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

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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\(^7\), 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

\(^7\) 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.74 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).
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-

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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.
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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, Kvaronda (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
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>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>
</tbody>
</table>

ARRANGEMENTS

<table>
<thead>
<tr>
<th>Actors involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>KWS, MCN, MENR, Egerton University, MOLG.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nature of relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal relations guided by memoranda of understanding.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decision-making structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a management committee constituted from all the above actors that is mandated to make decisions; a manager heads WQTL.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inputs by different actors</th>
</tr>
</thead>
<tbody>
<tr>
<td>KWS donated land and provides security, the MCN seconds staff to the WQTL, and Egerton University provides technical expertise.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<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>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monitoring and evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<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>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<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.

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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 undertakingship 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>MCN</th>
<th>NGOs</th>
<th>Community-based organisations</th>
<th>Private sector</th>
<th>Universities</th>
<th>External/donor agencies</th>
<th>Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central government agencies/ministries</td>
<td>Ministries</td>
<td>KWS</td>
<td>MCN</td>
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<td>Community-based organisations</td>
<td>Private sector</td>
<td>Universities</td>
<td>External/donor agencies</td>
<td>Households</td>
</tr>
<tr>
<td>MCN</td>
<td>WWF</td>
<td>ITDG</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>NGOs</td>
<td>WWF</td>
<td>ITDG</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community-based organisations</td>
<td>Lakeview</td>
<td>Naroka</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Naroka</td>
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<td></td>
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<tr>
<td></td>
<td>Mwariki</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>Kwaroda</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector</td>
<td>Formal</td>
<td>Informal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Universities</td>
<td>EU</td>
<td>UON</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External/donor agencies</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
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<td></td>
</tr>
</tbody>
</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*
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 pre-conditions.

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.
### 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><strong>MANDATE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aims</strong></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><strong>Range of activities</strong></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><strong>Scale of intervention</strong></td>
<td>Entire lake Nakuru catchment area (spatial dimension)</td>
<td>The entire municipality and the peri-urban areas</td>
</tr>
<tr>
<td><strong>ARRANGEMENTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Actors involved</strong></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><strong>Nature of relationships</strong></td>
<td>Formal relations governed by letters of commitment</td>
<td>Formal relations governed by Articles of Association</td>
</tr>
<tr>
<td><strong>Decision-making structure</strong></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><strong>Inputs of different actors</strong></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><strong>Financial arrangements</strong></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><strong>Monitoring and evaluation</strong></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><strong>Discussion/comments</strong></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)\(^80\), 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.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.

**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.

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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.82 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.83 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. 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, 23October 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
Emerging Partnership Arrangements in Urban Environmental Management

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.\textsuperscript{86} 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 \textit{The Pollutant Release and Transfer Register (PRTR) initiative}

A public/private partnership exists between the Lake Nakuru Conservation and Development Project (LNCDP)\textsuperscript{87} 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\textsuperscript{88} initiated dialogue with Nakuru based indus-

\textsuperscript{86} MCN had accumulated huge amounts of unpaid electricity bills.

\textsuperscript{87} It was initiated in 1988 and operates in the catchment basin of Lake Nakuru. The project is based on the premise that conservation of the natural resource base is an essential prerequisite for meaningful and sustainable development.

\textsuperscript{88} In this initiative, DOHSS, WWF and MCN acted as the champions popularising the PRTR to industries and other actors.
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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.  

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 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.

89 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.

90 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)
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.
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>
<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</td>
</tr>
<tr>
<td></td>
<td>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
Emerging Partnership Arrangements in Urban Environmental Management

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
emerging 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>
</tr>
</thead>
<tbody>
<tr>
<td>MANDATE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Aims                         | To improve the environmental manage- | To collect and sell recyclable and reus-
|                              | ment practices through refuse collection; able materials collected at the house- | able materials collected at the house-
|                              | to create employment opportunities and holds, streets and at the dumping site | to create employment opportunities and holds, streets and at the dumping site
|                              | earn a living through self-employment.. | earn a living through self-employment.. |
| Range of activities          | Storage, collection, transportation and House to house picking of valuable | Storage, collection, transportation and House to house picking of valuable
|                              | disposal of household and institutional wastes, picking from garbage bins along | disposal of household and institutional wastes, picking from garbage bins along
|                              | wastes at the designated area streets, picking at the dumpsite, sell the | wastes at the designated area streets, picking at the dumpsite, sell the
|                              | collected materials to intermediaries who later sell them to industries | collected materials to intermediaries who later sell them to industries
| Scale of intervention (spatial dimension) | Level of intervention is at the household | The level of intervention is the whole
|                              | and institutional levels | town
| ARRANGEMENTS                 |                                     |                                     |
| Actors involved              | Households, institutions and the private | Some households, Waste pickers, inter-
|                              | and the private | mediamy buyers, and recycling and process-
|                              | and the private |ing industries
|                              | companies. | |
| Nature of relationships      | Relationships formalised through contrac- | Relationships are informal based on trust
|                              | tual agreements between companies and and mutual benefit | the clients
|                              | the clients | |
| Decision-making structure   | In all companies, the Board of Directors formulated all policy and implementation | Waste pickers sell their wastes to interme-
|                              | decisions | diary buyers who later on sell the col-
| Division tasks               |                                     |lected materials to recycling and processing
|                              |                                     | industries
| Inputs of different actors   | Households and institutions enter into write- | Waste pickers collect recyclables that
|                              | ten contracts with private companies; they sell to middlemen who further sell | ten contracts with private companies; they sell to middlemen who further sell
|                              | private companies offer garbage collection the materials to processors | private companies offer garbage collection the materials to processors
|                              | services as stipulated in the contracts | services as stipulated in the contracts
| Financial arrangements       | Households and institutions pay a pre- | Households and institutions pay a pre-
|                              | determined fee to the private companies; depending on the amount delivered per | determined fee to the private companies; depending on the amount delivered per
|                              | private companies pays for the annual kilo of collected materials and this is | private companies pays for the annual kilo of collected materials and this is
|                              | operating and dumping fee to the MCN. done as previously agreed by both par-
|                              | ticipants. The middlemen get paid for the materials delivered to the processors | participants. The middlemen get paid for the materials delivered to the processors
| Monitoring and evaluation    | Individual companies did monitoring by Monitoring and evaluation absent in this | Individual companies did monitoring by Monitoring and evaluation absent in this
|                              | keeping all the crucial records on opera-
|                              | kind of arrangement | kind of arrangement
|                              | tions, areas of intervention and the number of clients. Evaluation mechanisms | tions, areas of intervention and the number of clients. Evaluation mechanisms
|                              | were not evident. | were not evident.
| Discussion/                | The private companies are able to meet The recycling activities generate incomes | The private companies are able to meet The recycling activities generate incomes
| comments                      | their operational costs and the institutions for those that are involved. However, | their operational costs and the institutions for those that are involved. However,
|                              | and households receiving the private gar-there is exploitation of the waste pickers | and households receiving the private gar-there is exploitation of the waste pickers
|                              | bage collection services indicated their by the middlemen and this affects the | bage collection services indicated their by the middlemen and this affects the
|                              | willingness to pay for the services. There financial viability of the private-private | willingness to pay for the services. There financial viability of the private-private
|                              | is lack of official support and recognition arrangement. Lack of official recognition | is lack of official support and recognition arrangement. Lack of official recognition
|                              | by the MCN and this affects legitimacy of affects the legitimacy of this arrangement. | by the MCN and this affects legitimacy of affects the legitimacy of this arrangement.
|                              | the private-private arrangements. The ar-The arrangement excludes actors from the | the private-private arrangements. The ar-The arrangement excludes actors from the
|                              | rangements exclude poor households that middle and high-income neighbourhoods. | rangements exclude poor households that middle and high-income neighbourhoods.
|                              | cannot afford to pay for the services | cannot afford to pay for 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-
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. 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-

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95 See footnote 85 on exchange rates
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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\(^{96}\) 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-

\(^{96}\) Most of the figures given are not reliable as there is poor record keeping of such data.
portant 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>
</thead>
<tbody>
<tr>
<td><strong>MANDATE</strong></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 (spatial dimension)</td>
<td>Intervention is at the household level.</td>
</tr>
<tr>
<td><strong>ARRANGEMENTS</strong></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.
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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 hawker’s 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.
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.99 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.

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99 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.
Figure 6.3 Relationships between waste picking activities, recycling and solid waste management process

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).¹⁰³

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 kiosks¹⁰⁴ 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

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).
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 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

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 residents\(^\text{106}\) 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><strong>Mandate</strong></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><strong>Arrangements</strong></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 Lake-view Usafi Self-help group, the MCN, MoLG, World Bank and residents of lake-view estate</td>
<td>The MCN, NAROKA, LA 21 coordinator, ICLEI through IGP</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>The nature of relationship is formal and also informal (a memorandum of understanding between partners exists)</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>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>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>There is a management committee that oversees the daily functioning of the water kiosks</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>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>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>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>
<tr>
<td>Discussion/comments</td>
<td>Financial support from WWF and 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
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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-
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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.
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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
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.
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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, sensitisise 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 makes 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
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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.