this respect, we will pay ample attention to the role of community-based organisations (CBOs).

5.1 The infrastructure system for urban services

5.1.1 Water supply

Until 1985, the town was adequately served with water. In the recent past, however, the supply of water has been characterised by chronic shortages affecting mainly the residential and industrial functions. The town gets its water from both surface and underground water sources. The council has about six major water reservoirs. While most of the water distributed to consumers is treated, some water from the boreholes is not. Available information from the Municipal Council of Nakuru (MCN)\(^{36}\) indicates that the water reticulation system is inadequate with only about 35 km\(^2\) (34%) of the municipal being covered. Areas well covered include the Central Business District, Milimani, Shaabab, Freehold, Section 58, Free area, the Industrial area and the Council housing estates\(^{37}\). Water supply in newly

\(^{36}\) Information from the MCN Water and Sewerage Department.

\(^{37}\) The MCN owns over 5,000 housing units within the municipality and they are well served with water.
settled areas\textsuperscript{38} is mainly achieved through collaborative initiatives between households, civil society organisations and the private sector.

It is estimated that water sources have a capacity of 36,260 m\textsuperscript{3}/day and that the actual water supply is 28,280 m\textsuperscript{3}/day (MCN, 1999). Other supplementary sources include the National Water Conservation and Pipeline Corporation (NWC&PC)\textsuperscript{39}, the Kenya Army\textsuperscript{40}, Lanet Barracks, eight private boreholes and self-help water projects in Barut and Mогоon areas. The supplementary sources supply a total of 11,990 m\textsuperscript{3}/day against a design capacity of 15,290 m\textsuperscript{3}/day (DURP, 1998). The report states that the total water supply is 40,270 m\textsuperscript{3}/day against the present demand of 50,000 m\textsuperscript{3}/day. It is not possible to accurately determine the individual water demand for various consumer groups. The report by the DURP states that in the absence of comprehensive data on various consumer groups, water demand can be calculated on the design criteria based on domestic demand.\textsuperscript{41} The quantity of water supply has been subject to large fluctuations owing to the operational condition of pumping facilities in the borehole fields. What this means for the situation in low-income neighbourhoods and the households responses will be examined in the Sections 5.3 and 5.4.

Residents of Nakuru Municipality depend on public water supply for their domestic use. The municipality depends on two water treatment works and three borehole fields for its potable water supply. According to the municipal records, there were only 15,000-registered water consumers by 1999, out of a total population of nearly 300,000.\textsuperscript{42} This implies that most of the actual water supply available to the council is lost or unaccounted for. This is attributed to illegal water consumption and connections, a high number of non-metered connections, shortage of meters, defective meters, leakage of long service lines and wastage at the council housing estates where we find communal water closets. According to information from the former Water Supply and Sewerage Department, the quantity of water unaccounted for is very large. There have been recommendations to install more meters and put leakage detection and reduction mechanisms in place to reduce the amount of water unaccounted for. This has, however, not been done thus far.

\textsuperscript{38} These are areas around Kiamunyi, Lanet and Teachers.
\textsuperscript{39} Prior to February 2001, the NWC&PC was selling water to the MCN. There was some disagreement between the two entities.
\textsuperscript{40} Only supplies water to the Barracks and Army Training School.
\textsuperscript{41} Based on past experiences in Kenya, the following two assumptions were made to estimate the water demand in Nakuru: half to two-thirds of the urban water is for domestic demand and the average domestic water consumption rate is 100-litres/person/per day (DURP, 1998).
\textsuperscript{42} Information from the former Water and Sewerage Department.
5.1.2 Sewerage and storm water drainage

Sewerage involves the mechanisms of handling domestic and industrial liquid waste. Domestic sewage disposal in Nakuru town is done through sewer reticulation, septic tanks and cesspools and pit latrines. There are two sewage treatment works: the Old Town treatment works within the boundaries of Lake Nakuru National Park and the newer and bigger Njoro treatment works in the south-west, both using stabilisation ponds as the treatment mechanism (MCN, 1999). The capacity of the sewage system is underutilised, mainly because of the inadequate sewage network. The MCN estimates that the truck sewer system only covers about 13 km² with only 12,000 sewer connections. As a result, only 19% of the built-up area is served by the sewage network, including areas such as the CBD, the Industrial Area, the MCN housing estates, Shaabab, Pangani, Lakeview, Racetrack, Gilani Estate, Prisons and the Lanet Army Barracks and their surroundings. About 5,000 consumers of water are not connected (DURP, 1997). In the low-income neighbourhoods, it is common to see wastewater flowing along the roads from the households that are not connected to the sewerage system, running directly into open drains which become breeding habitats for disease vectors (see Plate 5.1).
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Considering the pollution of ground water, which is a major water source, it would be necessary to expand the sewerage trunk and reticulation network into all areas of the town, and especially in the high-density low-income areas.

The use of septic tanks and cesspools are common mainly in high-income areas such as Milimani, in public institutions and in some newly settled areas especially middle and high-income settlements like Kiamunyi, Teachers and Lanet. This translates to about 11% of the households in the unsewered areas in the town. The use of pit latrines is limited to the low-income high-density settlements such as Kwaronda, Kaptembwo, Kiamunyeki and Barut. In all, 89% of the households use pit latrines in the low income, high-density areas of the town (DURP, 1997).

Plate 5.1 Raw sewer flowing from a house compound in Lakeview estate into Lake Nakuru

5.1.3 Solid waste management

No official statistics or reliable data are available on waste generation, but it is estimated to be 350 tonnes per day, based on the assumption that the generation ratio is 0.5-0.6 kg per day per capita and that the current population amounts to nearly 300,000 (JBIC, 2001). There is also no data about the composition of waste. Rough estimates indicate that plastics, especially plastic films, constitute a significantly large portion of the total garbage volume. There are no official recycling activities at the moment. However, scrap metal, paper, plastics, bottles and vegetable matter are materials sorted at the generation source for sale.
to buyers who in most cases transport these items to recycling facilities outside the municipality.

There are several ways to discharge and store the waste, including the din container, the multi-container and the refuse chamber. People may also just throw their waste in pits near their houses or on illegal dumping sites. A din container has a capacity of 1.1 m³. They were donated by the Italian Government in 1989 and now almost useless, since most of them have broken down (see Plate 5.2). Multi-containers with a capacity of 15 m³ are set out and sometimes grounded at locations where there is much generation of waste, such as markets or the CBD.

Plate 5.2 Broken din container

A refuse chamber (see Plate 5.3) is a fixed storage facility with a capacity of 11 m³ built of concrete blocks, introduced by WWF in low-income neighbourhoods. There are 19 refuse chambers that have been built in partnership and with assistance from the MCN (providing land), the LA 21 group, WWF and KWS (providing funds), and the local communities (maintenance of the chambers and notifying MCN when the chambers are filled up). It is worth noting that the refuse chambers are presently not properly used, as most households were not consulted regarding the appropriate loca-
There are also concerns about the design of the refuse chambers and it is common to find garbage littering the structures.

Plate 5.3  Refuse chamber

In 1997, the MCN had only five collection vehicles in good serviceable conditions, only three of which were operational. The current waste collection and transportation system is quite miserable because of the lack of proper collection vehicles to transport the waste. In the mid-1980s, the MCN had and maintained eight refuse collection vehicles, but presently only 2-3 refuse collection vehicles are on the road per day, on average.

Others are parked in the municipal garage with no hope for repair because of lack of financial resources, spare parts, tools and maintenance skills. The electric power to the garage was disconnected two years ago as a result of unpaid electricity bills.

43 In the discussions with some residents in the Pangani area, some of them noted that the refuse chambers were located too far from their houses and they found themselves dumping their domestic solid waste in undesignated areas. In fact, only a few households in a specific locality need to start dumping in an open site near their houses for a site to turn into a rubbish dump, especially if the site is not in anyone’s backyard. The poorly maintained roads turn out to be the most favourable areas for dumping.

44 In the period that we undertook our survey (1998-2000), there were only two vehicles operational, which were occasionally backed up by a tipper from the Town Engineer’s Department.
There are three types of collection vehicles on the road: a side loader, a multi-lift and the mini-matics. In all, 86% of the households dump the waste at undesignated open sites and the municipal collection services only cater for 9% of the households (JBIC, 2001). Also, there are the small-scale private refuse collection companies in town like Salvage Refuse Collectors, Nakuru Hygiene Services and Parrots Services who enter into contracts with individual households and institutions to collect their waste. In addition to these companies, there are other unregistered waste collectors that collect waste from restaurants and institutions, which they dump on illegal dumping sites at night to avoid the disposal fee at the municipal dumping site. This was evidenced by the presence of waste dumped in low-income neighbourhoods of Ronda and Kaptembwo that consisted of beer cans and vegetables; waste that is rarely generated by low-income households.

Plate 5.4  Burning of waste after a community clean-up day

The MCN has one designated site for solid waste disposal located at the western side of the town. The disposal system is based on open dumping in an abandoned excavation quarry next to the London residential area. The dumping site is situated about 4 km from the CBD on the upper side of the industrial areas where there are many private boreholes. All kinds of waste, including hazardous, industrial and hospital waste, is dumped at this site. The current dumping site was opened in 1974. The method used at the site is controlled tipping where soil is used to cover the waste and it is done on a daily basis. This method was practised during the initial stages. It is no longer done due to a breakdown of the equipment that was used.
The waste is now, without any form of separation, being dumped in a natural ravine. Where the ravine has been filled up, the garbage is covered with a thin layer of soil where food crops are now being cultivated. There is, however, no controlled tipping at the site and the waste is dumped in the open environment. As a result, bad smell, breeding of flies and mosquitoes, vermin and rodents pose serious health risks to the people surrounding the areas. Due to burning of waste, which is common scene in most residential areas and at the dumping sites, air pollution is also evident (Plate 5.4). Underground water pollution is most likely since the underlying aquifer is volcanic and extremely pervious. This, however, has not been scientifically ascertained.

Human settlement at the tipping site and agricultural activities are causing a lot of concern. The area can hardly expand due to encroachment and with the current increase in refuse yield its lifespan is grossly compromised. Plate 5.5 shows the dumping site Menengai, which is almost filled up.

Plate 5.5  The dumping site at Gioto, Menengai

5.1.4  Implications of the status of the infrastructure system

Given the above structure of services in Nakuru, the low-income settlements suffer a blunt lack of provisioning. Low-income residents therefore take various initiatives in order to improve the structure of services in their neighbourhoods. Households in these neighbourhoods organise themselves in collaboration with other actors to improve the quality of their environment and ensure that they get the very basic services. Such household responses to shortages of water supply, lack
of sanitation facilities and lack of garbage collection services and its results will be analysed in Section 5.4.

5.2 The actors in urban service provision

As will be seen in this section, several actors from various sectors are involved in the provision of urban services. The provision of water and sewerage was, until recently, the sole responsibility of the MCN. Now, the former Water and Sewerage Department has been fully commercialised. The main actors involved in water supply are the National Water Conservation and Pipeline Corporation, the Nakuru Quality Water and Sewerage Services (NAQWASS) (until 2001), the Kenya Association of Manufacturers (KAM), owners of private boreholes, self-help water supply schemes, the Catholic Diocese of Nakuru and the individual water vendors of the CBO Naroka. NAQWASS was, until recently, also the main actor involved in sewerage. The management of solid waste is primarily the responsibility of the MCN, through its Public Health Department. However, an institutional change is proposed, aimed at establishing an Environmental Department, which will have four sections: the cleansing section, the parks and cemetery section, the pollution control section and administration. In recent years, private sector entrepreneurs have increasingly been involved in refuse collection and disposal. It is estimated that the current waste generation is 350 tonnes per day, slightly less than 20% of which is collected by the MCN. Other groups involved in solid waste management in Nakuru include three private companies (i.e. Parrots, Hygiene services and Salvage), individual waste collectors and scrap-metal recyclers. The informal jua kali sector has a lot of interest and several waste pickers in the dumping site. NGOs – especially the WWF – have been instrumental in facilitating the building of refuse collection chambers in different locations in Nakuru, while several environmental CBOs are also active in the area of solid waste management. In the areas selected for the household surveys – Lakeview, Kwaronda, Kaptembwo

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45 The current Government policy is to withdraw from direct involvement in the implementation and management of water schemes and hand them over to communities, local authorities and other service providers. See the Interim Poverty Reduction Strategy Paper 2000-2003, p.16 and the Sessional paper No. 1 of 1999.

46 The Kenya Association of Manufacturers is involved in the management of water bills payments by industrialists for the maintenance and rehabilitation of boreholes.

47 In Chapter 6 we will discuss the partnership arrangements that have been formed within the water sector in more detail.

48 The terms solid waste, refuse and garbage are used interchangeably in this book.

49 Information from Mr Isaac Kimani, Public Health Officer with the MCN.

50 Solid waste management refers to the handling of waste/garbage/refuse from the generation to treatment and disposal. It may also include the recovery, re-use and recycling of solid waste.

51 Waste pickers are commonly known as Chokolas.
and Mwariki - four such environmental CBOs were studied. The new actors emerged because the MCN is no longer able to adequately supply these services because of various factors, including institutional weaknesses and the dramatic increase in the population. Many households in the low-income areas rarely receive any municipal services and this had led to the mushrooming of environmental CBOs that are today involved in cleaning-up exercises in the neighbourhoods. We will see that there is very little collective action in the high-income neighbourhoods, which still receive municipal services. In the deprived areas (low-income and usually unplanned settlements) and also in the middle income areas, households have come up with initiatives to ensure that they have some of the basic services like water supply, sanitation and solid waste management services. Below, we will first zoom in on the governmental actors, the private sector and NGOs. Next, we will highlight the problems faced with regard to solid waste management and examine the activities undertaken by the households (either individually or collectively through CBOs) as a response to the deficiencies.

5.2.1 The role of MCN in urban environmental management

Nakuru acquired its municipal status in 1952. The town is a constituency represented by a Member of Parliament (MP) in the Kenyan parliament. The constituency and provincial administrative centre gives the town an important but peculiar political significance in Kenya. At municipal level, Nakuru is divided into 19 elective civic wards. Each ward is being represented by a councillor in the MCN. In addition, different parties nominate five councillors and the District Commissioner for Nakuru also sits in the council. The sitting councillors elect the mayor, who is assisted by a deputy mayor and various sectoral committee heads. In theory, the MCN should be an autonomous local authority, but in practice it is an agency of the central government on behalf of which the council implements policies under the supervision of the Minister of Local Government.

The MCN is responsible for encouraging good governance within the municipality. For the purposes of effective policy making, legislation and the translation of decisions and laws to the social, economic and ecological domains, the MCN has a legislative arm, the major function of which is policy formulation, and an executive arm, which implements these policies. The council is supposed to manage the growth of the town by undertaking elaborate planning and managerial activities, such as the provision and delivery of services and control and regulation of the day-to-day human developmental activities within its jurisdictional boundaries. The extent to which these arms function to ensure the efficient provision of urban basic

52 Nakuru has for long been Kenya's political hotbed and the municipality has since 1992 been led by opposition councillors.

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services and coordinate urban development initiatives depends to a large extent on some socio-economic and political conditions.

The legislative arm operates on a committee system model, with each committee consisting of elected council members and performing specific functions. There are seven committees in charge of the following issues: education, social services and housing, public health and environment, water and sewerage, housing development, town planning and works, and finances. These committees are in charge of formulating policy laws and regulations that guide the execution of the council’s functions. These policies are discussed with officials from the Ministry of Local Government before they are adopted and implemented. We note, however, that there have been frequent conflicts in policy formulation between the municipal government and the central government.

The executive arm is divided into seven departments based on the nature of services provided. They include general administration, municipal engineer, education, social services and housing, public health, water and sewerage and the municipal treasurer. Each department is divided into sections with specific powers, duties and responsibilities. The seven committees and seven departments with their various sections constitute the management and organisational structure of the municipality. Of the seven standing committees, the Town Planning and Works Committee is the one that deals with town planning and development control issues.\(^{53}\)

Decision-making takes place in four major stages:
1. The town clerk discusses the matters raised or received in the council with relevant committee chairpersons and heads of departments.
2. Relevant committee members meet and discuss the matters and issues for consultation with other committees within the council and can also invite persons and agencies outside the council. The town clerk and other chief officers sit as *ex-officio* members. The committee recommends to the council the suitable and possible actions to be taken with regard to particular matters.
3. Decisions and proposals are referred to the full council meeting for approval. The council adopts or approves decisions and actions to be taken.
4. Council officers in relevant departments implement the necessary measures in partnership with the town clerk’s office.

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\(^{53}\) Discussions with a newly posted Town Planner. The position of the town planner was recently created as it was realised that there was need for a qualified town planner within the municipality. Earlier, the office of the town engineer undertook the planning roles.
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Community participation to the full council meetings takes place either through the elected councillors or through the technical officers linked to the people through service delivery. Instruments used to reach the people are the by-laws, licensing enforcement, plans etc. The management structure of the council has a number of weaknesses such as inadequate participation by the communities in decision-making, unresponsiveness of the management to the diverse needs of the community, poor functional relationship between the councillors and the chief officers, barrier between the management structure and the community, and lack of appropriate tools to work with. In addition to popular representation through elected members, the direct involvement of the local population in the decision-making process is an idea that is being experimented with in Nakuru. There have been attempts by the MCN to promote community participation in environmental management through the support of their organisations. CBOs are recognised entities by the municipal authorities and are involved in some municipal deliberations. The MCN is aware that in order to serve people more effectively and to gain maximum support to its programmes, it must become more accountable and transparent to the local people, for whom the decisions are made. The local people must be involved not only in the plan preparation process, but also in various aspects of programme implementation.

The MCN is currently unable to provide many services especially in the low-income areas and it has problems in paying its staff. There have been abuses of positions by both elected members and council officials. Corruption is rampant at the MCN. Decision-making is typically split between the mayor, the council (through the committees) and the chief officers, including the town clerk. The mayor has some influence in the decision-making process, though his major objective is getting re-elected. There is lack of continuity in the system since the mayor is elected after two years. The main objective of the councillors (who represent the wards) is to enrich themselves and get re-elected later, which requires them to deliver results to their constituents. Actually, their concern is to maximise the slice of

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54 All CBOs are registered with the Department of Housing and Social Services.
55 During the fieldwork period, there were strikes by the council workers every last week of the month because of delayed and unpaid salaries.
56 The former Minister of local Government, Hon. J.J. Kamotho, ordered the suspension of MCN Mayor Herman Nderi in November and ordered investigations into councillors' allegations against the mayor. The allegations included financial mismanagement, illegal disposal of council assets such as plots and houses and over-staffing.
57 Due to political interference, political differences and disagreements among the councillors, the town clerk was forced on compulsory leave in the year 2000 and the mayor has been suspended by the Minister of Local authorities the same year pending investigations on abuse of office. This will definitely affect the implementation of some programmes and projects in Nakuru.
cake going to their ward, rather than concerning for the whole town. They also have a short-term vision\(^{58}\) of five years at most, and most of them concentrate on enriching themselves before the term expires. Individual councillor’s powers to influence decision-making are constrained by lack of municipal resources, a small sphere of influence within the MCN and hostility from the council officers. The chief officers are supposed to guide the committees on technical matters. There have been frequent conflicts and tensions between the officers and the councillors and this seriously affected the operations of the MCN. Within the current council, all full council meetings have been disrupted with councillors trading accusations and counter accusations (see Box 5.1 on recent disruptions of a full council meeting due to political differences). The interviews revealed that chief officers have a long-term vision for the town, though their performance is rarely measured. Their powers to influence decisions are constrained by regulations, limited financial resources and hostilities from politicians. For any decision to be approved, it has to be endorsed by the full council meeting chaired by the mayor.

Both the legislative and the executive arms of the municipality undertake decision-making processes and until recently actors outside the MCN were rarely consulted. Different actors, groups and interests may influence the decision-making about and the implementation of projects, both formally and informally, but their ability to influence outcomes is highly unequal. There also have always been continuous conflicts between the legislature and the executive arms, which affects the provision of services and performance of specific functions. Finally, there are other central government agencies that influence decision-making within the MCN. The central government, through the institutions of the Provincial Commissioner (PC) and the District Commissioner (DC) (see below), is also administrating the implementation of government policies in the municipality. The two administrative officers also form the security councils in Nakuru. The poor coordination of the MCN and central government activities is a serious problem, to the extent that political party functionaries at times usurp the powers and functions of the municipality. For instance, the ruling party supporters, locally known as “the KANU youth wingers”, collect revenues at the bus-Matatu terminal. This is clearly an activity that is supposed to be done by the MCN, but has been taken over by a non-municipal actor.\(^{59}\) These central government policies and administrative institutions that operate in the context of the province and the district modify the role of MCN in the development of the economy. There is

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\(^{58}\) Currunthers (1978) argues that “it always strikes him as ironic that we have placed responsibility for curbing our ‘defective faculty’ for the future in the hands of individuals whose prime interests rarely exceed five years”

\(^{59}\) This is an example of political interference with the running of the affairs of the MCN and other councils in Kenya.
need to coordinate all agencies in order to improve the quality of the environment and the level of service delivery in the municipality.

Box 5.1  Nakuru councillors exchange blow, kicks

A Nakuru Municipal councillor was last evening arrested in a chaotic full council meeting where councillors exchanged blows while others fought with the official mace. Councillor Peter Gichangi of Viwandani Ward was arrested as wrangling councillors turned the council’s chamber into a battlefield. Gichangi was arrested by Central Police Station OC, J Mbahuka after he battered Councillors Joseph Ngetich and Samuel Ng’eno who had assaulted him. Scores of councillors and officers sustained minor injuries during the free-for-all battle as members of the public joined the fray by shouting from the public gallery. Mayor Jackson Mugo Maathai whose conduct was to be discussed at the meeting was whisked away by orderlies as the fight escaladed in the chambers between two rival groups. Trouble started when Town Clerk Gabriel Kenaiya read a court order obtained by Maathai barring the civic leaders from proceeding with the meeting. Kenaiya’s voice was drowned by shouting and heckling from the enraged councillors led by former mayor who is also Maathai’s bitter rival, Herman Marine Nderi. It was a day of shame as the revered mace, a symbol of the authority of the council, was grabbed by Nderi’s right-hand man, Kuria Gitu, who swung it dangerously at his rivals. At this juncture, the chambers turned chaotic with the councillors opposed to Maathai’s leadership grabbing the court order from the clerk before tearing it into pieces. Hospital Ward councillor Wachira Ngoru, a staunch Maathai critic, reignited vicious blows on a helpless Kisulisuli Ward councillor, Awanda Ohasha, before police intervened. Council askaris who had jammed the chamber due to the fracas turned the wrath on Biashara councillor, John Ngere, and subjected him to a thorough beating with their clubs. Nakuru Town MP, Mr David Manyara, who was present in the chamber had to take cover under a table as the fight intensified.

Source: East African Standard, posted on the web Saturday, May 4th 2002

14 Councillors to Discuss Nakuru Mayor

Fourteen councillors opposed to Nakuru Mayor Mugo Maathai have been allowed to meet and discuss his conduct on June 18. A similar meeting was stopped by a court three weeks ago after Maathai obtained a court injunction. The councillors, led by former Mayor Herman Marine Nderi, claim they have 18 charges against the Mayor which they declined to divulge, other than accusing him of refusing to call full council meetings since his election. But Maathai claims the councillors started opposing him after he spearheaded an anti-graft campaign at the council that landed five councillors and three chief officers in court.

Source: The East African Standard (Nairobi); June 15, 2002. Posted to the web June 17, 2002 by Steven Mkawale

As noted elsewhere, environmental management in Nakuru has a multi-sectoral approach. For purposes of the three areas that are the focus of our study, the Water and Sewerage Committee and the Water Supply and Sewerage Department (WSD) are the two management and organisational structures responsible for water supply and sanitation. Within the solid waste management sector, the statutory responsibility is vested in the Public Health and Environment department in accordance with the MCN Public Health bylaws 1994. Major issues are discussed during the com-
mittee meetings and later certified by the full council meeting and hence become council resolutions. The council officers implement these resolutions. Generally, the areas covered include water supply, sanitation, drainage, solid waste management, pollution control, public health nuisances control and disposal of the dead. The committee meetings are held on a monthly basis and so is the main council meeting. The Public Health and Environment departments prepare the agendas of the meetings, though other issues relevant may be raised during discussions under the monthly report of the department.

5.2.2 The role of non-municipal central government institutions

Many government agencies, NGOs and research institutions support environmental management and conservation initiatives within the MCN and the Lake Nakuru catchment basin. This has created a complex web of information and activities, which are not always well integrated. The non-municipal institutions that impact on the environmental management initiatives are:

(i) The Ministry of Local Government (MOLG)

The MOLG officers are responsible for the Nakuru Local Authority Development Programme (LADP)\(^{60}\) and the District Development Committee (DDC), which are among the most influential planning institutions that have a direct role in urban planning and management. The DDC, coordinated by the Nakuru DC, is the overall body dealing with development matters in the district, including departmental activities of sectoral ministries and NGOs. In the DDC’s development coordination context, MCN is just one of the many development agencies in Nakuru District. Other institutions include NGOs, the churches and a number of parastatal bodies. In 1987, the Ministry of Local Government produced manuals with financial and technical assistance of USAID to guide local authorities in preparing LADPs. One of the problems of the LADPs is lack of linkage to environmental concerns, while all local authorities have to wait for officers from the ministry to prepare the LADPs because of the shortage of qualified staff. The other weakness is the lack of finances to implement development programmes.

(ii) The Ministry of Agriculture

The Ministry of Agriculture has a Nakuru-based District Soil and Water Conservation Officer, who works with six divisional extension officers in the Nakuru catchment. These are well-trained staff who work closely with the WWF pro-

\(^{60}\) The LADP is an investment plan covering the entire Nakuru District, including the areas under the jurisdiction of the MCN. LADP is developed by officers from the MOLG in collaboration with the DDC where the town engineer, director of social services and the town clerk represent MCN.
gramme that, unlike the Ministry, is able to provide transport, fuel, lunches and other support for field officers. Much of their work is to advocate sustainable farming methods to some 200 small farmers per year. They also have joint activities with the Kenya Wildlife Service (KWS) along the boundary of the National Park, conducting Participatory Rural Appraisal (PRA) and advising people on how to live with wildlife. The District Soil and Water Conservation staffs have apparently had a lot of success working with small-scale farmers, but they have made less progress with those people in the newly settled areas, who do not yet have title to their land and are therefore less committed. The retrenchment of 60 out of the district’s 300 agricultural extension officers has also been a drawback.

(iii) The Forestry Department

The Forestry Department of the Ministry of Environment and Natural Resources has a Provincial and District Forestry staff based in Nakuru. The cutting and de-gazetting of parts of the Mau forest for resettlement, which they were unable to oppose in the face of political decisions, dispirited the department’s staffs. This was apparently done without technical guidance or proper surveying. Much faith is now being placed in the new forestry policy, which concentrates on community participation, privatisation and the development of a new Forestry Service. No instant de-gazetting will be possible. Environmental Impact Assessment (EIA), stakeholder consultation and approval of the District Environmental Committee would be required. Much hope is also being put in the New Environmental Management and Coordination Act, to integrate measures for the protection and management of forests in the Lake Nakuru Catchments. The department sees intensive farm forestry as the way ahead in the catchment. They are now providing extension services on species selection, nurseries, planting and care, based on the experience of a long-term FINIDA-funded farm forestry in the north of the catchment. The department encourages partnership between all interested parties and works with, for example, Friends of Mau Watershed and the Forest Action Network. The Africa Development Bank is currently considering the funding of catchments rehabilitation in the Bahati Forest.

(iv) The Kenya Wildlife Service (KWS)

The KWS is involved in education, extension and research, both inside the National Park and in the Catchment. KWS staff work with many of the other initiatives in the catchment, and are particularly involved with communities neighbouring the park to minimise human/wildlife conflicts. In addition, KWS has been conducting research on lake water quality and flamingo population dynamics. An im-

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61 The major problem in Kenya is the enforcement of existing rules and regulations and recently the government cleared large chunks of forests for resettlements despite public objections.
portant contribution to environmental management will be the KWS Lake Nakuru National Park Integrated Management Plan (currently in draft), which extends to the whole catchment of the lake. This will require very serious integration of other stakeholders and donors if it is to be fully implemented. It is important to note that the KWS manages the Lake Nakuru National Park that occupies 64% of the entire municipality. However, the revenue generated from the park is controlled directly by the central government and the municipality gets nothing. Apart from the minimal support of the communities surrounding the National park, the MCN only gets little revenue through licensing tourist hotels within the town.

(v) The Ministry of Environment and Natural Resources (MENR)
The MENR’s local interest in environmental management within the municipality and the Lake’s Catchment area is through the establishment of the District Environmental Committee (DEC), of which the District Commissioner (DC) is the Chairman, and the District Environmental Officer (DEO) is the Secretary. The DEC is currently preparing its District Environmental Action Plan (DEAP). No draft is yet available. In fact, the DEO requires considerable technical assistance to articulate the breadth and complexity of environmental issues within the municipality and the Lake Nakuru basin. By the time we collected data for this study, no provincial Environmental committee (PEC) had yet been formed, but the provincial Forestry officer was acting Chairman pro tem. By the time that we collected data for this study, NEMA had not yet been established though the post of provincial NEMA officer had been advertised. At the national level, the MENR has expressed an interest in the protection of the Lake Nakuru Basin, and sent a mission to Nakuru at the end of the year 2000 to discuss the matter. There has not yet been any further development on this idea. Unusually, the MENR is now also involved in water supply and sewerage in Nakuru, having unilaterally taken over this responsibility from NAQWASS and the MCN in February 2001 (see Section 5.2.3).

The implication of the issues discussed above is that those groups who have traditionally participated in decision-making continue to do so: women, youth and generally the poor have been excluded from the process. This can be attributed to the limited resources available and the tradition of working only with the educated and articulate property-owning middle classes. What is evident is that a significant gap exists between the rhetoric and the reality, which is unlikely to be reduced without significant central government political support and appropriate legislation.
5.2.3 The private sector

The private sector is actively involved in urban environmental management through water supply within the industrial area and water vending activities in the low-income areas and garbage collection, disposal and recycling activities. A significant part of this work is done by the informal sector: the part of the economy that does manual work for cheap wages, under poor working conditions and without legal protection or job security.

Water supply

Members of the Kenya Association of Manufacturers (KAM), Nakuru Chapter, signed an agreement with the MCN in March 1995, in which they were to contribute money for rehabilitation of council boreholes. The money contributed by private investors was to be credited to individual accounts on charges payable to the council. According to the KAM chairman, investors rehabilitated all council boreholes between 1995 and 1999. KAM has been supportive of the idea of commercialising the water and sewerage department. Commercialisation of water in Kenya started in 1999 after the government issued Sessional Paper No. 1 of 1999 on the National Policy on Water Resources and Development. The government and GTZ subsequently contracted a consultancy firm, GOPA, to coordinate water commercialisation in selected urban areas. GOPA formed the Urban Water and Sewerage Management (UWASM) that has been coordinating water commercialisation in Kenya’s urban areas.

Within the water supply sector, the informal worker is mostly engaged as a water vendor. Households normally contact the water vendor in times when the major source of water for domestic use is interrupted. Of all households interviewed, 6% gets water from the water vendor on a daily basis, 8% gets water every other day and 12% buys water at least once a week. Irregular contacts with water vendors exist for 42% of the households, which contact a water vendor for the supply of water when they need it. Only 29% of the households does not buy water from water vendors. In addition to the water supply from water vendors, households used domestic labour to fetch water from the council estates directly.

The household survey revealed that the water vendors were making a living out of the sale of water, using bicycles or handcarts to deliver the water. They normally draw the water from council estates free of charge to sell it at Kshs. 10 per 20 litres gallon, depending on the distance. The further a household lives from the source, the more it pays for the water. Households pay a much higher price for the water to the water vendor than what is charged by the MCN. Households tend to rely on a specific water vendor, with whom they have established a good relationship.
Table 5.1 Frequency of water supply to households by water vendors

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>29</td>
</tr>
<tr>
<td>About every other day</td>
<td>38</td>
</tr>
<tr>
<td>At least once a week</td>
<td>71</td>
</tr>
<tr>
<td>Vendor has to be contacted</td>
<td>203</td>
</tr>
<tr>
<td>Does not buy water from a vendor</td>
<td>140</td>
</tr>
<tr>
<td>Total</td>
<td>481</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

Sewerage

Sewerage was formally the sole responsibility of the MCN, but the former Water and Sewerage Department was fully commercialised during our fieldwork in 2000. The commercialisation of services occurred when the municipal council formed a company under contract to the Local Authorities Act Chapter 265 of the Laws of Kenya. In March 2000, the MCN entered into an agency agreement with the Nakuru Quality Water and Sewerage Service Company Limited (NAQWASS).\(^{62}\)

The agency agreement defined the obligations and relationships between the principal (council) and the agent (the water and sewerage company) and the third party (consumer). A Board of nine directors managed the company. After having operated for five months, NAQWASS was dissolved in February 2001 and the government took over the water supply and sewerage departments from NAQWASS and the MCN. Presently, the Ministry of Environment and Natural Resources (MENR) is in charge of sewerage, although no transfers of assets or liabilities took place. MENR took all staff of NAQWASS apart from some senior staff. The take-over was done in a haphazard manner, immediately after a presidential public announcement of the dissolution of the company.

It is worth noting that there was public apprehension about the formation and operation of NAQWASS at the time, as many consumers were not consulted and the consumers did not know what to expect from the new company. It was not until there were several notices in the media by the mayor that residents knew of the new developments in the water and sewerage sector. The partnership was expected to improve the water and sanitation services. In practice, it functioned essentially as a provision by the municipal/local authorities under a commercialisation strategy.

\(^{62}\) We will present more details on NAQWASS as a failed partnership arrangement in Chapter 6.
Solid waste management

Our fieldwork showed that a significant portion of the population receives their garbage collection services from contracted private collectors. In the area of solid waste management, three medium-sized enterprises are engaged in house-to-house garbage collection and disposal. These three enterprises were operating in the middle-income settlements (Shaabab, Section 58, Racecourse, Free Hold and Kenlands) where municipal garbage collection is irregular. The private firms are small-scale in nature and clearly fill an important gap in municipal garbage collection coverage. Households have individually entered into contracts with the private garbage collectors. The private companies pay a dumping fee per trip at the dumping site near Menengai. The MCN does not license these garbage collection companies and they are registered as business enterprises. These companies remain unguided and their activities are taking place without any institutional and legal regulation.

Parrots operating in Racecourse and Freehold estates collect about 6 tonnes of garbage per day. Nakuru Hygiene Services, operating in Shaabab, collects 3 tonnes per day and Salvage, operating in Section 58, collects 12 tonnes per day. This translates to only about 6% of the total solid waste produced in Nakuru per day. From our interview with officials of these companies, Parrots was serving 220 households, NHS was serving 40 households and various institutions while Salvage was collecting garbage from 400 households. Most of the households covered were in the high and middle-income neighbourhoods. These companies have also entered into agreements with some other institutions in the municipality to collect and dispose of their solid waste. One of the most interesting observations is that the private sector organisations focus mainly on household waste management as compared to other types of waste in Nakuru. However, the population served by the private companies is still too small compared to the total population.

As indicated in Table 5.2, the majority of the households receiving private waste collection services had contracts with Salvage Services, which is the oldest small-scale private company.

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63 In Nakuru, the three private companies, though not well coordinated by the MCN, have been active in the middle and high-income areas.

64 It is important to indicate that these are estimates, as actual record keeping by small scale companies is not done regularly and MCN does not keep up to date data on solid waste collection either.

65 It is estimated that 350 tonnes of solid waste is generated in Nakuru municipality.
Urban Environmental Management in Practice

Table 5.2  Distribution of the households receiving private garbage collection over the private companies

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salvage</td>
<td>50</td>
<td>56</td>
</tr>
<tr>
<td>Parrots</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>Nakuru Hygiene Services</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

The relationship between the individual households and the private companies was guided by contractual agreements signed between the householder and the company offering the service. The majority of the households had entered into a monthly agreement, but a relatively high percentage had signed yearly contracts. This shows that some households have confidence in the small-scale private companies. One interesting finding was that the number of households receiving private garbage collection seemed to be on the rise. Table 5.3 below shows that 41% of households had entered into contract for garbage collection less than a year ago.

Table 5.3  Duration of the contract

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 6 months</td>
<td>28</td>
<td>31</td>
</tr>
<tr>
<td>One year</td>
<td>37</td>
<td>41</td>
</tr>
<tr>
<td>1-2 years</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>More than three years</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

The small-scale garbage collectors provide a high coverage and the competitive environment in which they work encourages a much better service than is often provided by the single, large providers. Small-scale operators are often customer-driven and ready to meet local demand. Table 5.4 shows that the majority of the households (96%) receiving garbage collection from the private sector were satisfied with the quality of the service offered by the small-scale private companies. They were of the opinion that the services offered were far much better than those that used to be offered by the MCN.
Table 5.4 Perceptions of the quality of service of private waste collectors

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td>68</td>
<td>76</td>
</tr>
<tr>
<td>Satisfied</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: Fieldwork, 1999*

Our household survey in the four poor neighbourhoods indicates that waste pickers collect part of the waste in most households (Table 5.5). In all, 63% of the households interviewed indicated that waste pickers collect part of the households waste generated.

Table 5.5 Whether waste pickers collect part of the household waste

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>303</td>
<td>63</td>
</tr>
<tr>
<td>No</td>
<td>169</td>
<td>35</td>
</tr>
<tr>
<td>Do not know</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>481</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: Fieldwork, 1999*

A significant percentage – 23% of the households interviewed – also trade with recyclable waste, which indicates that a number of residents generate income from waste. The MCN employees try to hinder, suppress or eradicate waste picking. The waste pickers have a stake in development and a lot can be achieved through their participation and contribution. They simply cannot be ignored. After all, if they are driven out of the city they will still remain in poverty, no matter where they are. The objective therefore should be to improve their conditions rather than depriving them of facilities of town life. All the waste pickers interviewed in this study reside in the low-income neighbourhoods; the majority in the Ponda Mali neighbourhood (Table 5.6). The majority of the waste pickers interviewed collect recyclables from the dumpsite (Table 5.7). The problems they face are summarised in Table 5.8.
Table 5.6  Estate where the waste picker is living

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ponda Mali</td>
<td>9</td>
<td>45</td>
</tr>
<tr>
<td>Kaptembwo</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Kwaronda</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Menengai</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Sewage</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

Table 5.7  Place where the respondent collects recyclables

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streets</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Dumpsite</td>
<td>13</td>
<td>65</td>
</tr>
<tr>
<td>Estates and homes</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Institutions</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

Table 5.8  Problems experienced by the waste picker

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor working conditions</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Harassment</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Both Problems</td>
<td>17</td>
<td>85</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

The role of the informal sector in environmental management in Nakuru is insufficiently recognised by the municipal authorities. Most waste pickers consider themselves to be gainfully employed in relatively well-remunerated, though difficult and unpleasant work. Waste pickers are intimately familiar with their environment and its ability to yield a variety of valuable materials. Though they have very little economic or political authority, they are involved in a production and marketing system that supplies 'modern' factories with essential secondary raw materials. The waste pickers are involved in all the different aspects of the system from the time waste is generated till it is disposed of in the dumping site.
Small-scale private garbage collectors need to be better recognised for the flexibility and efficiency they offer in solid waste management to less advantaged neighbourhoods that otherwise would not have garbage collection coverage. Official support to these smaller-scale providers should be increased.

5.2.4 **NGOs and environmental management**

The World Wildlife Fund (WWF) and the Intermediate Technology Development Group (ITDG) are the only NGOs in Nakuru that have been involved in environmental management initiatives in low-income neighbourhoods and have been collaborating with other actors. Both are international NGOs and our survey learned that local NGOs do not engage in environmental management initiatives in Nakuru municipality. We studied the two organisations with a view of establishing the actual activities they are engaged in, their areas and levels of intervention, the partners that they work with and the problems that they face.

**Table 5.9** Households' knowledge of NGO activities

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>173</td>
</tr>
<tr>
<td>No</td>
<td>308</td>
</tr>
<tr>
<td>Total</td>
<td>481</td>
</tr>
</tbody>
</table>

*Source: Fieldwork, 1999*

**Table 5.10** NGO known to the households

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage*</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWF</td>
<td>117</td>
</tr>
<tr>
<td>ITDG</td>
<td>54</td>
</tr>
<tr>
<td>Inter-Aid</td>
<td>15</td>
</tr>
</tbody>
</table>

*The total percentage does not equal 100 because some households mentioned more than one NGO.

*Source: Fieldwork, 1999*

It is surprising that the majority (64%) of the households interviewed in the four low-income neighbourhoods did not know of any NGO operating in the neighbourhoods (Table 5.9). Table 5.10 shows that 68% of the households who did know of any NGO activity mentioned WWF as the NGO that was actively involved in various activities in their neighbourhoods. In all, 31% mentioned the Intermediate Technology Group (ITDG) as the NGO that operated in their
neighbourhoods. Surprisingly enough 9% of the households mentioned Inter-Aid, an NGO that left Nakuru in 1994.

The following sections describe the two NGOs that are involved in environmental management initiatives and that are collaborating with CBOs in undertaking several activities. As will be seen later, these are the only NGOs of which the officers of the MCN indicated that they have had some impacts on environmental management.

(i) **The World Wildlife Fund (WWF)**

The WWF's Lake Nakuru Conservation and Development project is probably the most significant initiative in the catchment. The project ran from 1988 until mid-2001, initially with DFID/EU-funding and then with the EU alone. It is now winding up, but there will be an EU-funded 18 months extension to address biodiversity issues and possible future inputs under the WWF Eastern Rift Valley Lakes Programme.

The project is based on the premise that conservation of the natural resource base is an essential prerequisite for meaningful and sustainable development. Although the project has intervened in the entire catchment basin of Lake Nakuru (1,800 km²), this section will only deal with WWF's intervention in Nakuru Municipality. The build-up of waste in densely populated residential areas and the contamination of the lake and the surrounding park with heavy metals and xenobiotic substances are some manifestations of the urban impact on the environment. In an attempt to address these issues and achieve a harmonious balance between conservation and development, WWF implemented several programmes in partnership with relevant government departments and other actors.

WWF has learnt that involving all the stakeholders in a problem-solving initiative is the only way in which lasting solutions can be found. This is why, for example, WWF is promoting, through local projects, public access to information on toxic emissions and effluents from industrial plants. In Nakuru, a level of trust has built up between industrialists and the local community, and together they are working to revitalise the lake's natural life, including the famous flamingos. WWF has been running several programmes within the Lake Nakuru catchment area aimed at involving different actors in conservation initiatives.

The Environmental Planning programme aims at integrating environmental considerations into the development processes within the Lake's catchment area. The programme focuses on urban development and its impact on the environment. A joint project with the Survey of Kenya and the MCN to update the map of Nakuru
was completed in 1998 and 2,000 copies of the new map were handed over to the Mayor of Nakuru. Town planners can use this map, which is based on 1993 aerial photography, to evaluate current development trends and place future development planning on a more rational basis. Village, locational and divisional environmental committees (VECs) have been initiated in an attempt to facilitate grassroots participation in designing and implementing environmental committees programmes. Clear linkages are being established between the grassroots committees and the District Development Committee (DDC).

The WWF has been collaborating with the town residents in their bid to secure a clean environment. In 1993, the organisation mobilised residents of Lakeview through seminars and workshops, to sensitise them on the importance of participating in solid waste management activities. Later, women groups, schools and youth groups got interested in the activities. “Initially, our clean-up activities attracted as many as 2,000 people. We also mobilised students to come up with drama and song,” said a programme officer of WWF. WWF has constructed four solid waste chambers in Lakeview and 15 others in Pangani, Bondeni, Mwariki, Kaptembwo, Menenga and Free Area (see Plates in Chapter 4). These chambers were constructed in partnership with CBOs and the MCN. WWF offered the materials and local communities provided the labour. Under the Environmental Education programme, 569 urban residents in 15 target areas in the Municipality have been trained and organised in environmental health groups actively involved in solid waste management. This community approach to waste management has been adopted as a strategy in the Nakuru SSP.

The project has made good progress with environmental management and conservation in the Lake Nakuru basin, but has identified some problems that proved to be beyond its mandate or capacity to cope. One of these concerns two waves of forest de-gazetting and clearance for resettlement (e.g. 200 km² in 1994). The only practical response that WWF could give was to encourage the planting of on-farm trees after clearance. Other central government initiatives such as road construction have little regard to environment. The focus of environmental management through the District Environmental Committee does not provide for sufficient input by people at village level. Other problems that WWF was not able to control were the discharge of heavily contaminated storm water into the lake and the need to control industrial pollution at the source to protect groundwater and other sources.

The Lake Nakuru Conservation and Development project came to an end in the year 2001. This will have serious implications for the activities that had been started. One of the lessons learnt is that other actors have high expectations regarding the inputs of WWF. One officer noted that they were operating on a fixed
budget and emphasised that it would be better to mobilise local resources for a longer lasting success of local initiatives.

(ii) The Intermediate Technology Development Group

The Intermediate Technology Development Group (ITDG) enables poor people in the South to develop technologies and methods which give them more control over their lives and which contribute to sustainable development of their communities. ITDG works with local NGOs, CBOs and local government institutions facilitating appropriate technology development in a variety of sectors within the framework of organisational development. In 1995 the government revised the Grade II building bylaws, especially the performance standards. In Nakuru the council adopted the bylaws in 1996 and certain areas were scheduled for their application. Such areas include Kiratina Lanet hill, Kaptembwo, Mwariki and Menengai. Through a partnership with ITDG, representatives of selected community groups have been involved in awareness building about certain provisions of the bylaws. Locally based technicians in the construction industry have been trained to do the designs and construction using appropriate materials.

ITDG has been assisting the construction of new houses in the Kaptembwo/Kwaronda neighbourhoods that are two most densely populated low-income neighbourhoods in the south-western part of Nakuru bordering the National Park. The neighbourhoods are poorly serviced and there is a geological fault line running through the area that causes soil subsidence in the rainy season, resulting in the formation of deep gullies. Of interest to our research is how the ITDG is involved in environmental management initiatives. Among the pilot plots where ITDG has assisted in the upgrading of the house stock, affordable adequate sanitation and water supply have been realised. As regards solid waste management, ITDG advocates that each housing unit should have a facility that will act as a receptacle for the garbage generated, the size of which is determined by the number of households in each compound. ITDG has assisted the organisation of plot owners into cooperatives, brought in financial credit and created new housing designs (see Box 5.2). It organised and trained a group of artisans to make the soil blocks. Together, they built demonstration houses throughout the community to show what the new technology, laws and procedures could do. Landowners and cooperatives immediately began to build the new designs. For all house types and sizes, the MCN had to approve the plans to ensure that the proposed houses would meet the required standards. MCN has agreed to “fast track” approval and this has been one of the achievements of the project.

The partnership between ITDG and CBOs has helped build two kinds of capacity: technical capacity (for example in the use of appropriate building materials and
producing house designs) and organisational capacity (for example through legal registration and proper accounting and management). The groups started dialogues with the local authority and its service departments. They also managed to get a credit provider and established links with professional architects. The project has resulted in (a) the collaborative production of a standardised housing design for rapid council approval; (b) the streamlining of the council’s planning approvals; (c) the formation of an artisans’ cooperative producing stabilised soil blocks for the improved houses; and (d) formation of a plot owners association and their access to small credit for the building of the new house design in the neighbourhoods. New houses are now being built in Nakuru’s poor areas on self-sustained basis, using improved technologies and house design. These areas now have vibrant associations tackling environmental and health issues, alongside a local authority, which listens to and supports the organisation of poor people.

Box 5.2 Comments about the new technology for the housing sector in low-income areas

"The new houses are easy to make at low cost and you can make a very beautiful house" said developer Kimenu and member of the KwaRonda neighbourhood environmental group. The low-ceiling, gloomy mud-built houses he previously rented out were “cheap to build, but expensive to maintain”, because the mud cracked in dry weather and slipped when wet. Alfred Misango moved from a mud house to one of Kimenu’s 12 new units, built with stabilised soil blocks, a cement floor, metal roof and ventilation. “This house is better, it’s higher and much more spacious and the air is better” he said. Now, the demand for stabilised soil blocks is booming and the original artisans have trained more members. Their income has risen and their cooperative is making some profits. The project’s mobilisation of communities and the local authority has led ITDG to develop new projects of Integrated Urban Housing in three other neighbourhoods, with housing and environmental concerns as its core activities.

Source: Fieldwork, 1999

One of the major problems with this ITDG-supported project is the requirement for land ownership. Most of the poor people in Nakuru’s low-income areas are tenants without access to land. Others do not have legal documents to certify their ownership of land. To enable the project to extend its reach to assist people such as these, non-conventional ownership documents such as letters of allotment are now being used (with reduced loan amounts to reflect the additional risks).

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66 Stabilized soil blocks are made of a mixture of soil, sand and cement and then compressed using an easy-to-use compressor that is locally fabricated.
A summary of the aims and objectives and activities of WWF and ITDG in Nakuru is given in Table 5.11.

Table 5.11 Comparing WWF and ITDG

<table>
<thead>
<tr>
<th>WWF</th>
<th>ITDG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of the project</strong></td>
<td><strong>Integrated Urban Housing Project</strong></td>
</tr>
<tr>
<td><strong>Aims and objectives of the project</strong></td>
<td>- To increase access of the low-income households and the poor to adequate safe and secure shelter.</td>
</tr>
<tr>
<td>- To protect the forest, wetlands and lake system of the Nakuru ecosystem by identifying the main causes of destruction and pollution and designing systems to reduce their impact.</td>
<td>- To identify and promote a sustainable shelter delivery strategy for the urban poor which can be adopted by governments in Kenya and India</td>
</tr>
<tr>
<td>- To address the problem of human pressure on the National Park and to provide long-term protection by helping the population around the park to develop sustainable land-use practices.</td>
<td></td>
</tr>
<tr>
<td>- To reduce conflicts between the support zone inhabitants and the park authorities.</td>
<td></td>
</tr>
<tr>
<td>- To act as a scientific support team for many other organisations working in the project area, including the Kenya wildlife service, the local government authority and NGOs and PVOs.</td>
<td></td>
</tr>
<tr>
<td><strong>Areas of intervention</strong></td>
<td>Low-income neighbourhoods: Rhoda, Kaptembwo, Lakeview</td>
</tr>
<tr>
<td>The entire Lake Nakuru catchment</td>
<td>- Upgrading of housing</td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td>- Improvement of sanitation</td>
</tr>
<tr>
<td>- Environmental education</td>
<td></td>
</tr>
<tr>
<td>- Environmental conservation</td>
<td></td>
</tr>
<tr>
<td>- Ecological assessment</td>
<td></td>
</tr>
<tr>
<td>- Environmental planning</td>
<td></td>
</tr>
<tr>
<td><strong>Partners</strong></td>
<td>CBOs, MCN, NAHECO, NACHU</td>
</tr>
<tr>
<td>CBOs, MCN, Industrialists, OHSS, KWS</td>
<td></td>
</tr>
<tr>
<td><strong>Time dimension</strong></td>
<td>Project to go on until 2004</td>
</tr>
<tr>
<td>Project came to an end in July 2001</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Fieldwork 1999*

5.3 **Problems associated with urban service provision**

5.3.1 **Problems related to the infrastructure**

In Nakuru, households and commercial and industrial activities generate a lot of solid waste. However, waste collection and disposal services by the MCN are highly inadequate and limited to the old town (MCN, 1999). As we have seen in
Section 5.2.3, the inhabitants of many residential areas rely for waste collection on private initiatives, including some non-governmental and community-based organisations. Some areas receive ‘regular’ service of waste collection. Residential areas that are not served include the peripheral and newly developed areas and the low-income and unplanned settlements. Where domestic waste is collected, it is done is on a house-to-house basis, while institutions, factories and other enterprises are supposed to be provided with refuse storage facilities from which waste is to be collected regularly. The frequency of collection in most areas is once in every 7 to 14 days in the middle-income areas and once in every 7 to 10 days in the high-income areas (DURP, 1997). Statistics or estimates on the solid waste generated and the actual waste collected are not available. Heaps of garbage in the main municipal market, low-income settlements and some isolated areas within the CBD show evidence of uncollected waste. Our household survey in the four low-income settlements indicated that 56% of the households does not receive any garbage collection services at all. Some 37% of the households did mention, however, that the MCN had to be contacted to collect the garbage and these households were depositing household waste in refuse chambers built within their neighbourhoods. The MCN occasionally empties the receptacles once they have been filled up, but do not so on a regular basis.

The problem of solid waste has now been recognised as a big threat to the quality of the environment. The waste collectors do not reach high-density areas, which are the unplanned settlements. As a result of these deficiencies, initiatives such as those undertaken by the WWF and several environmental CBOs have emerged to reduce the problem of solid waste. For these initiatives to be successful, collaborative and cooperative working relations with individual households, the MCN and the private sector are required.

5.3.2 Perceptions of environmental problems in low-income neighbourhoods

A majority of the respondents in the four areas mentioned inadequate water provision, poor sanitation and uncollected garbage as some of the most serious problems in these neighbourhoods. An overwhelming majority of the respondents in all the four settlements studied is not satisfied with the current status of water supply, sanitation and solid waste management by the MCN. The assumption here is that when households are not satisfied with the provision of services, they will be inclined to look for alternatives, including contracting of private sector actors or engaging in collective activities.

67 The term regular here is not used to mean frequent. This is a comparative term used here deliberately, as some areas do not get any services at all from the MCN.
Water supply
The majority of the respondents were getting water from water vendors (50%) while a significant 41% was getting water from the MCN. Most of the respondents whose major source of water was the MCN were not satisfied with the current status (Table 5.12 and 5.13).

Table 5.12 Household’s major source of water

<table>
<thead>
<tr>
<th>Source:</th>
<th>Fieldwork 1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>MCN</td>
<td>197</td>
</tr>
<tr>
<td>Water vendor</td>
<td>241</td>
</tr>
<tr>
<td>Water tank</td>
<td>26</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>481</td>
</tr>
</tbody>
</table>

Table 5.13 shows that in all, 44% of the households interviewed was dissatisfied with the current status of water supply in their community. The main reason advanced was frequent interruptions. However, 54% of the respondents was satisfied with the status of water supply and most of these households relied principally on water from water vendors. Many households were of the opinion that MCN is the organisation responsible for the supply of water in the municipality.

Table 5.13 Perception of the current status of water supply

<table>
<thead>
<tr>
<th>Source:</th>
<th>Fieldwork 1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Satisfied</td>
<td>258</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>213</td>
</tr>
<tr>
<td>Indifferent</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>481</td>
</tr>
</tbody>
</table>

Table 5.14 shows that only 13% of the respondents who get water from the MCN was satisfied with the current status of water supply, while 82% was dissatisfied. This can be explained by the fact that there were regular interruptions of water supply within the estates studied. Of the households getting water from the water vendor, 92% was satisfied with the status of water supply, while 8% of the households was dissatisfied. There is also a strong association between the principal source of water and the perception of the current status of water supply (Cramer’s V= 0.553).
Challenges of Urban Environmental Governance

Table 5.14 Appreciation of the household’s main source of water for domestic use

<table>
<thead>
<tr>
<th>Provider</th>
<th>MCN</th>
<th>Water vendor</th>
<th>Water tank</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Satisfied</td>
<td>26</td>
<td>13</td>
<td>222</td>
<td>92</td>
<td>8</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>161</td>
<td>83</td>
<td>41</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>Indifferent</td>
<td>10</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>197</td>
<td>100</td>
<td>241</td>
<td>100</td>
<td>26</td>
</tr>
</tbody>
</table>

Cramer’s $V = 0.553$; phi = 0.783

Source: Fieldwork 1999

In all the estates the respondents appear to feel powerless with regard to the problem of inadequate water. The majority of the residents get their water for domestic use from water vendors for a fee. A twenty litres gallon costs from Kshs.10 depending on the distance from the source. Water vendors get the water free of charge from the council estates in Flamingo and Kivumbini, using bicycles. Table 5.15 shows that most of the residents interviewed in all the estates believe that their drinking water is potable (78%), though the majority of them boils the water they use for drinking.

Table 5.15 Perception of whether the water is safe for drinking

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>375</td>
</tr>
<tr>
<td>No</td>
<td>106</td>
</tr>
<tr>
<td>Total</td>
<td>481</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 1999

Sanitation

Concerning the perception of different types of sanitation facilities, most households were not satisfied with the current status of sanitation (Table 5.16 and 5.17). In all, 59% of the households using septic tanks was satisfied, while 35% of the households was dissatisfied. Of the households using sewered toilets, 9% was very satisfied, 59% was satisfied and 30% was dissatisfied with this type. The latter is attributed to the frequent blockages in the sewerage system in many parts of the town. Of those households using the pit latrines, 4% was very satisfied, 40% was satisfied and 52% was dissatisfied. The high percentage of dissatisfied people can be explained by the fact that the majority of the households using the pit latrines were sharing with other households and maintenance was poor among the shared toilets. Generally, most households indicated they would prefer better forms of sanitation than what they are currently using. The association between the toilet
facility available to the households and the perception of the current status of sanitation was weak (Cramer’s $V = 0.173$).

Table 5.16 Perception of the current status of sanitation

<table>
<thead>
<tr>
<th>Perception</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td>Satisfied</td>
<td>202</td>
<td>42</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>234</td>
<td>48</td>
</tr>
<tr>
<td>Indifferent</td>
<td>27</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>481</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

Table 5.17 Appreciation of the type of toilet the household uses

<table>
<thead>
<tr>
<th>Type</th>
<th>Sceptic tank or aqua privy</th>
<th>Sewered toilet</th>
<th>Drop toilet over water</th>
<th>Pit latrine</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Very satisfied</td>
<td>27</td>
<td>59</td>
<td>5</td>
<td>9</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Satisfied</td>
<td>16</td>
<td>35</td>
<td>17</td>
<td>59</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>50</td>
<td>179</td>
</tr>
<tr>
<td>Indifferent</td>
<td>12</td>
<td>100</td>
<td>56</td>
<td>100</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>100</td>
<td>56</td>
<td>100</td>
<td>2</td>
<td>100</td>
</tr>
</tbody>
</table>

Cramer’s $V = 0.173$; $\phi = 0.300$.

Source: Fieldwork 1999

Solid waste

Solid waste is a major problem in the neighbourhoods studied with a majority of households indicating that garbage is never collected from their neighbourhoods (Table 5.18).

Table 5.18 Perception of the current status of solid waste management

<table>
<thead>
<tr>
<th>Perception</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Satisfied</td>
<td>59</td>
<td>12</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>380</td>
<td>79</td>
</tr>
<tr>
<td>Indifferent</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>481</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999
In all, 79% of the households was dissatisfied with the current status of solid waste management in their neighbourhoods (Table 5.19). Most of the households that were satisfied with the current status of solid waste management had contracted private waste collectors.

Table 5.19 Frequency of garbage collection in the four estates

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not collected</td>
<td>271</td>
</tr>
<tr>
<td>Collected once a week</td>
<td>36</td>
</tr>
<tr>
<td>MCN has to be contacted</td>
<td>174</td>
</tr>
<tr>
<td>Total</td>
<td>481</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

Table 5.20 Appreciation of the frequency of garbage collection

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Never</th>
<th>%</th>
<th>Once a week</th>
<th>%</th>
<th>MSN has to be contacted</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td>12</td>
<td>33</td>
<td>12</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td>4</td>
<td>2</td>
<td>24</td>
<td>67</td>
<td>31</td>
<td>18</td>
<td>59</td>
<td>12</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>248</td>
<td>91</td>
<td>132</td>
<td>76</td>
<td>380</td>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indifferent</td>
<td>19</td>
<td>7</td>
<td>11</td>
<td>6</td>
<td>30</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>271</td>
<td>100</td>
<td>36</td>
<td>100</td>
<td>174</td>
<td>100</td>
<td>481</td>
<td>100</td>
</tr>
</tbody>
</table>

Cramer’s V = 0.56; p = 0.792

Source: Fieldwork 1999

Table 5.20 shows that in all, 56% of the households indicated that the garbage is not collected at all by neither the MCN nor the private sector. Only 8% of the households received regular collection and all of them had contracted some private garbage collectors. A significant percentage (36%) indicated that they had to contact the MCN once the refuse chambers were filled up, so that the MCN could send a garbage collection vehicle to empty the chambers. This depends, however, on the availability of a vehicle. According to a Public Health officer in whose department garbage collection falls, there was only one operational garbage collection vehicle in the entire municipality by mid-1999 which is at times backed up by a tipper from the town engineer’s department. Owing to this state of affairs, only 18% of households in areas where there were garbage receptacle chambers was satisfied with the current status of solid waste management, while 76% was dissatisfied. This can be attributed to the fact that the MCN does not succeed in emptying the refuse receptacles when they are filled up. The households receiving regular collec-
tion from the private sectors were satisfied with the frequency of collection. The results show that there is a strong association between the frequency of collection and the perception of the current status of solid waste management (Cramer’s V = 0.56).

Table 5.21 Perception of households on who should be responsible for water supply, sanitation and solid waste management

<table>
<thead>
<tr>
<th>Who should be responsible for</th>
<th>MCN</th>
<th>%</th>
<th>Landlords</th>
<th>%</th>
<th>Tenants/Renters</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>water supply</td>
<td>406</td>
<td>84</td>
<td>75</td>
<td>16</td>
<td></td>
<td></td>
<td>481</td>
<td>100</td>
</tr>
<tr>
<td>Who should be responsible for provision and maintenance of sanitation</td>
<td>219</td>
<td>45</td>
<td>205</td>
<td>43</td>
<td>57</td>
<td>12</td>
<td>481</td>
<td>100</td>
</tr>
<tr>
<td>Who should be responsible for solid waste management</td>
<td>385</td>
<td>80</td>
<td>83</td>
<td>17</td>
<td>13</td>
<td>3</td>
<td>481</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

With regard to the responsibility to manage environmental problems at the community level, Table 5.21 shows that 80%, 84% and 46% of the respondents in all the four settlements think that the local authority should be responsible for the uncollected garbage, water supply and provision of sanitation in their communities, respectively. They think so because many formally employed people in the municipality are currently paying a Local Authority Service Charge (LASC). In all, 16%, 43% and 17% of respondents had the opinion that the landlords should be responsible for water supply, sanitation and solid waste management in their communities, while 12% and 3% of the respondents had the opinion that the tenants or house renters should be responsible for sanitation and solid waste management, respectively. It was interesting to find out that in all the settlements no respondent indicated that tenants or house renters were responsible for water supply in their communities. The implication of these perceptions is that it can be difficult to mobilise households to participate in activities aimed at environmental improvement until awareness is created on the fact the MCN is no longer able to provide the services that it is supposed to. In fact, respondents kept arguing that they should not perform the roles that are supposed to be done by the MCN. None of the house-
holds, interestingly, had the opinion that the private sector should be responsible for the provision of these urban basic services.\footnote{Many of those interviewed indicated that the private sector was getting involved only after the municipal council has failed to provide certain services.}

House owners do feel responsible for environmental management initiatives, yet hardly participate in CBOs that take such responsibility in water supply and sanitation. Many households belong to organisations whose major activities are solid waste management and income generation. Within Lakeview, for instance, the community-based organisation has conducted education campaigns with assistance from WWF, to persuade residents to keep their communities free of garbage. Impact of these campaigns is limited to street sweepings, but we still find a lot of garbage littering and surrounding the garbage receptacles. In all the settlements studied, the majority of house renters does not belong to the CBOs that are involved in environmental management.

5.3.3 Factors aggravating urban environmental problems in Nakuru

To reverse the negative issues and problems mentioned above, it is essential to understand and specify the factors that perpetuate the lack of appropriate preventive and curative environmental actions. Most of the problems can be attributed to institutional deficiencies, inadequate policies and actions (or inaction) by the public and private actors, while others can be attributed to the increasing population and land-use conflicts. Among the prevailing factors have been the absence of full participation, inadequate governance, inadequate regulatory and economic policies and insufficient knowledge and information.

Prior to the entrance of the WWF in Nakuru in the late 1980s, there was a lack of awareness of environmental problems and low participation\footnote{Participation here is used to refer to an active, sustained role in influencing policy formulation and other key decisions.} in efforts to improve environmental conditions. Politicians were more concerned with immediate and highly visible problems, which result in short-lived solutions only. It was only after the massive deaths in the mid-1990s and subsequent disappearance of flamingos from Lake Nakuru and the frequent outbreaks of cholera and other waterborne diseases that there were concerted efforts in the town directed at pollution control, improvement of water quality and sanitation by the MCN and other actors.

Weak institutional capacity within the MCN has hampered most efforts to improve environmental conditions. There is no environmental planning division within the MCN and, until recently, there were no efforts by the council to incorporate appro-
appropriate technologies, community involvement and the participation of the (formal or informal) private sector. Efforts to mobilise financial resources, such as through user charges, service charge and property rates have often been inadequate. This inability to raise funds is an important factor indicating the failure of the municipal authority to cover the full costs of operation and maintenance.

The MCN, just like other municipal councils countrywide, has experienced frequent conflicts between the elected leaders and the chief officers. This has had negative implications, caused delays in the decision-making process and adversely affected the provision of services. There have been situations where councillors — generally politicians with a short-lived vision on what is good for the town — demanded the removal of chief officers — often professionals who tend to gave a long-term vision.

Town development was supposed to be guided by a 1975 Master Plan. In the 1980s, this plan was outdated and never followed up because of the weaknesses of the existing legal framework and the inadequate enforcement of rules and regulations. As seen in the discussion on the weaknesses of local government institutions, the MCN also faced problems related to inadequate manpower and lack of sufficient financial resources. Revenue collection is inadequate and the staff is not motivated. Corruption among MCN workers and politicians means that the little revenue generated is misappropriated. There was also a lack of co-ordination between the activities carried out by the central and the local government, which can be attributed to overbearing central government control. The intolerance and absence of community participation in the decision-making process about the town’s affairs are other institutional problems complicating urban management.

The low financial capacity of CBOs and the general poverty of the majority of the residents make the process of participation difficult. Involvement of the community groups takes time, energy and resources, but it is still regarded as worth the effort and the required perseverance. Misunderstanding among different community groups and manipulation by community leaders are common features that characterise many CBOs. This sometimes results in frustrations and mistrust and slows down the progress of work.

Table 5.22 summarises the key issues and problems related to water supply, sewerage and drainage, and solid waste management in Nakuru.
### Table 5.22 Summary of problems and issues related to water supply, sanitation and solid waste management in Nakuru

<table>
<thead>
<tr>
<th>Water supply</th>
<th>Sanitation</th>
<th>Solid waste management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Problems and issues</strong></td>
<td><strong>- Inadequate supply: most households do not have adequate water supply.</strong></td>
<td><strong>- The existing sewerage-system only services less than 20% of the potential municipal service area.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>- High cost of maintenance: the major source of water is underground water extracted by the MCN (now NAQWASS), NWC&amp; PC, private individuals, the catholic Diocese and the military. The boreholes have to be maintained regularly.</strong></td>
<td><strong>- 5,000 consumers of water are not connected though they adjoin the municipal sewer.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>- Inadequate personnel: there are very few field workers in the department of water supply who should regularly read the water meters and detect the defective ones.</strong></td>
<td><strong>- Existing sewer systems experience sewer blockages and this eventually leads to sewer busts and overflows from the manholes.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>- Inadequate revenue and rising costs of supply and maintenance of the water supply and distribution systems. This is due to inefficient billing system and default rates by the water consumers.</strong></td>
<td><strong>- Toxic elements are discharged into the municipal sewer.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>- Inadequate or lack of a clear policy on private sector and local community participation in the water sector.</strong></td>
<td><strong>- Inadequate surface water drainage and discharge from septic tanks overload the sewerage system.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>- Revenue collection is low.</strong></td>
<td><strong>- Revenue collection is low.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>- Sewerage section lacks adequate technical staff and skilled manpower.</strong></td>
<td></td>
</tr>
</tbody>
</table>


### 5.4 Responses to environmental problems

#### 5.4.1 The relation between urban service provision and collective actions

Access of the poor to urban basic services such as water, sewerage or garbage collection is often viewed as very important to the well-being of households. Access of a household to such services reflects the household’s welfare. Households in the high-income estates enjoy the provision of municipal basic services. These are areas
with adequate water supply, adequate sanitation facilities and regular and frequent garbage collection. In the middle-income areas, there is some degree of provision of services like garbage collection, but on an irregular basis. Provision of some services, such as garbage collection and water supply, is done by the private sector, as households are able and are willing to pay for these services. In the low-income neighbourhoods where the majority of the urban population lives, the provision of these services is not guaranteed.

Observations from the field showed that in high-income settlements where services are provided by the MCN, there is no collective action by households through community groups. In the Milimani area, a high-income neighbourhood where the MCN offers services not one CBO was found. In the middle-income settlements some households come together to form organisations, but there is very little collective action towards environmental improvement. In these settlements, we find the intervention of the private sector, especially in the provision of garbage collection services, water and general cleansing services. In contrast, in the low-income settlements where services are unavailable and people are not able to contract the private sector, households have resulted to collective activities through community groups. It is in these settlements that we find interventions from NGOs and other outside agencies to support these community initiatives. Table 5.23 summarises the provision of services in different settlements, community action and private sector provision.

Table 5.23 Provision of services, community action and private sector participation in different neighbourhoods

<table>
<thead>
<tr>
<th></th>
<th>Low-income neighbourhoods</th>
<th>Middle-income neighbourhoods</th>
<th>High-income neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type (planned/unplanned)</td>
<td>Mostly unplanned</td>
<td>Planned</td>
<td>Planned</td>
</tr>
<tr>
<td>Level of service provision</td>
<td>Very low provision</td>
<td>Some provision</td>
<td>High provision</td>
</tr>
<tr>
<td>Existence of community action</td>
<td>More community action</td>
<td>Little community action</td>
<td>No community action</td>
</tr>
<tr>
<td>Private sector participation</td>
<td>Little</td>
<td>More engagement of the private sector</td>
<td>Some participation by the private sector</td>
</tr>
<tr>
<td>Service offered by private sector</td>
<td>Water provision</td>
<td>Solid waste management, water provision, sanitation</td>
<td></td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999
Table 5.24 Profile of the households in the survey

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex of the respondent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>142</td>
<td>29</td>
</tr>
<tr>
<td>Female</td>
<td>339</td>
<td>71</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>481</td>
<td>100</td>
</tr>
<tr>
<td><strong>Household Size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2 persons</td>
<td>51</td>
<td>11</td>
</tr>
<tr>
<td>3-4 persons</td>
<td>247</td>
<td>51</td>
</tr>
<tr>
<td>5-6 persons</td>
<td>128</td>
<td>27</td>
</tr>
<tr>
<td>7-8 persons</td>
<td>46</td>
<td>9</td>
</tr>
<tr>
<td>8+</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>481</td>
<td>100</td>
</tr>
<tr>
<td><strong>Family Composition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married and with children</td>
<td>303</td>
<td>63</td>
</tr>
<tr>
<td>Single mother household</td>
<td>64</td>
<td>13</td>
</tr>
<tr>
<td>Single father household</td>
<td>49</td>
<td>10</td>
</tr>
<tr>
<td>Married with no children</td>
<td>51</td>
<td>11</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>481</td>
<td>100</td>
</tr>
<tr>
<td><strong>Housing Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owners</td>
<td>63</td>
<td>13</td>
</tr>
<tr>
<td>Renters</td>
<td>418</td>
<td>87</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>481</td>
<td>100</td>
</tr>
<tr>
<td><strong>Neighbourhood type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detached dwellings</td>
<td>93</td>
<td>19</td>
</tr>
<tr>
<td>Medium density</td>
<td>113</td>
<td>24</td>
</tr>
<tr>
<td>Apartment</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Poor neighbourhood (blocks)</td>
<td>259</td>
<td>54</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>481</td>
<td>100</td>
</tr>
<tr>
<td><strong>Household Monthly income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below Kshs. 5,000 pm</td>
<td>219</td>
<td>45</td>
</tr>
<tr>
<td>5,000-10,000 pm</td>
<td>187</td>
<td>39</td>
</tr>
<tr>
<td>Over 10,000 pm</td>
<td>75</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>481</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Fieldwork 1999*

5.4.2 Low-income households and urban environmental management

The household level is the lowest level of decisions for approaches to local environmental management. In urban areas, households cannot be considered in isolation or
as autonomous, independent units, since they are involved in intra-household networks for their survival. There are networks of solidarity and economic exchanges between household members, neighbours, community residents and other institutions. The results of the household survey conducted in the low-income settlements between April and August 1999 show that the communities are not homogenous in terms of their housing status and neighbourhood type, and that households differ in family composition, household size, household income and length of residence in their respective communities. These variations in the profile of households in these settlements have an important influence on the perception of environmental issues and the responses to environmental problems. These also influence the participation in community-based organisation and community environmental management activities. Table 5.24 presents the profile of the households covered in the survey.

Our household sample had more female respondents than men, although we used simple random sampling to select the respondents. The average household size is 3-4 persons. The majority of the respondents (55%) had stayed in the estates for less than 1 year to 4 years and in all, 87% were renters and only 13% were house owners. Most of the respondents (54%) described their neighbourhoods as poor. In all, 63% of the respondents indicated that they were married, had children and that their average monthly income was below Kshs. 5,000 per month.

5.4.3 Household responses
From the foregoing, it is possible to indicate that households in the four estates are facing problems related to water supply, sanitation and solid waste.

Water supply
Most of the households interviewed indicated that their principal source of water was at one time or another interrupted. We wanted to find out to what alternative source of water they resort to when this happens. In all, only 5% of the households indicated that their principal source of water has never been interrupted. Most of these households had their main source from the MCN and had a storage tank to cater for the times of shortage. All the households had alternative sources of water and what strikes us is the relatively high number of households buying water from the water vendors when the main source is being interrupted (Table 5.25).

In all, water supplied by the vendor appears to be the main alternative. The role of the water vendor is still important regardless of the frequency with which the water is interrupted. This indicates that many households in the low-income areas still buy water from the water vendors in times of shortage.
Table 5.25  Alternative sources of water when the principal source is interrupted

| Source: Fieldwork, 1999 |

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy from nearby plots</td>
<td>57</td>
</tr>
<tr>
<td>Get free from nearby source</td>
<td>64</td>
</tr>
<tr>
<td>Water vendor</td>
<td>187</td>
</tr>
<tr>
<td>Rain water</td>
<td>84</td>
</tr>
<tr>
<td>Other</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>481</td>
</tr>
</tbody>
</table>

Sanitation

The household survey indicated that very few households are connected to the municipal sewerage system. This is consistent with the fact that the municipal sewerage system is underutilised, as was seen in Chapter 4. The majority of the households (73%) have resulted to the use of the pit latrine as shown in Table 5.26.

Table 5.26  Type of toilet facility available to the households

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Septic tank or aqua privy</td>
<td>49</td>
</tr>
<tr>
<td>Sewered</td>
<td>65</td>
</tr>
<tr>
<td>Drop toilet over water</td>
<td>2</td>
</tr>
<tr>
<td>Pit latrine</td>
<td>348</td>
</tr>
<tr>
<td>Others</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>481</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 1999

Many households drained waste-water from bathrooms within their compounds, although they knew the consequences of such action. There was evidence of wastewater flowing out of the compounds uncontrolled, which constituted a threat to public health (see Plates 5.1 and 5.2, pages 124 and 125). The following graph shows the prominence of pit latrines usage regardless of the type of housing tenure. In all, 40% of house owners were using pit latrines.

There is a strong association between the type of housing tenure and the toilet facilities that are available to a household (Cramer’s V and phi = 0.337). The pit latrines seem to be preferred, regardless of the housing tenure and this is because it is easy to maintain them compared with other waterborne toilet facilities. Most of the households that had other types of toilet facilities, like the septic tanks or
toilets connected to the sewer, also indicated that they had pit latrines that were used during the times the water supply was interrupted.

Table 5.27  Type of toilet facilities for owners and renter

<table>
<thead>
<tr>
<th>Type of toilet</th>
<th>Type of housing tenure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owned</td>
<td>Private rental</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Septic tank or aqua privy</td>
<td>17</td>
<td>27</td>
</tr>
<tr>
<td>Sewered</td>
<td>21</td>
<td>33</td>
</tr>
<tr>
<td>Drop toilet over water</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Pit latrine</td>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>Others</td>
<td>17</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100</td>
</tr>
</tbody>
</table>

Cramer's V = 0.337; phi = 0.337

Source: Fieldwork, 1999

Responses to uncollected solid waste

As we have seen, households in the low-income neighbourhoods do not receive municipal waste collection on a regular basis. Households have different ways of dealing with uncollected waste, but most of them end up transferring waste to other areas like collection points, empty lands and disused roads, waterways and drainage channels. As seen from Table 5.28, the majority of the respondents noted that there was a problem of foul smell coming from uncollected garbage that was evident from littering in most neighbourhoods studied. A significant number of households (36%) burn the waste generated, while 19% bury the waste. In most compounds we observed some garbage pits dug by the landlords. In all, 63% of the respondents indicated that waste pickers collect valuables from the waste generated. Of these, 30% collect paper, 38% collect scrap-metal, 40% collect bottles and glass while 50% of the respondents indicated that plastic containers are also collected. It is very difficult to find these types of recyclables amongst the heaps of waste found in the empty spaces, around the community containers and refuse chambers and in the dumping site. The main type of waste common in all neighbourhoods and common all over the municipality are the plastic films that are non-degradable. We noted that a significant percentage (23%) of respondents traded part of their waste generated.
Table 5.28 Household responses to uncollected garbage

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Sell</th>
<th>Do Not Know</th>
<th>Give</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>There is a problem of foul smell</td>
<td>70</td>
<td>30</td>
<td>144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burns part of garbage generated</td>
<td>36</td>
<td>64</td>
<td>173</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bury part of the garbage generated</td>
<td>19</td>
<td>81</td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste pickers collect any of garbage generated</td>
<td>63</td>
<td>35</td>
<td>303</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Waste pickers collect paper</td>
<td>30</td>
<td>62</td>
<td>143</td>
<td>40</td>
<td>8</td>
</tr>
<tr>
<td>Waste pickers collect any metal</td>
<td>38</td>
<td>52</td>
<td>184</td>
<td>49</td>
<td>10</td>
</tr>
<tr>
<td>Waste pickers collect bottles or glass</td>
<td>40</td>
<td>52</td>
<td>250</td>
<td>37</td>
<td>8</td>
</tr>
<tr>
<td>Waste pickers collect plastics</td>
<td>50</td>
<td>44</td>
<td>210</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>Part of waste is traded</td>
<td>23</td>
<td>77</td>
<td>369</td>
<td></td>
<td></td>
</tr>
<tr>
<td>House trade or give away paper</td>
<td>87</td>
<td>12</td>
<td>56</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Trade or give away metal</td>
<td>89</td>
<td>11</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade or give away bottles or glass</td>
<td>84</td>
<td>7</td>
<td>36</td>
<td>41</td>
<td>9</td>
</tr>
<tr>
<td>Trade or give away plastics</td>
<td>83</td>
<td>10</td>
<td>46</td>
<td>35</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 1999

5.4.4 Collective actions

During the household survey, we wanted to find out whether the individual households participated in collective activities related to water supply, sanitation and solid waste management. We only asked this question to those households that indicated that they belonged to any community-based organisation. We deliberately left out those households that do not belong to CBOs, as our concern was community-based collective action as opposed to individual actions. It should be noted that individual households in low-income areas are involved in some form of environmental management acting alone. This study revealed some very interesting findings. Within the water supply and sanitation sectors, only a negligible percentage of the households was involved especially in the supply side and maintenance of the systems. However, more households were involved in communal solid waste management initiatives.

Most households were involved in collective activities in solid waste management, especially so during the clean-up exercises. The results indicate that females, youth and children dedicated more voluntary labour to solid waste collection than the
males. A negligible number of the households indicated that they got paid for the labour provided. Most of the labour provided in these activities was on a voluntary basis.

Table 5.29 Provision of labour in collective environmental management activities by households

<table>
<thead>
<tr>
<th>Nobody does Yes</th>
<th>Wife does</th>
<th>Husband does</th>
<th>Both</th>
<th>Children</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No %</td>
<td>No %</td>
<td>No %</td>
<td>No %</td>
<td>No %</td>
<td>No %</td>
</tr>
<tr>
<td>Who in the household provides labour in water supply</td>
<td>153</td>
<td>91.1</td>
<td>1</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Who provides labour in sanitation</td>
<td>152</td>
<td>90.5</td>
<td>3</td>
<td>1.8</td>
<td>13</td>
</tr>
<tr>
<td>Who provides labour in solid waste management</td>
<td>92</td>
<td>54.8</td>
<td>56</td>
<td>33.3</td>
<td>9</td>
</tr>
</tbody>
</table>

\textit{Source: Fieldwork, 1999}

5.5 CBOs and environmental management

Given the heterogeneity and mobility of urban dwellers, the individuals living in urban settlements have been reported to have a different sense of community as compared to inhabitants of rural areas. In the urban areas, there are several ‘functional’ definitions of the community. In our study, a community can be defined in terms of ‘common interest’, interests which may be as diverse as ‘cleaner neighbourhoods’, ‘improved shelter’ or ‘income generation’. This definition needs to capture the territorial nature of the urban communities, which undertake collective actions within a specific neighbourhood.

Lee (1994) argues that the society and social relations have been transformed in the urban areas in a way that it is not obvious that CBOs will spontaneously arise. This is also the case with Nakuru where we only have CBOs in the low-income areas that undertake collective actions aimed at improving the living environment in their neighbourhoods. Lakeview, Mwariki, Kwaronda and Kaptembwo settlements are some of the poor neighbourhoods in Nakuru town. Together, they harbour more than 45% of the population of the municipality. These estates were deliberately selected for this study because of the activities organised by community groups aimed at solving some of the environmental problems. These areas lack most municipal services.
There are a huge variety of CBOs, which include self-help, local, grassroots and community management organisations. The strength of CBOs lies in their ability to mobilise members to tackle local problems and seek common solutions. CBOs relate closely with members at the grassroots level. CBOs are, however, constrained by their weak resource base and limited exposure that limits their ability to seek appropriate solutions to problems facing them. Their major problems are limited information, skills and technical knowledge and access to finance, which are vital for successful intervention in the living environment of their neighbourhoods.

All the CBOs studied and discussed in this section initially started as self-help voluntary organisations that are now addressing environmental management issues. In all the four poor neighbourhoods studied, some households belonged to some community-based organisations that had different activities. Our specific interest was to study the CBOs that had environmental management objectives among their activities. As noted earlier, in Nakuru, most of these CBOs are found in the low-income areas, which lack adequate environmental infrastructure. Collective activities by CBOs were mainly aimed at joint clean-up activities and income generation activities. In all, 35% of the respondents belonged to CBOs while the majority (65%) did not belong to any CBO. An interesting finding was that the majority of the respondents who were members of the CBOs were house owners (Table 5.30).

<table>
<thead>
<tr>
<th>Does any household member belong to a CBO?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owners</td>
</tr>
<tr>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>Yes</td>
<td>45</td>
</tr>
<tr>
<td>No</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
</tr>
</tbody>
</table>

Cramer’s V=0.297; phi = 0.297

*Source: Fieldwork, 1999*

There are some factors that influence or determine whether a household will belong to a CBO. Some of the factors that were considered in this study were the sex of household members, the nature of tenure and the length of stay in an estate. Thus, while the conventional belief that house owners are more active and responsive than house renters in community affairs seem to hold true, it is somewhat revealing to find that some of the house renters have displayed their willingness to join and contribute their share towards the collective welfare of their communities. A significant percentage of house renters (29%) belonged to CBOs that are actively involved in community environmental management activities in all the estates studied.
The length of stay in an estate seemed to influence the percentage of the households that belonged to a CBO. The longer the stay in an estate, the greater the likelihood of belonging to a CBO, hence participating in collective activities within the community (Cramer's V and phi = 0.297). Table 5.31 shows the percentages of households belonging to a CBO by the length of stay in an estate. In all, 56% of the respondents who had stayed in a specific estate for over 10 years belonged to some CBOs. This result shows that the longer the length of stay in an estate, the greater is the likelihood of a household to belong to a CBO. This is, however, also affected by other factors that our survey did not focus on. Our study showed that a significant number of households had the opinion that CBOs were improving the environmental conditions of their neighbourhoods. This is an interesting finding because not so many households were members of the CBOs.

Table 5.31 Membership to CBOs and length of stay in the estate

<table>
<thead>
<tr>
<th>Does any household member belong to a CBO?</th>
<th>Length of stay in the estate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;1-4 years</td>
<td>5-10 years</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>79</td>
<td>21</td>
</tr>
<tr>
<td>No</td>
<td>301</td>
<td>79</td>
</tr>
<tr>
<td>Total</td>
<td>380</td>
<td>100</td>
</tr>
</tbody>
</table>

Cramer's V = 0.206; phi = 0.206

Source: Fieldwork, 1999

Another finding was that some households belonged to a CBO, while still having the opinion that CBOs were not improving the environmental conditions within the neighbourhoods. This was because they belonged to a CBO the main activity of which was income generation and not environmental improvement. It is interesting to note that a significant number of respondents (43%) who did not belong to any CBOs still had the opinion that the CBOs were improving the quality of the environment. This can be explained by the fact that when a CBO organises a clean-up exercise, they do it in an entire neighbourhood, regardless of whether households in the neighbourhood are members. This finding shows that many households tend to free ride.

5.5.1 The CBOs studied

The following section describes four CBOs that were active in the neighbourhoods studied. The study focused on the activities of the CBOs and their interaction with other actors. It is evident from the analysis that, in their attempts to solve urban environmental problems, the CBOs faced a series of barriers. There are some key
Challenges of Urban Environmental Governance

factors underlying the successes in mobilising the CBOs that are able to go beyond the smaller inter-household networks, to embrace the community as a whole. Organising a community is, however, not easy at all. Studies have shown that there can be different interests of house-owners versus renters, between men and women, between the youth and the older generation, between longer residing residents and newcomers, and so on. We first present a description of the CBOs selected for this study. We purposively selected CBOs in the four low-income neighbourhoods of Lakeview, Kaptembwo, Kwaronda and Mwariki that were involved in collective environmental management initiatives. It was possible to get more information on some CBOs than on others because of the status of record keeping. Two of the CBOs – Lakeview and Naroka – had very good record keeping compared to Kwaronda and Mwariki.

(i) The Lakeview USAFI Environmental Group
The Lakeview USAFI environmental group can said to be one of the oldest environmental CBOs in Nakuru. It was started in 1993 on the initiative of the MCN, the Kenya Wildlife Service and the World Wildlife Fund (WWF). This was after a series of sensitisation workshops organised by WWF aimed at creating awareness about the negative impacts of household activities on the environment and specifically on the Lake Nakuru ecosystem. Prior to these workshops, there had been indiscriminate garbage disposal in the estate and the residents were defecating next to the Lake Nakuru National Park. The group was formed by the residents of the Lakeview estate, most of whom were landowners. Later, renters were to join the group. Initially, the group had 104 members who focused most of their activities on the Lakeview estate.

Among other activities, the group is involved in solid waste management through clean-up exercises which are organised on a weekly basis, collection of plastics and metals for recycling, composting, selling curios, making ventilations and building tiles. In the area of solid waste management, the group has been collaborating with the WWF, KWS, ITDG, UNCHS (Habitat) (through the LA 21) and the MCN. WWF and KWS have assisted the construction of five garbage receptacle chambers (Plate 5.3) in the Lakeview estate which are managed by the CBO leaders. During the construction, MCN supplied land, WWF and KWS provided materials and the community provided labour.

70 An overwhelming majority of the members of the CBOs in all the neighbourhoods studied are house owners. Very few house renters (the majority in the study areas) belong to CBOs. Most of them belong to smaller inter-household networks that are involved with income-generating activities and other social roles.

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These chambers serve as receptacles for garbage before it is collected and disposed of by the MCN to the dumping site at Menengai. The role of the CBO leaders is to notify the public health department when the chambers are filled up so that a garbage collection vehicle can be sent to empty the chamber. The MCN provided a plot where the CBO could build a social hall and other community facilities. The plot is currently being used as a community market and a meeting place for the members of the CBO.

The CBO has established cordial relations with the MCN, WWF, KWS, UNCHS (Habitat) and other CBOs within the municipality. In relative terms, the activities of the CBO have reduced the heaps of uncollected garbage, increased environmental health awareness within the community and succeeded in establishing good relations with the MCN. The group has regular neighbourhood cleaning exercises every other Saturday and a number of households participate in these activities. The World Bank has assisted the CBO to purchase a garbage collection vehicle (Plate 6.3) that is now jointly managed by the CBO and the MCN. The delivery of the vehicle to the community took longer than expected because of the long bureaucratic channels at the Ministry of Local Authorities’ headquarters.

(ii) *The Naroka Greeners Action Group*

Volunteer members formed the Naroka Greeners Action Group in January 1997 after a participatory environmental planning (PEP) workshop. The workshop had been organised by UNCHS (Habitat) in the framework of the LA 21 project) in conjunction with the MCN and the Green Towns Project of the Ministry of Local Authorities. The Green Towns Project was launched in 1992 to counteract the negative effects of urban growth in Kenya and to improve the management of towns. The project’s goal is to introduce the sustainable integration of environmental considerations into urban development, in order to achieve a healthy and attractive living environment. It is a joint venture of the Government of Kenya and the Netherlands. Capacity building workshops at the grassroots level are organised to initiate projects, work effectively with communities and oversee project implementation. The project is also involved in the mobilisation of the general public through community outreach, participatory environmental workshops and community-based projects.

Most participants came from the Kwaronda and Kaptembwo Estates and the MCN. The members took the name of Naroka Greeners Action Group (Naroka being a acronym of Nakuru, Ronda and Kaptembwo). The CBO can undertake activities in any part of the municipality and it is registered with the Ministry of Social Services. The CBO started with activities in these two neighbourhoods that are densely populated and located in the south-western part of Nakuru municipality.
bordering the Lake Nakuru National Park. These neighbourhoods are poorly serviced and located on a geological fault line that runs through the area and causes soil subsidence in the rainy season causing deep gullies.

The CBO seeks to address issues related to the provision of clean drinking water, community sensitisation and raising awareness of environmental issues in connection to solid waste collection, handling and disposal and sanitation. This is achieved partly in organised clean-up campaigns in the municipality, activities addressing environmental health issues, improving housing conditions in partnership with the ITDG and the involvement of all households and other actors in actualising the vision of a cleaner and healthier environment.

The CBO activities can be summarised as environmental management initiatives including organised clean-up activities, advocacy of community needs to relevant authorities, building partnerships with other stakeholders and coordination of the process. The CBO has written several proposals to the municipality to allow it to undertake several income-generating activities like the public-pay toilet, rehabilitation of a public recreational park, building strategic water kiosks (see Plate 6.1) in the Kwaronda and Kaptembwo neighbourhoods and upgrading of the housing stock. Most of these activities were outlined during the participatory environmental planning workshop where the residents drew an action plan. In attempts to create partnerships, the CBO has had linkages and partnerships with the MCN, government departments and agencies, other CBOs, NGOs such as ITDG and WWF, and professional associations like the Architectural Association of Kenya.

(iii) The Kwaronda Neighbourhood Community Group
This neighbourhood group was started in October 1997 out of a growing concern by the residents to improve the quality of the living environment. Kwaronda is a low-income settlement that is faced with a number of environmental problems. The settlements do not receive many services from the MCN and the streets are characterised by heaps of uncollected garbage. According to some residents, Kwaronda is one of the neglected settlements in Nakuru without adequate water supply, insufficient drainage and poor sanitation, while at the same time not receiving any garbage collection services. The group has been involved in clean-up exercises, security issues, upgrading of the existing housing stock and improvement of roads. The group is also involved in self-help and income-generating activities. The group started addressing issues related to these problems and are involved on weekly clean-ups of the entire neighbourhood.

The Kwaronda neighbourhood group has been collaborating with ITDG in improving the housing stock in the area and four contact members have already
benefited from this project. Currently, stabilised building soil blocks are used to construct new houses that take into account environmental management issues. ITDG assisted the group to acquire a machine for the manufacture of stabilised soil blocks. ITDG also introduced the group to the National Housing Cooperative Society (NACHU). Initially, NACHU assisted 21 members of the group with approximately Kshs. 120,000 (US$ 1,500) each to improve their housing stock. The group has now joined the cooperative union and can be considered for a housing loan.

(iv) The Mwariki Environmental Group
Originally this group was started as a women’s group in 1993 and as a forum whereby members could know each other and assist one another in times of need. It had only 44 members, but has attracted more members since its activities are now more diversified. The group is currently involved in environmental management initiatives such as clean-up exercises and improvement of drainage channels. Some residents in Mwariki do not participate in the clean-up exercises. This is attributed to lack of awareness among residents and the fact that there has not been any sensitisation workshop by either the NGOs or the MCN. This community-based organisation had the least exposure to outside agencies and also had very few activities. It is hoped that, with the recent interaction with other groups, the CBO may expand its activities.

(v) The Umbrella CBO Group
Thirteen environmental CBOs in Nakuru Municipality have come together to form an umbrella group called the “Nakuru Municipality CBO’s Environmental Self-help”. This group has been involved in several activities in the areas of environmental management and income generation. The group has started some micro-finance projects aimed at generating some employment for members, hence improving their living conditions. The group has a membership of 160 people and is managed by a committee elected by the members. The group is registered with the Ministry of Social Services. The group has initiated a multi-purpose tree nursery on a hired small plot in Lanet to create employment and support afforestation programmes. The main objectives of the umbrella CBO are to start income-generating activities and employment for members; to achieve increased and sustainable agricultural production systems; to restore the health of the environment; awareness creation on environmental matters among the residents; to stimulate the participation of group members in development projects and activities and to promote cooperation and social interaction with other development groups. The group is in a formative stage and faces a number of challenges. There are very limited financial resources available to the group and most of the activities being undertaken are only supported through membership fees that are quite minimal.
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The other problem is to harmonise the varied needs of the organisations involved. The group has already started experiencing leadership squabbles. The chairman of Lakeview CBO heads the environmental CBO and is using already established contacts with other organisations like the MCN, LA21, WWF, KWS and ITDG to seek support for the larger group.

5.5.2 General characteristics of the CBOs

Results from the CBO study reveal that the CBOs are quite heterogeneous in terms of the date of formation, number of members, activities, incentives for starting the organisations, the number and functions of officials and members of the organisation, the assistance they get from outsiders, the frequency of meetings, the partners and the problems they face in their day-to-day operations.

All the four CBOs studied were found in low-income areas and are different from the CBOs found in middle-income areas and the peri-urban areas where tenure may be different and incentives for formation are fewer. As we noted earlier, there are more community-based environmental initiatives in the low-income areas than in other areas in the municipality and this aspect guided our selection of the CBOs in the poor neighbourhoods. The CBOs studied were formed at different dates and for different reasons (Table 5.32). The Mwariki Environmental Group is the oldest CBO having been formed in 1993 as a women group and started some clean-up exercises in 1995. In 1994, the Lakeview USAFI Environmental Group was formed with the assistance of WWF, KWS and the MCN.

It can be observed from Table 5.32 that all the groups studied were started between 1993 and 1997. This period coincided with the change in urban governance in many urban areas in Kenya. There was emphasis on increased community participation in matters affecting the communities. Prior to 1993, most community groups existed as women groups and with the intervention of WWF, Inter-Aid, KWS and the MCN, most of the community grouped started undertaking environmental management initiatives. One interesting finding is that apart from Narok that has had an increase in membership, all the other three groups have had very high drop-out rates. Topping the list is the Lakeview group, which has very limited participation of renters. It is, however, one of the most successful groups in Nakuru. The reasons given for this drop-out rate is that many members were apathetic about the success of the group and the long-term benefits. Its survival is attributed to skilful and charismatic leadership of the group’s chairman, a landlord in the estate. His influence was actually acknowledged by the ward councillor who indicated that he owes his success in the 1997 polls to the chairperson of the Lakeview action group. Currently, the chairman is very active in the umbrella CBO groups and has been aggressively lobbying for support of the joint activities.
Table 5.32 Background information on the CBOs studied

<table>
<thead>
<tr>
<th>Name of CBO</th>
<th>Date of formation</th>
<th>Number of members at formation</th>
<th>Current number of members</th>
<th>Ethnic composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lakeview Usafi Environmental Group</td>
<td>August, 1994</td>
<td>104</td>
<td>35</td>
<td>Luhya, Kambas and Agikuyu</td>
</tr>
<tr>
<td>Naroka Greener</td>
<td>January, 1997</td>
<td>17</td>
<td>30</td>
<td>Agikuyu, Kalenjin, Kisii, Somali, Kamba, Luhya and Luo</td>
</tr>
<tr>
<td>Kwaronda neighbourhood Environmental Health Group</td>
<td>October, 1997</td>
<td>45</td>
<td>25</td>
<td>Agikuyu and Kalenjin</td>
</tr>
<tr>
<td>Gwicokereria Women Group, Mwariki</td>
<td>July, 1993</td>
<td>44</td>
<td>32</td>
<td>Agikuyu and Kambas</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

5.5.3 Internal characteristics of CBOs

In this section we describe the patterns of internal characteristics of the CBOs studied, including ethnic composition, incentives for starting the CBOs, activities, frequency of meetings, gender relations, representation and financial matters.

Ethnic composition

Regarding ethnic composition, CBOs had different compositions (Table 5.32). Naroka, for instance, had members from at least seven ethnic groups. This is also the only group that has registered an increase in membership since its inception. As seen earlier, this action group was formed after a participatory environmental planning workshop organised in 1997. The other three groups had fewer ethnic groups, which has to do with the areas where they are located. However, in all the four CBOs the Gikuyu tribe dominates their membership, but this is also the majority group in Nakuru.

Incentives for starting the CBO

One of the issues that we wanted to find out from the CBO studies was the incentive for forming the group and who were the initiators of its formation. It was striking to find out that most of the CBOs have been formed with some external influence. There was only one group in Mwariki estate that was formed purely by members of the community without external intervention. This group is currently facing quite a number of problems and they are actively looking for external partners. In three of the CBOs, the MCN had some influence in terms of either advising the leaders or linking the CBO with other actors. All the CBOs had an incentive to generate incomes for their members. Coming second was an incentive for envi-
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Environmental management through community clean-up activities. In two CBOs, social considerations were mentioned as an incentive to start the CBO.

Activities of the CBOs
Most activities of the CBOs were concentrated in the neighbourhoods where their members come from. It is only recently that the CBOs are undertaking joint clean-up activities. We observed that one CBO, Kwaronda, was actively involved in house construction activities assisted by ITDG. This was not initially an activity that the CBO was involved in but a result of their interaction with NACHU and ITDG. This is an indication that the CBOs could expand their level of activity as a result of interacting with different partners. In all, the Mwariki Gwicokereria group was least exposed to outside agencies and consequently had very few activities and accomplishments. The following box summarises some excerpts from a local daily, showing the effectiveness of the CBO activities. This shows that the local press is active in highlighting CBO activities in Nakuru.

Frequency of meetings
At the initial stages of formation the meetings were very frequent as members were enthusiastic about accomplishing so many activities. Currently, all the CBOs hold one meeting per month, on average, with the possibility of the officials meeting twice a month. All the CBOs elected their leaders democratically, though the landlords seemed to dominate the leadership.

Gender relations
In all the four CBOs, women demonstrated a high level of interest and participation in meetings and collective neighbourhood activities like clean-ups. In all but one case, however, women were the minority when it came to leadership positions. Even when women are involved in leadership, they engage in primarily traditional female tasks such as secretarial and entertainment offices. In the only all-female CBO, no leadership problems are experienced. It is, however, interesting to observe that this is the only group that is least exposed to outside agencies.

Representation
Given the way urban communities are structured, it is important to find out if the existing community groups serve the interests of the majority in the community. We have already seen that more house owners and landlords than house renters tend to belong to community groups. In the Nakuru case, the majority of the residents are tenants and most of them do not belong to any community group. There are several reasons that can be advanced to explain this. Our household survey indicated that tenureship, length of stay and perceptions about the benefits of community groups are some of the factors that determine whether a household will join
a community group. In all the CBOs studied, the extent to which we could say that they are representative of the communities in the neighbourhoods where they function is quite low.

Box 5.3 A town’s efforts to reclaim its lost glory

Low-income owners who reside in Flamingo estate have decided that they will live in a clean environment. The grass in the estate is trimmed so regularly that it now rivals well-managed football pitches. And there are no garbage piles since tenants burn household waste routinely. Flamingo is one of the many estates in Nakuru municipality, whose 5,000 housing units were built in the 1940s and 1950s. "Most of our housing estates were designed for single workers and, therefore, lack adequate sanitation facilities although the rents are low," said Mr James Michoma, the director of social services and housing. The planners of the 1940s did not imagine that the town’s population would grow to the current 350,000 people. The council thus faces the daunting challenge of providing more services to its residents. Town residents are meeting the municipality halfway to ensure that they stay in a clean environment. Community-based organisations have come up to specifically address housing and environmental needs. Says Mr Ernest Mukuza, secretary of Kaptengenwe Greeners Group, "A healthy environment is as vital as having a roof over your head. This is why we are seriously concerned about sanitation in our residential areas." Most of the organisations have come together under an umbrella group called Nakuru Affordable Housing and Environment Committee. The committee seeks to improve the status of members’ housing structures, address environmental issues and fundraise. "We are doing our best to encourage community-based organisations in their quest to maintain sanitation standards because we do not have the capacity to keep the town as clean as we would like to," says Mr Isaac Mugoi, the municipal engineer. Mugoi praised the organisations for sensitising wananchi on the importance of keeping their environment clean. The council has, consequently, assisted them significantly. "We are helping Lakeview Self Help Group to get a tipper from the Ministry of Local Government for transportation of waste." There are 13 community organisations involved in housing and environmental conservation in Nakuru town. Lakeview Secretary Esther Kilona says it is vital for the residents to keep the area clean. "As neighbours of the park, we need the tipper so that we can transport the garbage. Polythene papers are a danger to wildlife and the garbage is a sore sight for tourists." Lakeview borders the park and Lake Nakuru. Flamingo will benefit from a facelift as a result of residents’ efforts to maintain high standards of sanitation. Already, Sh1.5 million has been set aside for improvement of sanitation as well as extending the houses to provide a spacious cooking area. This project is a result of winning Nakuru town with the Belgian city Leuven. The council is also involving all stakeholders in its future plans as a lasting solution to the sanitation problem. One way of ensuring this is flexibility in exercising its by-laws to ensure that low-income owners put up decent houses using affordable materials. This, in turn, curbs proliferation of slums and the attendant sanitation problems. As part of the new spirit, the council has allowed low-income groups to put up houses in estates like Kwa Rondo and Kaptengenwe using stabilised soil blocks. which were introduced by the Intermediate Technology Development Group. "Our new approach enables us to address the environmental concerns of our beneficiaries as well as their income. We would like to ensure that urban poverty is eradicated through our interventions," Mr Josiah Omoto of Intermediate Technology. Town residents have also been collaborating with the Worldwide Fund for Nature (WWF) in their bid to secure a clean environment. In 1993, the organisation mobilised residents of Lakeview, through seminars and workshops, to sensitise them on the importance of participating in solid waste management activities. Later, women's groups, schools and youth groups got interested in the activities.

Integrated Realty Information System (IRIS) Feature.
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The external environment
Outside agencies played a significant role in the functioning and overall effectiveness of the CBOs studied. All the CBOs studied had formed linkages and partnerships with outside agencies, including the MCN. The impact of the MCN was positive because the MCN is willing to support CBO activities where possible. In all, Lakeview had six partner organisations that it has been closely working with, followed by Naroka and Kwaronda groups with four and three partner organisations, respectively. The CBO Mwariki had only the MCN as the outside agent or partner that it was collaborating with. In the next section, we will observe that all the CBOs are financially weak. This implies that they could be easily influenced by stronger partner institutions.

5.5.4 Social and management problems of community-based environmental organisations

Many social and management problems are encountered by the community-based environmental management initiatives. The field survey indicated that three of the four CBOs studied were dealing with solid waste management initiatives, only one was involved in water supply and none was involved in sewerage improvement. The Mwariki CBO concentrated more on the social welfare of its members and it is only recently that it has started some clean-up exercises. Some of the common problems mentioned by CBO leaders facing the organisations were the low participation of households, management problems, financial problems, political interference and failing cooperation with the MCN officials. We will examine these problems below.

Low participation of households
Our household survey indicated that although respondents were aware of the shortcomings of the MCN in the provision of water, sanitation services and solid waste management services, they were of the opinion that the MCN should be the responsible organisation providing the same. This can explain why few households in our survey (35%) belonged to CBOs. One way that has been suggested to increase participation in community-based environmental initiatives is community education. Another solution that was mentioned by CBO leaders was the provision of appropriate incentives.

Financial problems
The financial position of all the CBOs studied was very weak. Only few members of the CBOs are able to pay the membership fee that is quite low in all the CBOs studied. We observed that the amount paid was also very low, ranging from Kshs. 100-300 per month. This makes the CBOs very weak partners financially. According to many CBO members, they had the willingness to pay the membership fees, but could not afford it. Currently all the CBOs are coming up with proposals seek-
ing external support for several activities. The Umbrella Environmental CBO that has been formed is lobbying for external funding to implement a number of priority projects. All the CBOs heavily rely (and tend to over-rely) on external support from well-wishers, NGOs, donors and other outside agencies. The Lakeview, Naroka and Kwaronda CBO’s have been very aggressive in writing project proposals that they submitted to donor agencies for funding. For instance, Lakeview relied on a grant from the World bank to buy the refuse collection truck and on WWF funds for the construction of refuse chambers. NAROKA’s water kiosks were constructed using a grant from the International Council for Local Environmental Initiatives (ICLEI) and the Kwaronda neighbourhood group’s shelter improvement programme relies on funding from ITDG. Mwariki relies more on membership fees and monthly contributions by members. Though there are initiatives to start income-generating activities by all the groups to improve their financial resources, at the moment they are weak partners and can easily be manipulated. We contend that over-reliance on external funding and resources makes an organisation vulnerable and does not promote its long-term operation. The WWF programme in Nakuru, for example, was winding up in 2001, marking the end of support to the local CBO.

Management problems

The management of community-based environmental initiatives in Nakuru is a voluntary activity, carried out by more affluent residents\(^{71}\), house owners and landlords, who are motivated by community benefits such as a cleaner environment and a better health of neighbourhood residents. Voluntary management is not a problem itself, but continuity of the service may not be secured. There are limitations to voluntary work. Other problems related to management issues that were mentioned by CBO leaders were lack of accountability to the community. All the CBOs studied had very low membership and cannot be said to be representative of the entire community. We need to note that representation of the interests of the under-privileged groups is particularly important for women and youth in Nakuru’s low-income areas.

Leadership and political interference

CBOs face leadership problems and in-fighting among the members. For a specific action to be agreed upon by members who come from different backgrounds takes a long time and it requires skilled leadership to move on. In all the four CBOs studied, Lakeview seemed to have very good leadership with a very active chairperson who had also managed to have several linkages within the municipality and other outside actors. He has been the chairperson since the inception of the CBO and has attended a number of leadership training workshops. Naroka, the second

\(^{71}\) For instance retired civil servants and businessmen.
most active group among the ones studied, had a very active secretary who is a teacher in a local school and had managed to write several project proposals some of which have been funded. The other two CBOs indicated that they have had some leadership problems, and that these had not adversely affected their day-to-day operations, but had limited their expansion. We observed that men dominate the leadership of CBOs, with only one CBO having a woman as a chairperson. Local politicians in Nakuru were said to interfere with the running of the CBOs, although this was not directly observed. One observation made was that the CBO leadership was inclined to cooperate with local politicians for obvious reasons: to get support of the MCN in their activities. The chairperson of the Lakeview CBO was well connected to local politicians and the Lakeview councillor indicated that he (the chairman) helped the councillor to be elected. It should be noted, however, that most of the registered CBOs in Nakuru, and especially the ones we studied, are in the areas that are dominated by supporters of the ruling party.72

5.6 Conclusions

Most middle- and low-income areas do not receive adequate basic services such as water supply, sewerage and solid waste collection. The provision of urban basic services is such that the low-income neighbourhoods are under-serviced, while the middle-income areas still receive some services and the high-income areas are well serviced. Though the population of Nakuru municipality has increased very rapidly, the MCN has a weak revenue base to cater for the needs of the entire population. This leads to several environmental problems being experienced and the portion of the population most hurt is the majority in the poor neighbourhoods. Some of these problems have led to incidences of environment-related diseases like typhoid and cholera. According to the Public Health Department, there have been outbreaks of these two diseases almost every other year. The need for more appropriate planning tools has become critical due to increased social, economic and environmental impacts of urbanisation and the renewed concern for sustainable development.

The role played by the MCN in the environmental management process indicated the extraordinary complexity of the decision-making process and the interaction with other governmental actors. This leads to confusion, poor communication and coordination, and the adoption of a sectoral approach. The major challenge of the urban environmental process in Nakuru is to ensure the improvement of the quality of the environment. The prevailing view is that the MCN is responsible for the

72 This is an observation made by a former MCN councillor and the physical distribution of the CBOs seems to confirm this fact.

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provision of urban basic services, though many households do not pay taxes to support this attitude, which depicts lack of civic responsibility that is usually seen as a prerequisite for successful collective action.

The private sector has also been involved in the provision of water through the Kenya Association of Manufacturers. The informal private sector is also actively involved in environmental management initiatives and provision of urban basic services. Waste pickers can be said to have some impacts in solid waste management system though it was not easy to collect actual data on the amounts of waste that they collect and recycle. It is their compounded activities that can be said to have an impact on the entire garbage that is collected and recycled. The informal sector is also involved in water supply through water vending. They are, however, not recognised by the MCN and are usually harassed.

The MCN has opened up to the idea of working with other actors partly as a result of external pressures by donors, partly due the recognition of its weakness in financial and managerial capacities and partly due to the influence of a new governance climate. However, it prefers to work with ‘recognised’ actors, i.e. registered CBOs and NGOs rather than the informal sector. The frequent conflicts between the MCN chief officers and elected councillors have negative implications on the provision of urban basic services and they need to be resolved amicably. There is the need to educate the councillors on their role in environmental management in order for them to support specific activities proposed by the chief officers.

Most responses to poor environmental conditions involve the collaboration between various actors. CBOs need to call upon the MCN for legal and technical backing and on external donors for funding; NGOs always work with other actors, in sum, environmental action is always a matter of partnering. Collective action seems to rest on the dedication and enthusiasm of a rather limited group of people; especially tenants do not seem motivated to engage in collective action and this is a serious bottleneck. This raises issues of the difficulties of mobilising community members in low-income settlements. Both the formal and informal private sector has been actively involved in environmental management initiatives. Small-scale private garbage companies were found to be active in the middle-income and some high-income neighbourhoods. Though their activities are not adequately coordinated, they collect a significant amount of waste, which would otherwise be indiscriminately dumped. Many informal operators are involved in urban environmental service delivery though they do not get the appropriate backing. Even CBOs and NGOs seem reluctant to engage the informal actors. We contend that the roles played by the informal sector, though fragmented, need to be recognized and supported.
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As regards to CBOs studied we found that they (a) are small entities which direct their activities to a local level (in most cases corresponding to a neighbourhood), (b) always seek to build on and develop trans-local links, (c) tend to attract NGOs and other civil society organisations, (d) often operate in a participatory mode and depend on voluntarism, (e) though financially unstable, are thought to be effective in improving the quality of the environment and (f) have helped improve the relations between the residents and the municipal council.
Emerging Partnership Arrangements in Urban Environmental Management

This chapter examines partnership arrangements between different actors engaging in urban environmental management initiatives. Different types of partnership arrangements have been emerging since the early 1990’s in Nakuru and they have been prompted by an environment crisis that was immanent. Deteriorating quality of the environment, insufficient urban basic services, increase in vector-and waterborne diseases, poor housing conditions, pollution of Lake Nakuru and lack of public awareness on people’s actions are some of the factors that have triggered the emergence of these partnership arrangements. Seeking for solutions to these problems requires that the MCN involves different actors. There is need for communities to be involved, partnership with the NGOs, industries, traders, schools and other groups including professionals who can donate their skills. There is also need for a change of attitude among the urban dwellers towards environmental management.

Some of the arrangements are the result of a deliberate initiative, while others have been spontaneous. In the recent past, the Kenya government was committed to encourage initiatives aimed at improving the quality of the environment and the 5-year development plans outlined the policy issues that were to lead to sustainable development. Sessional papers that followed have tended to direct development policies towards attaining sustainable development goals. Community participation had all along been emphasised as an important input in the national development, though more emphasis was on rural areas, but recently there has been the realisation that communities in the urban areas can play a crucial role in the management of the environment.

The focus in this chapter is on partnerships dealing with water supply and waste management. We also discuss initiatives that address issues of pollution control in the MCN that utilise the partnership principle. Within the sewerage and sanitation sectors, there were no arrangements that we could classify as partnerships. During

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73 The District Focus for Rural Development of the mid-eighties emphasised that the mobilisation of local resources for development and indicated that development issues should be addressed at the District level
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our fieldwork, the MCN was still in charge of sewerage services until the recent takeover by the Ministry of Environment and Natural Resources (MENR). Most initiatives have not been analysed or documented earlier, though the local press has recently been highlighting them. We classify them according to the actors involved from the three different sectors of the society: the public sector, private sector and the civil society sector. In this chapter we first discuss the reasons advanced by partners as to why they were entering into partnerships. Later we identify the different partners and the linkages they have established. We then analyse the partnerships that we identified in Nakuru. These partnership arrangements include public sector partnerships, public-private partnerships, private-private partnerships and the public/civil society/community partnerships. We have utilised the framework that was developed in Chapter 2 highlighting the mandates, arrangements and outcomes to analyse the partnership arrangements observed. This will be followed by a discussion of the problems and challenges of each arrangement.

6.1 Revisiting the partnership concept

We note that from the existing literature on urban environmental management and the debates on urban governance, the term partnership has become one of the most widely used words in the debate of sustainable development. It has lately been argued that it is being used too much and too loosely and this raises the question of what is meant by a partnership (see for example OECD, 1990; Bennet and Krebbs, 1991; Serageldin et al., 1994; McQuaid, 1994; Badshah, 1996; Schubeter, 1996; Katajima, 1997; Syrett, 1997; Selman, 1996, 1999; Baud et al, 2001; Baud and Post 2001; Hordijk, 2001). Does it require a written agreement? Does it call for legal procedures in terms of its creation or termination? When does dialogue or cooperation between two or more parties become a partnership? Does a partnership imply equality? Given the enormous range and complexity of organisations and people who are joining hands to promote sustainable development, and the wide varieties of localities and issues that they are tackling, it is almost impossible to provide a universally acceptable answer to the above questions. The cases discussed in this chapter refer to interactions between people and organisations where all or some parties have put something into process and at some point expect to get something out of it - although the inputs and outputs may be often intangible as well as tangible.

Our initial visits to and general discussions with different actors in the area of urban environmental management showed that for the purpose of studying different partnership arrangements we had to adopt an open-ended definition of partnerships. This was prompted by the fact that several activities were being undertaken by joint actions between different actors. In this study, we conceptualise partnerships as those arrangements that include collaboration between two or more actors.
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guided by trust and mutual benefit or commitment documents and at times contractual agreements between these actors. They are engaged in collective activities aimed at improving the quality of the environment. In our working definition we also capture the fact that many actors participate in a partnership voluntarily and expect something (both tangible or intangible) out of their participation in the partnership activities.

Rather than analysing partnership arrangements necessarily as outcomes, we have also discussed them as a process, an action we refer to as partnering. This conveys the key active aspect of partnership arrangements: they are not static, but are always changing as goals, abilities and relationships change over time. Parties may act as relatively equal partners, but equality has not been realised in practice. Some partners are more powerful than others in terms of availability of resources (financial and technical), implementation mechanisms, political power and availability of information.

The MCN now recognises Nakuru’s deteriorating environment, mounting housing shortages, declining value of council housing, growing ethnic tensions in the southern edge and the falling industrial base. The municipal administration is now, more than ever, committed and willing to collaborate with CBOs, NGOs, industrialists, institutions, international agencies and individuals, to address these issues. The MCN has realised that it cannot continue operating in isolation from other actors in the area of urban environmental management. The council therefore has been seeking ways and means of involving a wide array of actors in urban environmental management.75

6.2 Reasons for forming partnerships

Many different partnerships have been formed and local situations, actors and the government policies determine the forms that they take. There are many actors in urban environmental management both from the public, the private and civil society sectors and at different levels: international, national, regional/provincial, district or municipality, the community level and household levels who combine forces to tackle environmental problems with varying degrees of success. Our observations and discussions with different actors indicated that partnering has been happening for several reasons. Table 6.1 presents a summary of the responses to the question: Why were different actors entering into a partnership arrangement?

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74 Interviews with the former town clerk.
75 The revision of by-laws related to various issues also took into considerations the roles that different actors could undertake in collaboration with the MCN. See for example the Public health by-laws (1994) and the building and construction by-laws (1996).
Table 6.1  Reasons for participating in partnership arrangements in Nakuru

<table>
<thead>
<tr>
<th>Reason given</th>
<th>No. citing the reason</th>
<th>Percentage*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because there exists a problem that needs im-</td>
<td>36</td>
<td>89</td>
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<tr>
<td>mediata attention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To capitalise on political advantage/power/influence</td>
<td>18</td>
<td>44</td>
</tr>
<tr>
<td>To exchange technologies or information</td>
<td>27</td>
<td>66</td>
</tr>
<tr>
<td>To take advantage of the strengths of a partner</td>
<td>41</td>
<td>100</td>
</tr>
<tr>
<td>Increase level of activity</td>
<td>28</td>
<td>68</td>
</tr>
<tr>
<td>Individual interests</td>
<td>30</td>
<td>73</td>
</tr>
<tr>
<td>To coordinate service provision</td>
<td>19</td>
<td>46</td>
</tr>
</tbody>
</table>

* Total is not equal to 100% because respondents gave more than one reason.

Source: Fieldwork 1999

Although one of the most important reasons for partnering is that all partners want to take advantage of the strengths of a partner, the existence of a crisis that needed immediate attention was also cited as a driving force for partnering in Nakuru. According to CBO leaders, the informal private sector and NGOs, the other reason for partnering was that they want to develop undefined opportunities (based on the understanding that dynamic interaction creates new ideas and solutions to problems). According to officials of NGOs, the MCN and LA 21 group, they realised that they needed to increase the scale of their activity within their areas of operation by involving all actors whose cooperation was needed and they have different qualities (and contribute different capitals). This explains why there have been partnerships between NGOs, LA 21 group, the MCN, CBOs, schools and central government agencies. The private sector organisations involved in solid waste collection and disposal that we observed were entering into partnership arrangements with households in the middle to high-income neighbourhoods to increase their scale of operation. Another reason for partnering was that different parties want to exchange technologies or information in order to learn from one another. We noted that there was still limited flow of information amongst the partners and this affects the functioning of the partnership arrangement.

Exchange of technologies is the reason given by the Intermediate Development Technology Group (ITDG) programme manager, who indicated that they have been educating the CBOs on appropriate technology of using stabilised soil blocks for building. This was soon after the revision of building by-laws by the MCN. Officials of WWF also indicated that this was a reason for their partnering with industri-

76 This partnership is not analysed in this study as it is involved in upgrading of the housing stock within the municipality and that is beyond the scope of our study.
alists in the PRTR initiative. Another reason was that different parties would want to capitalise on the political advantage and power that can derive from partnering (CBOs, NGOs vs. the MCN). The MCN has political advantage and is easily able to influence the implementation of partnership objectives.

Most of these reasons were strengthened by the fact that there has been a more relaxed exploration of opportunities for joint action in Nakuru. The recent change of approach and willingness of the MCN to work with other actors to ensure the improvement of environmental quality within the municipality has led to increased partnership arrangements. These reasons lead different partnerships to undertake activities like reforming public policy, coordination of different activities at the same level, improving service delivery: water supply and solid waste management, technology and knowledge transfers, upgrading the housing stock, community development, awareness creation and providing education and improvement of environmental quality and pollution control. In the following section, we introduce the assessment criteria used to examine the process-outcomes and substantive outcomes of the partnerships identified.

6.3 The actors and their relationships in Nakuru

The actors in Nakuru that are forming partnerships are the MCN, central government departments, private enterprises, universities, NGOs, CBOs, households and external support agencies. The initial discussions were to find out if there existed contacts, coordination of activities or joint actions between either two of these different actors. The following matrix (Table 6.2), constructed after initial discussions and interviews with a wide array of actors in Nakuru in the area of water supply and solid waste management, indicates the presence of some form of relationships among them. Several issues can be distilled from the above matrix. There are those actors who have linkages or relations with the majority of actors. We call such an actor a strategic partner. We now rank the partners in order of strategic importance and come up with the following hierarchy of actors from the most important to the least important:

<table>
<thead>
<tr>
<th>Number of linkages</th>
<th>Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 15 partners</td>
<td>The MCN (p), external support agencies (UNCHS, BADC/DGIC), JICA, GTZ, ODA/EU</td>
</tr>
<tr>
<td>Between 10-15 partners</td>
<td>KWS (p), WWF, ITDG (NGO), Lakeview, Naroka (CBOs), formal organisations (pr), UON (p), low income households</td>
</tr>
<tr>
<td>Between 5-10 partners</td>
<td>Ministries (p), Mwariki, Kwaronda (CBOs), informal organisations (pr), EU (p)</td>
</tr>
<tr>
<td>Between 0-5 partners</td>
<td>Middle and high income households</td>
</tr>
</tbody>
</table>

P = public sector; pr = private sector
Challenges of Urban Environmental Governance

The MCN is a strategic partner. This confirms what is indicated in literature that the local authority has to be one of the essential partners in emerging partnership arrangements in urban areas. Its role is primarily coordination and facilitation. Following the MCN in our ranking are the external support agencies or donors (UNCHS (Habitat), BADC /DGIC, JICA, GTZ, World bank, ODA, EU). This is because they provide the much needed finances for other partners to help in the implementation of projects and programmes. Most partnership arrangements that involved the participation of influential NGOs and CBOs also have a high number of linkages, i.e. WWF, ITDG, KWS (a central government agency), Naroka and Lakeview (local CBOs). The formal private sector (industrialists and small-scale formal enterprises), the University of Nairobi, low-income households, central government ministries and departments, Kwaronda (CBO), the informal private sector, Egerton University (the local university) and Mwariki (CBO). High and middle-income households have the least number of linkages. The above linkages and relationships observed involve two or more actors. For us to be able to analyse the different partnership arrangements, we need to develop a framework of analysis to assist us in comparing different arrangements.

6.4 Public sector partnership arrangements

Public sector partnerships can take two forms: inter- and intra-governmental partnership arrangements. Intergovernmental partnership arrangements include cooperative working agreements among central, regional and local government departments. Intra-governmental partnership arrangements involve cooperative working arrangements among departments, agencies and other similar entities at the same level of government. Many public sector partnership arrangements observed involved both inter- and intra-governmental partnership arrangements. Although Public sector partnerships can take two forms, there are many examples of the public sector partnerships in Nakuru. For the purpose of this study we will only discuss one example: the management of the Water Quality Testing Laboratory (WQTL). This is because the arrangement was well structured and we could get enough information about the mandate, arrangements and outcomes. Table 6.3 shows a summary of the components of a public sector partnership arrangement.

6.4.1 Mandate: aims, activities and the scale of intervention

The Water Quality Testing Laboratory (WQTL) was constructed with a grant from the Japanese International Cooperation Agency (JICA) who later handed it to the Kenya government in 1996 through the Ministry of Local Government (MOLG). The WQTL is located in the Lake Nakuru National Park and whereas it remains the property of the MCN, the council and KWS have agreed to oversee the management and operation of the facility for the first five years. The aims of this arrange-
ment are to organise and manage water, wastewater and solid waste testing facilities; to jointly design water and water quality monitoring programmes in the lake Nakuru basin; to jointly sample and analyse water samples collected through the monitoring programmes, interpret data collected and inseminate the same to managers for decision-making; to establish a good relationship and workable atmosphere for all interested parties in the Lake Nakuru catchment area for the noble existence and survival of the lake ecosystem and to jointly set up a management committee comprising officers from the actors mentioned below. The intervention by this arrangement is in the entire Lake Nakuru’s catchment area including the MCN and the areas surrounding the Lake’s basin.

Table 6.3 Summary of components of public sector partnership arrangements

<table>
<thead>
<tr>
<th>Component of partnership</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANDATE</td>
<td></td>
</tr>
<tr>
<td>Aims</td>
<td>To organise and manage water, wastewater and solid waste testing facilities; to jointly design water and water quality monitoring programme; to jointly sample and analyse water samples collected through the monitoring programme.</td>
</tr>
<tr>
<td>Range of activities</td>
<td>Interpret data collected and inseminate the same to managers for decision-making; to establish a good relationship and workable atmosphere for all interested parties</td>
</tr>
<tr>
<td>Scale of intervention</td>
<td>Area of intervention is the Lake Nakuru Catchment area</td>
</tr>
<tr>
<td>(spatial dimension)</td>
<td></td>
</tr>
<tr>
<td>ARRANGEMENTS</td>
<td></td>
</tr>
<tr>
<td>Actors involved</td>
<td>KWS, MCN, MENR, Egerton University, MOLG.</td>
</tr>
<tr>
<td>Nature of relationships</td>
<td>Formal relations guided by memoranda of understanding.</td>
</tr>
<tr>
<td>Decision-making structure</td>
<td>There is a management committee constituted from all the above actors that is mandated to make decisions; a manager heads WQTL.</td>
</tr>
<tr>
<td>Inputs by different actors</td>
<td>KWS donated land and provides security, the MCN seconds staff to the WQTL, and Egerton University provides technical expertise.</td>
</tr>
<tr>
<td>Financial arrangements</td>
<td>Revenue is generated from user fees charged to individuals and industries doing analysis and deposited in account for WQTL; the MCN pays the staff of WQTL.</td>
</tr>
<tr>
<td>Monitoring and evaluation</td>
<td>Monthly, annual and progressive operational reports are prepared by the manager in-charge of the laboratory and circulated to the MCN and KWS. Laboratory inspection is to be done from time to time as deemed necessary by the management committee.</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Data on the quality of water for domestic use; data on the extent of water pollution in lake Nakuru and other water bodies; data and analysis on the extent of ground water pollution as a result of the location of the dumping site, etc.</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999
6.4.2 Arrangements

Actors, nature of relationships and decision-making process

The major partners in this partnership arrangement are the MCN departments, Egerton University, the Ministry of Health, KWS, DWD (MENR), the office of the District Commissioner, the provincial water engineer, the District Environmental officer and a representative from the Ministry of Local Government. This is a formal partnership arrangement. The partnership between public agencies is formalised through various commitment documents and memoranda of understanding that guide the operations and activities of different actors. The Local Government Act and the Environmental Coordination and Management Act provide some guidelines as to how consultations and working relationships should be conducted at the municipal level. After JICA handed the WQTL over to the Ministry of Local Government, that ministry subsequently handed the facility to the MCN, which was then the water undertaker in the municipality. At that time, the understanding was that KWS, MOLG and the Department of Water Development (DWD) jointly founded the facility. The facility is jointly managed by KWS and MCN through a management committee comprising of representatives from various stakeholders and the management is through public sector partnership model. However, the management committee was not formed as fast as it was planned and the Water and Sewerage Department (WSD) of the MCN assumed management responsibility of the facility. A memorandum of understanding between KWS and the MCN was, however, signed outlining the roles and obligations of each partner.

Inputs of different actors

The MOLG handed the management of the laboratory to the MCN and the KWS, which owns the land where the WQTL is located. The MCN seconded staff to the laboratory and provided water to the laboratory and the project provides a vehicle for use in running the laboratory and in carrying out related activities. Egerton University brings the required expertise and trains the WQTL staff on some environmental monitoring and research techniques. The university also recommends the use of the facility to graduate students at a fee.

77 It is worrying that KWS and MCN have not agreed on a MOU for the management of the WQTL for so long, though several draft MOU have been prepared.
78 This Department was then in the Ministry of Land Reclamation, Regional and Water Development, but now it's under the Ministry of Environment and Natural Resources.
79 In September 2000, MCN commercialised its water and sewerage services by forming NAQWASS and subsequently transferred the management of WQTL. In February 2001, MCN’s undertakership was revoked by the Minister for Environment and Natural resources by Gazette Notice No. 884, and subsequently transferred to the DWD (MENR) and therefore the DWD is currently managing the WQTL.
Monitoring and evaluation

Monthly, annual and progressive operational reports are prepared by the manager in charge of the laboratory and circulated to the MCN and KWS. Laboratory inspection is to be done from time to time as deemed necessary by the management committee. There is need for the establishment of an institutional framework with clear demarcation of responsibilities and budget allocations. Monitoring and evaluation should be done on a periodic basis to ensure that the operation of the WQTL is sustained over a long period of time.

Figure 6.1 Existence of linkages and relationships between different actors in the MCN

<table>
<thead>
<tr>
<th>Central government agencies/ministries</th>
<th>Ministries</th>
<th>KWS</th>
<th>WWF</th>
<th>ITDG</th>
<th>Lakeview</th>
<th>Naroka</th>
<th>Mwariki</th>
<th>Kwaroda</th>
<th>Private sector</th>
<th>Formal</th>
<th>Informal</th>
<th>Universities</th>
<th>External/donor agencies</th>
<th>H</th>
<th>M</th>
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<td>MCN</td>
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<td>Universities</td>
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<td>External/donor agencies</td>
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<td>Households</td>
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</table>

Key:
- A linkage/relationship exists
- Unmarked cells indicate that there is no evidence of any linkage or relationship
- H – High-income households
- M – Middle-income households
- L – Low-income households
- UON – University of Nairobi
- EU – Egerton University

Source: Fieldwork 1998
Challenges of Urban Environmental Governance

6.4.3 Assessment of outcomes

Process outcomes and shortcomings

In terms of inclusiveness, public sector partnerships are only made up of actors drawn from the public sector. The management of the WQTL is supposed to be accountable to the MCN and KWS, while at the same time to clients approaching the laboratory for sample analysis. Each participating department or agency would want to be in charge. This is a legally recognised arrangement and guided by formal arrangements. The WQTL is expected to play an important role in environmental monitoring, surveillance and research, not only within the Nakuru municipality, but also on other lakes in the rift valley. The fact that this type of partnership consists of actors from the public sector, and that they tend to have the necessary political support makes it surprising that they do not seem to be functioning well. This indicates that political will and support are crucial among many other preconditions.

Substantive outcomes and shortcomings

In terms of substantive outcomes we consider financial arrangements and viability of this partnership arrangement and its effectiveness in achieving the main objectives. Regarding financial arrangement, JICA gave a grant for the construction of the WQTL as part of the larger Nakuru Sewerage works rehabilitation and expansion project. KWS provided land where the laboratory is situated. KWS was to develop recurrent budgets for the laboratory, comprising expenditure on chemicals, maintenance, telephone, electricity and other expenses, to be financed by and under the project. The MCN has been paying the laboratory staff and had entered into an informal arrangement with Egerton University’s Chemistry Department to be undertaking tests in the laboratory at pre-determined fees per sample and offer the necessary technical advise. The monies realised from the fees are deposited in a bank account whose signatories are: the laboratory manager, General manager (Water and Sewerage Department) and senior warden, KWS.

Regarding the effectiveness of this arrangement, the WQTL has excellent facilities. These facilities, if well utilised, can ensure that the quality of water in the municipality of Nakuru is well monitored. The equipments are not put to maximum use and this is because of lack of a comprehensive monitoring plan, limited budgetary allocation and lack of technical staff. A few equipments are currently out of order and need urgent replacement. Maintenance of the equipment and procurement of spare parts is a major problem and this affects the effectiveness of the WQTL.
6.4.4 Discussion

Ten officers from the public sector who work together in the management of the WQTL were purposefully selected and asked to rank the major challenges from the most important to the least important. Their responses are summarised in Table 6.4.

Table 6.4 The first most important challenge facing the public sector partnerships (n = 10)

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Number of responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of clear policy guidelines for collaborative action</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Lack of financial resources for implementation</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Decision-making power differentials</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Lack of legislative/ regulatory measures, i.e. lack of rules and by-laws to guide collaborative decision-making</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

Our interviews with the officers that are involved in this partnership revealed a number of challenges facing this arrangement. Since the nature of relationships is guided by a variety of norms of different organisations, there seems to be a lack of clear policy guidelines to guide this collaborative management. There is lack of clear guidelines of what should be the roles of different actors and to whom they are answerable. There is absence of a legal framework to ensure that what is deliberated is legally acceptable. The partnership arrangement faces a financial challenge since the fundings of activities are controlled by individual sectors. Other challenges that were mentioned by different interviewees were decision-making power differentials.

The management of the WQTL has faced several institutional problems that need to be solved if it will effectively meet its objectives. These challenges indicate the difficulties of a public-sector partnership and they reflect on the fact that there is a lot of political interference with the functioning of this kind of a partnership arrangement. Coming up with an agreed upon memorandum of understanding seems to take very long. Implementation of the existing monitoring programme of the WQTL has not been effective due to a number of limitations, including: (a) limited budgetary allocation for monitoring activities; (b) enforcement of drainage, sewerage and trade-effluent by-laws (1994) has not been possible because the by-laws
are yet to be enacted; and (c) a vehicle that was provided by JICA to be used for monitoring purposes is not always available when required.

Based on the discussions with various partners involved in the management and operation of the WQTL, we conclude that there is no institutional framework for collaborating stakeholders. It is necessary for the major two partners, the MCN and KWS to sign a memorandum of understanding (MoU), spelling out the roles and responsibilities of each other. The two institutions as noted earlier are yet to agree on a MoU. The major bone of contention seems to be who should claim ownership of the laboratory facility, and who should provide financial and logistic support for operation. Even though KWS have at times used the laboratory in their monitoring activities, more would have been achieved with proper coordination of all such activities. With the changes in water undertakership in Nakuru, the management issue of the laboratory seems to be even uncertain. It is not clear who the laboratory staff are answerable to amongst the MCN, KWS, MENR and NAQWASS. There is clearly a need to resolve this issue if the laboratory is to function normally.

6.5 Public-private partnership arrangements

These arrangements involve cooperation among organisations in the public and private sectors. In theory, public/private partnership arrangements are often government-business partnership arrangements, but they are not limited to business and government. We observed that there are some public/private partnership arrangements between the public sector and private partners, including non-profit organisations such as NGOs, private partners also include community-based organisations and voluntary organisations. Two cases are analysed and discussed here because they deal with the areas of environmental management that our study focuses on: water supply and waste reduction (pollution control). A summary of the components of the public/private partnership arrangements is presented in Table 6.5.

6.5.1 Nakuru Quality Water and Sanitation Services Company limited

Nakuru Quality Water and Sanitation Services Company Limited (NAQWASS) was formed to be in charge of managing water and sewerage services in Nakuru town in September 2000. We present this case here although the company has been dissolved after operating for only five months. The purpose of discussing this case is to highlight the problems that face an institutional arrangement formed utilising the partnership principle which did not operate for long because of political interference.
### Emerging Partnership Arrangements in Urban Environmental Management

#### Table 6.5 Summary of components of public-private partnership arrangements

<table>
<thead>
<tr>
<th>Component of the partnership</th>
<th>The PRTR initiative</th>
<th>NAQWASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANDATE Aims</td>
<td>To provide baseline data on pollutants from which reduction initiatives are developed</td>
<td>To efficiently manage the production and distribution of water for both domestic and industrial use; provide quality sanitation services</td>
</tr>
<tr>
<td>Range of activities</td>
<td>Monitoring chemical usage by industry and implement waste reduction measures</td>
<td>To produce and distribute water; collect and treat waste water; investigate and develop new sources of water</td>
</tr>
<tr>
<td>Scale of intervention</td>
<td>Entire lake Nakuru catchment area</td>
<td>The entire municipality and the peri-urban areas</td>
</tr>
<tr>
<td>(spatial dimension)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARRANGEMENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actors involved</td>
<td>The MCN, Industrialists, researchers, WWF, DEC, Ministry of Health, Ministry of Environment, Ministry of Labour (DOHSS) Dept of pollution control in the Ministry of water</td>
<td>The MCN, KAM NWC and PC, CBOs and consumers, government ministries, GTZ and DDCs</td>
</tr>
<tr>
<td>Nature of relationships</td>
<td>Formal relations governed by letters of commitment</td>
<td>Formal relations governed by Articles of Association</td>
</tr>
<tr>
<td>Decision-making structure</td>
<td>PRTR task force comprising representatives from all actors involved convenes meetings, consultants undertake studies and industrial environmental committees develop and implements WRAPs</td>
<td>Shareholders elect the Board of directors during the AGM; the directors recruit a managing director who heads the corporate management team</td>
</tr>
<tr>
<td>Inputs of different actors</td>
<td>WWF provides the necessary training; industrialists undertake monitoring and develop and implement WRAPs; the MCN and DOHSS receives and evaluate reports</td>
<td>NAQWASS was to supply water in the entire municipality and beyond; the MCN was to receive and evaluate all progress and annual reports</td>
</tr>
<tr>
<td>Financial arrangements</td>
<td>WWF and DOHSS provided funds for initial training; industrialists pay for effluent analysis and monitoring</td>
<td>NAQWASS to charge water bills and maintain the water account; pay its staff etc</td>
</tr>
<tr>
<td>Monitoring and evaluation</td>
<td>Inventory registers are prepared and reports from industries are submitted to the MCN and DOHSS</td>
<td>The company keeps records of all consumers, annual reports are submitted to the MCN and the technical department monitors the entire reticulation system on daily basis</td>
</tr>
<tr>
<td>Discussion/comments</td>
<td>Participating industries have been using a lot of money to monitor their emissions and implement waste reduction action plans The PRTR initiative enjoys legal recognition from both the local and central governments The initiative, however, excludes local communities neighbouring the industry The major challenge is to institutionalise the initiative under the industrial set-up</td>
<td>Operated for five months and then the water company was dissolved There was lack of political will though the new water company enjoyed legal recognition Socially, many consumers did not understand the intentions of the water company</td>
</tr>
</tbody>
</table>

Source: *Fieldwork 1999*
6.5.1.1 Mandate: aims, activities and areas of intervention

The aims of the company were to efficiently manage the production and distribution of water for domestic and industrial use within and beyond the municipality. It aimed at providing quality sanitation services in the municipality's areas of jurisdiction. It also aimed at collaborating with other actors involved in the water supply sector within and beyond the municipality to ensure a sustainable yield of the water sources and also to ensure that the wastewater is properly disposed of. The company also aimed at investigating and developing new sources of water to ensure that water is available to all. The company was mandated to produce and distribute water, collect and treat wastewater in the municipality and develop new sources of water. The company entered into agency agreement with the MCN as has been outlined in the sessional paper No. 1 of 1999. This paper encourages the commercialisation of water and sewerage services in towns and the inclusion of the consumers and other stakeholders in the management of this sector. NAQWASS activities were concentrated in the municipality as far as sanitation facilities are concerned. In regard to water supply, the company operated in the peri-urban areas that are currently outside the municipal boundaries. The company's level of intervention was to be in the entire municipality and the peri-urban areas.

6.5.1.2 Arrangements
Actors, nature of relationships and decision-making

NAQWASS was to work closely with the MCN, which owns several boreholes, and the National Water Conservation and Pipeline Corporation (NWC and PC), together with the Kenya Association of Manufacturers (KAM) among other partners. NAQWASS established two kinds of partnership arrangements, involving both developmental and institutional partners. The developmental partners are GTZ, which supports the policy implementation and offers technical advise, and the French Government, the Japanese Bank for International Development (JBIC) and the Africa Development Bank (ADB) offering financial support. The institutional partners are the Ministry of Reclamation, Rural development and Water Resources, the Ministry of Environment and Natural Resources, the Ministry of

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80 The Corporation was established under the State Corporations Act (Cap. 446) vide Legal Notice No. 270 of 24 June 1988 as an autonomous agency reporting to the Ministry of Water Resources. It became operational on 1 July 1989. The Corporation was created with a view to (1) commercialise the water sector operations; (2) to achieve financial autonomy in water operation; (3) to improve performance of water supplies; and (4) to reduce dependence on public funding of water projects. The corporation's present mandate is to develop water projects and manage water supplies in areas where it has been appointed the water undertaker.
Local Authorities, the National Water Conservation and Pipeline Corporation, the MCN, KWS, KAM, WWF, DDC and CBOs.\textsuperscript{81}

The Water Company was established and was to operate under the companies Act, Chapter 468 of the Laws of Kenya. It was structured in a way that it allows cooperative working relations among different actors from the public, private and civil society sectors. The structure of the company was that of an ordinary company, with shareholders, board of directors and a management team. The shareholders are the members of the MCN and any additional nominees required to satisfy the requirements of the companies Act. They exercise power over the operations of the company by means of the Annual General Meeting (AGM). The shareholders appoint a board of nine directors that consist of one elected representative nominated by the MCN, one Chief Executive of the company, one representative from the business/financial sector of the community, one representative from a local women's organisation (read CBOs), one representative from consumers, two officers of the MCN, one non-voting representative from MOLG and 1 non-voting representative from the MENR.

\textit{Inputs of various actors}

The Board of directors appointed a Managing director entrusted with the entire management of the company. He headed the management team and was responsible for day-to-day operations of the company. He kept the board informed on performance, prepared business plans and budgets and implemented the board’s resolutions while also maintaining good public relations. The board of directors were responsible for the implementation of the Company’s Memorandum and Articles of Association, and to provide and control the functions of the company. They provided the management guidelines, approve major contracts, authorised changes of policy, held quarterly meetings and approved tariffs in compliance with existing legislation.

The top management officials of the company were recruited from the open market and were employed on contract terms. The contract of employment contains some performance-related clauses. NAQWASS was supposed to manage the water and sewerage sector in a coordinated way and recruit other personnel with specialised skills.

\textsuperscript{81} Note that one of the directors of NAQWASS has to be one of the representatives of community-based groups or organisations.
**Monitoring and evaluation**

Annual reports were to be submitted to the MCN. The company was mandated to keep records of all the registered consumers and bill them monthly. The technical department, to reduce incidences of water leakage and sewerage blocks does the monitoring of the reticulation system. There was no evidence of other monitoring and evaluation mechanisms. The company’s strength was expected to be the different institutional set-up, which made a board of directors constituted from the public and private entities autonomous. It was initially hoped that this would reduce political interference. The MCN still had a lot of control over the operations of the new company, through the Annual General Meeting (AGM). Of particular concern to the council was the retention of control of water and sewage tariff increases. If the company was to succeed, it had to be able to control, through the Board of Directors, their single source of income.

6.5.1.3 **Assessment of outcomes**

**Process outcomes and shortcomings**

The process outcomes of NAQWASS have been analysed by considering the involvement of many actors, existence of political will, legitimacy and accountability. First, regarding the involvement of many actors, the now defunct water company had a wide representation of actors representing the MCN, the central government departments, industrialists, women groups and consumers. The main reason why the water company did not operate for long was purely lack of political support from the onset. This is a clear example of a failed partnership arrangement in practice though it had very good aims, intended activities and proposals on paper.

Secondly, regarding the existence of political will and support, local politicians did not support the formation of NAQWASS from the onset. There were differences on the issues related to shareholding within the company where sitting councillors wanted their names included in the articles of association. Actually the first copies of the articles of association had the names of the sitting councillors as shareholders on behalf of the individual wards that they represent. This anomaly was later discovered and rectified. After the new company was formed, with a board reflecting a true partnership, local politicians were still not satisfied. One area, which made most of the local politicians uneasy about the new water company, was the fact that it moved fast to disconnect illegal connections and those consumers who had not been paying for the water supply for a long time. Some observers indicate

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82 A local newspaper reported that unknown people had been inserting blocks of wood into the main pipelines ostensibly to bring the new company to its knees!

83 It is evident that most of the local politicians, councillors and former councillors have had illegal water connections and the new company did not spare them.
that interested people fed the president on falsehood when he ordered the take over of the water and sewerage services by the government.\textsuperscript{84} The formation of NAQWASS brought about political attention to the water supply shortages in Nakuru and its dissolution had more to do with politics than operational difficulties.

Thirdly, initial registration documents for the now defunct water company indicated that it was legally recognised under the Company Act, Chapter 468 of the Laws of Kenya. The other policy document that supports the formation of the water company and the use of the partnership principle in its formation is the sessional Paper No. 1 of 1999. Despite the legal recognition, partnerships also require political will to function efficiently. Consumers in the municipality were not consulted or frequently informed on the formation of the water company until they started receiving water bills from NAQWASS. There were complaints that since the new water company took over, the water supply situation had not improved. This can be construed to indicate that the company was not socially accepted.

Finally regarding accountability, NAQWASS was accountable to the general public through the annual general meetings where shareholders, represented by all the sitting councillors, were to examine the progress made by the company and review proposals for future actions. However, by the time the company was dissolved no meeting had been held.

\textit{Substantive outcomes and shortcomings}

The assessment of substantive outcomes of NAQWASS has been done by considering indicators such as financial arrangements and viability and effectiveness in terms of the achievement of specific objectives. First, NAQWASS inherited all the assets and liabilities of the former Water and Sewerage Department that had maintained a separate bank account from the MCN’s other accounts. At the time when we conducted the interviews, the company was buying water from National Water Conservation and Pipeline Corporation at Ksh. \textsuperscript{85}15\textsuperscript{85} per 1 m\textsuperscript{3} and selling the same to consumers at Ksh. 10 and this is not sustainable. The technical manager also noted that many consumers were not paying their bills and this led to a majority of them being disconnected. The issue of water unaccounted for by the company meant there was a great loss of revenues from the water supply and this affected the financial viability of the company.

\textsuperscript{84} See daily Nation, 23 October 2001.

\textsuperscript{85} 1 Ksh = 0.012 US dollar

1 Ksh = 0.014 Euro
Regarding effectiveness, NAQWASS operated for only five months and then it was dissolved so it is not practically possible to assess its effectiveness at this short time. We were not able to get information on whether NAQWASS improved the water supply situation in the municipality. However, the company had moved fast in disconnecting water from those households and institutions that had accumulated huge water bills.

6.5.1.4 Discussion

Despite the clearly established organisational structure and the clear division of tasks, the company did not improve the water supply and sanitation services in Nakuru and the central government took over the water and sanitation sector. It was necessary for the AGM (elected councillors) to have sufficient confidence in its Board of Directors to allow it set the tariff levels. This degree of trust can only be achieved over a period of time. In its formative years, it may be necessary for the Board to provide detailed financial evidence directly to the controlling ministry to prove that any tariff increase is fully justified, and that the same result cannot be achieved by a decrease in expenditure levels. The other area of concern to the elected councillors was the facility, which it would lose after NAQWASS was formed: to transfer funds from the water account to meet other pressing financial obligations. However, there have been studies on alternative sources of revenues available to them, which they have either under-utilised, or ignored, so long as the steady source of water revenues remained.

Some of the major challenges that faced the new company in its early stages of operation according to the technical and commercial managers were: political interference (see Box 6.1); technical issues related to current reticulation and distribution systems; illegal water connections; inadequate revenue collection; inadequate water; rapid population growth and the rapid growth of illegal settlements and unprecedented growth of the peri-urban areas. In addition, a source of friction between the councils and the company was identified, arising from the company enjoying better conditions of employment than the senior council staff.

The president ordered the supply of water in Nakuru to be taken over by the Ministry of Water development in February 2001. The president had noted with concern the suffering the people of Nakuru had undergone in the last few weeks after taps ran dry. The ministry in charge of water development moved in to take over the management of water supply and revoked the appointment of the MCN as the water undertaker in the municipality. The prevailing water problem in Nakuru has been attributed to the council’s incapacity to operate and maintain the water system. Other factors include low water revenue that does not meet operations and management costs. This results in frequent disconnections of the bulk water supply
by the NWC and the PC. The other cause of the recent acute shortage was the disconnection of electricity supply to the council’s boreholes by the Kenya Power and Lighting Company. Other problems are unsustainable water tariffs applied by the municipal council in which water is purchased at Ksh. 15 per cubic litre and later sold at Ksh. 10 per cubic litre. Frequent wrangling and interference within the council on water management and water shortages from source works to meet the water demand are also some of the problems encountered.

According to the Minister, the ministry would investigate the technical and managerial shortcomings in Nakuru municipality and propose solutions; follow up on proposals for development of new water sources for Nakuru municipality; study and propose a sustainable institutional arrangement for Nakuru water supply in line with the current National Water policy launched as Sessional Paper No. 1 of 1999 and liaise closely with the stockholders including the Local Government ministry, Nakuru municipal council and consumers. The minister observed that some of the problems facing the municipal council in fulfilling its mandate included lack of management capacity to operate and maintain the system.

6.5.2 The Pollutant Release and Transfer Register (PRTR) initiative

A public/private partnership exists between the Lake Nakuru Conservation and Development Project (LNCDP) of WWF, industrialists, central government departments and the MCN. In an attempt to address some environmental challenges in Nakuru and achieve a harmonious balance between conservation and development, WWF has initiated a partnership with relevant government departments and industrialists to set up a Pollutant Release and Transfer Registers (PRTR) in Nakuru. The PRTR are publicly accessible information systems, which record chemical specific, source specific and standardised data on emissions of toxic substances to air, water and land from industrial facilities. They are catalogues or registers of potentially harmful pollutant releases to the environment from a variety of sources.

In 1992, WWF-LNCDP in partnership with the District Environmental Management Committee and the Department of Occupational Health and Safety Services (DOHSS) in the Ministry of Labour initiated dialogue with Nakuru based indus-
tries to discuss the implication of industrial waste on environmental quality. The discussions were prompted by a recent fish kill at Lake Nakuru, which was attributed, in part, to toxic contamination of the lake. Following a seminar with industrialists, 38 industries in Nakuru agreed to sign a pledge committing them to the conservation of the environment. Among the actions proposed by the industry was the reduction and safe disposal of industrial waste. In 1994, WWF-LNCDP and DOHSS held a seminar in Nakuru to introduce the concept of the PRTR. The outcome of the seminar was an agreement to set up a PRTR pilot project in Nakuru under the aegis of DOHSS and with the technical assistance and funding from WWF-international and WWF-LNCDP. In 1995, a PRTR working group consisting of representatives from industry, academia, government and WWF was constituted to launch the PRTR initiative in Nakuru.

Among the first actions to be taken was the drafting of a format for reporting annual industrial solid and liquid waste emissions.

6.5.2.1 Mandate: aims and activities
The PRTR initiative aims at providing baseline data on pollutants from which reduction initiatives can be developed. This information is of value to a wide range of groups; industries themselves which can save money by cutting down wastage of chemical feedstock as well as improving their pollution control measures, emergency services, town planners, community groups, NGOs and other interested groups. The initiative aims at providing industries with hands-on assistance in identifying and solving pollution problems at source. The initiative also aims at making this information available to the public so that it can exert pressure on industry to adopt cleaner technologies.

Two major activities have been undertaken by the PRTR initiative in Nakuru. These are monitoring chemical usage by the industry and development and implementation of waste reduction measures based on the information collected. Monitoring the chemical usage involves collecting information from the participating industries on the amounts used, amounts ending up in the products and the amounts ending up in the waste stream. The information gathered is then collated and analysed for use in making decisions on waste reduction strategies. The second activity is to embark on developing waste reduction measures for the few participating industries. The level of intervention of this type of a partnership arrangement is the entire catchments area of lake Nakuru, which transcends the municipal boundaries.
6.5.2.2 Arrangements

Actors, nature of relationships and decision-making process

The partners in this arrangement are industrialists, the MCN, the District Environmental Management Committee, WWF-International and WWF-LNCDP, the Ministry of Health, the Ministry of Environment and Natural Resources, the Ministry of Labour (DOHSS), the Department of Pollution Control in the Ministry of Water and researchers from Egerton University. Relationships between these institutions are formalised through several commitment letters between industrialists, the relevant by-laws and memorandums of understanding between the participating industrialists and the above mentioned partner institutions. In the municipality, the Public Health By-laws (1994) require that all industries undertake environmental auditing studies and keep registers of pollution loads. Commitment letters to this effect are with the MCN’s Public Health Department. The MCN trade effluent by-laws sets up the trade effluent standards for discharge into public sewer that also indicate that apart from the allowed levels, the effluent should not contain any toxic matter or any matter that will cause blockage and damage to sewers. Inflammable materials and tar should not be present in the final effluent entering the sewer.\(^9\)

The reporting format was patterned on the format used by PRTR programmes in the USA and Canada. Nine priority pollutants were highlighted for special attention. Investigations carried out by WWF-LNCDP at Lake Nakuru showed that a number of contaminants were present in the lake waters, which included lead, copper, chromium, zinc, mercury, DDT and its degradation products. PRTRs have been shown to be effective in reducing pollution and ultimately preventing it. The project today covers 16 industrial facilities. Of these, ten facilities\(^9\) have been submitting their emission reports. For these industries, the project is facilitating formation of committees in each of the establishments who will develop and implement Waste Reduction Action Plans (WRAPS). The other six industries joined the project at the beginning of the year 2000 and WWF is helping them generate their emission reports for the year 1999 which will form benchmarks for waste reduction strategies.

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\(^{9}\) For more details on the requirements of these by-laws, see a final report by JICA/MOLG (1994) on Nakuru Sewage Works Rehabilitation and Expansion Project.

\(^{99}\) They included Spin Knit (k) Ltd., Kenya Seed Company, Gohil Soap and Plastics ltd., Sunny Autoparts Ltd., Pyrethrum Board of Kenya, Nakuru Tanners Ltd., Londra (K) ltd., Flamingo Paints Ltd., and Ply and Panels Ltd.
Figure 6.2 The PRTR process (an illustration generated from discussions and other information on the PRTR)

- Formation of a PRTR Taskforce
- Introduction of the PRTR initiative to industries through seminars facilitated by WWF
- Training and hiring of consultants by participating facilities
- Seminar for all participating facilities to discuss feedback reports, and plan for WRAPs development and implementation
- Meeting with senior management of individual facilities to set-up industrial environmental committees (IECs), of 2-5 members, for each industrial facility. IEC members develop and implement WRAPs
- Organize seminar for IEC members for each of the facilities to set-up terms of references.
- Meeting with IEC Member I - Storage
- Meeting with IEC Member II - Processing Unit
- IEC members I, II and III meet in their facility premise to discuss WRAP and develop the Report
- One Seminar for all IEC members from different facilities to present the WRAP
- PRTR team and the IEC members further work on the submitted reports and make them standard
- Present reports to senior management for implementation
As seen from the illustration in Figure 6.2, the Industrial Environmental Committees (IEC), constituted by senior management and comprising 3-5 members from the different sections of the industry (storage, processing and shipping) flag an area in which they would want to reduce wastage and develop an action plan. Flagging is based on toxicity, persistence in the environment, bioaccumulation and total loads into the environment. The project ensures that the developed action plan is documented, the action plan is specific, measurable, achievable, realistic and time bound (SMART); the senior management endorses the action plan and commits itself to oversee the implementation of the action plan. The developed action plans are implemented once they are presented to the senior management and when they have been endorsed. Incentives in forms of awards provided by the project ensure competition among the participating industries. Success in the implementation of the plans is pegged on the fact that the plans are developed by the industries themselves, giving them a sense of ownership.

**Inputs of various actors**

WWF offered training and popularised the PRTR initiative to industries and other relevant actors. DOHSS and the MCN are the public actors supporting the initiative with the required legal provisions and appropriate political support. The industrialists develop and implement WRAPs and participate in workshops organised by WWF in collaboration with Egerton University, DOHSS and the MCN. Although the initiative is in the pilot phase it has been proposed that there is need to set up a PRTR unit to coordinate all PRTR activities in the project area. The Unit will consult with professionals drawn from the industry, the MCN through its relevant departments, DOHS, DEC, and researchers especially those from the centre for Nuclear Science Techniques of the University of Nairobi. Training is also proposed to improve the ability of the unit to estimate emissions, develop and maintain databases, analyse trends and communicate information back to the industry and the public at large. The initiative proposes to establish and maintain a register of specialist who can provide consultative services to industry and the PRTR Unit. Such a register will include professionals from various disciplines including: toxicology, ecology, human and veterinary medicine, planning, engineering, statistics, hydrology, geology, public health and occupational health.

**Monitoring and evaluation**

WWF and DOHSS have been undertaking the monitoring and evaluating of the initiative. There is frequent communication between the participating industries and the other partners involved. So far, eight facilities have developed their WRAPs and have started implementing them. Two other facilities are currently developing their plans.
Challenges of Urban Environmental Governance

Table 6.6 shows the facilities that have developed and implemented their action plans and the areas they flagged as needing attention. The project has so far enrolled 22 major processing and manufacturing industries. In all, five have just been enrolled and their performance is yet to be assessed. There are 13 facilities that have been very active in the project's activities and are committed to environmental conservation, while three facilities have not fully embraced the strategy and their performance has not been up to date. One facility stopped its operations in the municipality. Emission reports for the year 1998 from ten industries have already been collected and analysed and feedback was sent.

Table 6.6 Industries participating in the PRTR and areas that they have flagged

<table>
<thead>
<tr>
<th>Facility</th>
<th>Flagged area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Nakuru Tanners Ltd.</td>
<td>Chrome and sodium chloride</td>
</tr>
<tr>
<td>2 Spin Knit Ltd.</td>
<td>Water and waste oil</td>
</tr>
<tr>
<td>3 Londra Ltd.</td>
<td>Dyestuff</td>
</tr>
<tr>
<td>4 Sunny Autoparts Ltd</td>
<td>Asbestos dust</td>
</tr>
<tr>
<td>5 Kenya Seed Company</td>
<td>Discarded dressed seeds</td>
</tr>
<tr>
<td>6 Oil Crop Development</td>
<td>Copperphone and raxil</td>
</tr>
<tr>
<td>7 Pyrethrum Board of Kenya</td>
<td>Pyrethrum dust</td>
</tr>
<tr>
<td>8 Rosin Ltd</td>
<td>Sodium hydroxide and organic waste from gum production</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

An inventory of the registers is in the process of being prepared and the reports from companies are continuously reviewed by the DOHSS. This is a long-term undertaking and it has been attracting more and more industries since 1995 when the pilot phase was started.

6.5.2.3 Assessment of outcomes

Process outcomes and shortcomings

In assessing the process outcomes, we consider whether the arrangement involved many actors, whether there has been political support for the partnership, legitimacy of the partnership and accountability. First we note that the PRTR initiative involved a wide array of actors from the public, private and the civil society sectors. However, we observed that the community in Nakuru is not involved in the initiative. The officer in charge of the PRTR initiative in WWF-LNDCP did not see the need of involving the community at this phase of the initiative. We contend that community representatives need to participate in the workshops organised under the PRTR initiative, especially because some industries neighbour some housing
The PRTR initiative has cultivated a cordial relationship with participating industries. Confidence and trust between the parties concerned is steadily growing and there are indications that the relationship will strengthen with time. Secondly, regarding the existence of political will and support, DOHSS of Ministry of Labour has been very much instrumental in the implementation of the PRTR initiative and this is further strengthened by the support from the MCN’s public health personnel. There is hence a lot of political will for the initiative to succeed. What is very striking is that the local politicians do not really understand the initiative and there is need for more information about it to be shared.

Thirdly, concerning social and legal legitimacy, the PRTR initiative has received recognition by the participating industrialists, the central government departments and the MCN, meaning that it enjoys legal legitimacy. The public health by-laws (1994) require that industrialists submit environmental audit reports to the MCN and the PRTR initiative has been promoted as one of the ways to come up with a comprehensive environmental audit. Finally, as regards accountability, the PRTR reports are submitted to the DOHSS and the MCN for assessment and review. These reports are also available for inspection by the members of the public hence improving the accountability on the part of the industry as far as pollution is concerned.

**Substantive outcomes and shortcomings**

In our attempt to assess the substantive outcomes of the PRTR initiative, we consider the financial arrangements and viability, presence of action plans and effectiveness of the initiative. First, regarding financial arrangements, each industrial establishment makes its own financial arrangements for collecting, analysing and reporting the pollution emissions. Most of the industries have annual budgetary allocations to participate in the PRTR initiative. WWF and the DOHSS were providing funds for the training and the related workshops and also facilitate the reporting of all the participating industries. The pilot phase of the PRTR initiative has received external funding and technical support from WWF international. Although the participating industries were paying for the monitoring studies, it was not evident that they would continue keeping the registers with the exit of WWF. It can be observed that the PRTR initiative is not financially viable since there is over-reliance on external funding. However, the interviewed industrialists indicated that they were willing to invest money in their research and development divisions for the monitoring and control of wastes produced. Participating industrialists were

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91 Nakuru Tanners limited is located within Shaabab estate and it is participating in the PRTR initiative. At least a representative of the community should participate in the workshops and seminars organised for this industry.
paying an estimated Ksh. 8000 per effluent analysis at the MCN laboratory. However, there are also other costs involved though we could not get any figures from the participating industries.

Secondly, the PRTR initiative’s outputs include the Waste Reduction Action Plans (WRAPs) by participating industries. These action plans, when implemented, can lead to reduction of the production and release of wastes to the environment. It is premature at this stage to say with a high degree of certainty that the PRTR initiative, on a pilot basis, has reduced pollution especially to lake Nakuru. Follow-up studies need to be periodically undertaken.

Considering effectiveness, the PRTRs provide information that is of value to a number of groups: the industries themselves can save money by cutting down wastage of chemical feedstock as well as improving their pollution control measures and emergency services. Their benefits to the society as a whole are:

- **environmental**: in contributing to the industry’s overall improved environmental performance (reduced pollution and improved resource and energy efficiency as companies adopt preventive and cleaner production measures);
- **cultural**: in shifting business practice from a minimalist, regulatory approach to a proactive, cleaner production and sustainable development strategy;
- **economic**: in reducing direct and indirect pollution costs, increasing resource and energy efficiency, reducing accidents and clean-up efforts and reducing society’s regulatory costs.

However, more is needed to sell the idea to more industries so that the initiative could have some possible impacts. The PRTR initiative also embarks on awareness creation campaigns for the general industrial staff. A well-informed society will make informed decisions, raising awareness of the industrial staff on the dangers of chemicals on human health and the environment; the cost of waste production and the economic benefits of waste reduction positively changes their attitudes towards conservation. Documenting and demonstrating success case studies of similar situations in other parts of the world increases the industrialists’ urge to be involved. In-house training, seminars and publications are the methods used to transmit information on environmental conservation.

More detailed follow-up studies are required to establish the contributions of this kind of partnership arrangements to better public health. The PRTR ensures a safe and healthy working environment, hence leading to greater effectiveness in terms of a clean and healthy urban environment. The revised Public Health by-laws requiring all industries to submit to the public health department annual environmental audit reports indicate that the MCN has instituted initiatives that make it
easier for more industries to participate in the PRTR initiative and this will eventually lead to a cleaner and healthier working environment in industries.

6.5.2.4 Discussion

The challenges faced by this kind of a partnership arrangement are many and varied. There is lack of a legal framework to guide this kind of a relationship. Though some kind of commitment documents exists, it was the feeling of those interviewed that there is need for a broad legal framework. It was noted that there is willingness in the industrial sector and other sub-sectors to participate in the PRTR not only out of altruism, but also because of the potential economic gains that can be achieved through waste reduction measures. However, there is the issue of lack of financial resources to undertake several partnership activities. It was observed that the current funding from ODA and EU will not be there forever and there should be mobilisation of local resources. The PRTR is at the pilot stage and as yet there is little knowledge among some industrialists of the environmental impacts of their effluent and of the options available to achieve waste reduction/re-use. Nearly all industries were unable to provide immediate quantitative estimates of pollutants contained in the wastes they discharge into the environment. Also, several industries have stock-piled potentially dangerous waste such as used oil and electroplating slurry which they are unable to dispose of due to the local authority restriction on disposal of such waste and lack of local expertise on how to handle, reuse or dispose of the waste. Finally, another challenge facing the implementation of this initiative is that there have been changes in the management personnel in some industries and this hampers implementation.

The PRTR initiative is a welcome but very expensive exercise and industrialists need to accept it as a management issue. The present estimates provide a benchmark against which future waste reduction measures can be evaluated. Industry can now calculate the cost of its waste and take remedial action in the interest of increasing profits. The current estimates also form the basis for targeting specific chemicals for waste reduction measures. Feedback reports already submitted provide information on the environmental significance of certain substances released into the environment. This will enable industry to understand the threats posed by these substances.

From the above analysis, it also appears that there is need for more training of the industrial staff in how to estimate and report emissions. The PRTR reporting form must be as simple and as clear as possible for easier understanding and accurate reporting. There is need to commission a specialist group to review annual PRTR submissions from industry to validate the data, provide analysis of trends, evaluate the significance of products and make recommendations on data collection and control measures.
Since the government take-over of the water company, there have been frequent requests by various stakeholders including the industrialists through the Kenya Association of Manufacturers and the new Mayor requesting the government to facilitate the commercialisation of water supply in the town. This is to attract about Ksh. 2 billion in donor aid to increase the water supply for the town. The African Development Bank (ADB) shelved a Ksh. 1.6 billion loan package for the proposed Olbonita and Kabatini water projects after the government took over the running of water services from the NAQWASS in February 2001. Though the government has managed to end the water crisis by rationing water, the water problems in Nakuru are far from being solved as the current supply meets only half of the town’s requirements. The new Mayor of Nakuru says that the government has neglected the sewerage system since the take-over of the company. The mayor says that the government is not collecting enough money to service the boreholes, buy chemicals for treating water and service the distribution network and sewerage system.

Due to these changes in the water supply sector and the frequent interruption there have been new initiatives and an increased role of the water vendors in this sector. NAROKA, a CBO operating in the low-income areas of Ronda and Kaptembwa has been operating several Water Kiosks that have been built in partnership with ICLEI and the MCN. We will discuss these arrangements later in this Chapter.

6.6 Private-private partnership arrangements

Private/private arrangements can take many forms and in this section we discuss formal and informal arrangements in solid waste management and water supply. Private/private partnership arrangements differ from other commercial activities because of their small-scale nature and locality and also because they are more directly accountable to households and institutions that they have entered into contract (Baud, 2000). These small-scale enterprises are local and their reputation is dependent on the quality of services that they provide. Furthermore these enterprises provide services at a price more affordable to the households they serve as their organisational overheads are much lower than those of larger firms. Households have built trust with specific small-scale enterprises and individual water vendors and this makes the arrangements different from the usual commercial enterprises. We further examine networks of waste pickers and waste buyers that are based on principles of trust and mutual benefit, and these make them qualify as a partnership arrangement as opposed to ordinary commercial relationships. Table 6.7 presents a summary of the components of the examples of private-private partnership arrangements in Nakuru.
### Table 6.7 Summary of components of private-private partnership arrangements

<table>
<thead>
<tr>
<th>Component of the partnership</th>
<th>Formal private-private partnerships</th>
<th>Informal private-private partnerships</th>
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<tbody>
<tr>
<td><strong>MANDATE</strong></td>
<td></td>
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<tr>
<td><strong>Aims</strong></td>
<td>To improve the environmental manage-</td>
<td>To collect and sell recyclable and reus-</td>
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<td>ment practices through refuse collec-</td>
<td>ment practices through refuse collec-</td>
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<td>tion; able materials collected at the</td>
<td>tion; able materials collected at the</td>
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<td>house to create employment opportuni-</td>
<td>house to create employment opportuni-</td>
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<td></td>
<td>ties and holds, streets and at the dumping</td>
<td>ties and holds, streets and at the dump-</td>
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<td></td>
<td>site earn a living through self-employ-</td>
<td>site earn a living through self-employ-</td>
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<td></td>
<td>ment.</td>
<td>ment.</td>
</tr>
<tr>
<td><strong>Range of activities</strong></td>
<td>Storage, collection, transportation</td>
<td>House to house picking of valuable</td>
</tr>
<tr>
<td></td>
<td>and House to house picking of valuable</td>
<td>disposal of household and institutional</td>
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<td></td>
<td>disposal of household and institutional</td>
<td>wastes, picking from garbage bins along</td>
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<td>wastes, picking from garbage bins along</td>
<td>streets, picking at the dumpsite, sell the</td>
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<td>streets, picking at the dumpsite, sell the</td>
<td>collected materials to intermediaries who</td>
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<td></td>
<td>collected materials to intermediaries who</td>
<td>later sell them to industries</td>
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<tr>
<td><strong>Scale of intervention</strong></td>
<td>Level of intervention is at the house-</td>
<td>The level of intervention is the whole</td>
</tr>
<tr>
<td>(spatial dimension)</td>
<td>hold and institutional levels</td>
<td>town</td>
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<tr>
<td><strong>ARRANGEMENTS</strong></td>
<td>Households, institutions and the pri-</td>
<td>Some households, Waste pickers, inter-</td>
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<td></td>
<td>vate companies.</td>
<td>mediary buyers, and recycling and proc-</td>
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<td></td>
<td></td>
<td>essing industries</td>
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<tr>
<td><strong>Nature of relationships</strong></td>
<td>Relationships formalised through con-</td>
<td>Relationships are informal based on trust-</td>
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<tr>
<td></td>
<td>tractual agreements between companies</td>
<td>tual agreements between companies and</td>
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<tr>
<td></td>
<td>and mutual benefit</td>
<td>and mutual benefit</td>
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<tr>
<td><strong>Decision-making</strong></td>
<td>In all companies, the Board of Direc-</td>
<td>Waste pickers sell their wastes to interme-</td>
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<td><strong>structure</strong></td>
<td>tors formulated all policy and imple-</td>
<td>diary buyers who later on sell the col-</td>
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<td>mentation decisions</td>
<td>lected materials to recycling and process-</td>
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<td><strong>Division tasks</strong></td>
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<td>ing industries</td>
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<tr>
<td><strong>Inputs of different</strong></td>
<td>Households and institutions enter into</td>
<td>Waste pickers collect recyclables that</td>
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<td><strong>actors</strong></td>
<td>with private companies; the they sell to</td>
<td>ten contracts with private companies; the</td>
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<td>middlemen who further sell</td>
<td>they sell to middlemen who further sell</td>
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<td>private companies offer garbage col-</td>
<td>private companies offer garbage col-</td>
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<td>lection the materials to processors</td>
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<td>services as stipulated on the contrac-</td>
<td>services as stipulated on the contrac-</td>
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<tr>
<td><strong>Financial arrangements</strong></td>
<td>Households and institutions pay a pre-</td>
<td>Middlemen pay the water pickers money</td>
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<tr>
<td></td>
<td>determined fee to the private compa-</td>
<td>determined fee to the private compa-</td>
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<td>nies; depending on the amount delivere-</td>
<td>nies; depending on the amount delivere-</td>
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<td>d per private companies pays for the</td>
<td>d per private companies pays for the</td>
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<td>annual kilo of collected materials</td>
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<td>to the MCN. done as previously agreed by</td>
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<td>both parties. The middlemen get paid for</td>
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<td>the materials delivered to the proces-</td>
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<td><strong>Monitoring and evaluation</strong></td>
<td>Individual companies did monitoring</td>
<td>Individual companies did monitoring</td>
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<td>by Monitoring and evaluation absent in</td>
<td>by Monitoring and evaluation absent in</td>
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<td>tions, areas of intervention and the</td>
<td>tions, areas of intervention and the</td>
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<td>number of clients. Evaluation mecha-</td>
<td>number of clients. Evaluation mecha-</td>
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<td>nisms were not evident.</td>
<td>nisms were not evident.</td>
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<td><strong>Discussion/ comments</strong></td>
<td>The private companies are able to meet</td>
<td>The private companies are able to meet</td>
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<td>The recycling activities generate in-</td>
<td>The recycling activities generate in-</td>
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<td>comes their operational costs and the</td>
<td>comes their operational costs and the</td>
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<td>institutions for those that are invol-</td>
<td>institutions for those that are invol-</td>
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<td>ved. However, and households receiv-</td>
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<td>tion of the waste pickers bage collec-</td>
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|                              | port and recognition arrangement.     | port and recognition arrangement.     |
|                              | Lack of official recognition by the | Lack of official recognition by the |
|                              | MCN and this affects legitimacy of a- | MCN and this affects legitimacy of a-|
|                              | fects the legitimacy of this arrange-| fects the legitimacy of this arrange-|
|                              | ment. The arrangement excludes actors from the arrange-| ment. The arrangement excludes actors from the arrange-|
|                              | ments exclude poor households that middle and high-income neighbour-| ments exclude poor households that middle and high-income neighbour-|
|                              | hoods. They cannot afford to pay for | hoods. They cannot afford to pay for |
|                              | the services                          | the services                          |

*Source: Fieldwork 1999*
6.6.1 **Formal private-private arrangements in solid waste management**

As seen in Chapter 5, in those areas that do not receive regular solid waste collection in the high, middle and some low-income settlements, households involve the private service providers. Though this role does not imply that the private sector can manage to provide solid waste management services to all areas in the entire municipality, the gradual takeover of provision by small-scale private companies and CBOs is important to fill the gap left by the MCN. Individual households have been entering into a contractual agreement with small-scale private companies\(^{92}\) to get garbage collection services. Our survey showed that all the three private companies operating in Nakuru were collecting garbage from house to house on a weekly basis. Households in the middle-income settlements of Freehold, Racecourse, Shaabab, Kenlands, Gilanis, Section 58 and Free Area are provided with plastic bags by the private companies to store the household waste and when filled up, they are advised the specific days to put the garbage outside for collection.

6.6.1.1 **Mandate: aims, activities and scale of intervention**

The private companies’ main aims are to earn a living through self-employment and to improve the environmental management through refuse-collection in unserviced areas.\(^{93}\) On the part of the households and institutions receiving the private garbage collection services, the aim is to have regular and reliable services and the resultant cleaner neighbourhoods free of garbage heaps. Activities under this kind of arrangement involve the storage of the household and institutional waste at the source by the householders and institutions using the plastic bags and other receptacles and putting it at an agreed point for collection. The small-scale private companies therefore come at agreed days to collect the waste. These companies utilised the communal and door-to-door collection systems depending on the structure of housing and the agreement made with the households. After waste is collected, lorries transport it to the Menengai dumping site.

6.6.1.2 **Arrangements**

*Actors, nature of relationships and decision-making process*

Actors in this kind of partnership arrangement are households, institutions and private companies in solid waste management (Parrots, Salvage and Nakuru Hygiene Services (NHS)). The role of these private companies is not officially defined. This partnership arrangement is formal and guided by contractual agreements between

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\(^{92}\) It is important to note that very few households in the low-income areas receive the services of the private sector. As seen earlier in our literature study, the private sector is reluctant to operate in the low-income areas since the households may not be able to pay for the services offered.

\(^{93}\) This is not a motivation for private sector participation in waste management, though they may claim it to be so. In practice, the major incentive is profit maximisation.
the individual companies and households or institutions. The Nakuru Hygiene services have two types of agreements. There are those with households and those with institutions. The agreement between NHS and institutions are annual contract agreements after which they may be terminated with a three months written notice to be either registered by post or hand delivery. Any breach of this agreement by either side will pay the offended one a sum equivalent to three months payment of the monthly rate.

A Board of Directors (BoDs) formulates all policy decisions of small-scale private companies. For NHS, the Managing Director with the assistance of the General Manager played the executive role. All technical and logistical issues on solid waste management were under the Operations Manager. The sales department was mainly dealing with customer's problems and sales issues; while the Accounts Department dealt with the management of financial resources. For Salvage Services and Parrots, the Manager with the help of the Assistant Manager administered all the operations. The small-scale private companies operated only on weekdays. All the services are concentrated in middle-income estates and a few cases in the Milimani area, which is dominated by high-income housing.

Each household client signed an agreement stipulating all the terms and conditions of services. The solid waste management methods used by private companies are: (a) **Storage**: Only one type of receptacles was used for storage of household waste: plastic bags. An average of two plastic bags were supplied to each household per week. The distribution of such receptacles was dependent on the number requested by the householder, and on the type and amount of waste generated per week. Each plastic bag carried approximately ten kilogram's of household waste. NHS had distributed sanitary bins to institutions and industries use drum receptacles. In some estates, landlords provided tanks at central areas and contacted the private company to empty it at a fee; (b) **collection**: the small-scale private companies utilised the communal and door-to-door collection systems; depending on the housing structure and the agreement made with the clients.

The communal collection system was observed in freehold and Racecourse estates. All the clients were billed individually and their wastes were stored in communal skips. The door-to-door system was used in areas where clients demanded for recording of the number of bags collected in order to avoid cheating from the collection crew; (c) **transportation**: NHS owns one 1-tonne pick-up and one seven tonne truck hired from private individuals. The Salvage Services and Parrots operated one 7-tonne vehicle hired from private individuals. Vehicle distribution was based on workload in a given area and the type of waste to be collected. The collection service was carried out in one shift per day starting from 8:00 a.m. to 5:00 p.m and
salvage and Parrots did a lot of collections on Fridays in many estates; (d) disposal: all the three small-scale private companies used open dumping at the Menengai landfill. Plans to start recycling and composting activities by these companies were underway, but by the time this study was undertaken, none of the companies had started these management activities.

**Inputs of various actors**
The households enter into contracts with the small-scale private company and agree to be paying a monthly fee for garbage collection services. The private companies agree to collect the garbage that has already been put in plastic bags and placed at agreed upon locations at specific days of the week in areas that they are operational.

**6.6.1.3 Assessment of outcomes**

**Process outcomes and shortcomings**
We undertake the assessment of process outcomes and their shortcomings by considering indicators such as the involvement of many actors, political will and support, legitimacy and accountability. First, as far as involvement of many actors is concerned, this partnership involved the three small-scale private companies and a variety of households in all settlements though their activities are concentrated in the middle-income areas. They also service institutions and hotels in the municipality.

Secondly, private-private partnership arrangements receive very little political support as their activities are not recognised by the municipal authorities. We contend that this arrangement is very crucial in improving the service provision in middle and low-income areas and therefore there is need for its recognition and support.

Thirdly, regarding legitimacy, the private service providers are not fully recognised by the local authorities. The private companies involved in solid waste collection and disposal get an annual disposal license from the MCN at a cost of Ksh. 6,000/-. Two of the companies, Salvage and Parrots were paying the disposal fee at the dumping site per load, while Nakuru Hygiene services\(^{94}\) (covering more institutions and better structured organisationally) has been acquiring an annual disposal fee. The issuing of the disposal license is the legal recognition by the MCN of the operations of the private companies. The officials of these companies indicated that there is need for more contacts with the MCN. One public health officer from the MCN noted that there were still some small-scale garbage collectors that are not registered with the MCN who are involved in illegal dumping of wastes in undesignated areas. There is therefore more need to monitor the activities of these ‘in-

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\(^{94}\) Officers of the MCN own NHS most of whom belong to the Public Health Department.
formal actors’. The private/private partnerships are socially accepted and this gives the arrangement social legitimacy. Finally, regarding accountability, the small-scale private companies are accountable to their clients and this is well spelt in the contractual agreements.

**Substantive outcomes and shortcomings**

We analyse the substantive outcomes and their shortcomings by considering indicators such as the financial arrangements and viability and effectiveness in terms of a cleaner environment. First, the average service charge per month per household was between KShs 100 and 200 including the cost of the plastic bags. Households are provided with four free collection polythene bags per month and more where necessary; institutions are provided with sanitary bins and some industries devise their storage facilities. The private companies collect the garbage once a week. Small-scale operators are customer-driven and ready to meet local demand. They charge an average price of between Ksh. 100-200 per month and are able to cover costs, and respect willingness to pay. They provide reliable, high quality services to areas that are typically under-serviced by the MCN. A dumping fee of Ksh. 400/- per trip is paid to the MCN. We note that the households were dealing with the small-scale private companies directly and there wasn’t any bureaucracy when a householder had anything to complain about to the company.

The three small-scale private companies involved in solid waste collection and disposal indicated that they were able to cover their costs of operation. However, all the three companies indicated that they frequently encountered problems related to a breach of contracts from some households where they were operating. This may eventually affect their financial viability. It was, however, not possible to get the actual data on costs as these companies were not fully willing to avail such data. Nakuru Hygiene Services indicated that the cost of collecting and disposing one tonne of garbage was Ksh. 1000.\(^95\) It was also not possible to get information on the financial position of the informal private-private arrangements between the waste collectors and waste buyers.

Secondly regarding effectiveness in terms of improved services, the companies, as contrasted to the MCN’s service that is socially, economically and politically biased, maintained equity and convenience of service to all household and institutional clients. According to the key informants from Salvage and Nakuru Hygiene Services, such an equitable and convenient environmental service was maintained by the companies, because of the competitive atmosphere among themselves and against the MCN. This had generally resulted in efficient, reliable, thorough, flexi-
Challenges of Urban Environmental Governance

ble, productive and responsive service at a lower cost per tonne compared to the MCN. The MCN has 207 employees dealing with solid waste collection and disposal. According to the records in the public health offices in the MCN, the council only manages to collect and dispose only 70 tonnes\textsuperscript{96} of garbage per day. This figure is doubtful given the fact that there were only three vehicles operational in 2000. The three small-scale enterprises studied have an average of five employees and they collect 21 tonnes per day indicating lower cost per tonne.

These arrangements, between the private sector and households, have led to the improvement of the solid waste collection and disposal. Though formal private sector enterprises are not involved in recycling activities, the informal actors lead to minimisation of wastes and recovery and re-use of waste hence contributing to sustainable development. It is noted that there is need for the MCN to monitor the activities of the private waste collectors as some may dump waste in undesignated areas, hence transferring one environmental problem from one place to the other. The private sector contributes in ensuring that garbage is disposed of in a controlled way hence contributing to ecological sustainable development. The private-private partnerships in solid waste management and water supply lead to a cleaner and healthier urban environment with reduced waste and increase in water supply.

6.6.1.4 Discussion

The entrance of these companies in the solid waste management has drastically reduced the waste in the high and middle-income estates. There are no longer huge heaps of garbage in the estates where the private companies operate. While the charges currently levied by the private companies varies, and those that the residents are willing to pay tend to vary, most people are generally willing to pay more than they are paying if the services continue the way they are currently. All the three firms interviewed were involved in collection (removal of waste from generating source) and disposal (transfer of waste to the dumping site at Menengai). They are not at all involved in recycling or recovery activities.

Apart from lower costs and higher productivity, we observed that the service of private companies was better in all respects than that of the MCN. First, all household clients received a regular and consistent service of once per week, hence better returns on the community’s environmental investment. Such a reliable collection frequency limited the breeding of flies and other pests normally attracted by the organic household waste. When extra equipment or labour was required, the private companies hired more, to ensure high standards of this environmental service, unlike the MCN. The private firms are small-scale in nature and clearly fill an im-

\textsuperscript{96} Most of the figures given are not reliable as there is poor record keeping of such data.
important gap in municipal garbage collection coverage. In addition to the coverage they provide, the competitive environment that most small-scale providers work in encourages a fast service, much better than that often provided by the single, large providers. Smaller-scale private garbage collectors need to be better recognised for the flexibility and efficiency they offer in solid waste management to middle to high-income neighbourhoods that otherwise would not have garbage collection coverage. Official support for these smaller-scale providers should be increased. The role of the MCN is that of regulating the dumping behaviour of the private companies at the dumping site.

The private companies face numerous problems in their operations in Nakuru. There is lack of awareness on the part of some households on the eventual implications of indiscriminate garbage disposal. Some households still believe that the MCN should collect the garbage as they were still paying some service charge to the local authority. So far the government has waived this charge. Many households did not quickly accept the change of service provider because of the fact that the MCN was charging unrealistic low cost of garbage collection. By 1996 when most of the small-scale private companies started, the MCN was charging a standing fee of Ksh. 40 per household. This fee was always included in the water bill as the dustbin fee! The other problem is that of breaching of contracts by some households and institutions. This eventually affects the effectiveness of the private companies in offering quality services. There was also undue competition from informal garbage collectors ("jua kali" actors) who dump the waste in undesignated areas.

The MCN should continue to retain the responsibility for public health and environmental impacts of the work of the small-scale private firms, and for upholding legal requirements regarding the health and safety of the workers, and their employment conditions. Employers and their workers should know about the risks associated with waste management. If there are good channels of communication between local government and the small-scale private firms, it will be possible to resolve problems in these fields in a spirit of cooperation, instead of relying on coercion or legal action.

6.6.2 Informal private-private partnership arrangements in water supply

Our observations in Nakuru revealed two different types of informal private-private partnership arrangements. These are collaborative working relations between different actors in water supply and solid waste management based on trust and mutual benefits. They are governed by unwritten rules and regulations. The private/private partnership arrangements in the low-income areas dealing with water provision were mainly between households and water vendors. A summary of the components of private-private arrangements in water supply is presented in Table 6.8.
Table 6.8 Summary of components of private-private arrangements in water supply

<table>
<thead>
<tr>
<th>Component of partnership</th>
<th>Examples</th>
</tr>
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<tbody>
<tr>
<td>MANDATE</td>
<td></td>
</tr>
<tr>
<td>Aims</td>
<td>To buy and sell water to households where there is shortage; to generate some incomes for the water vendors and their families through the sale of water; to offer quality sanitation services</td>
</tr>
<tr>
<td>Range of activities</td>
<td>Supplying water for domestic use to households, digging of pit-latrines and provision of exhaustion services at affordable cost to households</td>
</tr>
<tr>
<td>Scale of intervention</td>
<td>Intervention is at the household level</td>
</tr>
<tr>
<td>(spatial dimension)</td>
<td></td>
</tr>
<tr>
<td>ARRANGEMENTS</td>
<td></td>
</tr>
<tr>
<td>Actors involved</td>
<td>Water vendors, households, source water sellers</td>
</tr>
<tr>
<td>Nature of relationships</td>
<td>Relationships are informal guided by trust and mutual benefit</td>
</tr>
<tr>
<td>Decision-making structure</td>
<td>Households contact water vendors when they need their services</td>
</tr>
<tr>
<td>Inputs by different actors</td>
<td>Water vendors use non-motorised mode of transport to deliver water from the sources to households</td>
</tr>
<tr>
<td>Financial arrangements</td>
<td>Household pay the water vendors after water has been delivered; Some vendors make outright profit as they do not buy water at the source</td>
</tr>
<tr>
<td>Monitoring and evaluation</td>
<td>No evidence of any monitoring and evaluation mechanisms</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Financial viability of the vendors depends much on the willingness to pay by the householders; This partnership excluded those poor households that are not able to pay</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999

6.6.2.1 Mandate: aims, activities and the scale of intervention

The role of the water vendor is to buy and sell water to households where there is shortage. The other aim is to generate some incomes for the water vendors and their families through the sale of water. The role of the water vendor in water supply is very important both in the poor neighbourhoods and the middle-income areas. It is, however, of very little or no importance in the high-income neighbourhoods where households are adequately supplied with water. In times of shortage, the affluent households make their own arrangements to get water either from some institutions or on their own without relying on the water vendors.

It is an informal arrangement based on trust. Interviewed households were found to be consistent in the way they contract water vendors. This type of a partnership

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97 We need to indicate that trust is difficult to measure but we can only imply its existence. There is need to develop some indicators of trust and this is beyond the scope of this study.
arrangement was observed in the middle and low income areas that are currently facing a water crisis. Households in the low-income and middle-income neighbourhoods contact water vendors when they want to buy water from them. We also observed some water vendors who move from one estate to another, looking for potential buyers.

6.6.2.2 Arrangements

Actors, nature of relationships and decision-making process

Actors in this arrangement are water vendors, households and residents in the council estates whom, in many instances supply water to the water vendors. However, a majority of the households receiving water from the water vendors indicated that they had to contact the vendor before he supplies water. Also, we found that there are some vendors who move around the estates looking for potential buyers of water. However, many households stuck to a specific water vendor. The principal mode of transport is by the use of bicycles and hand driven carts enabling the vendors to transport large quantities of water. It is important to note that all the households interviewed had some contacts with the water vendors who play an important role in the water sector in many neighbourhoods in Nakuru.

This is a relationship that is both short-term and long-term depending on the availability of water from the municipal sources. According to the household survey, a majority of the respondents indicated that the water vendors were reliable and the only complain was that they were charging a higher price per litre compared to the MCN sources. Vendors are therefore used as an expensive alternative for the convenience of having water delivered to the home.

Inputs of various actors

From our household survey in the low-income neighbourhoods of Lakeview, Mwariki, Kaptembwo and Kwaronda, a significant number of households indicated that they were getting water from a water vendor. Water vending is still an illegal activity in Nakuru and the MCN does not officially recognise their critical role. Men dominate water vending in Nakuru, as it requires cycling for long distances to get water and then deliver it to households in the middle and low-income settlements. Water vending uses simple technologies of water delivery that can readily be maintained on a local basis. Water vending micro-enterprises have assisted in meeting household water demand, while at the same time offering employment to a large number of people in the low-income settlements.
Challenges of Urban Environmental Governance

Monitoring and evaluation

The perceived advantages of water vending are that it provides good quality water, waiting times are short, and customer relations are good though the price is usually high. According to the households interviewed, vended water was usually a reliable source and consumers had made arrangements to pay immediately for the delivery. Piped water from the MCN was frequently disrupted and many households did not pay their bills.

6.6.2.3 Assessment of outcomes

Process outcomes and shortcomings

When analysing the process outcomes and their shortcomings, we consider indicators like the involvement of many actors, existence of political will, legitimacy in terms of legal recognition and social acceptance and finally, accountability. First, water vending ensures self-employment to many people and ensures some living wage to the water vendors who would otherwise be unemployed. The arrangement also involves households that have inadequate water supply. Secondly, regarding political will, this partnership arrangement receives very little political support since the municipal authorities do not recognise this activity. The municipal officials always harass water vendors as water vending is considered an illegal activity. The current move in the municipality is to encourage the building of water kiosks by CBOs. Thirdly, regarding legitimacy of this arrangement, water vendors lack legal recognition though they are socially accepted by households because of the role they play in ensuring adequate water supply in times of water shortage. Their role is more pronounced in the low-income households than other settlements. Regarding accountability, water vendors are accountable to the households that they supply with water with regard to the quantity and quality of the water supplied. Because there is open competition and their activities are not regulated, individual water vendors maintain cordial relations with the households they supply with water. However, since the water vendors do not buy water from registered consumers, they contribute to the water unaccounted for in the municipality. Some may also supply water from unknown sources.

Substantive outcomes and shortcomings

To assess the substantive outcomes of this arrangement and the shortcomings, we consider indicators like financial arrangements and viability and effectiveness in terms of improving the waste supply situation. First, as far as financial arrangements are concerned, the households pay cash for the amount of water they have received from the water vendors. This was an outright profit to the water vendors

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98 This is not always true as some vendors may collect water from unsafe sources. Households indicated they contacted the water vendors that they trust (and trust was build over a long time).
as some of them were getting water free from the MCN housing estates, while others got water from undefined sources. The water vendors make high profits per litre of water supplied. They sell water between 50-75 cents per litre, depending on the distance and the amount of water supplied at a time. There wasn’t a fixed rate by the water vendors as such and respondents indicated that they could negotiate the prices with the suppliers. This is more expensive than the amount households with Municipal water supply, which costs Ksh. 10 per cubic metre (less than 1 cent per litre). Households indicated that because the water vendors were reliable, they still were willing to pay for the water supplied.

Secondly, the water vendors improve the water supply situation of the households in the low-income areas by ensuring adequate supply in times of shortage. They cover most areas in the middle and low-income settlements.

6.6.2.4 Discussion
The challenges facing this kind of arrangement are related to the informal nature of this relationship. There is exploitation, for instance of the households by some influential water vendors. The distribution of water by vendors is expensive, irrespective of the mode of delivery. Households served by vendors paid higher charges for water than those directly connected to the MCN piped water system. Beyond cost considerations, vending is linked to health problems as hawkers may sell from polluted sources. The lack of coordination and official recognition of water vendors means that there are frequent conflicts with the MCN officials.

6.6.3 Private-private partnership arrangements in solid waste management
In the solid waste management sector, informal private-private partnership arrangements exist between the individual waste pickers and waste buyers. It was observed that there are cooperative working relationships between waste pickers either from house to house, institutions, at the dumping sites or the waste buyers located in different areas in the town.

6.6.3.1 Mandate: aims, activities and scale of intervention
The aims in this arrangement are to collect and sell recyclable and reusable materials collected from the households, streets and at the dumping site. The specific activities include house to house picking of valuable wastes, picking from garbage bins along streets, picking at the dumpsite, sell the collected materials to intermediaries who later sell them to industries. Waste pickers in Nakuru take different forms: some precede the refuse collection teams, going house to house, collecting recyclables; others pick from garbage bins on the streets; yet others live on or near the dumping site, under highly unsanitary conditions. Waste picking is perhaps the
most notable features of recycling activities in the MCN. While providing a source of raw materials for the industries, they also do so in a manner that has practically no adverse environmental consequences.

6.6.3.2 Arrangements

Actors, nature of relationships and decision-making process
The actors involved in this partnership arrangement include the itinerant street waste pickers, itinerant waste pickers (from house-to-house), collection crew waste pickers, dumpsite waste pickers, itinerant buyers (buying specific types of collected recyclables from households and institutions), middlemen and brokers and other buyers (normally having yards where recyclables are delivered and stored to accumulate before selling to big buyers) and processors. This kind of partnership arrangement is highly informal in nature and the networks are maintained through trust and mutual benefits and understanding between the different actors. This arrangement is an ongoing arrangement especially between the waste pickers and waste buyers. These arrangements are guided by mutual agreements between those involved and they are informal arrangements. Because of this informality, there is always conflict between the actors and there is the absence of a mechanism for resolving these conflicts. From our interviews with 20 waste pickers at the dumping site, 87% complained of being exploited by the middlemen. However, they continued selling their collected valuables to them, as they could not penetrate through the market. The partnership arrangements are continuous and are daily activities of a significant number of street people and destitutes in Nakuru. The more an individual waste picker collects and sells, the more there is a likelihood of climbing up the ladder to becoming a waste buyer or a middleman. Due to the level of informality of these arrangements, the MCN rarely recognises the role they play in solid waste management. There are frequent conflicts between the MCN workers and the waste collectors.

Inputs of various actors
Waste pickers collect recyclable and reusable waste from the households all over the municipality, along the streets in the CBD and also in institutions and sell it directly to middlemen who have yards where they store the waste. The middlemen sell the collected materials to dealers who later transport the materials to industries in Nakuru or other industries elsewhere. In essence, the waste picker, lower on the waste recycling hierarchy, contributes time, labour and materials, and middlemen and dealers have the financial resources to purchase the recyclables and space to store huge volumes before selling it to the processors.
Emerging Partnership Arrangements in Urban Environmental Management

6.6.3.3 Assessment of outcomes

Process outcomes and shortcomings
To analyse the process outcomes of this arrangement, we consider indicators such as involvement of many actors and legitimacy. First, as we have seen earlier, this partnership arrangement involves the waste collectors, middlemen buying the recyclables and the industrialists who re-process the recycled materials. Although in Nakuru the recycling enterprises are not officially recognised, there are many people getting a livelihood from these activities. Secondly, for this arrangement, though having social recognition from the actors that are involved, there was lack of official recognition of the roles played by the waste pickers and their networks. The MCN needs to be involved in this partnership to give it the necessary legitimacy.

Substantive outcomes and shortcomings
We analyse the substantive outcomes by considering indicators such as financial arrangements and viability and effectiveness in terms of a cleaner environment. First, regarding the financial arrangements, a large proportion of the profits generated through waste picking and recycling activities ends up with the intermediary institutions. Waste pickers just get meagre benefits although they are very important in reducing the volumes of waste.\footnote{The records of the actual amount of waste collected are not available but judging from the huge heaps of paper, plastic and scarp metal collected, it was evident that a significant volume of waste is recycled.} Waste pickers and their families align themselves closely with a buyer (middle-men) of recovered materials. This is because they fill an essential role of a leader, protector and an advocate of those waste pickers who sell to him or her. Between the buyer and the recycling factory, materials typically pass through several hands in a series of heavily conditioned transactions. Figure 6.3 shows the relationships between waste picking activities, recycling and the solid waste management process. The lives of some waste pickers are confined to the limits of the dumping site. Almost all of them are utterly exploited by the intermediaries who buy waste materials from them at a throwaway price. Ignorance, illiteracy, inability to collaborate among themselves, and often heavy indebtedness to the buyers, all combine to create a weak bargaining situation in which they are the sole losers.
Figure 6.3 Relationships between waste picking activities, recycling and solid waste management process

Source: Fieldwork 1999

Secondly, considering the effectiveness of this arrangement, the informal actors lead to minimisation of wastes and recovery and re-use of waste hence contributing to a cleaner environment. This kind of a partnership arrangement has a potential of reducing the amounts of waste generated at the source, along the streets and at the
dumping site. The recycling micro-enterprises ensure some source of income and employment of a significant number of poor people in Nakuru. Waste picking reduces the public burden of collecting and disposing of municipal solid waste, and at the same time serves as an important refuge occupation for the most impoverished residents in Nakuru's poor neighbourhoods. Old metal scraps are collected piece by piece from among refuse and construction debris. Bottles and plastics are collected and sold to middlemen who sell them to industries in Nairobi where they are moulded and converted into products of inferior quality and use. Scrap metals are sold to the steel plants where they are recycled into the manufacturing process. Waste paper, mainly newspapers, is collected and sold out to small vendors who use it to wrap goods and items that they sell. The middlemen in turn sort through the waste and clean and bundle them according to different streams of recyclables to be sold to brokers. These brokers eventually transport and resell them to the factories where materials are recycled, especially in Nairobi.

6.6.3.4 Discussion

There are frequent conflicts between the municipal disposal crew and waste pickers at the dumping site. Our field observations showed that waste pickers lack proper housing and sanitation. Some waste pickers live with their families in a group and share the same small and congested space, among uncollected wastes and unsanitary conditions. Other waste pickers live in poor neighbourhoods that lack municipal services like water and sanitation, and uncollected wastes. The risks therefore are obvious for children playing in open sites with contaminated garbage and for waste pickers. According to some waste pickers at the dumping site, waste picking is a job that doesn't involve much hard work and energy.

As a result, the involvement of women and children is more widespread in this business and they are the ones who work on a regular basis. Therefore women and children are more prone to diseases as a result of unsanitary conditions at work. Most men involved in waste picking participate in selling the products that have been collected during the day. Waste picking is a secondary job for the men and they turn to this option only when it is difficult to find a job elsewhere. There are hundreds of children, some as young as five at the Menengai dumping site. The living conditions are pitiable and most children suffered skin diseases because of

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100 It is estimated that the dumping site alone has a population of over 200 destitutes. Apparently, most children make a living out of their mere existence in the streets, by waste picking garbage bins in the town centre and residential estates and selling the materials they recover to other recycling intermediaries higher up in the recycling industry hierarchy.
their interaction with the waste. Through their participation in environmental management issues, the private sector becomes more aware of and receptive to efforts towards the improvement of environmental quality. One of the disadvantages of the private-private partnership arrangements especially in solid waste management is that they tend to concentrate on the middle to high-income neighbourhoods and exclude the low-income areas where households are not able to pay for the services. If not supervised very well, private waste collectors might end up transferring waste to the poor neighbourhoods. We observed waste dumped in the Ronda and Kaptembwo neighbourhoods.

6.7 Public-civil society-community partnership arrangements

6.7.1 Informal private-private partnerships in water supply: Water Kiosk project

Alongside problems of indiscriminate disposal of solid waste, many low-income neighbourhoods in Nakuru also face the problem of inadequate water supply. In 1999 there was a major outbreak of cholera in the Ronda/Kaptembwo neighbourhood and many residents started seeing the need for improving the water supply (both quality and quantity). In the absence of a local supply, water had to be carried in jerry cans for two to three kilometres on foot or by bicycle. If the residents fetched it themselves from free connections on council’s housing estates, it was a considerable effort. If they bought it from water vendors, it came from unknown sources (such as dirty streams), was sometimes contaminated and they were charged high prices. Further, relations between the Kwaronda/Kaptembwo community and the MCN have been poor because most of the residents paid their taxes and (justifiably) felt they should have better services in return. However, the MCN did not have sufficient resources to extend services or invest in new infrastructure. Through several environmental awareness raising workshops, the community was encouraged to participate as a partner with the council and to solve its own problems.

6.7.1.1 Mandate: aims, activities and scale of intervention

The aims of this project are to improve the incomes of the CBO, provide clean water to the area residents, act as an integrating force for the group, while at the same time fostering stronger links with the MCN and other partners.

NAROKA (Nakuru Ronda/Kaptembwo Association), a CBO, was one of several groups to emerge in 1997, and it began working with the council on a solid waste

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101 We observed that clinical waste also finds its way to the dumping site and this is definitely some public health threat to the children living at the dumping site.

102 Water contamination was considered the cause of the higher incidence of diarrhoea and other water-borne diseases in children from Kwaronda/Kaptembwo than from other parts of Nakuru. In 1999, a cholera outbreak killed around 40 people.
initiative. In the year 2000, NAROKA had a team of eight key players, paid membership of 30, with an extra 20 that were too poor to pay, but who had offered labour. Although the solid waste initiative was not a resounding success (as trash is still piling up in most places), the project established the beginnings of a good working relationship for a subsequent project, the Water Kiosk Project, sponsored as an Incentive Grants Project (IGP).

At the start of the project, IGP staff facilitated two workshops on priority setting and project planning, and reviewed the LA21 planning process that the municipality had just undergone. During the workshops the Nakuru and Kwaronda/Kaptembwo visions were re-examined and priorities were clarified. Water emerged as the key issue to be addressed. A plan was developed to construct five kiosks throughout Kwaronda/Kaptembwo neighbourhood, with residents having to walk no more than a kilometre to find water. One of the Kiosks was designed to comprise an office for the CBO. The area of intervention of this partnership is in the Ronda-Kaptembwo neighbourhood, though residents from the nearby estates are also targeted.

6.7.1.2 Arrangements

Actors, nature of relationships and decision-making process
The actors involved in this partnership are the MCN, NAROKA, Artisans Association, LA 21 coordinator and the IGP staff. As a commitment to its ongoing relationship with the community, the MCN was to turn over almost all management responsibilities for the kiosks to NAROKA, which would then run them as a profit-making enterprise. However, some council members have been reluctant to relinquish the kiosks to NAROKA because they believe the group is relatively inexperienced with financial management and maintenance matters. Sceptics in the council have viewed the project as another capacity-building exercise for NAROKA to show they can manage their own affairs and take on future projects.

The CBO reported that it was hard to achieve consensus with such diverse stakeholders (varying in age, sex and ethnicity) and that its meetings were unfocused. Participants had little experience in seeing the intermediate steps necessary to reach

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103 Between 1997 and 2000, the Incentive Grants Project (IGP) provided small grants to local stakeholder groups for developing and implementing LA 21 action plans in 18 cities in Latin America, Africa and Turkey. The grants allowed the groups to solve problems identified during the LA21 planning process, with projects in areas such as waste management and stream restoration. The project was funded by the Open Society Institute and implemented by the International Council for Local Environmental Initiatives.

104 Each was to be built of stone, connected to the municipal water main, able to be locked at night, and large enough to house the tap and its attendant. The kiosks were to be painted a distinctive blue and white (blue for water, white for purity) to enable residents to recognise them at a distance (see plate 6.2).
Challenges of Urban Environmental Governance

final goals. They agreed that the presence of an impartial mediator and/or training in self-organisation would have facilitated and streamlined the decision-making process (training is still part of the work plan, but has not yet taken place.) Also, both groups found that obtaining agreement between different partners, especially partners that include a variety of different stakeholders, always takes more time than predicted. Nakuru Council felt that CBO staff would have benefited from training in leadership skills, financial management and maintaining the kiosks.

Plate 6.1 One of the water kiosks in Kaptembwo Estate

Inputs of various actors

The project was run through a management committee of seven that included five MCN members and two NAROKA members. MCN members also gave time outside their normal working schedule as a gesture of goodwill towards residents they felt had been under served. The community was to provide manpower to dig and backfill the trenches and lay the pipes. Another CBO from Kwaronda/Kaptembwo, the Artisans' Association, was awarded the contract to build the kiosks. IGP staff worked with the community to produce a schedule of events and finance the purchase of materials and labour to build the kiosks.
Emerging Partnership Arrangements in Urban Environmental Management

Monitoring and Evaluation
NAROKA with assistance from the public health officers and the senior superintendent in the water and sewerage department keep records of the amount of water supplied to the Kiosk and the amounts they have sold. The CBO then banks the proceeds from the sales and it pays the water bills to the MENR. Evaluation of the project is to be done by ICLEI.

6.7.1.3 Assessment of outcomes
Process outcomes and shortcomings
To assess the process outcomes and their shortcomings we consider indicators like involvement of many actors, legitimacy, political will and support and accountability of this arrangement. First, this partnership involves a wide range of actors as seen above and is a good example of public sector-civil society partnerships. The private sector is not at the moment involved in this partnership as it is not clear what role they may play. It is a partnership arrangement that has helped change the relationships between council officers and the residents in the low-income areas.

Secondly, regarding legitimacy, this partnership is socially acceptable and the communities in the settlements where the Kiosks were constructed indicated that the Kiosks have reduced the distances they used to travel to get water. The construction of the water Kiosks was passed through a full council meeting giving the project the legal recognition. However, the changes in the Water supply management to the MENR only delayed the operation of the Kiosks, but now they are fully operational. It is not clear if the Kiosks are provided for under the MCN by-laws and this raises the question of their legal status.

Thirdly, in so far as political will and support is concerned, the MCN has opened up and is willing to work with different actors to improve the living environment within the area of its jurisdiction. The CBOs therefore receive the necessary political will from the local politicians, though some politicians may use them as a basis of getting political support. Because of the way NAROKA was formed, as a CBO representing a variety of interests, while at the same time a response to various neighbourhood problems, there is a lot of political will to support its activities.

Finally regarding accountability, NAROKA keeps records that are eventually supervised by the officers of the MCN. The management of the water kiosks is therefore accountable to the members of the CBOs and the MCN.

Substantive outcomes and shortcomings
In attempts to assess the substantive outcomes of this partnership arrangement, we consider indicators like financial arrangements and viability, existence of action
plans and effectiveness in terms of improved situation in water supply. First, partners in this arrangement divided the costs of materials and labour between them with IGP offering US$27,929 that included materials for constructing five kiosks and associated pipe work ($9,129), skilled labour to build the kiosks ($2,600), training and technical support (remaining funds). NAROKA was to provide labour to dig and backfill trenches and install the pipes. The water kiosks are complete and operational though initially there were delays because of the recent changes in the management of the water and sewerage department. The price of water for residents was expected to be about half the price of what residents had been paying. The final price was to be decided by the Water Company, the MCN and NAROKA when the project was completed, ensuring that both the water company and NAROKA maintained certain profit margins.

The partnership, to some extent, is financially viable since the CBOs are assisted by the MCN and NGOs to be self-sufficient and are venturing in income generating activities. The Kiosks ensure that there will be increase in water supply that is portable and reliable and at the same time generate income for the maintenance of the Kiosks. The prices that the Kiosks were charging were lower than those charged by the water vendors.

Secondly, regarding the existence of action plans, the construction of the water Kiosks is in line with an area-based action plan that had been developed earlier by the local residents with technical assistance from the MCN and the Green Towns Project. This action plan has detailed proposals aimed at eventually solving most environmental problems identified and others directed at income generating activities. Regarding effectiveness, the project was expected to generate seven well-paid, permanent jobs that NAROKA intended to give to young people who had participated most in the work. As of November 1, 2000, the project was six months behind schedule. Five water kiosks had been constructed, but pipe laying had not started. Both the MCN and NAROKA faced logistical problems that caused the delay. The water Kiosks are adequately supplied with water by the MENR and subsequently sells the water to households in the Ronda/Kaptembwo estates. This has made water available at short distances to households and also safe time for these households. The water kiosks also sell water at lower prices than the ones charged by the water vendors and quality is also assured. They have been charging Ksh. 2.50 per 20 litres that translates to about 1.25 cents per litre. Hence clean water is now available in the neighbourhood; the CBO’s financial status has been enhanced and they have an office; three clerks have been employed by the group to manage the water sale.
6.7.1.4 Discussion

The MCN had difficulty with providing the necessary equipment and NAROKA, though still very positive about the enterprise, raised concerns about having sufficient labour to dig the trenches and possibly hiring casual labour. Though a draft of a memorandum of understanding is in place, it is still not clear on the specific roles to be played by the CBO in so far as the management of the kiosks is concerned. However, the project has already had some positive outcomes. NAROKA members reported that a drastic change in community relations had recently occurred with people beginning to take responsibility for their environment. As well, they now understand council operations better and realise that the council cannot do everything.

Factors that might lead to the success of this project include: an existing vision for the area with an action plan and priorities, a water supply system that could be extended, a CBO with willing, active members capable of achieving the objectives (it has been argued that CBOs should have already gained experience in self-organisation before entering into partnership with another organisation), a municipal council that had adapted its ways of working with the community and the development of a self-perpetuating system that can lead to the establishment and management of other projects. To facilitate this, a reflection workshop was held where the CBO, neighbouring communities and the MCN reviewed the process to identify its strengths and weaknesses, see how far they had gone in achieving their vision, and discuss how the water project could be taken to other areas further from water mains and how infrastructure could be created to cope with the waste water. One issue we need to emphasise that has also led to the success of this project has to do with able leadership. The chairperson and secretary of NAROKA are respected leaders and are able to mobilise resources locally. They have also been involved in a national umbrella organisation of action groups\textsuperscript{105} involved in the “Green Towns” initiatives.

A general observation of all CBOs is the lack of resources they control and the implication is that they hardly influence decisions taken in partnership arrangements where they participate. The CBOs are torn between their intended community empowerment and development objectives and their lack of expertise and access to funding. Until recognition is given to voluntary services as effective ways of achieving development objectives by CBOs, partnerships will remain skewed. One of the major worries of relying so much on CBOs to initiate environmental management interventions is that they are completely non-existent in the middle-and high-income zones. Though these areas are adequately provided with basic urban

\textsuperscript{105} The Kenya Green Towns Partnership Association
services, there are some pockets of residents in these areas who do not have access to these services. It should also be noted that community involvement tends to be ‘tokenistic’, that is, involving only a few ‘community representatives’ who are actually the CBO leaders.

6.7.2 Solid waste management: the refuse collection Chambers project

A public/civil society/community partnership is taking root in many poor neighbourhoods in Nakuru. This type differs from the public/private partnership arrangements in the sense that the arrangements to work together are purely guided by trust and mutual benefits (tangible or intangible). The WWF has been collaborating with the town residents, community based organisations and the MCN in their bid to secure a clean environment. In 1993, the organisation mobilised residents¹⁰⁶ of Lakeview, through seminars and workshops, to sensitise them on the importance of participating in solid waste management activities. Later women groups, schools and youth groups got interested in the activities. A summary of the components of the public/civil society/community partnership arrangements is presented in Table 6.9.

6.7.2.1 Mandate: aims, activities and scale of intervention

This type of partnership aims at awareness creation among residents surrounding Lake Nakuru and especially so on the negative effects of indiscriminate garbage disposal. Hence, this partnership’s main objective is to encourage ways in which households reduce waste at the source and dispose of their waste at designated areas. Continuous community environmental education has been undertaken by WWF and environmental CBOs in Lakeview estate, Mwariki, Kwaronda and Kaptembwo.

Under the Environmental conservation programme, a total of 19 refuse collection chambers have been constructed in five low-income estates in Nakuru town. Each chamber has a capacity of 11 cubic metres and serves as depository for domestic waste prior to removal by the MCN (see Plate 6.2, page 232). The refuse reception chambers were constructed in partnership with CBOs and the MCN. The community and their organisations through their representatives inform the officers in charge of solid waste (the Public Health Department) when the refuse chambers are filled up. The level of intervention of this partnership arrangement is at the neighbourhood level where most of the cleaning activities are undertaken.

¹⁰⁶ "Initially our clean-up activities attracted as many as 2,000 people. We also mobilised students to come up with drama and song" says Mr. Majani of WWF.
Table 6.9 Components of public/civil society/CBO/external agencies/community partnership arrangements

<table>
<thead>
<tr>
<th>Component of partnership</th>
<th>WWF/CBOS/KWS/MCN/UNCHS</th>
<th>MCN/MOLG/WORLD BANK/CBO</th>
<th>MCN/NAROKA/IGP</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANDATE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aims</td>
<td>Awareness creation among residents surrounding Lake Nakuru and especially so on the negative effects of indiscriminate garbage disposal</td>
<td>Purchase of a refuse collection vehicle to collect garbage in low-income neighbourhoods and charge predetermined charges</td>
<td>Supply of water at an affordable price to households in a low-income neighbourhood</td>
</tr>
<tr>
<td>Range of activities</td>
<td>Construction of refuse chambers and community environmental education</td>
<td>Collect and dispose refuse in a coordinated manner and enhance community environmental awareness.</td>
<td>Generate income and employment to members</td>
</tr>
<tr>
<td>Scale of intervention (spatial dimension)</td>
<td>Community and neighbourhood levels</td>
<td>Intervention at the community, neighbourhood and city-wide levels</td>
<td>Construct water kiosks in the neighbourhoods thereby easing the problem of having to walk long distances looking for water</td>
</tr>
<tr>
<td>ARRANGEMENTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actors involved</td>
<td>The actors involved in this arrangement are CBOs, WWF, KWS, the MCN, UNCHS and the LA 21 project.</td>
<td>The actors involved are the Lakeview Usafi Self-help group, the MCN, MoLG, World Bank and residents of lake-view estate</td>
<td>The nature of relationship is formal and also informal (a memorandum of understanding between partners exists)</td>
</tr>
<tr>
<td>Nature of relationships</td>
<td>The relationships are more or less informal in nature and are guided by trust and mutual benefits</td>
<td>Formal based on a memorandum of understanding and the relations are based on trust and mutual understanding</td>
<td>Initially, the water company was to manage the kiosks and later hand them over to the CBO. A management committee of seven members is to run the project (five from the MCN and two from CBO). As of now, the water Kiosks are not operational because of the changes in the management of water sector</td>
</tr>
<tr>
<td>Decision-making structure and division tasks</td>
<td>WWF has an officer who deals with all CBO matters. Within the MCN, the Social Services Department registers CBOs in Nakuru and they work closely with the Public health Department. All the CBOs involved in this arrangement have elected a Chairperson, secretary and treasurer.</td>
<td>Management of the vehicle is by two committees: management and executive committees. These committees are well constituted representing various interests.</td>
<td>There is a management committee that oversees the daily functioning of the water kiosks</td>
</tr>
<tr>
<td>Inputs of different actors</td>
<td>Refuse chambers are managed by CBOs, the MCN empties the chambers once they are filled up</td>
<td>CBOs bring with them the required community mobilisation mechanisms</td>
<td>ICLEI provided the finances to enable the construction of the water kiosks. An account has been opened to deposit the proceeds from selling water. NAROKA pays water bills to MENR IGP staff has been following the implementation of the project</td>
</tr>
<tr>
<td>Financial arrangements</td>
<td>WWF and KWS provided funds to by the materials that were used in constructing the refuse chambers</td>
<td>The MCN and the CBOs contributed different amounts that were deposited into an account as agreed in the MOU</td>
<td></td>
</tr>
<tr>
<td>Monitoring and evaluation</td>
<td>WWF and the MCN periodically monitor the activities of CBOs through workshops where CBOs are invited to present their progress and challenges facing them.</td>
<td>Monitoring and evaluation is to be done jointly by the MCN and the CBO</td>
<td></td>
</tr>
<tr>
<td>Discussion/comments</td>
<td>Financial support from WWF and the World bank, socially and legally legitimate arrangements, CBOs are financially weaker partners, and CBOs are not 'representative'. However, it is a partnership that involves so many actors</td>
<td>Financial grant from the World bank, the MCN through the MoLG and the CBO. Revenue generated from refuse collection makes the project viable: its an inclusive activity; there is awareness raising and creation</td>
<td>Financial support from IGP: little locally mobilised resources. Socially acceptable and legally backed by action plans. CBO is weak financially; question of representativeness. Recent changes in the water supply sector.</td>
</tr>
</tbody>
</table>

Source: Fieldwork 1999/2000
6.7.2.2 Arrangements

Actors, nature of relationships and decision-making process

The actors involved in this arrangement are CBOs, WWF, KWS, the MCN, UNCHS and the LA 21 project. The relationships are informal in nature and are guided by trust and mutual respect. WWF has an officer who deals with all CBO matters. Within the MCN, the Social Services Department is the one that registers CBOs and they work closely with the Public health Department. All the CBOs involved in this arrangement have elected a Chairperson, secretary and treasurer. These are the officials who link the members with supporting institutions. They, on behalf of members, write proposals for any development initiatives. The MCN has recently taken action aimed at strengthening the CBOs by the formation of Zonal Development Committees (ZDCs) within the municipality. The zones are Western, Central, Eastern and Southern. This initiative is also supported by the LA 21 project to assist in the implementation of the short-term actions outlined in the action plan. Meetings of ZDCs are held on a quarterly basis, but at times regularly meet to deliberate on urgent matters.

Plate 6.2 Refuse chamber constructed in Lakeview Estate
Emerging Partnership Arrangements in Urban Environmental Management

Inputs of various actors and financial arrangements
The MCN provided land on which these structures were built, CBOs offered labour and WWF financial resources. The chambers are managed by the CBOs and they report to the Public health department when the chambers are filled up.

Monitoring and evaluation
WWF and the MCN periodically monitor the activities of CBOs through workshops where CBOs are invited to present their progress and challenges facing them. This arrangement is supposed to be long-term as the activities started are supposed to continue forever. However, it faces several challenges that need to be addressed.

6.7.2.3 Assessment of outcomes
Process outcomes and shortcomings
To make an assessment of the process outcomes of this partnership we consider indicators like involvement of many actors, legitimacy and existence of political will and support. First, in terms of inclusiveness, this partnership arrangement involves more than ten CBOs that participate in environmental improvement and management initiatives. Some of these groups are more active than others. WWF and KWS started collaborating with Lakeview, one of the oldest environmental CBOs, since the early 1990's. However, the CBOs that were involved in solid waste management are significantly higher and all of them indicated that they participated in clean-up exercise in their neighbourhoods. Secondly, this partnership arrangement is legitimate as it has been socially accepted by the community and formally recognised by the local authority. The continued existence of the CBOs will depend on how the local residents identify with them. Some are seen as organisations introduced from outside the communities and have not succeeded in incorporating the existing self-help groups and other networks. Another issue that we need to mention here is the degree to which members of CBOs are willing to voluntarily offer their services to collective action. CBO leaders also did observe that there is a limitation to which they will volunteer their resources: material or otherwise for the common good.

Thirdly, there is a lot of political support for this kind of partnership arrangement, especially from the MCN officers and local politicians. This is because the outputs of this kind of arrangement can be seen. We noted, however, that some politicians only supported the activities of this kind of a partnership to get some political support from the respective communities.

Substantive outcome and shortcomings
While analysing the substantive outcomes and their shortcomings we consider indicators like financial arrangements and viability and effectiveness of the arrange-
ment in terms of a cleaner environment. First, we note that this partnership is, to some extent, financially viable since the CBOs are assisted by the MCN and NGOs to be self-sufficient and is venturing in income generating activities. WWF had an operational budget aimed at supporting the CBOs. The town clerk’s office in the MCN receives proposals from CBOs for support. However, we note that there are still too few resources that have been locally mobilised. The CBOs managing the refuse chambers are involved in income generating activities and are currently undertaking a poultry project in Lanet and peanut butter processing. These activities ensure that the CBOs remain financially viable. However, financial viability of this arrangement is undermined by the over-reliance on external funding and few attempts to mobilise locally available resources.

Secondly, the construction of the waste reception chambers by joint actions between the CBOs, WWF, KWS and the MCN and their eventual maintenance means that solid waste disposal is taking place in a controlled fashion and ensuring a reduction of pollution into Lake Nakuru. We observed that there are some waste receptacle chambers that are overflowing with garbage despite the fact that the CBO leaders had notified the MCN of the same. By the time we conducted this study, the MCN had only two vehicles involved in garbage collection and disposal. One is a multi-lift truck operating at the CBD and parts of the Milimani estate and one lorry for lifting the community waste containers located in parts of the middle income areas. At times, though too infrequently, a tipper from the municipal engineer backed these vehicles up. It is therefore not surprising to find heaps of garbage in disused roads and unoccupied lands. Our household survey showed that 40% of the households interviewed in four low-income neighbourhoods dump their wastes in such areas. The purchase of a refuse collection vehicle that is jointly managed by the MCN and Lakeview CBO will improve the refuse collection and disposal hence ridding the low-income neighbourhoods of refuse.

Through the joint projects by CBOs, NGOs and the MCN representatives and other partners, efforts have been made to raise the legislative and public policy understanding of communities. This is intended to facilitate their efforts not only to preserve and expand their ecological environment, but also to exercise their obligations as citizens.

6.7.2.4 Discussion

WWF has succeeded to be an intermediary between the communities and the local authority and has facilitated many sensitisation workshops on environmental management issues. CBOs tend to trust WWF so much and this was evidenced during many workshops and discussions. In principle, WWF is supposed to respond to the needs of the community without imposing its own interests or raising expectations.
In some communities, WWF seems to have had a huge impact on community expectations and yet it intends to facilitate the local communities to take responsibility of their own environmental development initiatives and understand that the NGO will not be there forever. This aspect is evident among several communities in Nakuru and it is a major weakness of this partnership.

One of the major problems that we observed during the entire fieldwork is that some households still dump their waste outside the refuse chambers and that even when they are filled up, the MCN do not have vehicles ready to empty them. Recently, the MCN has placed multi-containers adjacent to the refuse chambers as a temporary measure to reduce garbage thrown outside the chambers as seen in Plate 6.2. This kind of arrangement has enabled the local communities through their organisations to intervene to improve the quality of their environment. Through weekly clean-up activities at the neighbourhood levels, streets are clean and garbage is deposited at a central place. In the low-income areas, a considerable number of households interviewed were not participating in collective clean-up exercises though they acknowledged the need for cleaner neighbourhoods. This confirms what was mentioned in literature that there is a tendency of free riding (enjoying cleaner neighbourhoods without participating in collective activities to attain the same).

6.7.3. The refuse collection side loader project

6.7.3.1 Mandate: aims, activities and scale of intervention

Another activity in solid waste management that has utilised the partnership principle is the purchase and management of a side loader for the Lakeview USAFI Self-help group. The major aim of this partnership was to purchase, operate and maintain a refuse collection truck that will be collecting waste from the refuse chambers in the Lake View estate and further service other low-income neighbourhoods and charge a fee for the service. The vehicle therefore is meant to serve other areas in the municipality as long as a predetermined and accepted service fee is charged.

6.7.3.2 Arrangements

Actors, nature of relationships and decision-making process

The partners involved in this ‘micro-project’ are the World Bank, Lakeview group, the MCN and the ministry of Local authorities. The World Bank availed a grant to the self-help group, through the ministry of local government for the purchase of a refuse collection truck with the requirement that the MCN through the ministry

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107 This implies that there is the problem of transferring the waste from one place to another: from the household and neighbourhood levels to the areas where the refuse chambers have been located.
contributed 10% of the total cost of the vehicle. The MCN entered into a memorandum of understanding with the ministry of Local Government in respect of providing a grant towards undertaking a micro project namely the purchase of a refuse truck. The memorandum of understanding obliges the MCN and the CBO to contribute towards the capital cost of the project. The MCN and the group are supposed to manage the subsequent operations and maintenance of the project in an efficient and effective manner. In effect, the MCN and the group prepared a subsidiary MOU with the CBO and also a contractual agreement outlining the roles and responsibilities of both parties in meeting the capital contributions towards the cost of the project and its subsequent operations and maintenance.

The vehicle (see Plate 6.3) is currently operational and was jointly registered and the MCN and the CBO operated two joint bank account. The first is the main account for payments of salaries, running of the vehicle and servicing costs. The second joint account is for major repairs. The MCN and the CBO agreed that any disagreements that may arise shall be sorted out between the two parties and should an agreement not be reached, the ministry of local government shall arbitrate.

Plate 6.3 The refuse collection truck
Emerging Partnership Arrangements in Urban Environmental Management

**Inputs of various actors**
Both the MCN and the CBO agreed to constitute a management committee that is in charge of the overall management and supervision of the refuse collection vehicle. The committee consists of representatives from KWS, the CBO, a representative of the Lakeview estate residents, WWF, the MCN’s Public Health Department, the town engineer’s department and a member representing other CBOs in the project area. An executive committee was also constituted to ensure that the decisions of the self-help group and management committee are executed and also oversee refuse collection programmes are carried out in a coordinated manner on a day-to-day basis. It is also mandated to oversee and monitor revenue collection and carry out any emergency and regular procurements. It should also play a major role in organising community activities including joint cleaning of neighbourhoods and educational seminars. The committee consists of the chair-person, treasurers and secretary of the CBO, representative of WWF, town clerk of the council, medical officer of Health in the MCN, KWS representative.

**Monitoring and evaluation**
The CBO has committed itself to follow up the activities of the truck and they actually draw a timetable for the areas in which the truck is to operate. They employ the driver and the loaders and monitor the servicing and maintenance of the truck guided by the MCN Engineers department.

**6.7.3.3 Assessment of outcomes**

**Process outcomes and shortcomings**
In analysing process outcomes of this arrangement we consider involvement of many actors, legitimacy and political will. First, in this arrangement, the management and executive committees involved in the management, operation and maintenance of a side loader purchased through a World Bank grant include many representatives of a wide variety of actors and this contributes to the effectiveness of this partnership activity. Secondly, this kind of partnership is legitimate as it has been socially accepted by the community and formally recognised by the local authority. There has been the change of attitudes among the local residents towards the officials of the MCN, especially those from the Public health department. The continued existence of the CBOs will depend on how the local residents identify with them. Some are seen as organisations introduced from outside the communities and have not succeeded in incorporating the existing self-help groups and other networks. CBO leaders also did observe that there is a limitation to which they will volunteer their resources: material or otherwise for the common good. We contend that if partnerships with CBOs are to be sustainable, there is need to appreciate their contributions in terms of time, labour and other intangible contributions.
Considering political will and support, there is currently a lot of interest and political support for this kind of partnership arrangement especially from the MCN officers and local politicians. This is because the outputs of this kind of arrangement can be seen. We noted, however, that some politicians only supported the activities of this kind of a partnership to get some political support from the respective communities.

Substantive outcomes and shortcomings
To analyse the substantive outcomes and their shortcomings, we consider indicators such as financial arrangements and viability and effectiveness in terms of cleaner neighbourhood. First, regarding financial arrangements and viability, the MCN agreed to contribute Ksh. 1,473,000 in cash for the purchase of the refuse truck and to pay all staff salaries and benefits and all costs of maintenance for a period of six months. In this respect, the MCN deposited Ksh. 350,000 in a joint account before the commencement of the operation of the truck. The MCN was also obliged to employ, supervise and pay a supervisor who will programme, direct and supervise refuse collection in accordance with the executive committee policies and report to the committee. The local authority, in liaison with the CBO agrees to prepare charge lists, enforce refuse charges and bank the refuse revenue into the joint account. All maintenance works for the vehicle are to be undertaken in the council garage. The MCN also commits itself to provide secure parking space, road licence and insurance. The CBO agreed to contribute to the capital costs of the project a sum total of Ksh. 327,000 in cash. It also committed itself to employ and supervise four refuse loaders, a driver and an accounts clerk and to pay all these employees. The CBO also agreed to mobilise, sensitise and organise the community to participate in cleaning activities by setting a cleaning day, separating wastes and having seminars on environmental health. The Group is also obliged to repair, rehabilitate and expand the number of refuse chambers. The truck will assist in raising funds for its maintenance and repair through renting it to other CBOs at a reasonable cost. However, financial viability of this arrangement is undermined by the over-reliance on external funding and few attempts to mobilise locally available resources.

Secondly, regarding the effectiveness in terms of cleaner environment, we note that the purchase of a refuse collection vehicle that is jointly managed by the MCN and Lakeview CBO will improve the refuse collection and disposal hence ridding the low-income neighbourhoods of refuse. Through the joint project by CBOs, NGOs and the MCN representatives and other partners, efforts have been made to raise the legislative and public policy understanding of communities. This is intended to

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108 See footnote 85 for exchange rates.
facilitate their efforts not only to preserve and expand their ecological environment, but also to exercise their obligations as citizens.

6.7.3.4 Discussion
One of the major problematic areas was the fact that due to bureaucratic issues within the ministry of local government, it took very long for the vehicle to be purchased and delivered to the MCN and the CBO. We cannot say with a high degree of confidence that the operation and maintenance of the vehicle will be carried out as agreed between the two parties given the past performance of the MCN. The MCN still maintains too much power and is over represented in the two committees. The CBO is still a weaker partner in many aspects and has to rely on mobilising funds from other powerful partners and this leaves a lot of room for manipulation. Currently, the truck has not been handed over to the CBO and there is confusion regarding full ownership of the truck. The lorry was registered by the MCN and it bears the local authority’s licence plates. This make the ownership complicated as some officers and politicians in MCN don’t know the actual ownership. For instance, the councillors do not know the contents of the MOU and since the MCN registered the truck, they still think it is the property of the council. This is one of the major challenges facing the ownership of joint property within a partnership. There is need for the officers involved in the project to share information on the ownership arrangements as this might lead to confusion especially when there is a new council.

6.8 Conclusions
In this section we present concluding remarks on emerging partnerships in Nakuru. First, most of the partnerships studied were loosely structured and they involved more than two actors and had specific aims and objectives. Of interest to this enquiry were the interactions between the partners that take place under these arrangements and their outcomes. Our study examined the role played by the informal sector in solid waste management and in the provision of water. This is a point of departure from the common discussions focusing only on the formal forms of partnership. These informal arrangements are rarely included in the planning for privatisation and the public/private partnerships by either the national or local authorities. Yet, it is especially these forms of partnerships that include civil society as a partner and ensure a level of equity of access that may be lacking with formal service providers.

Secondly, the partnerships discussed have come about as a result of an existing urban problem that needs immediate response and also as a result of missing services. One of the preconditions for the formation of partnerships is the existence of
a crisis that requires collaborative and joint action between those actors that are affected. Another precondition for partnerships to function effectively is political will from local, regional and central government. The case presented earlier on the water company (NAQWASS) indicated that where there is absence of political will, any partnership arrangement even with very good intentions will not operate. Partnerships operate in a political environment and when they are not politically supported, it is difficult for them to be functional. There is also need for continued information flow and exchange among partners. This will enhance trust and mutual understanding, which are critical for any partnership arrangement. In the partnerships that we have studied, partners mentioned that this lack of information flow and exchange between the partnering organisations and actors led to misrepresentation of crucial facts. Finally, legitimacy (both social and legal) is important for the sustainable development of the different partnership activities. However, in Kenya, it is noted that even where we have adequate legal provisions, the problem has been the inadequate capacity to ensure collaborative and collective action. The MCN, a principal partner in most of the partnership arrangements assessed, frequently fails to play its active role due to inadequate finances, skilled personnel and enforcement machinery. This situation has lead to the piecemeal enactment of the existing laws and regulations.

Thirdly, partnering organisations and groups need to appreciate the strengths and weaknesses of each actor. For instance, CBOs in many cases are weaker partners as far as financial resources are concerned, but they are able to mobilise households into action, while NGOs may possess the necessary information and links to funding agencies. The private sector normally possesses the financial resources and technical know-how, while the central and local government organisations possess the necessary political will and support. Another point that we need to emphasise here has to do with quantifying the inputs of each partner into the partnership activities. As far as CBOs not having adequate resources, for instance, their contributions in terms of voluntary labour, time spent attending meetings and other non-material contributions need to be taken into account. Therefore, in this regard we contend that such quantifying needs to follow a specific criterion that is agreed upon jointly by all the partners.

A fourth conclusion that we can draw is that disparity among different actors in the partnerships was observed insofar as financial resources, information and political influence were concerned. For instance, the partnerships involving CBOs are on the receiving end and they can easily be manipulated. In most instances, CBOs are called in to participate in some pre-determined activities. CBO representatives do not influence the decision-making process in the partnerships that they participate in, especially on issues related to resources. In all the partnership arrangements,
there is no development budget associated with any of the partnership arrangements. Funding comes from budgets that individual partners control. We observed that in Nakuru, the main thrust is not to deliver new funds, but to find better and new ways of managing existing resources and improve the environmental quality.

We found that the field of partnerships for sustainable development is still fairly new, and that research and case studies have existed only for the last decade or so, making it difficult to assess and draw conclusions with some measure of rigor and validity. This is an experimental field, full of opportunities for innovation. However, if we believe that we must work together to move towards sustainability, it becomes all the more imperative that we learn how to work together. We need to compile and analyse the lessons learned on good partnership practice.
Challenges of Urban Environmental Governance
This chapter gives an analysis of the Local Agenda 21 (LA 21) process and the way partnerships were created and utilised in Nakuru. We have singled out the LA 21 process as it aimed at developing partnerships between different actors involved in urban development. Partnerships were formed in the areas that are of focus to this study and we discuss them to find out how operational they are and the specific challenges that they face. The partnerships formed within the LA 21 process are well documented and this made it possible to examine their structure and other aspects that are central to this study. We will first introduce what is meant by a Local Agenda 21 and the criteria used to select Nakuru as one of the three cities involved in the Localising Agenda 21 programme, the arrangements within the process, focusing on the partners, their inputs and who is excluded, the nature of the relationships and the organisational structure. The next section presents the mandate of the LA 21 including the aims, activities undertaken and mechanisms for monitoring and evaluation. Finally an assessment of LA 21 outcomes is done, followed by a discussion.

**7.1 Introducing the ‘Localising Agenda 21’ process**

As seen in Chapter 1, the global action programme for achieving sustainable development was outlined during the Rio Conference in a document entitled ‘Agenda 21’ in 1992. Over two thirds of the recommendations in the forty chapters of the Agenda referred to actions that should be taken at the local level. This appeal was most explicit in Chapter 28, where local authorities were called upon to undertake consultative processes and engage social organisations, companies and individual citizens in working towards their own programme for a sustainable future. The drafting of this chapter was done by the International Council for Local Environmental Initiatives (ICLEI) a year earlier and included a mandate for all local authorities to prepare a Local Agenda 21. This approach recognised the importance of a local agency in harmonising urban development in environmental protection. LA 21 became a conceptual framework for urban development programmes worldwide.

ICLEI outlined the key elements to the process as: full community participation, assessment of current conditions, target setting for achieving specific goals, moni-
Challenges of Urban Environmental Governance

toring and reporting. The call to engage in LA 21 processes on the part of the local authorities and communities has, arguably, been the most successful line of implementing Agenda 21. Church (2000), however, notes that the call for such processes to be undertaken brings together three policy areas in which concepts are all contested – community, sustainable development and participation. Each of these words and the ideas behind them are the focus of debate: it is therefore not surprising that development of LA 21 plans has been a process with many different approaches.

We note from the onset that a fashionable view of a LA 21 is that it is largely about process. According to Selman (1999), it is a process where partnerships are formed between various actors and a consultative process started whereby problems are identified, action prioritised, and joint actions are started. However, the LA 21 process is also involved in the implementation of these action plans leading to substantive outcomes. The importance of this process is widely considered to lie in the ways in which it extends genuine participation among stakeholders and the general public, both in setting priorities and taking decisions. Most of our key informants noted that the process of conducting an LA 21 was on a pilot basis and a coordinating unit had been established.

The Localising Agenda 21 programme\textsuperscript{110} of the UNCHS is a specific initiative, sponsored by BADC/DGIC and run by UN-Habitat, which started in 1995 to offer a multi-year support system for sustainable urban development in three selected secondary towns: Nakuru (Kenya) Essaouira (Morocco) and Vihn (Vietnam). This programme aims at disseminating lessons learnt from these towns to other cities in the region, to further help building the capacities of the local authorities (Tuts and Cody, 2000). The preference of medium-size towns, according to UNCHS, was based on the observation that a good number of large cities in developing countries were already benefiting from assistance of multi-lateral programmes such as the Sustainable Cities and the Urban Management Programmes. The way the LA 21 process was undertaken in Nakuru was through building partnerships between different actors.

7.1.1 Selection criteria used for Nakuru

There are a number of reasons explaining why Nakuru was selected to be one of the three cities involved in the Localising Agenda 21 programme, apart from the one mentioned above. The first criterion was one inherent to the town, the region

\textsuperscript{110} This is a programme within UN-HABITAT aimed at providing multi-year support in three selected towns (Nakuru, Essaouira and Vihn city) to come up with respective Local Agendas 21. Note that UN-Habitat chose to use the word ‘Localising’ to indicate the ongoing programme termed as “Action Planning for Sustainable Development”.

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and the province. Nakuru is situated on the axis between Nairobi and Kisumu and is the headquarters of the expansive Rift Valley Province. As a medium-sized town expanding rapidly, it has all problems that come with accelerated urban growth. These include shortage of housing and failing provision of urban services such as road infrastructure, electricity supply, supply of drinking water, sanitation and waste management.

The other criteria focused on the current government policies towards urban development. The provincial planning officer indicated he was prepared to conduct the LA 21 approach to urban planning in Nakuru as a test case for decentralisation policies in Kenya. Nakuru had a municipal council with progressive-minded councillors and well-trained council officers. Several CBOs had been active in the city for a number of years and could support the participatory approach of LA 21.

The final criteria had to do with the programme design. The town offers distinct problems of urban expansion constrained by natural or man-made boundaries (the Menengai Crater to the north, fault lines to the west and the National Park to the south). It also offers a combination of spatial elements that make an urban planning study particularly interesting, such as an east-west axis of transportation and a mountain and lake on a transversal axis. The relative proximity of Nairobi made it particularly feasible as a demonstration site within easy reach for visitors to the UNCHS headquarters. The relative proximity of Nairobi made it possible to involve the University of Nairobi in the sectoral studies required for the elaboration of the strategic structure plan (SSP) (Wanderer, et al., 2002).

In the following sections, we analyse the LA 21 partnerships using the framework utilised in Chapter 6, highlighting the arrangements, mandate, outcomes and a discussion on problems.

7.2 Arrangements

When analysing partnerships under the LA 21 programme we need to examine the partners (who are they; what do they bring into a partnership; who are excluded), the nature of relationships (which may range from formal legally binding contracts to commitment documents) and the organisational structure.

7.2.1 Partners in the LA 21 process

Partners involved in the LA 21 process in Nakuru are many and they come from the public sector, civil society, private sector and external agencies. The key partners actively involved in LA 21 are government departments, including the MCN, the Physical Planning Department (at provincial and district level) of the Ministry
of Lands and Settlements, the Urban Development Department of the Ministry of Local Authorities and parastatals with interest in infrastructure; institutions and research organisations such as the Departments of Urban and Regional Planning (DURP), the Housing and Building Research Institute (HABRI) and the Department of Architecture all of the University of Nairobi, the Catholic University Leuven (KLU) through its Post Graduate Centre in Human Settlements (PGCHS); NGOs such as the World Wildlife Fund (WWF) through its Lake Nakuru Conservation Project and the Shelter Forum of Intermediate Technology Development Group (ITDG); development agencies like UNDP, UNCHS, the Belgium Administration for Development Corporation (BADC/DGIC) and more than 10 CBOs. There is a problem of coordinating the activities of CBOs and they also tend to have too high expectations on the process. The Zonal Development Committees (ZDCs) are supposed to coordinate the CBO activities within the municipality. The LA 21 process has facilitated the development of partnerships between these actors. It supports the mutual consultation process, encourages brainstorming and clarifies expectations. The initial stages of this process have been difficult, because of the complexity of translating general urban sustainable development principles into actions, which make sense to different partners.

7.2.2 Inputs of different actors

The BADC provided the core funding of the LA 21 project in Nakuru though the UNCHS. The partnership between the MCN, the universities and the national government officials in the strategic structure planning contributed to the collection of information and testing of ideas by the participating research institutions. It also exposed future planners to innovative planning methodologies and gave the council a tool to guide urban design and development. The research institutions PGCHS, DURP and HABRI undertook the sectoral studies that elaborated the existing spatial structure and identified the major issues that needed intervention.

The PGCHS plays a prominent role in the entire LA 21 process. Besides the organisational support it lends to the LA 21, it coordinates the Belgian Consortium (BC) of Belgian Universities, municipalities, consultancy firms and NGOs, providing support to programme activities and providing specific competence as well as supporting tools and techniques. The Training and Capacity-building Section of UNCHS plays a similar role within the centre. Local teams complement the existing institutional framework for urban planning and management. They consist of members of the municipality, the central government and NGOs. The MCN offered office space, vehicle and logistics and all the chief officers and heads of departments were involved in all stages of the LA 21 process.
The City of Leuven in Belgium and Nakuru formed a partnership and they have been collaborating since 1996. Through the exchange, people of Nakuru have learned how to manage a housing project for it to become viable for the municipality in terms of income generation. The Leuven municipality, having realised the shortage of proper houses in low-income areas of Nakuru, have raised funds to build some houses to be used as a showcase. Already, a down payment for this purpose has recently been advanced to the MCN. The partnership between Nakuru and Leuven has enabled exchange of information between councillors and the community at both ends. Leuven has encouraged Nakuru council to enable civil society involvement in the Localising Agenda 21 activities. Leuven children, working together with their counterparts in Nakuru on greening projects, have helped promoting their understanding of sustainable development issues. It is indeed out of this friendship that Leuven students have decided to raise funds to help build a school for their poor counterparts in Nakuru.

7.2.3 Excluded actors

The Nakuru County Council (NCC), which was in charge of the entire Nakuru district including the rural areas, was not involved in the entire LA 21. This has serious implications as the council is in charge of the larger Nakuru District in which the hinterland affects the growth of the town. Lack of involvement of the NCC definitely will hinder the implementation of the strategic structure plan and other LA 21 activities, especially in the peri-urban areas. The reasons advanced for the exclusion of the Nakuru County council was that its areas of jurisdiction are outside the municipality. Given the fact that the LA 21 programme aims at achieving sustainable development in Nakuru, it is worrying to have proposals for development interventions and environmental protection disregarding the linkages between the town and its hinterland. Some of the officers involved in the preparation of the strategic structure plan for Nakuru acknowledged that this was a serious oversight.

Kenya Wildlife Services (KWS) was initially involved in the process, but dropped later on. KWS manages the Lake Nakuru National Park, which that covers over 64% of the entire municipality and there are conservation measures included in the strategic structure plan. There were efforts by the DURP and MCN to persuade KWS to be an active partner through the Nakuru strategic structure plan. DURP made its first contact with KWS during Phase I in the form of a letter, informing KWS on DURP scheduled fieldwork in Nakuru. KWS, however, did not participate in phase I. The organisation was only marginally involved through the Nakuru stra-

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111 KWS has traditionally over-relied on external funding and initially there was a misconception that LA 21 project involved a lot of funds to support some of their initiatives. On realisation that this was not the case, the KWS headquarters did not take the project seriously.
Challenges of Urban Environmental Governance

tegic structure plan phase II when the park warden met DURP to explain their concerns as far as the expansion of Nakuru town affected the ecology of the park (Mwangi and Ndegwa, 2002). The passive manner of KWS participation, therefore, raises a number of concerns as far as successful implementation of the strategic structure plan policies and strategies, especially those that have a relationship to tourism and natural environment relating to Lake Nakuru. For one, LNNP covers an area of 188 km² while the management of the park is entrusted to KWS according to the National Parks Act. The park is also within the MCN municipal jurisdiction and its planning and economic as well as social gains are covered among others within the local Government Act and the Physical Planning Act. The LNNP tourism value and activities and ecological processes taking place in the park all affect the town’s physical growth, economy and health of the Nakuru residents. Non-participation of KWS in the Nakuru strategic structure plan and indeed the entire LA 21 programme is a major setback for the expected partnership formations in planning of urban/ecological sensitive environments such as Nakuru town and its metropolitan areas (ibid.).

The church was also not actively involved in the process of LA 21 in Nakuru. The church in Nakuru and also in most parts of Kenya is and has been a very influential change agent for a long time. There are initial indications that the Catholic Diocese of Nakuru was involved but because most of the areas of interventions are beyond the municipality, their continued involvement was not sustained. We contend that the majority of residents in Nakuru are religious and the church is a major change agent within the town. The church could have been used to disseminate the intentions of the LA 21 activities and proposals.

The informal sector is very important in Nakuru’s economy and also in service provision. The majority of the informal sector organisations were not involved in the LA 21 process and it is imperative that future initiatives consider the role played by this sector and involve it in decision-making. Although the jua kali Artisans Association was involved in the consultative process, this organisation is not representative of the entire informal sector. Studies done in Nakuru indicate that the informal sector is actively involved in solid waste management and recycling initiatives and also in the water supply in the form of water vendors. The problem is the informal sector is largely unorganised and there are always difficulties of identifying who to involve.

7.2.4 The nature of relationships

The parties implementing the LA 21 in Nakuru and the organisational set-up have been formalised through a memorandum of understanding and urban pacts between all the actors involved. The urban pacts outline the functions and responsibilities of
key actors and stakeholders.\textsuperscript{112} These are dynamic, result-oriented negotiated agreements between all responsible parties. The pacts form a guideline for monitoring the progress of implementation of local agenda activities in the town. The pacts, however, lack legal status that would make them binding and sanctions for non-compliance were not outlined. There is also a commitment package detailing the specific commitments that various partners have made for the implementation of actions and measures derived from the strategic structure plan. To date, there are some partners who have not honoured their commitments. For instance, the MCN has not been emptying the refuse chambers as committed in the pact, the WWF were closing their offices by 2001, while KWS also failed to honour initial financial obligations.

7.2.5 The organisational structure in the LA 21 process

The Belgium Administration for Development Corporation entrusted the UNCHS with the management of all the funds that it provided for the entire LA 21 process in Nakuru. The organisational structure of this process is presented in Figure 1. The programme manager position for the LA 21 was created at UNCHS and administratively, UNCHS initiated a decentralisation strategy right from the beginning in locating the project coordinator at the MCN. Representatives of the PGCHS participated in most meetings and discussions in all stages of the strategic structure plan preparation. A secretariat was set up linking directly with MCN activities, with the coordinator becoming a member of the MCN at senior level and fully paid by the project. To facilitate the activities and to strengthen capacity at the MCN, UNCHS posted a junior project officer\textsuperscript{113} to assist day-to-day programme work, while an assistant physical planner from DURP was specifically seconded to the strategic structure plan, in order to keep track of the research activities being undertaken by the partners. The Physical Planning Department of the MOL&S, which was charged with the responsibilities of the legal approval processes of the strategic structure plan, is represented in the project by four assistant planners from the district neighbouring Nakuru, while an assistant director of Physical Planning from the Nairobi Headquarters forms key input to the process. The rest of the partners are called upon to undertake specific components of the terms of reference.

\textsuperscript{112} The urban pacts followed this format: preamble (background, preceding events); mandates (international, national, local); fundamental principles (potentials, constraints, ongoing initiatives and future vision); commitment package (specific measures, communication mechanisms and institutional set-up); resources (human, technical, information and financial); monitoring and evaluation (timing and modalities); approval (date and signature of key partners).

\textsuperscript{113} The junior project officer was seconded from the PGCHS.
The Local LA 21 project set-up therefore takes the following format:

The core team: consists of a medium-level officer of the council. The team is responsible for project planning, implementation of day-to-day project activities, monitoring project progress and preparation of monthly project reports. The team has grassroots links with the community through representatives of CBOs.

The management team: this team is made up of all the chairmen/heads of departments of the MCN. The team resolves project management procedures, information flow, public awareness and ways of integrating other activities within the LA 21 initiatives. The purpose of this committee is to make policy decisions regarding LA 21 project in Nakuru. Other functions include the evaluation of projects progress reports and advising on alternative solutions in enhancing the goals of the project emanating from the lower committees and teams. The members include the MCN town clerk, two private sector representatives, chair persons of ZDCs, the LA 21 coordinator, the chairperson of the DDC and the provincial physical planning officer, lands officer, two representatives from NGOs and CBOs, donor agencies and local advisors. Other key partners co-opted in the team include the provincial physical planning officer and the project executant of WWF. The chairperson convenes meetings every two months and representatives of all stakeholders attend.

The Local Advisory Committee: this committee comprises representatives from the above three teams, the Ministry of Local Government, UNCHS, DURP, additional local advisers and opinion leaders and other stakeholders. The committee provides policy advice regarding the project and evaluates progress in addition to advising on alternative solutions in enhancing the goals of the project.

The planning team: this team is made up of the Director of Social Services of the MCN, the Municipal Architect, the LA21 coordinator, an assistant professional officer from UNCHS, an assistant planner from DURP, a WWF programme officer, and the provincial and district physical planning officers. The team is responsible for the preparation of the strategic structure plan.

Finally, there is the formation of the Zonal Development Committees that are meant to coordinate all the activities of the CBOs in all the zones of the municipality.

These teams have so far led the project quite successfully, although within the council not all members can fully understand the initiative, making the exercise quite a challenge. There is the overrepresentation of the MCN in all these teams and committees. The strong representation of the MCN can be considered both as strength (increasing the likelihood of LA 21 initiatives to get the official support
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and backing) and a weakness (overlooking the major principles of LA 21 and good urban governance). Currently, the newly established Department of the Environment coordinates LA 21 activities. The town clerk has mandated this department to be in charge of all the LA 21 and related activities. As noted above, all other departments participate in the committees and this shows the multi-sectoral approach is still being utilised.

Figure 7.1 The organisational structure of LA21

7.3 Mandate

The aims of LA 21 involve a range of activities and programmes that are intended to influence a range of factors affecting the ‘quality of life’ of residents within Nakuru municipality. Below, we will first address such issues as how and what activities are to be undertaken. Next, we will discuss the monitoring and evaluation of these activities.

7.3.1 Aims and goals of the LA 21

As part of the process of building consensus towards a plan of action commonly agreed upon, several consultative workshops were held in Nakuru. These work-
shops brought together a wide range of stakeholders in Nakuru including elected councillors, officers of the MCN, and representatives of the district and provincial administration, research and training institutions, parastatal agencies, NGOs and CBOs, industrialists and other project partners. The objectives of the workshops were: (a) to review the urban planning and management practices in Nakuru, leading to a common understanding of factors promoting and/or hindering urban sustainable development; (b) to work towards an integrated view of urban development of Nakuru; (c) to reach consensus of all stakeholders through consultative processes and (d) to refine organisational structure of the local team in order to facilitate effective support to the planning process in Nakuru. Among the objectives of the LA 21 programme was the strengthening of North-South local-to-local partnership arrangements.

7.3.2 Partnership activities

The major components of LA 21 activities in Nakuru were a series of workshops organised by the MCN and UNCHS (Habitat) with support of the Belgian Consortium. This brought together a wide range of stakeholders in Nakuru, including councillors, officers of the council, the district and provincial administration, research and training institutions, parastatals, NGOs, CBOs, industrialists and other partners. These workshops not only acted as forums for exchange and discussions, but also as work sessions in smaller thematic groups to delve into the key planning and development issues.

The workshops resolved to carry out many actions that would lead towards urban sustainable development. Some key decisions were setting up a town planning unit to enhance municipal planning capacity and improve planning methods and practices; the preparation of the strategic structure plan to evolve the long term vision for Nakuru; the identification of priority zones for interventions like the bus park area, council housing estates, Nakuru east side and geologically sensitive areas; refining a range of activities for streamlining urban development and upgrading urban and national environment and finally, outlining actions for strengthening local institutions and stimulating innovative partnerships.

7.3.2.1 The development of the strategic structure plan

The consultative workshops adopted the strategic structure plan as the approach for achieving urban sustainable development in Nakuru. The LA 21 process interprets urban planning as a ‘strategic structure planning’ process, which mobilises all interested actors in a dynamic, continuous and consensual vision-building and pol-

114 The twinning of cities in the North with those in the South has been encouraged and is now an ongoing process.
cymaking process. A clear understanding of the spatial structure of the town helps to identify strategic actions. The strategic structure plan deals with the sustainability of spatial, ecological, social, economic, technical and institutional factors of urban development. The strategic structure plan approach mobilises key actors in a dynamic, continuous and consensual vision-building and policy-making process. As Figure 7.2 illustrates, the strategic structure plan approach proceeds on three tracks, dealing with the long-term visions, daily actions and communication with the stakeholders.

Figure 7.2 Three tracks of the strategic structure planning

First  
Long term Vision: Working towards a desired spatial structure. This was formulated during the consultative workshops

Second  
Daily problems solving: removing bottlenecks; actions

Third  
Engaging different actors and populations in the planning and decision-making process; dispute resolutions through communication


This conceptual approach was proposed and adopted as a methodology for preparing the strategic structure plan based on the philosophy that visions without action do not yield tangible results. Similarly, action without vision does not address strategic long-term conditions that ensure that essential resources for a good quality urban life are available to future generations. Visions and actions without communication are deemed to fail as they do not take into consideration the aspirations of the civil society as a whole (Tuts, 1998). The three tracks must be continuously interrelated. At the meeting points of the tracks, policy decisions are integrated into the process. These policy decisions are formalised through ' urban pacts'. Incrementally, the activities along the three tracks result in a strategic structure plan. This product consists of a vision on the urban development, a spatial concept as a basis for the desired structure and a programme of actions and specific measures. The prevailing planning

115 As will be seen later, these are dynamic, result-oriented negotiated agreements between all responsible parties though they may not be legally binding, they are integrated in the existing institutional framework of the local authority.
and management practices in diverse institutional contexts show that there is often a lack of balance between the three lines of strategic structure planning.

1. The Urban Planning Studio of the Department of Urban and Regional Planning (DURP)

DURP of the University of Nairobi conducted the preliminary phase of the strategic structure plan preparation as an academic exercise carried out under the curriculum of Urban Planning Studio for the first year post-graduate students. LA 21 sponsored this academic exercise. The six-month exercise, guided intensively by the members of staff of DURP, including two-week fieldwork in Nakuru assisted by a member of the Belgian Consortium, was conducted as the first phase of the Plan and formed the preliminary data collected and built upon in the subsequent phase. The final output of the studio was presented to the MCN and members of the BC for critical appraisals in July 1997.

Box 7.1 Key dates in the LA 21 process

Nov. 1995 – Consultative workshop to reach consensus on priority areas of action and to define the vision for the town

Sept 1996 – Planning workshop for technical officers and mobilisation of stakeholders to forge consensus on the future administration of the bus station and the market area

Nov. 1996 – Training of Councillors as Guardians of the Environment; environmental problem identification and action planning

March 1998 – Partnership with the town of Leuven, Belgium; exhibition on Nakuru in Leuven; technical exchange on planning and housing between the Municipalities of Leuven and Nakuru

May 1998 – Technical workshop

Nov. 1998 – Stakeholders workshop

June 1999 – Setting up of a Town Planning Unit to enhance municipal planning capacity.

July 1999 – Strategic structure plan finalised and advertised

Dec. 1999 – Negotiations on financial support for investments in solid waste and water are under way between the council and (AFD) Agence Française de Développement

April 2000 – Completion of a strategic structure plan for Nakuru town and its environs and evolve a long-term vision for the town

2. Technical work sessions on the preparation of the SSP

Several technical sessions were organised and attended by the planning team to discuss and work on the strategic structure plan document. Some of these weeklong sessions were also attended by members of the BC and took place in January 1998, August 1998 and September 1998. The session of September 1998 was organised as a retreat at Lake Bogoria, where the final shaping of the draft strategic structure plan document took place, before presenting it to the final workshop in November 1998. The planning team also organised similar sessions in 1999 for the finalisation
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of the draft document. These intensive work sessions were crucial in progressively defining the structure and content of the strategic structure plan. Other members of the participating institutions like DURP, HABRI and the Department of Architecture also attended some of these sessions. There are good indications that in its initial stages the strategic structure plan process in Nakuru has benefited from the partnerships between UNCHS, BC, DURP and the local Planning Team (the predecessor of the Municipal Planning Unit). Local stakeholders were invited to all the workshops and their comments on the strategic structure plan process and its outputs were duly recorded and incorporated. Other activities contributing to the preparation of the strategic structure plan document are discussed below. Box 7.1 (see page 254) shows the key dates in the Localising Agenda 21 process in Nakuru.

Box 7.2 Contents of the strategic structure plan for Nakuru the strategic structure plan

Introduction: Key issues of urban development; general methodology of the strategic structure plan; urban development issues in Nakuru; LA 21 process in Nakuru and the scope and contents of the report.

Planning and institutional context: This chapter contains the analysis and interprets the institutional context within which the strategic structure plan has been prepared. Some of the issues covered include the policy-making environment, the legal scope of planning and enforcement, the role of different actors in planning and the strengths and weaknesses of the current systems of urban planning and management. It also covers the existing planning frameworks and instruments operating in Nakuru.

Existing spatial structure: This key section focuses on existing realities, problems and assets of Nakuru. A good knowledge of entities (elements), linkages, functions and the relationships of activities within the town are pertinent. A preliminary analysis of the existing spatial structure is necessary, which defines areas for further research and action. The existing spatial structure contains an analysis of the geographical, natural and historical structure, the structure of land tenure, the settlement, economic and transportation structure, the structure of services and infrastructure.

Key planning vector: The sectoral studies are detailed and work on those elements that are not clear enough at the completion of the preliminary existing spatial structure. They include such areas as demography, land, the housing situation and needs, economic, development, transportation and services. Potentials and problems arising from this interpretation, as well as possible strategies to follow are described.

Detailed spatial and design studies: The objective of these studies is to come up with a detailed analysis and interpretation of specific areas or sites so as to define the structure, fabric and typography on the intended development of the area. Specific studies include the peripheries of the town, the edges, fabrics, nodes and strips. The chapter also explores proposals and strategies for specific locations in the town.

Intended spatial structure: This section brings together all the proposals realised from the analysis of the existing spatial structure (together with the sectoral and design studies, planning and institutional context), based on the vision. The intended spatial structure includes the following elements: visions and development perspectives, spatial concepts and proposals.

3. Realisation and approval of the strategic structure plan

As a result of the partnerships discussed earlier, the LA 21 accomplished what had been the main focus of its activities in Nakuru: a final structure plan was approved in April 2000 (Box 7.2, see page 255). It is the first and so far the only plan to be approved under the New Planning Act of Kenya.

This is together with the regional plan for Nakuru District, which was developed during the same period in a partnership between the Ministry of Physical Planning and the University of Nairobi. This is a major achievement for all project partners and local stakeholders involved and is being recognised as such by observers at a national and international level. It creates a momentum that could greatly benefit the LA 21 programme. LA 21 did not actually create the legal and administrative framework for this approval, but it convinced national authorities to accept the experiment in Nakuru as a pilot project exploring ways to decentralise planning responsibilities.

An important aspect of the strategic structure plan is the commitment package of which each partner is expected to carry out certain activities and fulfil various expectations up to the year 2020. The plan carries out an analysis and interpretation of the existing problems and challenges as well as potentials of Nakuru. It does so by carrying out studies on selected key strategic elements of the town’s existing spatial structure. The synthesis of the elaborate studies form a basis for the formulation of the Intended Spatial Structure (ISS) for Nakuru’s desired future. The overall goal is to guide the future of Nakuru up to the year 2020. To achieve this, the plan aims at integrating social and economic developmental activities, together with investments in the support of infrastructural facilities and services, with environmental considerations - all these with the aim of achieving sustainable development. The plan area covers about 440 km², including areas within the existing municipal boundaries, and surrounding peri-urban areas that are rapidly undergoing transformation and acquiring an urban character. It is an instrument for guiding rather than dictating future development of Nakuru by making strategic choices. This plan document contains the components as outlined in Box 7.2. Table 7.1 presents the strategic structure plan proposals related to water supply, sanitation and solid waste management. There is, however, a wide range of proposals covering other sectors as well.

\[116\] Part of the strategic structure plan.
Table 7.1 Proposed actions in the to improve water supply, sanitation and solid waste management

<table>
<thead>
<tr>
<th>Water supply</th>
<th>Sanitation</th>
<th>Solid waste management</th>
</tr>
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<tbody>
<tr>
<td>Proposed actions</td>
<td></td>
<td></td>
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<tr>
<td>- Increase water supply by either existing sources or developing new ones. This includes the development of the Itare Dam in the Molo area, together with associated treatment and distribution works.</td>
<td>- Rehabilitate the existing sewer systems.</td>
<td>- Launch public education and awareness campaigns on safe waste handling and disposal methods at production points.</td>
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<td></td>
<td>- Expand the sewer reticulation to all areas of the town giving priority to densely populated residential areas and newly settled peri-urban areas to fully utilise the available capacity.</td>
<td>- Conduct regular public cleaning campaigns.</td>
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<td></td>
<td>- Rehabilitate the existing old water sources at Kabatini, Baharini, Turasha and Meroron to realise their design capacities and improve routine maintenance processes.</td>
<td>- Promote waste minimisation techniques such as recycling.</td>
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<td></td>
<td>- Expand the water reticulation system especially in the densely populated areas and newly settled peri-urban areas.</td>
<td>- Adopt proper methods of waste disposal and treatment such as landfill and composting. This will include developing an appropriate waste disposal site and instituting effective monitoring and control measures to regulate the discharge of untreated toxic wastes into open dumps.</td>
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<tr>
<td></td>
<td>- Encourage and support participation and partnerships between the MCN, the private sector and the community in the development and operation of water sources and reticulation systems.</td>
<td>- Improve municipal waste collection systems by creating an autonomous waste management department, supplying it with appropriate easy to service equipment and recruiting qualified personnel.</td>
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<tr>
<td></td>
<td>- Improve management systems by recruiting qualified personnel and through improved metering system, prompt meter reading and billing, efficient revenue collection, block mapping and prompt disconnection of defaulting consumers.</td>
<td>- Initiate public education and awareness campaigns on safe methods of solid waste disposal.</td>
</tr>
<tr>
<td></td>
<td>- Institute effective monitoring and control measures to regulate the discharge of toxic waste into the municipal sewer.</td>
<td>- Privatise some aspects of the solid waste management process such as collection, disposal and billing.</td>
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<tr>
<td></td>
<td>- Develop an improved storm water drainage system to reduce excessive loading of the sewer system.</td>
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</table>
4. Creation of a Municipal Planning Unit

The creation of the position of town planner was a logical step after the planning team had developed the strategic structure plan on its way for approval. In mid-1999, a planning unit was established and the MCN appointed a municipal planner and agreed to recruit more personnel for the unit. LA 21 provided adequate equipment and strengthened the unit with capacity building activities. At the time of data collection, the MCN was acknowledging that the Planning Unit should be expanded into a Planning Department that would include a town planner, but also a municipal valuer, a municipal architect and a municipal surveyor. It was envisaged that this department would take over coordination of LA 21 in the future and that the office of the town clerk would head the core team so as to provide a sound legal framework for the project. Currently, the planning unit that is supposed to be coordinating the LA 21 activities is placed under the town Engineer’s Department and the deputy chief public health officer who is acting coordinator of LA 21 project is handling all the LA 21 activities. We need to indicate that the chief officers were opposed to the idea of having an independent planning department as they thought it could be too powerful and take over planning related issues that different departments were addressing. The first town planner resigned to join the Intermediate Technology Development Group (ITDG) as a programme officer in Nakuru.

7.3.2.2 Concrete actions

Water management

As seen in Chapter 4, the main source of water in Nakuru municipality is groundwater. There have been efforts to reduce the consumption of groundwater by increasing supply from other sources. LA 21 has initiated rainwater harvesting as a part of their tree nursery projects in primary schools. This action could possibly have been combined with systems for capturing and filtering rainwater for human consumption, being introduced by WWF. While these systems are developed for low-density settlements in the peri-urban areas around Nakuru, it might be interesting to explore the potential to use them in other locations.

In the upcoming peri-urban areas, there is an urgent need for the provision of more water sources and more boreholes are being dug. Due to the use of low quality materials or poor craftsmanship during the installation, existing boreholes could not function at optimum capacity. LA 21 has rehabilitated and facilitated the maintenance of several boreholes, and improved hygienic conditions of water storage by covering the storage tanks with roofs, and of water distribution by separating watering points for human and animal consumptions.

Current water supply falls short of the overall demand and at present, there are 19 boreholes in a radius of 9 km of the town centre, providing insufficient supply.
Within the Flamingo estate, there were also measures to improve water as the existing system is badly maintained and defective, resulting in massive losses of water. New water supply systems have been linked to the provision of sanitary blocks attached to every dwelling unit. These measures have not yet been implemented because they are unaffordable to the tenants.

**Solid waste management**

CBOs have been actively involved in the development of action plans aimed at reducing the problems of indiscriminate waste disposal in many low-income neighbourhoods. CBOs were already active in SWM, in particular in the Lakeview Estate, before LA 21 took off. With the LA 21 project and the awareness rising campaigns that have been initiated, there has been a multiplication of CBOs and their activities in many low-income settlements. This could well be among the most important achievements of LA 21 in Nakuru. One of the activities that LA 21 supported was the ongoing construction of refuse chambers in cooperation with WWF, the MCN and CBOs in low-income neighbourhoods. This initiative is aimed at improving the collection and reducing incidences of indiscriminate dumping of household waste. This initiative has served a triple purpose: (a) to provide collection points that would facilitate waste collections by the Municipality; (b) to contribute to cleaning up the living environment within the communities; and (c) to contribute to the clearance and maintenance of water drains, thereby reducing polluting effluents to Nakuru Lake.

Finally, there is the issue of contributions to the solid waste management plan, a proposal for which has been submitted to *Agence Française de Développement* (AFD). This issue is problematic, because the municipality does not have the necessary resources to organise waste collection on a regular basis because of lack of serviceable solid waste vehicles available. This also undermines the effectiveness of providing refuse chambers. According to recent developments, the demonstration project (refuse chambers) and the overall strategic structure plan framework were important factors for the MCN to start negotiations with AFD for a comprehensive solid waste project.

**Tree nurseries and greening of residential neighbourhoods**

One concern of the greening initiatives is to encourage tree planning and other related activities in the residential areas. The strategic structure plan has an emphasis on the planning and provision of green areas in appropriate locations, such as the green buffer area, proposed to be developed around the major storm water drain running from Menengai Crater to Lake Nakuru. In view of the dust pollution and drainage problems in many residential areas, this commitment could have been translated in several small-scale action-plans to be initiated by the CBOs them-
selves. However, the plan did not include an implementation plan that provides CBOs with resources to effectively implement the greening of their neighbourhoods. There have been campaigns to introduce tree nurseries in primary schools. This aims at raising awareness of school children by letting them grow trees in their neighbourhood school. It also intends to raise parents’ interest in urban environment issues through their children’s activities in school and has the advantage of having a strong ownership by the community. Schoolchildren take turns in tending the gardens under the supervision of one or more teachers. Beneficiaries of the project were satisfied with it. However, they acknowledged that its sustainability was problematic because the project largely depends on the personal initiative of a few teachers who have both the availability and the capacity to support and coach the project. The prospect of letting children take young trees back to their dwelling environments and plant them there proved unfeasible for several reasons (unaffordable, grazing domestic animals, no water reserves). The objective to offer young trees for sale on the market would require a more ‘market oriented’ and ‘management oriented’ approach than the persons/institutions involved can provide.

**Promotion of low-cost housing technologies (in cooperation with Intermediate Technology Development Group, East African Office (ITDG-EA))**

The partnership between LA 21 and the action of ITDG-EA in the low-income settlements in Nakuru is evident in low-income areas. ITDG-EA has made effective use of the LA 21 project infrastructure, the local team and its close linkage with the MCN to develop and implement several action plans related to housing in Nakuru. The municipal by-laws on low-cost housing are linked to a demonstration project set up by the urban livelihoods and shelter programme of ITDG-EA. They have proved a useful ‘test-case’ in a campaign to adjust the national legislation on building standards. This is an on-going campaign conducted by the national advisor to LA 21 and regional director of ITDG. ITDG-EA in partnership with the local team have been organising awareness-building workshops for low-income households and training on low-cost building technology for local artisans. It has also formed partnerships with key stakeholders to set up an integrated urban housing project in several of Nakuru’s informal settlements. The success of these interventions can be measured from the financial support from the National Cooperative Housing Union (NACHU) and the formation of Nakuru Housing and Environment Cooperative and savings Society (NAHECO), a local savings and credit cooperative.

**7.3.3 Monitoring and evaluation**

Monitoring and evaluation are key inputs of the implementation process. Project data and records are kept according to the actions implemented. The key activities in monitoring and evaluation include progress reports, liaison with all stakeholders and development of performance indicators. Currently, the beneficiaries have been moni-
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toring the progress of the project through review meetings and workshops. The indicators that have been used to assess impacts include cleaner neighbourhoods; availability of clean water and reduced distances to the water points; completion of the strategic structure plan and setting up the Municipal Planning Unit.

The monitoring mechanisms were built in since the inception of the programme both at the programme and project levels. At the programme level, interim reports were produced every six months containing detailed evaluation reports of all key activities, plus financial reports and meetings of the Steering Committee with representatives of BADC/DGIC, UNCHS and PGCHS. There have been eight meetings in six years. At the project level, advisory boards representing the principal partners and stakeholders involved in or affected by the project, meet at regular intervals to assess progress of the project (Wanderer et al., 2002).

Moreover, the mechanisms to monitor the implementation of LA 21 within the UNCHS include the UNCHS Inter-divisional Advisory Board Meetings held in Nairobi once or twice a year since the inception of the programme. The programme management developed and gradually refined a monitoring system on the basis of six-month progress reports. These reports present a breakdown of the number of outputs delivered globally and in the three cities according to seven headings. As with most programmes where the emphasis is on the change of qualitative conditions, quantitative monitoring of outputs alone cannot capture the multiple factors (including time) that need to be taken into account. We note, however, that there is lack of a well-defined system of communication between the partner institutions and the local communities. The Zonal Development Committees (mandated to coordinate the activities of CBOs and give feedback) are assumed to perform this role but their role is questionable as CBOs are only active in the low-income areas.

7.4 Assessment of LA 21 outcomes

The products of LA 21 exercises are, in the main, still to emerge and indeed, it was argued by many respondents that the long-term perspective of LA 21 made it very difficult to demonstrate value added in the conventional sense. The main outputs of the process to date were reckoned to be those of the LA 21 documents themselves and the mechanisms and networks that had been constructed to support them. Less tangible, but equally important, were the changes in attitudes taking place (perhaps most among individual officers and councillors) and the ways in which environmental and sustainable development issues are being accepted by the residents (through participation in clean-up exercises). Table 7.2 shows some changes that can be attributed to the LA 21 initiatives.
Challenges of Urban Environmental Governance

Table 7.2  Some changes as a result of LA 21 in Nakuru

<table>
<thead>
<tr>
<th>Situation before</th>
<th>Situation after (actual and proposed)</th>
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<tbody>
<tr>
<td>Conflicts over land use, uncoordinated planning and management practices, inadequate capacity of the MCN; conflicts between human activities and the protection of the park</td>
<td>Stakeholders workshop to address conflicts of space use, preparation of the strategic structure plan and the formation of a planning team as a precursor to the creation of a town planning unit</td>
</tr>
<tr>
<td>Inaccessibility of most low-income areas resulting in inadequate municipal collection of solid waste and blocked drains causing environmental hazards</td>
<td>Formation of neighbourhood committees in charge of cleaning and linking up with the MCN; construction of refuse chambers to improve refuse collection; strengthened ties between communities and the MCN</td>
</tr>
<tr>
<td>Inadequate communication between officers and councillors; inadequate awareness on environmental issues</td>
<td>Councillors workshops: councillors as the guardian of the environment; elected leadership and increased awareness of the role of the councillors</td>
</tr>
<tr>
<td>Inadequate involvement of residents in planning issues and in the management of services</td>
<td>Stakeholders workshops on different issues: creation of CBOs as action groups to implement action plans; creation of ZDCs to coordinate and integrate CBO activities; contribution of community members in technical meetings and especially during the preparation of the strategic structure plan</td>
</tr>
<tr>
<td>Geological instability in the western part and sand quarrying as an income-generating activity</td>
<td>Preparation of area-based environmental action plans; formation of the CBOs; sensitising children through environmental school clubs and tree nurseries</td>
</tr>
</tbody>
</table>

Source: Fieldwork 2000

Process outcomes and shortcomings

In analysing the process outcomes of the LA 21 partnership, we will consider the involvement of many actors and those that are excluded, legitimacy and political will. First, regarding involvement of many actors, the consultative workshops brought together stakeholders and sectors from the whole municipality and beyond and yielded two urban pacts in which the vision of the town was articulated. This was successful because of the involvement of several interested groups and parties who have a stake in the development of the town and the future trends that it may take. According to the ICLEI survey globally, stakeholder groups are involved at some level in 73% of the municipalities surveyed while 27% have no stakeholder group (ICLEI, 2002). In Nakuru, the preparation of the strategic structure plan involved representatives from different stakeholders (though a number were not represented) and it is the first one to be approved by the Minister of Lands and Settlements under the 1996 Physical Planning Act. Several partnerships have been forged with NGOs and CBOs. A partnership exchange activity has been undertaken between the MCN and the City of Leuven, Belgium and it provided a major cultural exchange. This partnership has strengthened the interest of donors in the ongoing
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process with the Belgium team committing to revitalise the council housing exercise. We note, however, that important actors like the KWS, Nakuru County Council in charge of the entire Nakuru District, the church and the informal sector in general were not fully involved.

Second, the Physical Planning Act (1996) gives the legal recognition of partnership activities undertaken within the LA 21. Section 25 outlines the contents of the development plans, while section 26, 27 and 28 stipulate the preparation process, from consultation to approval. The Act calls for a comprehensive planning approach, stressing the need to involve stakeholders and the general public in the planning process. The partnerships within the LA 21 in Nakuru are also socially accepted as indicated by the large number of CBOs that are involved in LA 21 activities.

Regarding political will, we observe that its existence is very crucial for any intervention by any partnership arrangement. It is both a pre-condition for effective partnering and can also be an output of successful partnerships. Although the process of LA 21 received political support from both the central and local government, it is now becoming apparent that much more is required from the local politicians. The LA 21 process in Nakuru and elsewhere is of an inherently political nature. The three-tiered strategic structure plan approach followed in LA 21 engages in a political process. One of the ‘strategic’ goals of the vision and communication components should be to avoid direct collisions with local politics and facilitate the way for the action component, where proposals are checked for actual implementation. It is at this stage of implementation that personal gains, business interests or political opportunism most vehemently come to confront ‘the public good’. Unless supported by sufficient political goodwill, projected actions may be contested and may never be implemented. In a recent workshop held in Nakuru to get the views of stakeholders on the LA 21 process and initiatives, it was observed that some councillors did not fully understand the process and were not supportive. It is hoped that the recent developments that all LA 21 deliberations be discussed and approved by the full council will enable the councillors to fully understand the intentions and the aims of the entire LA 21 process.

Substantive outcomes and shortcomings

The indicators that we adopt to assess the substantive outcomes of the LA 21 activities include financial arrangements and viability, the development of the strategic structure plan and other action plans and effectiveness in terms of improvement of the service levels. Regarding financial arrangements and the viability of the LA 21 activities, we observe that since the start of the LA 21 in Nakuru in 1995, BADC (now DGIC) has been providing financial support for the pilot phase and the subsequent preparation of the strategic structure plan. It was very hard to obtain the actual
figures of the amounts used or contributed by various actors in the LA 21. However, the following contributions are known: UNCHS provided technical inputs and networking and BADC/DGIC provided the core funding of the project. The real project costs between 1999 and 2001 were US $ 902,165. The funds were channelled through UNCHS that charged overhead costs at 13% until 2000 and then reduced those to 10% at the request of DGIC. The government of the Republic of Kenya (GoK) provided technical corporation inputs by availing physical planners, surveyors, land officers during the mapping exercise and the preparation of the strategic structure plan. The MCN provided financial and technical support that could not be quantified plus logistics, office accommodation and a vehicle. Other actors like WWF provided Ksh. 1.4 million during the mapping exercise and also provided a planner for the exercise. The national coordinator of ITDG also participated throughout in the strategic structure plan process as a national expert.

Most of the proposed activities to ensure sustainable development in Nakuru are to be implemented using the partnership principle. However, even the commitment documents do not indicate the amount of the financial inputs and other resources that are expected from different partners. It has been suggested that there is need for financial estimates and sources for the proposed projects. In fact, one of the weaknesses of the strategic structure plan is that it does not include budgetary implications in the proposals. However, there are detailed proposals and commitments by Kenya Wildlife Service and WWF. For the partnerships within the LA 21 to be effective and sustainable, detailed budgetary commitments need to be specified.

One of the substantive outcomes of the entire LA 21 process was the strategic structure plan document and related action plans. The degree to which local governments have completed action plans and sustainable development policies is one way to measure progress. However, this does not capture process issues such as the presence and strength of stakeholders. The strategic structure plan has proposals and area-based action plans aimed at moving towards sustainable development. Different interest groups in Nakuru jointly developed these action plans and there were commitment documents for their implementation. As we have previously noted, these actions if implemented could harmonise economic, social and ecological spheres as they recognise the interconnectedness of these aspects.

The other indicator of substantive outcomes has to do with the effectiveness in terms of service levels. We need to indicate that not all intended interventions towards the improvement of the service levels have been implemented. Only short-term actions are being implemented. In combination with cleaning-up campaigns organised by the CBOs, this action largely met these objectives: whereas garbage was spilled all over the street before, it is now piled up in and around the refuse chambers. The construc-
tion of the refuse chambers in the low-income areas has made the collection easy (that is when it is done). However, handling of the solid waste towards and at these collection points still happens under most unhygienic circumstances. The effects of raising awareness about separate-at-source selection, hygiene, safety and security thus appear limited. This may be because CBO members who followed training courses either failed to apply them and disseminate their knowledge or have engaged in other activities since then. A second consideration is the design of the refuse chambers that makes the disposal and removal of solid waste inconvenient due to its elevated platform, and that requires regular maintenance due to its movable elements.

Greening the city efforts, which have been done through the support of the Green Towns Project in the Ministry of Local Government, have ensured a lot of awareness in environmental matters in communities and schools. This is also seen as a significant input to LAs 21 environmental action involvement. Within the water supply sector, the LA 21 project has helped rehabilitate three boreholes and also provided water troughs for livestock. LA 21 has assisted in the formation of CBOs in the Council estate of Lumumba to help improve and protect sanitation facilities in the estate.

There have been several workshops and seminars for the youth, CBOs and its members on environmental health. This has led to the change in attitude of residents involved towards the environment and the large number of participants indicates this, during neighbourhood clean-up exercises. The improvement of community managed water draw-off points from boreholes in peri-urban areas in Nakuru has direct benefits for the whole community using water: three peri-urban communities now have access to cleaner and safer drinking water. However, it is difficult to measure the impact of these improvements on community health.

7.5 Discussion on opportunities and obstacles

Experience in the LA 21 process in Nakuru has shown that a number of partnerships were formed and are involved in joint activities. The most striking innovative feature of LA 21 in Nakuru is the participatory decision-making that was a result of the consultative meetings. The consultative workshops and follow-up meetings departed from the traditional mainstream planning process in Kenya and almost all the stakeholders in Nakuru were involved. A dialogue process was initiated and organised in sequential sessions of introduction, individual reflection, discussions in small groups, and full group discussions. This work process resulted in some commonly agreed priority and policy statements. The long-term vision was formulated:

“To restore past glory of the town through integrated process as a regional service centre, prototype ‘eco-city’, a centre for eco-tourism with regional, national and international railway and road networks and services” (BADC /MCN/UNCHS, 1997).
There are some factors that made the LA 21 process successful in Nakuru. Firstly, the entire strategic structure plan process involved people outside the planning system who showed their willingness to participate in the discussion of the long-term development issues. The process, through the inclusion of professionals, politicians and the civil society has actually shown that the gap between the planning system and the society can be bridged and new social settings can be established.

Secondly, the demonstrative value of the project was higher due to the proximity of UNCHS headquarters and this is also a purely logistic advantage because it allowed the programme manager to follow-up the developments in Nakuru in a more frequent and personal manner. Another reason that makes LA 21 a success in Nakuru is the long-standing relationship between key programme partners like UNCHS, PGCHS and project partners such as the University of Nairobi, and the national advisor (from ITDG) contributed to a good understanding of the project objectives, a smooth cooperation and proportionate distribution of tasks and responsibilities. The project partners in Nairobi and Nakuru agreed that the relationship between these core partners generated a tremendous potential to bring agencies together and generate synergy between parallel processes. We need to mention, however, that the availability of local stakeholders who were both competent and willing to join in helped LA 21 a great deal to realise that potential.

Thirdly, there is the issue of leadership. Initially, a deputy town clerk was a very able leader and could be able to guide most discussions during the consultative workshops. Councillors like the chairperson of the finance committee in 1996 were very helpful. He was a retired civil servant and conversant with environmental issues. The LA 21 coordinator has also been an influential figure and possesses unique leadership qualities. She has managed to coordinate the activities of different actors and has been an inspiration to CBOs.

However, the LA 21 process is facing substantive challenges and constraints some of which have to do with institutional weaknesses, lack of political will and support, lack of coordination, lack of financial resources, poor communication and inclusiveness. Regarding institutional weaknesses, the recent change of council members through elections led to changes of policies and a slow down of activities. During the last national and local government elections, the council experienced a complete overhaul with only four out of 19 elected officials having served on former (or other) Councils. The new councillors had no knowledge of procedures, or operations or functions of Council. However, mounting induction courses for councillors solved this problem. The other issue related to institutional weakness within the structure of the MCN is the inability to operationalise the office of the town planner. The newly recruited town planner is unable to control or influence planning decisions within the
council as he reports to the Municipal engineer rather than directly to the town clerk. This means that the implementation of planning proposals within the strategic structure plan will not be so easy.

Most of the proposals within the strategic structure plan are not in actual sense supported by the current policy environment within the MCN. For instance, the greening initiatives proposed in the strategic structure plan seem to contradict what is happening in practice. For example, in one community the council sold the open space that was supposed to be converted into a communal green area and playground. The developer who purchased the plot plans to build a supermarket with parking lot. This clearly demonstrates that the greening of residential areas does not figure as high on the municipal agenda as proposed by strategic structure plan.

Intra-organisational uncertainty is of great value in understanding many obstacles observed. It concerns power relations and tensions that always exist in an organisation, such as municipal administration. The change from one mayor to another, sending the town clerk on compulsory leave, death of an acting town clerk and a senior education official and transfers of the senior personnel have had negative impacts on the continuity of the process and implementation of issues highlighted in the process. The frequent tensions between the elected councillors and the chief officers within the MCN do not argue well for the intended dialogue and exchange of ideas. LA 21 in Nakuru has faced a lot of hostility from a group of councillors who did not understand the process from the onset. Most of them wanted some tangible outputs and physical activities that the process did not offer. The tensions between officials from different sectors of the administration can be explained by differences in status and authority or access to budget resources. Other explanations can be found in variations in professional backgrounds and culture.

The Ministry of Local Government is in charge of recruiting and transferring technical officers. During the project period key personnel have been transferred to other local authorities, adversely affecting the smooth follow up of activities. General laxity on the part of the council personnel slows down the implementation of activities. Delayed salaries, inadequate transport and lethargy are some of the factors that affect the project work and spill over to the community initiatives. Informants often refer to the lack of knowledge and staff involvement as a major obstacle in integrating LA 21 in the mainstream planning. Furthermore, some issues addressed in the action plan are not very clear and may therefore not be achieved within the specified period and areas.

Regarding the appropriate coordination, we observed that a clear mechanism is lacking to coordinate other development partners such as government departments,
NGOs, CBOs and organisations from the private sector. Currently there is a loose forum, which exist as provided for in the LA 21 project. To consolidate gains of co-operative action, there is need to develop such relations by forming a coordinating body. Such a body also needs to be involved at national level to guide the process. There is also lack of clear guidance from the central government about the relationship of LA 21 to other areas of activity of local government or existing planning initiatives. This is a particular issue in relation to the statutory duties of the local government. There appears to be a vacuum surrounding LA 21, and in particular and perhaps of more consequence, the implementation of the LA 21 action plans.

Insofar as financial resources are concerned, we noted that the LA 21 process in Nakuru was introduced after the town was selected together with two other towns for a pilot project ‘Localising Agenda 21’ funded by BADC through the UNCHS. The fact that UNCHS lent its support to the initiative has added leverage to this process, but overall, government officials involved in the LA 21 gave the distinct impression that the new approach had their full support and approval. The MCN just added the LA 21 to the existing officer’s duties with the exemption of former UNCHS-paid programme officer, a physical planner and a few assistants. A key issue underlying the whole LA 21 is the scarcity of resources. LA 21 comes at a time when the local government is facing tight financial constraints. Consequently, lack of resources and over-stretched staff are likely to be a major constraining factor on both the MCN and other organisations involved in the process. The low financial capacity of CBOs and the general poverty of the majority of the residents make the process of participation difficult. Involvement of community groups takes time, energy and resources but it is still regarded as worth the effort and perseverance which is required. There was evidence of misunderstanding among different community groups and manipulation by community leaders. Some participants in a workshop conducted in January 2002 indicated that this resulted in frustrations, mistrust and slowed down the progress of work (see Mwangi, 2002).

We observed that there was a lack of communication between some sections of the community and this has made the dissemination and feedback of the strategic structure plan proposals rather poor and slow. Similarly, not all residents fully understand the intended and proposed changes and there are still some stakeholders who insist that some proposals are not achievable. According to the former town planner involved in the exercise, about 1,000 responses and reactions to the strategic structure plan proposals were received from the general public and their concerns were noted117. We contend that this is quite a low response in a town with nearly 300,000 inhabitants. Many residents were not aware that they were supposed to raise objec-

117 Discussions with the former Town Planner in January 2002.
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tions and comments on the proposed interventions. All the plans and related documents were in English only and we contend that not all residents can read or understand the language, let alone speak it. In any future publicity of such plans, it is important that the plans are translated in a language that is common in the town and in this case action plans and proposals need to be translated into Swahili. We also note that many residents in Nakuru are still not aware of the LA 21 and the proposals within the strategic structure plan though we have area-based action plans. This is because CBO representatives were seen to be representing the local communities but CBOs are concentrated in the low-income areas.

Despite the clearly stated objective of Rio's Agenda 21 to encourage marginalised groups to participate in LA 21, experience in Nakuru has shown that those groups who have traditionally participated in decision-making processes continue to do so. Despite the best efforts of coordinators and their teams, problems of engaging ordinary people persisted: women, youth and generally the poor have been excluded from the process. This was much evidenced in the preparation of the strategic structure plan for Nakuru. A team of high-level physical planners and some officers of the MCN who are dubbed the ‘MCN Planning team’ did the Plan preparation and final documentation. Though the team relied more on sectoral studies done by several consultants, there was the exclusion of the ‘local people’, the Nakuru County Council\textsuperscript{118}, the Kenya Wildlife Service\textsuperscript{119}, the church and the informal sector.

We need to recognise that the political factor is an integral part of formulating and implementing LA 21 proposals at the municipal level. This can be handled in a constructive way by laying emphasis on familiarising newly elected officials with long-term vision and actions already achieved while at the same time leaving enough room for the priorities of a new council. Political change has undoubtedly induced some delays in implementing certain activities under the LA 21 framework, particularly as far as institutional change and municipal resources are concerned. Several action plans within the LA 21 in Nakuru fell victim to local politics. We observe that there are a number of possible causes. Some of these are related to the councillors. Most of them have limited levels of education and exposure.\textsuperscript{120} The two-yearly election of council and lengthy decision-making processes due to the committee system affect their effectiveness. There are also causes related to the council administration. These include limited information-flow between councillors and their officers, lim-

\textsuperscript{118} The County Council is in-charge of the entire Nakuru District which includes Nakuru’s hinterland and the rural areas. It was observed that is involved in the LA21 process.

\textsuperscript{119} Initially the KWS was involved in the process but in due course, it withdrew for some political issues

\textsuperscript{120} Traditionally, the position of councillor in Kenya has been attracting the lowly educated and least exposed persons whom in most instances are local businessmen.
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limited cooperation between different departments and frequent turnover of key personnel. There are also those causes related to the way LA 21 perceived the MCN. For instance LA 21 underestimated the way council officers initiatives remain limited within the MCN system, the different ways in which technicians and politicians rationalise things while overestimating the reliability of political commitments.

It is important to indicate that there are also complexities of local politics in Nakuru and LA 21 reports have depicted local politics as a hindrance to the success of the programme. With the election of ZDCs, it should become possible for the CBOs to increase the pressure on local politicians to work for their constituencies. We further note that the failure of LA 21 to yield physical outputs, say improvement of physical infrastructure, has made the local politicians very apathetic and this will affect the implementation of the proposals. Currently there is the proposal that all decisions made regarding the LA 21-type proposals and the strategic structure plan proposals will be discussed and approved by the full council meeting and this will raise political support among the local politicians.

From the foregoing, there are opportunities and prospects for a successful LA 21 and the implementation of the strategic structure plan. There is a strong desire to continue with the process. Paying attention to and the management of intra-organisational uncertainties must continue, however, since new problems and obstacles will most certainly arise before the LA21 and the resultant strategic structure plan has become an integral part of the ordinary planning and decision-making. The LA 21 project in Nakuru makes it clear that there are gaps to be abridged within the municipal planning system itself, between politicians and chief officers and between officials at different and in different sectors if participatory decision-making is to be achieved.

7.6 Conclusions

The LA 21 programme is not just about products, but is a multifaceted process that endeavours to involve an as wide a spectrum of actors as possible in pursuit of urban sustainable development. A major characteristic of the process is the empowerment of partners, the local level communities in particular, which, after the donor support is ended, will become the ultimate owners of development process. The Nakuru strategic structure plan (1998-2020) has outlined how the ultimate goal of achieving sustainable development will be achieved in Nakuru. The need to put in place an institutional mechanism for plan implementation has been recognised and the MCN will need to utilise and fully exploit the positive attributes of changes in planning and urban management legislation in Kenya. These regulations have decentralised powers to prepare plans, regulate land use and coordinate the actions of the public and private sector in land development to local authorities.
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It is surprising that the LA 21 process and most initiatives remain invisible to the general public and this indicates that communication with the public was rather poor. The approach that has been used to develop the local Agenda was top-down and it is very difficult for the residents in Nakuru to link the process to their daily struggles and aspirations. Another challenge is to connect the product of LA 21, the strategic structure plan, to the mainstream decision-making processes of the council so that the LA 21 really influences the way people live and relate to the environment. Some approaches that can help build LA 21 into the decision process include basing sustainable development aims and appraisal criteria on the LA 21 vision; asking service committees to include relevant actions from the Agenda 21 strategy in their own departmental service plans and building community involvement process into formal planning processes.

We observe that there is strong representation of the MCN in the LA 21 process. This has strong and weak points. Its strength lies in increasing the likelihood of LA ideals and initiatives to get the required official backing and support. Its weakness is that the local government continues to steer the process while much of the citizenship has lost faith and trust in the government. Respondents in our household survey had the opinion that the local authority should be responsible for adequate water supply, adequate sanitation and waste collection and disposal, but it has not been doing so. The CBOs (or their representatives) that are included are likely to fall into the trap of clientelism that is so characteristic of Kenyan politics. In a workshop that the author organised in Nakuru on the 3rd and 4th January, 2002, a former councillor who indicated that most of the CBOs actively working with the MCN had strong inclinations to the ruling party raised these sentiments.

The LA 21 process in Nakuru relied very much on external funding and support. We need to indicate that this was a very important input from the external support agencies. However, for the process to succeed and for the continuation of the implementation of the proposals, there is need to mobilise local resources and have budgetary allocations for the LA activities. There is need for long-term funding both from donors and the central government. The MCN also needs to allocate funds for the proposals and area based action plans in the strategic structure plan.

There is also need for the council officers to cultivate and nurture the culture that the programme has introduced, that of true partnership with the civil society sector. The issue of coordination is critical, as there are many organisations beginning to show interest in Nakuru. A key issue facing the main stakeholders active in the Nakuru programme so far is whether the political will can be strengthened to support what is seen as a quite new approach in planning and environmental management. The councillors are key to this. They need to see their roles quite differently and to influence the rest
of the council to show them what benefits they can all get by working with the community. A priority is to dispel the fear that is growing in the minds of some of the council representatives, that an empowered community will be a threat. We conclude that the LA 21 project and the proposals have the potential of leading Nakuru on the pathway to sustainable development. As we have discussed, a number of obstacles need to be addressed. The potentials of combining different forms of capitals (from households, CBOs, local government, NGOs, private sector and external support agencies) leads to the pathway towards sustainable development and poverty reduction.

There is urgent need to build capacity in partner institutions. The new ways of working and recasting of power relationships imply that there is need to develop new skills and capacities among all participants to establish the new careers that partnerships require. There is need to have the entire process firmly integrated into a national agenda. First and foremost, because the central government needs to deliver effective legal, budgetary and administrative measures that give the local council the legitimacy and the resources to actually implement the Local Agenda. Second, lack of any intergovernmental structure for the integration of the Local Agendas is likely to confuse and diffuse efforts. National officials have shown interest in the LA 21 exercise in Nakuru because, if successful, it would give them an example to replicate throughout the country.

Regarding contributions to urban sustainable development, the LA 21 process has potentials to putting Nakuru on a pathway to sustainable development, especially when all the proposals have been implemented. However, as we have noted, there are certain constraints that have to be dealt with. There is need to make resources available for the implementation of the proposals contained in the strategic structure plan. These resources can be mobilised locally, though the external support will also be required.
8 Conclusions and Recommendations

In this concluding chapter, we present the theoretical and empirical conclusions. Based on our study findings, we give recommendations for enhancing partnerships and suggest areas for further research.

8.1 Summary of major conclusions

8.1.1 Theoretical conclusions

There are two approaches that have been used to analyse urban environmental management issues and responses: the top-down, public management perspective and the bottom-up, community/local action perspective. Our study identified two types of partnerships: those that are process-type partnerships and address issues that are citywide. These kinds of partnerships use the top-down approach and are policy-oriented. The top-down partnerships lay much emphasis on the process, focusing on institutional reform. These partnerships originate from the public sector reform as a result of an official policy and/or a response to donor pressure. There also are partnerships that are deliberately based on social mobilisation and emphasise community action. They are bottom-up partnerships engaging in local actions at the community or neighbourhood levels. Most of these partnerships focus on substantive outcomes and are concentrated in the low-income neighbourhoods. These partnerships originate from the residents out of some specific felt needs and are supported and implemented through community organisations and non-governmental organisations (NGOs) and other partners. The partnerships that we analysed under the Local Agenda 21 (LA 21) process are partly related to the process, while we observed localised and spontaneous action-oriented partnerships in the low-income areas. A significant finding was the real gap between community-based partnership initiatives and the national and international policy setting. While local level partnerships are often very successful at addressing immediate problems, they often lack mechanisms to influence or change national policies that may have led to the problems in the first place. More attention needs to be paid to learning how community-based initiatives can leverage policy change.

Most of the literature on typologies of partnerships has often been organised around the types and numbers of actors in the partnerships (NGO/government/business). In this study, the examples discussed have shown that partnerships can be better classified by the work being undertaken and the desired outcomes of the partnerships. These examples therefore provide the beginnings of a partnership typology based on the scale and nature of the work rather than by sectors and organisations.
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**Process-type and top-down partnerships**
Public sector partnerships have been involved in the process-type partnerships aimed at reforming public policy. They possess the much required political support and official backing, though these partnerships have few substantive outcomes. The partnerships also tend to focus on the citywide interventions, and participating organisations take long to reach agreed modes of operation. We note that such partnerships are important as they address issues of public interest and ensure that there is coordination between government departments and agencies at the same level of government. Public sector partnerships are necessary structures for encouraging other forms of partnerships such as the public private partnerships.

**Action-oriented, localised and bottom-up partnerships**
One of the major conclusions drawn from the literature on local level environmental initiatives is that communities in the developing countries have done much to improve the quality of life in liveability of cities than other actors, including the government. Communities are able to mobilise a wealth of resources through their organisations, based on existing social networks, as is apparent in many examples of what organised people have been able to achieve (ibid.). However, for communities to succeed in their collective activities, they need to collaborate with other actors. Most of the analyses that have been done on community organisation have been done with respect to community-based organisations and our study has shown that these community-based organisations (CBOs) are concentrated in low-income areas or deprived neighbourhoods and that they are not always representative. They tend to address interests of specific classes of residents. Despite the bias in the composition of the CBOs, their activities benefit other residents in terms of, for example, cleaner and liveable neighbourhoods free of garbage.

Our findings have shown that not all citizens and communities have the intentions, abilities and/or resources to take on the responsibilities that partnerships entail, therefore thus the state should retain such mechanisms as ‘safety nets’ and compensatory mechanisms to protect the least active citizens and communities. We observe that citizens, communities and other actors from the popular sector cannot simply be left to go ‘their own way’ within a partnership, but that they need to be linked with other actors to achieve meaningful results. The virtual absence of the public sector in the community/local partnership arrangements is problematic in various ways. First, there is no actor that protects the interests of those excluded from the partnering. Second, there is no actor that protects the wider public interests or negative spin-off for neighbouring communities or for overall public health or environmental hazards that may result from local action. Another issue that we need to highlight here is that an increase of the local dimension in new partnerships
Conclusions and Recommendations

arrangements gives rise to complicated problems of coordination. This implies that the state has a key role to play in the delivery of strategic policy and governmental coordination. To make local action have more impact, it is often necessary to link it to other actions since there are limits to local actions. Further, for purposes of up scaling local action, the public sector becomes a crucial partner.

8.1.2 Re-defining partnerships

From the existing literature on partnerships, definitions of what constitute partnerships in urban environmental management are characteristically generalised and at times non-existent. However, various attempts have been made to come up with definitions that are specific to local situations, the actors themselves and the overall government policy. Given the various definitions that have been given in literature and those that were adopted for this study, we conclude that, indeed, the partnerships studied involve two or more actors. Most of the partnerships analysed had an enduring relationship guided by written agreements for instance, contracts, memoranda of understandings or urban pacts and commitment documents. Others were based on verbal agreements and on mutual trust for example those between the water vendors and households; those between waste pickers and waste buyers. Another aspect, which has been mentioned in literature is that all the participating actors in any partnership we analysed brought something to the partnership - both tangible and intangible contributions - and that they expect to get something out of the partnership activities. All the partnerships analysed had concrete activities and were all meant to serve a public interest. Several partnerships were involved in the joint development of action plans and had income-generating activities to implement the action plans. Concerning the different contributions that each partner puts into the partnership arrangement, they were of a different nature, ranging from financial capital to organisational, social, political and cultural capital. It was difficult, though, to quantify contributions of some partners in real terms.

Based on the results of our study, a partnership can thus be defined as typically two or more organisations working together to accomplish specific goals and objectives (which is more than simply networking for the sake of knowledge exchange); with decision-making shared among the partners (which goes beyond the contracting relationship); and with resources shared and leveraged (which goes beyond simple collaboration on a piece of work). But key to this is the 'compelling motive' - a felt need, an external driver, champion or challenge that organisations believe can only be addressed through actors working together. Partnership for the sake of partnership will not lead to outcomes or solutions. In our definition we need to capture the issue of voluntary collaboration. Partners therefore work hard to identify, clarify and understand the expectations of each partner and for the work they undertake collectively.
Conclusions on goals and obligations of partnerships

In conclusions, it is important to note that partnership arrangements are complex, operating along four distinct, but necessarily interactive, dimensions: (a) instrumental goals, i.e. what the relationship is expecting to do or produce; (b) maintenance goals, i.e. what holds the relationship itself together; (c) structures or the mechanisms available to set up and manage its activities; and (d) processes, i.e. how it decides, implements activities and sustains itself. Coupled with an often fluid, voluntary and geographically separated membership, such partnerships are also relatively unpredictable social arrangements. Indeed, effective partnerships are inherently flexible ones and those that are able to adapt to shifting internal and external environments. For the same reasons, any partnership has at least two sets of obligations: task-related – to produce better products – and organic – to mature a culture of trust and mutual respect, with partners communicating, exchanging and negotiating.

Partnerships are ultimately most sustainable when they reinforce the organic qualities, to:
(a) generate ownership, creating a shared identity around a common purpose to work with (not just for) the arrangement, ensuring members something meaningful to do together better than each would be able to do alone and helping them to grow and learn as individuals and collaborators;
(b) accept, seek out and make effective use of member diversities, while creating a culture of negotiation and cooperation;
(c) recognise that it is the individual that enter into a partnership, but that the organisation is key to providing an enabling environment;
(d) monitor and adapt to changing circumstances, within and outside the arrangement;
(e) accept a maturation process, which is gradual and meandering, practicing patience and tolerance for often ambiguous outcomes.

8.1.3 Empirical conclusions

We found that the field of partnerships for sustainable development is still fairly new, and that existing research and case studies exist only for the last decade or so, making it difficult to assess and draw conclusions with some measure of rigor and validity. This is an experimental field, full of opportunities for innovation. But if we believe that we must work together to move towards sustainability, it becomes all the more imperative that we learn how to work together. We need to compile and analyse the lessons learned on good partnership practice and further monitor the new partnership initiatives. Table 8.1 gives a summary of the characteristics of partnership arrangements that were discussed in chapter 6 and 7.
### Table 8.1 Comparing the components of partnership arrangements (experiences versus components)

<table>
<thead>
<tr>
<th>Component</th>
<th>Public sector</th>
<th>Public/private</th>
<th>Private/private</th>
<th>Public/civil society/external agencies</th>
<th>LA partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aims and objectives</strong></td>
<td>clear/ but some clear</td>
<td>specific and specific (water quality control)</td>
<td>specific/localised (water supply and waste collection, minimization and recycling)</td>
<td>clear and achievable many and localised (waste management, water supply)</td>
<td>clear/achievable many and ambitious (planning, waste minimisation, development control, water supply)</td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td>citywide and city-wide and specific (water quality control)</td>
<td>citywide and specific (water quality control)</td>
<td>city-wide and specific (water quality control)</td>
<td>city-wide and specific (water quality control)</td>
<td>city-wide and specific (water quality control)</td>
</tr>
<tr>
<td><strong>Level of intervention</strong></td>
<td>city-wide and regional</td>
<td>top-down</td>
<td>selective</td>
<td>neighbourhoods</td>
<td>city-wide/localised</td>
</tr>
<tr>
<td><strong>Partnership type</strong></td>
<td>top-down</td>
<td>top-down</td>
<td>bottom-up/vertical</td>
<td>neighbourhood communities</td>
<td>top-down</td>
</tr>
<tr>
<td><strong>Actors</strong></td>
<td>only public sector (exclusive)</td>
<td>formal public/private (exclusive)</td>
<td>private companies, water vendors, households waste pickers/buyers (not fully inclusive)</td>
<td>local authority, NGOs, CBOs, external agencies</td>
<td>government, local authorities, external agencies, NGOs, Private sector, Universities (all inclusive)</td>
</tr>
<tr>
<td><strong>Actor’s role</strong></td>
<td>defined</td>
<td>defined, fixed</td>
<td>defined, flexible</td>
<td>defined, multiple and flexible</td>
<td>defined, flexible and multiple</td>
</tr>
<tr>
<td><strong>Nature of relationships</strong></td>
<td>formalised through contracts</td>
<td>formal through MoUs/unbinding</td>
<td>contracts/informal based on trust</td>
<td>MoUs/unbinding and based on trust</td>
<td>urban pacts and commitment documents/unbinding</td>
</tr>
<tr>
<td><strong>Input of actors</strong></td>
<td>financial, management</td>
<td>financial, monitoring</td>
<td>labour, financial</td>
<td>labour, social capital, financial</td>
<td>urban pacts and commitment documents/unbinding</td>
</tr>
<tr>
<td><strong>Financial arrangement</strong></td>
<td>uncertain</td>
<td>present but unclear</td>
<td>present but uncertain</td>
<td>present/CBOs weak</td>
<td>uncertain</td>
</tr>
<tr>
<td><strong>Monitoring and present but evaluation</strong></td>
<td>uncertain</td>
<td>present but unclear</td>
<td>present but uncertain</td>
<td>present but weak</td>
<td>present and clear</td>
</tr>
</tbody>
</table>
Challenges of Urban Environmental Governance

We observe that the role played by the Municipal Council Nakuru (MCN) in environmental management indicates the extraordinary complexity in the decision-making process. We note that other governmental actors in Nakuru can lead to confusion because of poor communication, lack of coordination and the tendency to adopt a sectoral approach. This is a major challenge to urban environmental governance and there is need for a new approach. There is the prevailing view that the MCN should be responsible for the provision of urban basic services. Its weak revenue base and the fact that many households do not pay taxes support this attitude. This depicts lack of civic responsibility that is usually seen as a prerequisite for successful collective action.

Most responses to poor environmental conditions involve collaboration between various actors: households as members of CBOs, CBOs that need to call upon the MCN for legal and technical backing and on external donors for funding, NGOs that always work with other actors and the private sector offering service where it is lacking. This means that most environmental action is always a matter of partnering. Collective action seems to rest on the dedication and enthusiasm of a rather limited group of people. Most tenants are not motivated to engage in collective action and this is a serious bottleneck. This raises issues of the difficulties of mobilising community members in low-income settlements. Many informal operators are involved in urban environmental service delivery, though they do not get the appropriate backing. Even CBOs and NGOs seem to be reluctant to engage the informal actors. We contend that the roles played by the informal sector, though fragmented, need to be recognised and supported. In the following section we give conclusions on the specific preconditions for effective partnering.

Preconditions for partnerships
A general conclusion that we come to for all the partnerships that we studied is that actors are able to pool their limited expertise and resources to address a common aim and objective. They represent a broad coalition among the public, private and voluntary sectors and can therefore develop more confidence and command more respect and resources than any actor working alone. There is, however, need for new rules and regulations and at times guidelines to support the partnering process. For partnerships to function and be effective, our study has shown that there are preconditions that need to be fulfilled. In all, we can conclude that the memorandums of understanding (MoU), contracts, urban pacts and commitment documents greatly benefit partnerships, clarifying roles and responsibilities and underpinning the governance structures. Well-thought-out governance structures can provide transparency to the partnerships, enhancing their legitimacy and effectiveness, improve accountability and also help redress some of the typical imbalances of power relations between partners from different sectors.

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First, there is the issue of appropriate legislation to support the formation and registration of all partnership initiatives. All the stages of partnership formation from the experimental stage to the operational stage must be supported by appropriate rules and regulations. However, even where these rules and regulations exist, they need to be adequately enforced and this is determined by another precondition.

Secondly, the organisational structure of the public sector should be revised to create an enabling environment and appropriate institutional frameworks that will encourage the formation and functioning of partnership arrangements. The public sector also needs to be reorganised to be able to work together with a wide array of actors and be able to monitor the process and outcomes of partnership arrangements. There is need to change the mentality of the public sector actors in a way that they can be able to effectively work with other actors and even accept any positions within a partnership activity. They therefore need to adopt a collaborative mind-set as they are no longer able to deliver on their own.

Thirdly, all partnerships have to address a specific felt need and the specific objectives should address these needs. Successful partnerships, as seen from our analysis, are those that have clear, short term, localised and achievable objectives.

Fourth, there is need for the existence of a champion within the partnering institutions. In Nakuru, such champions include WWF and the United Nation Centre for Human Settlements (UNCHS). However, existence of a champion is a necessary but not sufficient precondition and all partnerships must ensure that there is commitment at the institutional level. If this precondition is not met, changes in personnel can be a destabilising factor for the partnership, as we observed in the LA 21 partnerships.

Fifth, political will is required from local, regional and central government. The case presented on the water company – Nakuru Quality Water and Sanitation Services (NAQWASS) – indicates that where there is lack of political support and will, any partnership arrangement, even with very good intentions, will not operate. Partnerships for urban environmental management operate in a political environment and when they are not politically supported, it is difficult for them to be functional.

Finally, one of the factors important for partnerships efficiency is accountability. Accountability is determined by the rate of information flow and exchange among partners. These stand out to be important conditions to enhance the trust and mutual understanding that are critical for any partnership arrangement. In the partnerships that we have studied, partners mentioned that lack of information flow and
Challenges of Urban Environmental Governance

exchange between the partnering organisations and actors led to misrepresentation of crucial facts. Most of the partnership initiatives that are being undertaken in Nakuru will take a long time for their impacts to be felt. For instance, within the PRTR initiative, partners need to know that the impacts of pollution control will take a long time to be seen.

Conclusions on identified partnership arrangements

A specific conclusion that we draw from the studied example of the public sector partnerships is that there is no institutional framework for collaborating stakeholders, and this affects the effectiveness of the Water Quality Testing Laboratory (WQTL). The key actors in this partnership have taken too long to agree on a joint memorandum of understanding, spelling out the roles and responsibilities of each other. The major issue that is hindering consensus seems to be who should claim ownership of the laboratory facility, and who should provide financial and logistic support for its operation. This clearly shows the ineffectiveness of the public sector organisations and it has more to do with lack of accountability.

From the discussion of two examples of public/private partnership arrangements, we conclude that there is lack of an effective legal framework to support and guide the new partnerships. The existing agreements are not effective in guiding the day-to-day operations and functions of the joint initiatives. As previously mentioned, there is need for the participating institutions to define their expectations from the onset and to have flexible work plans.

From our analysis of the private-private partnership arrangements we conclude that, although they are based on some formal contracts, there is need for the public sector to come in as a partner at a distance to ensure that specific rules and regulations are followed. We noted there is the tendency of the private service providers to deal with only those who are able to pay for the services, leaving out poor householders who are not able to pay. There are also tendencies of exploitation because of the power relations between the partners. Regarding the process of partnering we conclude that while formal structures should be developed (including partnership agreements, contracts, pacts, commitment documents and memoranda of understanding) our study has shown that these must be sufficiently flexible. This is to adapt to changes in context (such as a change in government or economic situations), learning processes, staffing and degree of success. All the MoUs and other documents should be rigorous and not rigid. This is because needs and roles keep changing.

Public/NGO/community partnerships have localised partnership activities and they operate in the low-income neighbourhoods. This is where we have a lot of collec-
Conclusions and Recommendations

tive community action in Nakuru, as opposed to the middle-income and high-income areas. This can be explained by the fact that in the middle to high-income areas, there is less community spirit and hence a lot of individualism. There is also more provision of urban basic services in these areas and households here can arrange for any shortcomings through water tanks and hiring solid waste collection and disposal services, etc. We observed that membership of community organisations in the low-income areas was low and mostly dominated by house owners rather than tenants. Tenants are not involved in collective community activities. Some of the explanations for this are that:

- participation in community action has less direct personal gain;
- neighbourhood improvement is not felt as their responsibility, but that of the landowners; and
- they have no time to participate in community activities as they have to struggle to survive in a harsh environment.

The economic viability of public/NGO/community partnerships is endangered, as they are unable to work at optimal level due to lack of legal backing and official support. Though there is a lot of interest in this type of partnership arrangements by the MCN, NGOs and the external support agencies, the main actors (CBOs) have a very weak financial base. They eventually might become instruments of implementing other actors' agendas as they end up being unequal partners. This, for instance, is deduced from the refuse truck project whereby even after the purchase and delivery of the truck to the MCN, it has not been delivered to the rightful owners: the Lakeview CBO. The MCN has been using the truck to collect garbage in the Central Business District (CBD), disregarding the provisions in the memorandum of understanding with the CBO.

An important conclusion on LA 21 is that there is lack of institutionalisation of the LA 21 working approach. There is need for a legal framework to guide this new approach to planning, accompanied by appropriate institutional frameworks and some specific rules and regulations. There is need for local government officials to change their attitudes and the traditional way of decision-making and incorporate a more consultative approach. The major achievements of the LA 21 in Nakuru have been the consultative processes, joint visioning and the development of the strategic structure plan. The LA 21 process has introduced new ways of addressing environmental problems through the consultative process and vision building. The process benefited more from a supportive local authority and a community that was willing to regain and restore the lost glory of Nakuru and make it "a peoples green city". The LA success can be said to be as a result of the mobilisation and inclusion of a wide range of actors and its weakness is that not all relevant actors have been mobilised. Another weakness is the strong involvement and control by the MCN.
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This has both strengths and weaknesses. Its strength is that overrepresentation of the local government gives the LA 21 initiatives the required political support and official recognition. Its weakness is that actors see the MCN as a corrupt and ineffective institution that has previously failed to deliver and cannot be trusted as a partner. This causes apathy among potential actors.

The Nakuru strategic structure plan has outlined how to achieve the ultimate goal of sustainable development. The need to put in place an institutional mechanism for plan implementation has been recognised and the MCN will need to utilise and fully exploit the positive attributes of changes in planning and urban management legislation in Kenya. These regulations have decentralised powers to prepare plans, regulate land use and coordinate the actions of the public and private sector in land development to local authorities. The strategic structure plan has to be firmly integrated into a national planning framework. First and foremost, because the central government needs to deliver effective legal, budgetary and administrative measures that give local councils the legitimacy and resources to actually implement their local agendas. The greatest challenge in Nakuru is to connect the product of LA 21 to the mainstream decision-making processes of the council enabling the LA 21 to really changes the decision-making process and the way people live and relate to the environment.

Conclusions on assessment of outcomes
A conclusion we can draw regarding the assessment of partnerships is that they need to be looked at not simply in terms of with what they can or have produced (outcomes) but also ‘in the doing of them’ (process). This is to know, for example, if and how a partnership is making a difference to members and users through changes it has precipitated in knowledge: about issues, processes of decision-making attitudes and motivations. Critical, too, it seeks to clarify factors influencing results: motivation, congruence with felt needs of people and whether members feel ownership of the process.

In terms of inclusiveness, the public sector partnerships have least representation of different actors. By their nature and the specific issues that they address, they rely more on public organisations and have little room for consultation with the private and civil society sectors at their initial stages. Bottom-up type partnerships are confined to the low-income areas and are more inclusive. They seem to have a room for all other actors. One of the major goals of partnering is to develop synergy through complementarity of different inputs by the actors. However, there has to be political will to create synergy. Existence of political will depends on specific persons, leadership and the structure of the government. Politics tend to interfere with the partnering processes.
In all the partnership arrangements studied, there is lack of jointness, since all partners tend to remain in control of their own resources. Without jointly managing partnership resources, it is difficult to create synergy. Partners are inclined towards jointness if there is credibility, transparency, trust and accountability. At the initial stages of partnering, there tends to be hesitation on the part of the actors. Partnerships tend to enhance complementarity of resources and avoid duplication of initiatives. This builds synergy and with appropriate coordination, it can help improve the quality of life in Nakuru.

However, in all the partnership arrangements, there is no development budget associated with any of the partnership arrangements. Funding comes from budgets that individual partners control separately. We observed that in Nakuru, the main thrust is not to deliver new funds but to find better and new ways of managing existing resources and improve the environmental quality. Financial challenges are numerous, with funding where it is available, provided only on a short-term 'pilot' basis. Most of the partners stress that one of the strengths of the emerging partnership arrangements is that they seek to promote the process of networking and exchange of information. The voluntary partners, especially in the public/private and public/community partnership arrangements, stress that it is a means of establishing environmental management structures where even local communities and groups will freely participate.

Disparity among different actors in the partnerships was observed insofar as financial resources, information and political influence were concerned. Because of the disparity among partners within any of these collaborative working relations, several conflicts eventually emerge. It was the expectation of the study that we would find some conflict management strategies in the partnership arrangements studied. However, because of the lack of a clear organisational set-up, conflict management strategies were non-existent. This has implications for the sustainable development of all the partnership arrangements studied.

Legitimacy (both social and legal) is important for the sustainable development of the different partnership activities. However, in Kenya, it is noted that even where we have adequate legal provisions, the problem has been the inadequate capacity to ensure collaborative and collective action. MCN, a principal partner in most partnership arrangements assessed, frequently fail to play its active role due to inadequacies.

Conflicts are likely to arise when those seeking change challenge those who benefit from the status quo. They also arise when affected partners differ on their definitions of the problem. The failure of the water company is much more related to conflicts among councillors and chief officers.
Challenges of Urban Environmental Governance

quate finances, skilled personnel and enforcement machinery. We conclude that there is an urgent need to build capacity in partner institutions. The new ways of working and recasting of power relationships implies that there is need to develop new skills and capacities among all participants to establish the new careers that partnerships require.

The MCN should ensure that an enabling environment is in place for partnerships to function effectively. The MCN has lately recognised that collaboration with other actors in attempts to improve the quality of the urban environment is yielding positive results and there is a lot of will and support on the part of MCN officers and councillors to work with other actors.

Finally, research findings suggest that partnerships require good coordination, administration, and a clear definition of the roles and identification of core objectives. Groups that commonly participate in decision-making, such as the educated, property owning and middle-class people continued to do so, whilst women, youth and poor people to a larger extent were excluded. Key concepts of partnership and participation did have some impact; yet successful capacity building and empowerment remain ideals rather than realities.

Table 8.2 Comparison of process-outcomes and substantive outcomes of partnerships

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicators</th>
<th>Public sector partnerships</th>
<th>Public/private partnerships</th>
<th>Private/private partnerships</th>
<th>Public/NGO/community partnerships</th>
<th>LA 21 partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process-outcomes</td>
<td>1 Number of actors included/excluded</td>
<td>+</td>
<td>++</td>
<td>+</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td></td>
<td>2 Legitimacy (social and legal)</td>
<td>+</td>
<td>+?</td>
<td>+</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td></td>
<td>3 Political will</td>
<td>+</td>
<td>+?</td>
<td>-</td>
<td>+?</td>
<td>++</td>
</tr>
<tr>
<td></td>
<td>4 Accountability</td>
<td>?</td>
<td>+?</td>
<td>_?</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td></td>
<td>5 Financial viability</td>
<td>-?</td>
<td>+</td>
<td>_?</td>
<td>+?</td>
<td>+?</td>
</tr>
<tr>
<td>Substantive outcomes</td>
<td>6 Presence of action plans</td>
<td>-?</td>
<td>+</td>
<td>_?</td>
<td>++</td>
<td>+++</td>
</tr>
<tr>
<td></td>
<td>7 Effectiveness</td>
<td>+?</td>
<td>+?</td>
<td>+?</td>
<td>++?</td>
<td>+?</td>
</tr>
</tbody>
</table>

Key: + = Presence of the outcome
- = Absence of the outcome
_? = More information is needed
8.2 Implications and Recommendations

Urban sustainable development is a process, which is ceaselessly dynamic, responding to changing economic, political, environmental and social pressures. Partnerships have been promoted as one of the approaches of striving towards sustainable development. Our findings have some theoretical and practical implications to this process and we outline them in this section. As for theoretical implications, the current study contributes to the on going debate on defining urban partnerships, the framework of analysing partnerships and that of assessing their process outcomes and substantial outcomes. Further the study outlines the preconditions of successful partnership arrangements. These frameworks could be adapted and utilised elsewhere based on specific local conditions. Our findings also indicate that a new typology of partnerships is possible: the one based on the nature and level of activities rather than the sectors and organisations.

The practical implications relate to recommendations that will ensure that partnership activities are promoted and enhanced. The first and foremost recommendation is that there is need to speed up the reform of local government administrative framework for planning and decision-making and move fast towards decentralisation. Subsequently, there is need to spend a good deal of effort in adapting the rules, regulations and procedures giving partnerships the necessary legal and official backing and to train officers and councillors in this new style of governance. The various examples of partnership arrangements can be involved in the formulation of specific guidelines utilising the vast experience that they have.

Secondly, there is need for the MCN to assess roles, responsibilities and institutional relationships of all other service providers and other stakeholders in the municipality and involve and incorporate them in planning for improvements in the form of a partnership. Here there is need to recognise the roles played by the informal sector in service provision. They should be encouraged and given appropriate incentives to operate in the low-income areas. Partnerships between different actors need to be promoted and strengthened where they exist, as they promise to be a possible option for improving the service provision in low-income neighbourhoods. Partnerships could be strengthened by the MCN by putting in place appropriate institutional frameworks to monitor partnership initiatives and offer the necessary advice. The roles and responsibilities of each partner need to be specified from the onset.

Third, this study has shown that the most effective partnerships are those that address a felt need and those whose activities are localised. We recommend that these partnership activities at different localities need to be supported while at the same
time promoting the process-type partnerships with city-wide intervention. Concerning the LA 21 process, there is need for the local and national policies and politics to support the proposals and the ongoing activities. One can work on strengthening political will by direct capacity building of decision-makers by exposing them to new ideas, point at long-term effects and show examples of good practices elsewhere. We note, however, that where political will is not sufficient, it must be counterbalanced by an equally sound critical mass of professionals, community leaders and action groups (Verschure, 2000). Hence, there is need to strengthen the civil society institutions and promote democracy.

Fourth, there is need to develop financial systems together with the community representatives and other actors to find ways of improving the financial situation and transparency. This is a very sensitive issue, however, and normally there is mistrust between the MCN and other actors. This is because councillors and officers of the MCN have always been seen as corrupt by actors outside the MCN. For all the emerging partnership arrangements there is need for budgetary allocations by both the central and the local governments and external support agencies. We need to emphasise here that although over-reliance on external donors is discouraged, the external support agencies need continue to financially assisting partnership initiatives and to assist these arrangements to mobilise local resources.

Fifth, development initiatives in Nakuru should take into consideration the interconnectedness of the landscape units and therefore use a holistic approach. There is need to recognise both the limitations to physical development and the exploitation of the physical environment in a sustainable manner. We recommend that the current alienation of the Lake Nakuru National park from the locals by the KWS management be revised so that the MCN gets some benefits and part of the revenues collected. The MCN should be involved as a partner in policies and negotiations related to the future of the park as it is directly affected by the park and also directly influences the area concerned. The MCN should then be mandated to undertake specific environmental improvements in the surrounding area on a periodic basis. The community partnership initiative currently advocated by the KWS management should not only include the neighbouring communities, but also other institutions like the MCN that operate in a larger area surrounding the Lake Nakuru National Park. The Park is actually under MCN’s jurisdiction.

8.3 Areas for further research
The type of data analysed in this study is cross-sectional and studying processes like partnerships require a follow-up type of data collection approach. There is need to undertake a study focusing on the internal dynamics of partnerships highlighting such changes as those in aims and objectives, in partners over time and in
power relations and highlight how conflicts that are inevitable in any partnering are managed. There is also a need to undertake a comparative study on the advantages and disadvantages of partnering and collaborative working relations between and with many actors as opposed to the single actor service delivery model. This is because in the process and functioning of partnerships, there are tremendous transaction costs involved. Questions like, do the advantages of partnering justify the efforts and sacrifices that are being made to make them work and become effective, can only be answered by empirical research. It is only after such questions are answered with empirical data that partnerships can be promoted as an alternative model of service delivery.

As for the partnerships described and analysed in Chapter 6, it is imperative that they are monitored and their results evaluated regularly. This could help answer questions related to the cumulative social change as a result of partnership initiatives over time. The framework developed for assessing the substantive and process outcome could be adapted to undertake such an evaluation. Such research studies could be undertaken both by scholars and consultants and give appropriate implications and recommendations. LA 21 process has helped redefine the role of planners and introduced new approaches towards communicative planning. We recommend that specialized studies be undertaken to evaluate the way these roles have changed and have influenced the traditional planning approaches and methodologies over a period of time.
Summary

This study focuses on participation and partnerships in Nakuru municipality, the headquarters of the expansive Rift-Valley Province in Kenya and a politically important town. Its physical characteristics, the location of Lake Nakuru and the rapid growth and composition of the population have implications for the environment. Rapid urbanisation in such a strategic town needs not be seen in a negative way and the implications and consequences should be addressed in a coordinated manner. There have been a lot of interventions by both local and international actors directed at improving the urban environmental management process. Interventions by two international non-governmental organisations (NGOs) – the World Wildlife Fund (WWF) and the Intermediate Technology Development Group (ITDG) – and the more recent approach in developing a Local Agenda 21 (LA 21) offer examples of collaborative actions. We have observed that such interventions will not succeed if they do not mobilise local resources and embrace community participation. The diversity of communities in Nakuru makes it difficult to have representative community groups. Recently, there have been interests by researchers to undertake studies in the municipality and in the lake’s catchment area covering many disciplines. This study focussed on the roles that different actors could play collaborating with others in attempts to improve the quality of the living environment. Given the inadequacies of the local authority and other related institutions in the municipality, it was evident that new initiatives are being experimented with. There are serious barriers to these new initiatives and at the same time, several opportunities can be exploited. Below, we summarise the major findings based on the research questions.

1. Who are the actors involved in the urban environmental management process in Nakuru, what problems are they dealing with and under what institutional framework do they operate?

We have analysed the process of urban environmental management in practice, highlighting the different actors involved and the roles they play. The Municipal Council of Nakuru (MCN) is the major decision-making organisation, although other non-municipal organisations impact on the decisions of the MCN as well. We have observed that there always have been conflicts between the councillors (politicians) and the chief officers (professionals) within the council and that these adversely affect the effectiveness of the MCN in the provision of urban basic services. The politicians have a short-lived vision for the city while the chief officers have a long-term vision, both related to their personal interests. Community par-
participation in decision-making is only through their representatives and direct consultation has not been exercised. However, the MCN has realised the importance of this aspect and is making attempts to have community views taken into consideration by allowing community-based organisations (CBO) officials to participate in some deliberations. However, the decision-making organs comprising of committees and respective departments do not directly involve the communities. The provision of urban basic services in Nakuru is such that the low-income neighbourhoods are under-serviced. The middle-income areas still receive some services while the high-income areas are well serviced. We found a correlation between the level of provision, community action and private sector participation.

Low-income households have several responses aimed at dealing with inadequate service provision. Our initial hypothesis was that most households in the low-income areas participate in community activities aimed at improving service provision. Households respond differently to environmental problems and this is determined by a variety of factors. Some of the factors have to do with, for instance, membership of a household to a community group or organisation. We observed that membership of households to community groups was determined by several factors, including the length of stay, tenure of a household and perceptions about the roles of community organisations. The CBOs that have been formed in the low-income areas cannot said to be representative as house owners dominate them. Most tenants do not belong to community groups that are involved in the improvement of the environmental quality through clean-up exercises. The community groups studied were more involved in solid waste management activities than in water supply or sanitation. The community groups faced a number of problems that affect their functioning. These problems include low participation of households, management problems, leadership challenges and political interference, low financial bases and over-dependence on outside agents.

WWF has been very active in supporting environmental management initiatives in the MCN. The NGO has been working with other actors in the entire Lake Nakuru Catchment basin. It has conducted workshops for CBOs and barazas for residents to raise their awareness on environmental issues. It has also been working closely with the MCN, Kenya Wildlife Service (KWS) and industrialists in areas ranging from planning initiatives to waste reduction. Another NGO that is involved in environmental management issues in Nakuru is the Intermediate Technology Development Group (ITDG), which has been assisting residents in low-income neighbourhoods to upgrade the housing stock using the stabilised soil blocks. The new housing units incorporate appropriate facilities to ensure that the living environment is improved. ITDG also participated in the recent planning initiatives in the town.
In Nakuru, the private sector has been involved in various environmental management activities such as water supply and solid waste management. In connection with water supply, we have the Kenya Association of Manufacturers involved in the rehabilitation and maintenance of some boreholes in the municipality. The informal sector is very active in the area of solid waste management as it is actively involved in recovery, re-use and recycling of waste. The majority of households in the low-income areas where we undertook our household survey indicated that waste pickers collect part of the household waste. Waste picking is very common in the streets and at the dumping site where more than 200 waste pickers earn their living by selling valuables recovered from the dumping site. The role played by the informal sector in urban environmental management and especially in solid waste management has not been officially recognised by the municipal government. We conclude that, although it is not easy to quantify the amounts of wastes recovered by the waste pickers, they are very important participants in the entire process. We observed that there has been a lot of intervention by the external support agencies and their financial support was on a short-term basis. Most of the partnership initiatives, especially those under the LA 21 process, have been supported financially by external donors. This has implications for their sustainability.

2. What kinds of partnership arrangements in urban environmental management have been developed and what are their major characteristics and outcomes?

In Chapter 6 we have analysed the several kinds of partnership arrangements observed in Nakuru, though some of them were loosely structured. We identified the public sector partnership arrangement made up of actors from the public sector operating at the same level of Government. A good example was the management of the Water Quality Testing Laboratory (WQTL). Public/private partnership arrangements were observed under the Pollution Release Transfer Registers (PRTR) initiative and the now dissolved Nakuru Quality Water and Sewerage Services (NAQWASS). We have examined the private-private partnership arrangement and observed that it differs from ordinary commercial relations since they deal with a public good and the private service providers maintain close links with their clients. Public/NGO/community partnerships were observed in Nakuru in water supply and solid waste sectors. We observed that the CBOs were weak partners in the arrangements because they controlled fewer resources. However, they are good instruments for social mobilisation.

Several outcomes of the partnership process were identified. First, empowerment through partnerships leads to other benefits. There is a multiplier effect. For example, community organisations working in partnership with NGOs and others on waste or water management challenges may turn their attention to income generation, housing, literacy and health issues as well. Second, partnerships can evolve
into long-term relationships. We observed that there are challenges of maintaining the partnership after initial objectives have been achieved, but before longer-term goals are fulfilled. Trust can break down and groups can walk away from the partnership. Third, partnerships can lead to improved accountability of individual sectors and organisations. The partnership modality has the potential to lead to new forms of democracy, where decision-making is shared across sectors.

Authoritative judgements about the extent to which these partnership arrangements lead to the improvement of the process of urban environmental management (UEM) would be premature at this stage. Most partnership arrangements that seek to address a broad spectrum of problems face the difficulty of trying to create a shared vision regarding the way forward that is normally a lengthy process. At the same time, they strive to show short-term results in order to keep the momentum and maintain the interest of participants in the partnership. The MCN should recognise that partnership arrangements do not ease its responsibilities for the provision of quality services. The MCN must be institutionally and financially prepared for the fact that they are no longer the only suppliers of public services. The MCN has to continuously monitor different interventions by different actors geared towards the improvement of the urban environment. Whereas the roles of different actors discussed cannot be underestimated, the role of the MCN is still paramount. In this regard there is a need to build capacities within this institution in terms of training, equipment and management aspects, for the MCN to be able to continue to provide support to the efforts of different actors even after the completion of joint activities. The MCN needs to continue playing the mediating role, brokering popular and private interests and minimising conflicts that may arise in the process of partnering and participation.

3. **What does the LA 21 process in Nakuru entail, to what extent does it utilise the partnership approach and what are its specific outcomes?**

The partnerships formed in the LA 21 in Nakuru have been analysed in Chapter 7. UNCHS selected Nakuru among two other priority towns in Morocco and Vietnam to implement the programme ‘Localising Agenda 21: Action Planning for Sustainable Development’. The Localising Agenda 21 programme was implemented by the UNCHS in partnership with a wide range of international, national and local partners. The Government of Belgium provided the core funding for the programme. Additional funds were generated through cost sharing with various partners, for the implementation of specific action plans in the priority towns. Our observations are that the LA 21 in Nakuru is a programme introduced by external intervening agencies and the local actors co-opted into the programme. We observed that the majority of residents in Nakuru know nothing about the process and find it difficult to relate the initiatives therein with their daily struggles. We argue that for the LA 21
to be seen as local, the process needs to incorporate the local level initiatives and should deviate from the traditional planning process. This, we observed, did not happen in Nakuru. Communities and their organisations, through their representatives, were involved in the consultative meetings where prioritisation of actions was done. Marginalised groups, women and youth, were not really given a good chance to participate.\textsuperscript{122} Real community participation and developing the Local Agenda from the bottom up did not happen. The local authorities and external support agencies dominated the process.

Though attempts were made to form partnerships between different actors in the municipality, these partnership arrangements were loosely structured and weak. This raises the question of how to sustain these partnerships. A critical issue that should make partnerships effective and sustainable is institutional reform and mobilisation of local resources. The implementation of the strategic structure plan requires that specific resources, both human and capital, be availed and allocated. This is not the case in Nakuru. Other critical issues revolve around legal frameworks and political will.

The LA 21 in Nakuru has been embraced as a programme and a process rather than a project. This gives it some sense of continuity as some of the actions are being implemented step by step. However, it also causes a lot of apathy to people who are and have been expecting immediate benefits. The programme has continued to emphasise stakeholder rather than popular participation. The notion of ‘stakeholders’ covers those who have a stake in urban development. This include representatives of community groups, NGOs, the private sector, training and research institutions, state agencies, local, regional and national authorities.

The programme emphasised the creation of partnerships between these stakeholders to undertake joint activities. However, to initiate a partnership requires a reason for existence, a felt need, a scope of action and a set of operational tools to realise its objectives. Only then can a partnership become operational and effective. The focus on partnership building should not be restricted to inducing the efficiency of the individual partners, but also pay attention to the ability of the partners to ‘manage’ collaboration, conflict and coordination for productive ends.

\textsuperscript{122} The author had a chance to participate in a workshop organised for the youth as partners in urban environmental management and what was worrying is that out of 45 participants, only six knew something about the LA 21 process, two years after it was started!
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4. What are the process and substantial outcomes of each of the various partnerships observed in Nakuru?

We have made an ambitious attempt to examine the process-outcomes and substantive outcomes of each of the partnerships discussed in this study. This assessment is not comprehensive since it is too early to undertake a definitive assessment. We noted that though the concept of partnerships has been promoted internationally as a way towards sustainable development, assessment criteria of their performance do not exist. Based on the literature survey and our fieldwork findings, a simple criterion was designed to undertake an assessment. Due to unavailability of enough information for an adequate assessment, we recommend this as an area for further development and research. Our conclusion is that although there have been emerging partnership arrangements in Nakuru, some of them have undertaken concrete activities that have had some outcomes while others, especially those involved in developing action plans, are at the early stages of implementing the prioritised actions.

A major factor that affects the successful implementation of partnership initiatives has to do with the availability of financial resources and the existence of political will. None of the partnerships studied had clear budgetary provisions for the activities being undertaken. Partners controlled their budgets. Our observation is that any partnership arrangement requires adequate financial resources and provisions for their allocation to specific activities. Partners have to agree on the same. In Nakuru’s LA 21 proposals, there were mere commitments made by partners, but they were very silent on financial commitments. Some partners have not honoured the commitments made and this will affect the implementation of the strategic structure plan, one of the products of the LA 21 partnership initiatives. Political will, too, is very crucial for the implementation of partnership activities. Our findings indicated that the NAQWASS partnership initiative in water supply failed because of lack of political will from the local politicians and the central government. We conclude that there is need to build capacity for all partner institutions to enable them to participate effectively in the partnership initiatives. There is need to develop new skills and capacities for all actors to enable them undertake the tasks that partnerships require. As far as the LA 21 initiative is concerned, there is need for the national government to give guidelines and allocate resources for the implementation of the proposed actions. The implementation of the strategic structure plan remains a major formidable task that requires national commitment.
References.


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2-Days Workshop on Experiences of Stakeholders on Localizing Agenda 21 in Nakuru, at Hotel, Genevieve, Nakuru 3rd –4th January.


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(Morocco). Nakuru (Kenya) and Vinh (Vietnam). Ministry of Foreign Affairs, Trade and International Co-operation, Brussels, Belgium.


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## Abbreviations

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<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ADB</td>
<td>Africa Development Bank</td>
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<tr>
<td>AFD</td>
<td>Agence Francaise de Development</td>
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<td>ALGAK</td>
<td>Association of Local Government Authorities in Kenya</td>
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<tr>
<td>BADC</td>
<td>Belgian Development Cooperation</td>
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<td>BC</td>
<td>Belgian Consortium</td>
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<td>CBOs</td>
<td>Community-Based Organizations</td>
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<td>CDN</td>
<td>Catholic Diocese of Nakuru</td>
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<td>DC</td>
<td>District Commissioner</td>
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<td>DDC</td>
<td>District Development Committee</td>
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<td>DEC</td>
<td>District Environmental Committee</td>
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<td>DFFRDS</td>
<td>District Focus For Rural Development Strategy</td>
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<td>DURP</td>
<td>Department of Urban and Regional Planning</td>
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<td>DWD</td>
<td>Department of Water and Sewerage</td>
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<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>EU</td>
<td>European Union</td>
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<td>EU</td>
<td>Egerton University</td>
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<td>ICLEI</td>
<td>International Council for Local Environmental Initiatives</td>
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<td>IGP</td>
<td>Incentives Grant Program</td>
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<td>ISS</td>
<td>Intended Spatial Structure</td>
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<td>ITDG-EA</td>
<td>Intermediate Technology Development Group – Eastern Africa</td>
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<td>GTZ</td>
<td>Deutsche Gesellschaft für Technische Zusammenarbeit</td>
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<td>HABRI</td>
<td>Housing and Building Research Institute</td>
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<td>JICA</td>
<td>Japanese International Cooperation Agency</td>
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<td>JBIC</td>
<td>Japanese Bank for International Cooperation</td>
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<td>KAM</td>
<td>Kenya Association of manufacturers</td>
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<td>KLGRP</td>
<td>Kenya Local Government Reform Programme</td>
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<td>KMRP</td>
<td>Kenya Municipal Reform Programme</td>
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<td>KWS</td>
<td>Kenya Wildlife Service</td>
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<td>LA 21</td>
<td>Local Agenda 21</td>
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<td>LADP</td>
<td>Local Authority Development Programme</td>
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<td>LASDAP</td>
<td>Local Authority Service Delivery Action Plans</td>
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<td>LASC</td>
<td>Local Authority Service Charge</td>
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<td>MCN</td>
<td>Municipal Council of Nakuru</td>
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<td>MENR</td>
<td>Ministry of Environment and natural Resources</td>
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<td>MOLG</td>
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<td>MOL&amp;S</td>
<td>Ministry of Lands and Settlements</td>
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<tr>
<td>MoU</td>
<td>Memorandum of Understanding</td>
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<tr>
<td>NACHU</td>
<td>National Cooperative Housing Union</td>
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<td>NAHECO</td>
<td>Nakuru Housing and Environmental Cooperative</td>
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<tr>
<td>NAQWASS</td>
<td>Nakuru Quality Water and Sanitation Services Company</td>
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<tr>
<th>Abbreviation</th>
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<tr>
<td>NAROKA</td>
<td>Nakuru Ronda Kapterbwo Association</td>
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<td>NEMA</td>
<td>National Environmental Management Authority</td>
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<td>NHS</td>
<td>Nakuru Hygiene Services</td>
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<td>NGO</td>
<td>Non-Governmental Organizations</td>
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<td>NWC&amp;PC</td>
<td>National Water Conservation and Pipeline Corporation</td>
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<td>ODA</td>
<td>Overseas Development Assistance</td>
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<td>PC</td>
<td>Provincial Commissioner</td>
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<td>PGCHS</td>
<td>Post Graduate Centre for Human Settlements</td>
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<td>PRA</td>
<td>Participatory Rural Appraisal</td>
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<td>PRSP</td>
<td>Poverty Reduction Strategy Paper</td>
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<td>Pollutant Release Transfer Registers</td>
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<td>PU</td>
<td>Planning Unit</td>
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<td>Strategic Structure Plan</td>
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<td>USAID</td>
<td>United State Agency for International Development</td>
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<td>UEM</td>
<td>Urban Environmental Management</td>
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<td>UMP</td>
<td>Urban Management Project</td>
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<td>UNCED</td>
<td>United Nations Conference on Environment and Development</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<td>UNCHS</td>
<td>United Nations Centre for Human Settlements (UN-Habitat)</td>
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<td>United Nations Environmental Programme</td>
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<td>UON</td>
<td>University of Nairobi</td>
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<td>WCED</td>
<td>World Commission on Environment and Development</td>
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<td>WQTL</td>
<td>Water Quality Testing Laboratory</td>
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<td>Waste Reduction Action Plans</td>
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Samenvatting

Dit onderzoek gaat over participatie en publiek-private partnerschappen in de gemeente Nakuru, de hoofdstad van de sterk groeiende Rift-valley provincie in Kenia. De fysische kenmerken van de stad, haar ligging aan het Nakurumeer en de snelle groei van de bevolking hebben nadelige gevolgen voor het milieu. Die kunnen evenwel het hoofd worden geboden via een coherente aanpak. In het verleden hebben verschillende interventies plaatsgevonden van lokale en internationale actoren gericht op verbetering van het stedelijk milieubeheer. Voorbeelden van zulke gezamenlijke acties zijn die van twee niet-gouvernementele organisaties (NGO’s): het Wereld Natuur Fonds (WWF) en de Intermediate Technology Development Group (ITDG). Ook de meer recente pogingen om een Locale Agenda 21 (LA 21) te ontwikkelen vallen hieronder. Een algemene conclusie van onze studie is dat zulke interventies niet slagen zonder de mobilisering van lokale middelen en de participatie van de bewoners. Een probleem daarbij is de diversiteit aan gemeenschappen in Nakuru waardoor het moeilijk is representatieve groepen samen te stellen.

Bij ons onderzoek lag de nadruk op de rol die verschillende actoren zouden kunnen spelen als ze met andere actoren samenwerken om het stedelijk leefmilieu te verbeteren. Gegeven de tekortkomingen van de lokale overheid en de daaraan gekoppeld gemeentelijke instellingen was het logisch dat er met de inbreng van andere partijen geëxperimenteerd. Deze nieuwe initiatieven ondervinden echter ernstige belemmeringen, Bovendien blijven diverse mogelijkheden onderbenut. Hieronder vatten we de belangrijkste bevindingen samen aan de hand van de onderzoeksvragen.

1. **Welke actoren zijn betrokken bij het stedelijk milieubeheer in Nakuru, welke problemen pakken ze aan en in welk institutioneel kader opereren ze?**

We hebben het proces van stedelijk milieubeheer in de praktijk geanalyseerd, met nadruk op de betrokken actoren en de rol die ze spelen. De Gemeenteraad van Nakuru (MCN) is de belangrijkste besluitvormende organisatie, hoewel ook andere niet-gemeentelijke organisaties invloed hebben op de beslissingen van het MCN. We hebben gezien dat er altijd conflicten zijn geweest tussen de raadsleden (politici) en de hoge ambtenaren (professionals) binnen de gemeente en dat deze de effectiviteit van het MCN in het leveren van basisdiensten negatief beïnvloeden. De politici hebben een kortetermijnvisie op de stad, terwijl de hogere ambtenaren een langetermijnvisie hebben, die gerelateerd is aan hun verantwoordelijkheid voor
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de beleidsbewaking. De bewoners hebben alleen via hun vertegenwoordigers zeggenschap in de besluitvorming, maar niet rechtstreeks. De MCN is zich echter bewust van het belang van dit aspect en doet pogingen om de visie van de bewoners bij de besluitvorming te betrekken. Dat doet ze door toe te staan dat vertegenwoordigers van basisorganisaties (community-based organisations of CBO’s) participeren in sommige beraadslagingen. De besluitvormende organen als commissies en de betreffende departementen betrekken de bewoners echter niet rechtstreeks bij de besluitvorming. De verlening van stedelijke basisvoorzieningen in Nakuru is zodanig dat de lage inkomenswijken onvoldoende worden bediend. De middenklassenwijken beschikken over sommige van de voorzieningen maar alleen de rijke buurten zijn voorzien van alle basisvoorzieningen. We vonden een relatie tussen het niveau van dienstverlening, gemeenschapsactie en participatie van de private sector.

Huishoudens uit lage inkomensgroepen zoeken verschillende oplossingen voor de inadequate dienstverlening. Onze beginhypothese was dat de meeste huishoudens in de lage inkomensgebieden deelnemen in gemeenschapsactiviteiten om de dienstverlening te verbeteren. Huishoudens reageren verschillend op milieu-problemen en dat wordt door verschillende factoren bepaald. Of een huishouden deel uitmaakt of lid is van een gemeenschapsgroep of organisatie is een van die factoren. We zagen dat deelname aan of lidmaatschap van een gemeenschapsgroep werd bepaald door zaken als woonduur, eigendomsvorm en de ideeën die men had over gemeenschapsorganisaties. De CBO’s in de lage inkomenswijken blijken niet representatief te zijn voor de bewonersgroep als geheel, omdat ze gedomineerd worden door huisbezitters. De meeste huurders maken geen deel uit van gemeenschapsgroepen die zijn betrokken bij verbetering van het leefmilieu bijvoorbeeld door schoonmaakacties. Opvallend was dat de bestudeerde gemeenschapsgroepen meer betrokken zijn bij afvalbeheer dan bij watervoorziening of sanitatie. De gemeenschapsgroepen staan voor verschillende problemen die hun functioneren belemmeren, zoals de geringe participatie van de huishoudens, problemen met beheer en leiderschap, politieke inmenging, een zwakke financiële basis en te grote afhankelijkheid van buitenstaanders.

WWF heeft de milieubeheerinitiatieven van het MCN zeer actief ondersteund. De NGO heeft ook met andere actoren in het stroomgebied van het Nakurumeer gewerkt. Het organiseerde workshops voor NGO’s en barazas (publieke bijeenkomsten) voor bewoners om hun milieubewustzijn te verhogen. WWF heeft ook nauw samengewerkt met het MCN, de Kenya Wildlife Service (KWS) en industriële ondernemers op terreinen die variëren van planning tot afvalvermindering. Een andere NGO die is betrokken bij initiatieven op het terrein van milieubeheer in Nakuru is de Intermediate Technology Development Group.
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(ITDG). Deze organisatie heeft bewoners in lage inkomensbuurten ondersteund bij het op peil brengen van het woningbestand door gebruik te maken van zogeheten ‘stabilised soil blocks’. De nieuwe woningen beschikken over passende voorzieningen die bijdragen aan een verbeterde leefomgeving. ITDG nam ook deel aan de recente planningsinitiatieven in de stad.

De private sector in Nakuru is bij diverse activiteiten op het terrein van milieubeheer betrokken, zoals in de watervoorziening en het afvalbeheer. In verband met watervoorziening is de *Kenya Association of Manufacturers* betrokken bij het herstel en onderhoud van sommige putten in de gemeente. De informele sector is zeer actief op het gebied van afvalbeheer en is actief betrokken bij het verzamelen, hergebruik en recycling van afval. De meeste huishoudens in de lage inkomensbuurten waar we onderzoek deden gaven te kennen dat informele vuilverzamelaars een deel van de vuilnis ophaalden. Vuil verzamelen is heel gebruikelijk in de straten en op de dumpplaats, waar meer dan 200 vuilverzamelaars van het afval leven door alles wat nog bruikbaar is te verkopen. De rol die de informele sector speelt in het stedelijk milieubeheer en vooral in het afvalbeheer wordt niet officieel door de gemeentelijke overheid erkend. Onze conclusie is dat, hoewel het niet gemakkelijk is om de hoeveelheid afval te schatten die door individuele vuilophalers wordt verwerkt, ze wel belangrijke deelnemers zijn aan het hele proces. We zagen dat er veel interventies waren door externe donoren, maar dat hun financiële steun meestal korte duur was. De meeste partnerschappen, vooral die in het kader van het lokale Agenda 21 proces, zijn financieel ondersteund door externe donors. Dit heeft gevolgen voor de duurzaamheid van deze initiatieven.

2. Wat voor soort partnerschapregelingen hebben zich ontwikkeld in het stedelijk milieubeheer en wat zijn daarvan de belangrijkste kenmerken en uitkomsten?

In Hoofdstuk 6 hebben we de verschillende partnerschapregelingen geanalyseerd die we in Nakuru tegenkwamen, hoewel sommige daarvan geen vaste structuur hadden. Een van de geïdentificeerde partnerschappen was het publieke sectorpartnerschap, dat bestond uit actoren uit de publieke sector die op hetzelfde administratieve niveau opereren. Een goed voorbeeld was het beheer van het *Water Quality Testing Laboratory* (WQTL). Publiek-private partnerschapregelingen hebben we gezien bij het *Pollution Release Transfer Registers* (PRTR) initiatief en

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123 Goedkoop maar duurzaam bouwmateriaal in de vorm van gecomprimeerde blokken gemaakt van een mengsel van lokale grond, een beetje cement en water.
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de inmiddels opgeheven Nakuru Quality Water and Sewerage Services (NAQWASS). We hebben de publiek-private partnerschappregeling bestudeerd en gezien dat het verschilt van gewone commerciële relaties omdat ze te maken hebben met een publiek goed en de private dienstverleners nauwe banden met hun cliënten onderhouden. Partnerschappen van publiek sector/NGO’s/gemeenschappen hebben we in Nakuru aangetroffen in de watervoorziening en de afvalsector. We hebben gezien dat de CBOs zwakke partners waren in de regelingen omdat ze over minder middelen beschikten. Deze organisaties zijn echter goede instrumenten voor het mobiliseren van de bevolking.

We hebben verschillende uitkomsten van het partnerschapproces gesignaleerd. Op de eerste plaats leiden partnerschappen tot een meerwaarde (een multiplier effect). Gemeenschapsorganisaties die bijvoorbeeld met NGO’s en anderen werken aan water of afvalbeheer kunnen ook hun aandacht richten op inkomensverwerving, huisvesting, alfabetisering en gezondheidskwesties. Ten tweede kunnen partnerschappen zich ontwikkelen tot langdurige relaties. We hebben gezien dat er de nodige uitdagingen liggen bij het onderhouden van het partnerschap als de aanvankelijke doelstellingen zijn bereikt, maar de lange termijndoelen nog gerealiseerd moeten worden. Het vertrouwen kan verloren gaan en groepen kunnen zich uit het partnerschap terugtrekken. Ten derde kunnen partnerschappen ertoe leiden dat individuele sectoren en organisaties eerder hun verantwoordelijkheid nemen. Partnerschappen hebben het potentieel om tot nieuwe vormen van democratie te leiden waarbij de besluitvorming wordt gedeeld door verschillende actoren.

Een concreet en definitief oordeel over de mate waarin deze partnerschappen tot verbetering van het stedelijk milieubeheerproces leiden zou in dit stadium voorbarig zijn. De meeste partnerschappregelingen die een breed spectrum van problemen willen aanpakken staan voor de moeilijkheid om tot een gedeelde visie te komen over de te volgen weg in wat normaal een langdurig proces is. Tegelijkertijd streven ze naar resultaten op korte termijn om de gang erin te houden en de interesse van de deelnemers aan het partnerschap vast te houden. Het MCN zou moeten onderkennen dat partnerschapregelingen niet haar verantwoordelijkheid wegneemt voor het leveren van kwalitatief goede diensten. Het MCN moet institutioneel en financieel voorbereid zijn op het feit dat ze niet langer de enige leveranciers van publieke diensten zijn. Het moet voortdurend de verschillende interventies van verschillende actoren monitoren met het oog op verbetering van het stedelijk milieu. Hoewel de rol van verschillende actoren niet onderschat moet worden, is die van de MCN nog overheersend. In dit opzicht is er behoefte aan capaciteitsvorming binnen dit instituut in termen van training, uitrusting en management, zodat het MCN de pogingen van de verschillende actoren blijvend kan ondersteunen, ook nadat de gemeenschappelijke activiteiten zijn beëindigd.
Het MCN moet een bemiddelende rol blijven spelen tussen publieke en private belangen en de conflicten minimaliseren die in het partner- en participatieproces aan de oppervlakte kunnen komen.

3. Wat houdt het LA 21 proces in Nakuru in, in welke mate maakt het gebruik van de partnerschappenadering en wat zijn de specifieke uitkomsten?


Hoewel er pogingen zijn ondernomen om partnerschappen tussen verschillende actoren in de gemeente te vormen, hingen deze als los zand aan elkaar en waren ze zwak. Dit doet de vraag rijzen naar hoe deze partnerschappen in stand kunnen worden gehouden. Een kritiek punt bij het verduurzamen en effectiever maken van partnerschappen betreft de mate waarin zij worden gesteund door institutionele hervorming en beschikbaarheid van lokale hulpbronnen. De uitvoering van het strategische structuurplan vereist dat specifieke middelen (zowel mensen als geld) worden benut en toegewezen. In Nakuru is dat niet het geval. Andere kritieke punten betreffen het ontbreken van adequate wettelijke kaders en van politieke wil om iets van de nieuwe samenwerkingsverbanden te maken.

Het LA 21 is in Nakuru meer omarmd als een programma en proces dan als een project. Dat geeft het proces een tweem van continuïteit omdat sommige acties
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stapsgewijs worden ingevoerd. Het veroorzaakt echter ook veel apathie bij mensen die directe voordelen verwachten. Het programma bleef meer nadruk leggen op de participatie van gevestigde belangen in plaats van participatie van de bewoners. Het begrip 'belanghebbenden' (stakeholders) dekt degenen die een belang hebben in de stedelijke ontwikkeling. Dit omvat vertegenwoordigers van gemeenschapsgroepen, NGO’s, de private sector, training- en onderzoeksinstituties, overheidsinstanties en lokale, regionale en nationale autoriteiten.

Het programma legt nadruk op het creëren van partnerschappen tussen deze belanghebbenden om gezamenlijke activiteiten te ondernemen. Het initiëren van een partnerschap vereist echter een bestaansreden, een gevoelde behoefte, een actiekader en een set operationele instrumenten om de doelstellingen te realiseren. Slechts dan kan een partnerschap operationeel en effectief worden. Men zou niet alleen de nadruk moeten leggen op partnerschapsvorming als een middel om een grotere efficiëntie van de individuele partners te bereiken. Er moet ook aandacht zijn voor het vermogen van de partners om samenwerking, conflict en coördinatie te ‘managen’ voor productieve doeleinden.

4. Wat zijn de uitkomsten van elk van de waargenomen partnerschappen in Nakuru?

We hebben een ambitieuze poging ondernomen om te onderzoeken welke de uitkomsten zijn van elk van de onderzochte partnerschappen. Deze inschatting is niet allesomvattend omdat het nog te vroeg is voor een definitief oordeel. We constateerden dat, hoewel het partnerschapconcept internationaal naar voren is geschoven als een weg naar duurzame ontwikkeling, er geen criteria zijn om de werking ervan te evalueren. Op basis van literatuuronderzoek en de veldwerkgegevens, hebben we een eenvoudig schema ontwikkeld om zo’n evaluatie uit te voeren. Gezien het feit dat er onvoldoende informatie is voor een adequate beoordeling, bevelen we aan om dit verder te ontwikkelen en te onderzoeken. Onze conclusie is de diverse partnerschapregelingen die in Nakuru zijn ontstaan tot wisselende resultaten hebben geleid. Sommige partnerschappen hebben geleid tot concrete activiteiten en resultaten, terwijl bij andere, vooral die welke gericht waren op het ontwikkelen van actieplannen, de uitvoering van prioritaire acties nog in de kinderschoenen staat.

De beschikbaarheid van financiële middelen en de aanwezigheid van politieke wil zijn belangrijke factoren die van invloed zijn op de succesvolle uitvoering van partnerschapinitiatieven. Geen van de bestudeerde partnerschappen had duidelijke budgettaire voorzieningen voor de activiteiten die werden ondernomen. De partners beheerden hun eigen budgetten. Onze mening is dat elke partnerschapregeling passende financiële middelen vereist en maatregelen voor de toewijzing van die
middelen aan specifieke activiteiten. Partners moeten het met elkaar eens zijn. In Nakuru’s voorstellen voor de Lokale Agenda 21 zijn slechts toezeggingen gedaan door de partners, maar vervolgens bleef het opvallend stil. Sommige partners hebben de toezeggingen niet waargemaakt en dat beïnvloedt de uitvoering van het strategisch structuurplan, een van de producten van de LA 21 partnerschapinitiatieven. Ook politieke wil is zeer cruciaal voor de invoering van partnerschapsactiviteiten. Onze bevindingen gaven aan dat het NAQWASS partnerschap initiatief in de watervoorziening mislukte omdat het de lokale politici en centrale regering ontbrak aan politieke wil. We concluderen dat er behoefte is aan capaciteitsoptemaak bij alle partnerinstituties zodat ze in staat worden gesteld om effectief te participeren in de partnerschapinitiatieven. Er is behoefte aan het ontwikkelen van nieuwe vaardigheden en bekwaamheden voor alle actoren die hen in staat moeten stellen de taken uit te voeren die de partnerschappen vereisen. Wat het LA 21 initiatief betreft, is er behoefte aan richtlijnen en het toewijzen van middelen door de nationale overheid voor de voorgestelde acties. De uitvoering van het strategisch structuurplan blijft een gigantische taak die vraagt om nationaal commitment.
This book is on urban environmental management in Nakuru municipality, the capital of the Rift-Valley Province in Kenya. It deals with a number of crucial issues in the current academic and policy debate on participation and partnerships in the transition to urban sustainable development in the South. It is unique because it:

- identifies and investigates a wide range of partnership arrangements across the public-private divide;
- provides a systematic analysis of the nature of these collaborative arrangements, their aims and outcomes, and the problems they face;
- pays special attention to dynamics of the Local Agenda 21 process in Nakuru;
- offers a wealth of new information on water supply, solid waste management and sanitation in the city.

The book is for practising professionals and academics working in urban planning and development: international project staff, trainers, urban development researchers and teaching staff in universities and polytechnics.