Settlement patterns and rural development: a human geographical study of the Kaonde, Kasempa District, Zambia
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It is the purpose of this chapter to summarise the spatial change which has occurred in the district over the last century. It can be observed that:

a) an increasing spatial and economic differentiation is evident in the region
b) an incomplete and inefficient pattern of central places has arisen
c) a tendency toward a fragmented and individually held pattern of land occupation is discernible.

In the following sections these changes will be discussed with the help of some geographical analyses. In the last section it will be argued that a regional plan for the entire district has to take these tendencies into account and should proceed from a differentiated planning policy.

7.1. THE DISTRICT AS A REGIONAL SYSTEM

In his locational analysis, Haggett (1965,18) distinguishes five stages in a regional system (cf.fig.7.1):

a) Movements - circulation in an area
b) Networks - communication routes
c) Nodes - centres within the network
d) Hierarchies - differentiation of nodes
e) Surfaces - areas of different densities (development areas)
A regional system can be studied in this manner for one moment in time (synchronously), as well as in consecutive stages which have taken place in a region through time (diachronically). Soja gives an example of the latter in his study 'The political organisation of space' and in his research on modernization and spatial change in Kenya (Soja 1971, 1967). In summarising previous chapters, I will assess the spatial change which has occurred in Kasempa District over the last 100 years on the basis of the above mentioned stages 1).

a) **Movements**: Kaonde clan migrations in the 19th century (cf. fig. 7.2A). As discussed in chapter 2, especially in the 19th century, a large number of small Kaonde clan-sections migrated into the area. These groups, led by headmen, wandered through a very sparsely populated region, whose inhabitants were either absorbed or forced to move elsewhere. The spatial situation was characterised by frequent movements for social and political reasons as well as in connection with the mode of subsistence (hunting, shifting cultivation). Clan-sections split off regularly and newly formed groups went their own way.
The vastness of the region allowed such a pattern. Movements appear, at first sight, to have been at random over the terrain. Actually, the direction of these relocations was substantially determined by environmental conditions - such as hunting and fishing areas, copper and salt winning locations - as well as by socio-political factors (clan-affiliations, political power of neighbouring groups).

At the end of the 19th century Chief Kasempa increased his political power by subjugating surrounding clan-sections. He began to create his own kingdom by situating regional headmen at regular distances from his village (cf. fig.7.3A). The political power function of his headquarters near Kamusongolwa Hill was further strengthened when a small army from the south was defeated there (the legendary war against the Lozi attempt to dominate the Kaonde) which resulted in the hill's getting a mythical quality retained to the present. Kasempa's fame became established and he proceeded to further expand his kingdom, operating from one location. This development toward state formation was disrupted by the arrival of colonial rule at the start of 1900.

b) Network: system of roads (cf. fig.7.2B) Kasempa was chosen as the central administration point by the colonial authorities. The connections from the already colonised south ran to Kasempa, and from there further into the North-Western Province. Favourable location circumstances were: the politically central place of Kasempa; Chief Kasempa's cooperation with the new rulers; a site free from tsetse fly; good arable red clay soils; a good water supply from a perennial river (Lufupa); and, moreover, a pleasant site with a nice view. The newly formed district was divided into territories headed by a number of chiefs. Population movements between these chiefs areas were discouraged but within the territories, village clusters continued to relocate for social and environmental reasons. A road pattern emerged which was directed toward communication with the outside world and the increasing importance of the circulation of labourers between rural and urban areas. Main routes were projected along the crests to avoid river crossings and dambos as much as possible. For administrative reasons, secondary roads were made in a few cases to a chief's location.
Fig. 7.2

A) MOVEMENTS 1800-1900

B) ROADS 1930

C) NODES 1940-1950

D) HIERARCHY AND DEV. SURFACES 1978

- DISTRICT CENTRE 2-10 SERVICES
- CENTRE 6-10 SERVICES
- CENTRE 2-5 SERVICES
c) Nodes: chiefs centres and service centres (fig.7.2C). With the introduction of the 'Indirect Rule' system (1930-1940), the concentration of certain administrative activities (local courts, tax collection) took place in the villages of a number of chiefs. A system of small centres developed with Kasempa as the focus. Nodes also developed at junctions or where roads cross rivers. These were often the places where restcamps for the passing migrant-workers were set up and where small stores were situated. The population was urged to settle as much as possible along the roads. In a number of cases, population groups were forced out of heavily infested tsetse fly areas, or from areas which became national parks and shifted to new centres along the road network. Since ca. 1950, services such as clinics and mission schools were established in a number of centres. The number of inhabitants in these centres was small (50-100 people), but a somewhat larger population settled around them. A system of nodes became apparent.

d) Hierarchy: a system of service centres (fig.7.2D) Kasempa developed into a centre with various administrative services, a number of stores, and a large mission station with hospital. In the case of Kasempa-Boma, these facilities were all found within a small radius, and one can speak of a definite district centre. The centre function increased particularly after independence and Kasempa became a full-fledged secondary centre (Gruber 1975,59) (Cf.Appendix IX). Since 1964, a large number of services have also become available to the dispersed population all over the district. If population density in any way allowed it, schools have been opened and rural health centres established. The National Marketing Board (Namboard) opened centres for the buying of maize, and agricultural assistants were placed in diverse localities. In this way a large number of service centres of various size came into existence.

e) Development surfaces: (fig.7.2D) In a number of regions, there is a perceptible clustering of services - namely, around Kasempa and Kizela. Here areas of concentrated economic activities have developed because of the growing number of farmers who bring part of their produce to the market, and because
in these areas a number of small centres lie within moderate distance of each other (ca. 10 km.). Population migration to these areas is gradually taking place and this is especially observable within a 20 km. radius area of the secondary centre Kasempa (Gruber 1975,116). Apparently, a number of 'development surfaces' have arisen in the district (cf.fig.7.2D).

In conclusion, the spatial organisation of the district has changed from a fluid, non-permanent settlement pattern to one of relative permanency. The stages as described in Haggett's locational analysis are perceptible in this process, whereby the development of a road network and centres along these roads has been of decisive influence. A hierarchy became distinguishable especially where, for administrative reasons, a larger centre was established. Later economic development around such centres is particularly dependent on the presence of good agricultural land suitable for cash-crop production, the absence of tsetse fly, communication networks, and market.

In an undifferentiated landscape, a pattern of differentiation has arisen. There is evidence of the development of central areas with a close network of services and peripheral areas with scattered and incomplete service network.

7.2. CENTRAL PLACE LOCATION AND SERVICE AVAILABILITY

At first glance it appears that the various service centres of the district are located arbitrarily. Further analysis through application of Christaller's central place theory shows that a certain structure can be discerned. Best known is Christaller's marketing and supply principle whereby, in a given landscape, a permanent hierarchical pattern of higher and lower order centres, located at regular distances, has developed to supply the population, in the most effective manner possible, with services and the opportunity to purchase goods. Analysis of this kind of marketing pattern is impossible for large parts of Central Africa, as in the pre-colonial period no market centres had formed. Even a system of weekly or circulating markets was unknown. This is explained by the very limited population density, absence of an agricultural surplus, difficult connections, and by large areas being infested with tsetse (Rotberg 1962,581, Roberts 1970,717). In the colonial period as well,
Fig. 7.3

A) TRADITIONAL HIERARCHY 1900

B) ADMINISTRATIVE HIERARCHY 1950

C) NODES ALONG TRANSPORT SYSTEM 1978

D) SECONDARY CENTRE KASEMPA SURROUNDED BY SMALL CENTRES
rural market centres did not develop. The colonial economy directed development toward an external market system and did not encourage growth of an internal market system. As far as participation in the money economy was concerned, exchange took place primarily within the cities where money was earned and goods purchased to take back to the country.

In addition to the principle of nodes based on the marketing function, Christaller has worked out other principles: the political-social (administrative) principle and the transport principle \(^4\) (cf. fig. 7.4). These principles appear especially applicable in explaining location of centres in Kasempa District. In the following I will briefly review these principles especially from the point of view of their spatial pattern \(^5\).

Fig. 7.4 The system of central places (Berry 1961, 17)

**Marketing principle**

**Administrative principle**

**Transport principle**

a) The administrative principle

Christaller's political-social principle is based on the manner by which administration of an area can be the most efficiently carried out. This principle occurs or is dominant where non-
economic, socio-political determinants are stronger than the rational economic determinants (Christaller 1966,192). The model distinguishes a higher order node encircled by six lower order nodes. Interestingly, the political division of the district had already to a certain extent developed such a structure in the pre-colonial period. As described above, at the end of the 19th century, Chief Kasempa established himself near Kamusongolwa Hill (now Kasempa Boma) and appointed regional headmen. The location of these headmen was focused on Kasempa, within a radius of about 30-50 km. (cf. fig.7.3A). Development of this administrative system halted with the coming of colonial rule. A new pattern emerged whereby Kasempa, with a magistrate court and superior native authority, became the middle point of colonial administration. Native authorities and local courts were established in the villages of chiefs of various clan-sections. In this case as well, a pattern of smaller centres encircling a centre of higher order at regular distances (70-90 km.) is evident (cf.fig.7.3B).

b) The transport principle
The transport principle assumes that the distribution of central places is at an optimum when central places lie on one traffic route between larger towns, a situation which comes into existence, if at the time of the consolidation of the net of central places, traffic played an outstanding role in the economic and social life (Christaller 1966,192). A linear arrangement of nodes along a road is the main feature of this principle. In an ideal arrangement, alternating large and small centres are located equidistantly from each other along a road that leads to a larger urban centre. In addition, two nodes are located some distance away from this main route (fig.7.4).

To a certain extent, this principle became discernible in the district. When labour circulation to the Copperbelt increased, the northern communication channels in the district became important, and even more so because these were also the main connections for the more distant Kabompo and Zambezi districts. Labourers and their relatives found means of transport to the city along these roads. Nodes emerged at road
junctions, where bus-stops were located and a small store or tearoom was established. These stores were dependent on merchants from the city for provisioning, not on other centres in the district or province. Gradually, villages began to locate in the vicinity of these nodes along the road. A small agricultural surplus would also be sold along the road to passers-by and city merchants. Just as all over in Zambia, a ribbon settlement pattern and linear location of nodes became evident (Williams 1973).

After independence, this tendency appears to have continued. A clear example is the construction of a new main route leading to the mining town of Kalulushi. Along this road, completed in 1970 and forming a shorter connecting route from the district to the Copperbelt, a number of village groups have located and a pattern of linear centres has developed within only a few years time.

Along the main routes of the district nodes of alternating size are located at relatively regular intervals of about 20 km. (cf.fig.7.3C). Because sufficient land is available along these roads, formation of nodes at a distance from the main route has not yet taken place.

c) The marketing principle
Although as mentioned above in former days marketing did not apply as a principle for the location of nodes, this situation has been changing since independence. The growth of the secondary centre Kasempa, having many governmental departments, a secondary school, and a large hospital, meant the growth of market demand. Presence of services in this centre (i.e. agricultural extension services, credit and marketing facilities) is a factor inducing permanent location by a growing group of farmers with a market-oriented production.

A pattern of a centre of higher order (Kasempa) surrounded by a number of smaller centres is beginning to be distinguishable around Kasempa. Supply of those services needed for daily life occurs in a number of smaller centres and those services less often needed can be found offered in the nearby located higher order centre (Kasempa). Although the structure of the hexagonal marketing principle is not exactly present and in reality never exists, some of the characteristics of the marketing principle become visible in the centre of the district (cf.fig.7.3D).
It can be ascertained that a mixture of various location principles have been at work in the district. Influential have been: a) the colonial administrative apparatus; b) an economy directed at communication with, and direct supply from town; c) recent growth of a market agricultural production.

Christaller's locational principles offer the possibility to gain some insight in the genesis of the existing spatial pattern of nodes, but today's very dispersed service centre pattern is not yet fully explained.

Since Independence the Zambian government applied itself to the provision of basic services for the dispersed population in an admirable tempo. Whereas in 1964 there were 14 primary schools and 5 clinics, in 1978 there were 38 schools and 11 clinics spread over the region: not a small accomplishment considering that the district today averages 1 school to 1000 inhabitants and 1 clinic to 3600 inhabitants. These services as well as services such as agricultural extension camps, market depots, community development centres were fairly haphazardly located in already existing centres or in newly established centres. Local political considerations and lack of coordination between departments concerned played a major role in this process. Consequently a very dispersed pattern took shape whereby services often were not located together in a node but dispersed at a distance from each other: for example, a school and a shop at one place and an agricultural camp or marketing depot at a location some kilometers away, a situation that is also visible in many other parts of Zambia (Siddle 1970, Human Settlements 1975, 14).

Moreover, as discussed in chapter 4.3., despite government's efforts it is certainly not the case that everyone is within easy reach of services nor is the service efficiency optimal for the government. In addition, a situation has grown whereby in some cases a larger package of services is offered in centres surrounded by a relatively limited number of inhabitants (such as those centres established at the failed resettlement schemes) and, on the other hand, there is a shortage of basic services at those points where the population is growing due to increased economic possibilities, such as at the farmers' settlement schemes.
In the colonial period the centres where a chief was established functioned as primary centres surrounding the Kasempa centre (cf.7.3C). Since Independence, however, with the abolition of the native authority system, these centres lost their primacy and were not always further extended with newly introduced services. In this respect the loose hierarchy in the system of nodes became even less pronounced.

It appears also that there are no fully equipped primary centres in the region 6). The Indicative Development Plan North-Western Province (1974) names the following functions for a primary centre (cf. also Kaunda 1968 and TNDP 1979,84):

- educational facilities (full primary school and adult education)
- medical care (Rural Health Centre)
- agricultural information service
- farming depot (delivery of sowing seed and fertilizers, buying produce (Namboard) )
- community development service
- welfare services (meeting hall, football field)
- store(s)

And to accomplish on the long term:
- post office
- police station
- public transport

Access to these centres should be via Grade II or Grade III gravel roads and with availability of scheduled passenger traffic7). No centre in the district (except the secondary centre Kasempa) has this combination of services. There are a few which approach it, but most centres have only two or three central functions. There is also no hierarchical relation between the centres of different size. Supply of goods and materials, supervision of government services, and payment of government personnel salaries are all separately done directly from the secondary centre Kasempa to the various dispersed centres which means sometimes a distance of above 100 km. In some cases, a relation does exist in regard to one single service, such as a lower primary school in a small centre where a portion of the pupils subsequently attend an upper-primary school in a more distant, somewhat larger centre. However, a functional hierarchical differentiation between the
centres is really absent. There is no sign of an in-between niche where, for instance, a primary centre surrounded by a number of 'additional-primary centres'. One could therefore speak of an 'incomplete situation' and of the development of a nodal pattern lacking systematics and hierarchy. Van Dusseldorp (1971, 23) gives a planning model for rural areas, in which the following hierarchy of centres and their radius of action are distinguished.

<table>
<thead>
<tr>
<th>Centres</th>
<th>Population</th>
<th>Radius of Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional primary centre</td>
<td>&lt; 1500</td>
<td>&lt; 2 km.</td>
</tr>
<tr>
<td>Primary centre</td>
<td>1500-5000</td>
<td>3-6 km.</td>
</tr>
<tr>
<td>Secondary centre</td>
<td>5000-10000</td>
<td>8-20 km.</td>
</tr>
<tr>
<td>Tertiary and other centres</td>
<td>&gt; 10000</td>
<td>&gt; 20 km.</td>
</tr>
</tbody>
</table>

A similar model is not exactly applicable to a sparsely populated district like Kasempa and certainly there is no question of filling the whole region with a system of such nodes. As described distances of the villages to the service centres are usually far above 6 km. and the distance to the secondary centre Kasempa far above 20 km. It does appear, however, to be of importance in fostering rural development and effective delivery of services to strive for a rearrangement of services and building-up a hierarchy. A hierarchy of a number of additional primary centres around well-equipped primary centres, which are in turn connected to the secondary centre - the district centre - might be a guideline here. In the last section such an approach will be discussed in more detail.

7.3. CHANGING MAN-LAND RELATIONSHIP

The previous sections have given a summary of spatial change over the entire district. This section will briefly summarise changes in the area of man-land relationships, especially pertaining to the system of land use. Prothero (1972, 330) notes a large number of components in his article 'Toward a model of population-land relationships' which are
liable to alterations when a population group changes production mode from shifting cultivation to permanent agriculture and market production. These changes usually come about gradually. One can speak of a continuum along which various components slide. Prothero mentions general characteristics such as:

- traditional → modern
- extensive → intensive
- fluid → fixed

This general pattern speaks for itself and aspects of these changes have been discussed in previous chapters as pertaining to the Kaonde population of Kasempa District. Table 7.2 gives further definition of this process of change according to components used by Prothero. Opposites consist of the traditional situation as exemplified in most of the peripheral areas of the district (signified by P; the area around Kanongo centre is used as an example) and the situation seen in the core areas (C; the Nkenyauna area serves as example) where the population, largely permanently established, practises more and more intensive land use. Table 7.3 summarises a number of aspects particularly relevant to changes in settlement pattern.

In the peripheral areas, the population is relatively mobile and relocates its villages regularly over small distances. Incorporation in the national economy is limited. Only a small number of inhabitants produce maize for the market in these areas, and there are considerable production fluctuations (cf. Appendix VIII). In several areas a small maize production exists for some years but is subsequently halted because of irregular service availability, debts with the credit organisation, changes in inhabitant composition, and changes in agricultural extension staff. In these areas a very extensive form of farming is practised.

More permanent location and intensification of land use occurs in a few core areas, such as Nkenyauna area and the farmers' settlement schemes. In the case of the farmers' settlement schemes, we see that farmsteads are still being relocated and rearranged primarily for social reasons and that the form of production is still relatively extensive through exploitation of virgin soils after using a field some
Table 7.2.: Changes in man-land relationships in Kasempa District

Components:

<table>
<thead>
<tr>
<th>Component</th>
<th>p: ca.3% in use</th>
<th>c: ca.10-40% in use</th>
<th>full use of all land being cultivated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>virgin land</td>
<td>increasing and intensification of use</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>low density</td>
<td>ca.10-20 per km²</td>
<td>high density</td>
</tr>
<tr>
<td>p: 1-2 per km²</td>
<td>c: ca.10-20 per km²</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Production mode</th>
<th>p: forest fallow and bush fallow</th>
<th>c: bush fallow and annual cropping</th>
</tr>
</thead>
<tbody>
<tr>
<td>shifting cultivation</td>
<td>rotation with varying periods of fallow</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crops</th>
<th>subsistence cropping decreases</th>
<th>production of cash crops increases</th>
</tr>
</thead>
<tbody>
<tr>
<td>p: cultivation largely of sorghum, some production of maize and cassava</td>
<td>c: cultivation of maize for marketing and own consumption, some sorghum cropping for beer-making</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Land title</th>
<th>community land rights</th>
<th>dispersed land use, no demarcation</th>
</tr>
</thead>
<tbody>
<tr>
<td>p: traditional land tenure</td>
<td>c: increasing number of farmers requesting land demarcation and a title</td>
<td></td>
</tr>
</tbody>
</table>

p = peripheral areas

c = core areas

(Components after Prothero 1972, 332)
**Table 7.3.: Changes in Settlement Pattern and Locational Situation in Kasempa District**

<table>
<thead>
<tr>
<th>SITUATION PERIPHERAL AREAS</th>
<th>SITUATION CORE AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Settlement pattern:</strong></td>
<td><strong>small villages (ca.20 people); villages move regularly and fission; villages grouped together in clusters (10-20 villages); mainly ribbon settlement along road, sites not far from streams, dambo, or well.</strong></td>
</tr>
<tr>
<td><strong>Method of house construction:</strong></td>
<td>mainly mud huts, some sun-dried brick houses.</td>
</tr>
<tr>
<td><strong>Naming settlement area:</strong></td>
<td>name borrowed from traditional name of chief or sub-chief.</td>
</tr>
<tr>
<td><strong>Territorial bonds:</strong></td>
<td>determined by social group (clan-group with regional headman as main representative).</td>
</tr>
<tr>
<td><strong>Kinship relations:</strong></td>
<td>matrilineal, (inheritance through younger brother or nephew).</td>
</tr>
<tr>
<td><strong>Events after death:</strong></td>
<td>deceased's house abandoned (burned), village moves, one searches for another site.</td>
</tr>
</tbody>
</table>
years. This is a practice resulting from sufficient land availability and can be described as being: 'a modern type of shifting cultivation', whereas with modern production methods, such as use of fertilizer and tractor, shifts to virgin soils are still being made. A more intensive form of farming can be observed in the Nkenyauna area. In that area investments have been made in housing, buildings for businesses, as well as on the land: irrigation systems, fish ponds, provisions for livestock. These investments are directed toward increasing and diversifying production.

Intensification takes place especially for economic reasons and for the practical reasons of operating optimally from one point and is not (yet) due to population pressure. Those farms in particular intensified which are situated at favourable points with regard to the communication network, water availability, and with access to various types of soil in the vicinity of their farmsteads. The most obvious example relating to permanent location and permanent land use is the attempt made to register individual land rights. Since 1977 farmers have begun requesting the Department of Agriculture to survey and map their land. The next step is to apply for a title to the land.

The Land (conversion of title) Act of 1975 determined that 'all land in Zambia shall vest absolutely in the President and shall be held by him in perpetuity for and on behalf of the people of Zambia' (Act no.20.4,1975,Kaunda 1975). All free-hold land was thereby converted to a statutory leasehold for a term of 100 years. After that period, renewal is possible and if not renewed, the statutory leaseholder is entitled to compensation for improvements. Moreover, the possibility exists of obtaining a leasehold on a piece of land for a certain period (14 or 30 years), whereby requirements pertaining to the effective use of the land are set. For those areas which were considered tribal-trust land during the colonial period, the new Land Act has not made any essential difference, since this land was already collectively owned and anyone could bring land into use by obtaining permission from the traditional chief 8). As long as it was kept in use, the user had land rights; if not, the land became community property again. But with the new Act, the possibility
has now been created for individuals to receive a formalised claim to land. Registration of land is today requested by farmers for land in use and lying fallow, as well as for adjacent ground suitable for further expansion. Farmers raising livestock, or planning to do so, claim areas of adjacent grassland (dambos). While this development is understandable and necessary from the viewpoint of legal security and the stimulation of investment, it means on the other hand that future expansion possibilities for neighbouring villagers become more limited and better situated pieces of land are the first to be reserved by a small group of inhabitants.

Fig. 7.5 shows a schematic representation of land plots which

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Fig. 7.5 Land demarcation around Kasempa (not to scale)

- demarcated farm plot
- stream
- road

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have been surveyed for individuals till 1979. This does not yet mean that in all cases titles have been given. For this, a declaration of consent is necessary from the Chief of the area, as well as from the Kasempa Rural Council, before official registration can take place.

The demarcated land involved is primarily that of farmers already having an existing enterprise, making effective use of most of the area claimed. But in a number of cases, requests are made for land not yet in use, by individuals sometimes living in urban areas. Requests for up to 100 ha. of demarcated land are not unusual. One would doubt whether these large areas can be put to optimal use within a short time. Moreover, the demarcated areas are spread very haphazardly over the area, which will ultimately result in a scattered and broken system of land use. In the future it will therefore become more difficult to plan roads and service locations, etc. It seems that further spatial planning guidelines will be needed here. Also, checks have to be built in to avoid excessive claims which will not be properly used and which will retard expansion possibilities for others.

It can be concluded that with this development a stage is reached whereby a society which up until recently has been characterised by a limited degree of economic differentiation and which has had an extensive and fluid pattern of land use has now become permanently settled, with increasing economic differentiation and growing individual claims on land.

7.4. REGIONAL PLANNING AND DEVELOPMENT CHOICES

7.4.1. A regional planning approach

There is a clear antithetical situation between the government's philosophy and desire to offer all inhabitants equal opportunities for development, no matter where they live, and the very dispersed location of population and the limited number of areas with favourable resources and infrastructure to foster economic growth.

Government policy swung back and forth in fact between the implementation of services at various locations among the dispersed population and policies to promote population concentra-
tion. In this last field, policy was directed at the re-grouping of villages. In general, these plans failed (cf. Chpt. 4, and Kay 1967). The Third National Development Plan, 1979-1983, states again the desirability of letting the people regroup themselves voluntarily with the assistance by government and local authorities. It argues also for the rationalisation of settlements by regrouping individual households into viable community groups and mentions a village size of 20-50 families (TNDP 1979,82). Instead of village regrouping in this way, it would appear, however, more important to give attention to the fact that villages today fall apart in smaller units as described in Chapter 3 and that there is a spontaneous migration of small family units to certain areas as discussed in Chapters 5 and 6. It would then appear desirable when formulating regional planning not to work with concepts like village regrouping, but first of all to formulate a policy directed toward an effective concentration of investments and services in suitable growth areas and to promote migration and settlement of small family units in these areas.

The Indicative Development Plan North-Western Province (1974,89) describes this as follows: 'Limited investible funds make it impossible to fulfill the social objectives of providing service facilities wherever people live in scattered small groups. The economics of infrastructure agglomeration require concentration of facilities in service centres.'

The TNDP argues for a 'decentralised concentration' of investment resources and a balance between the need for economic efficiency and an equitable distribution of economic and social benefits'. At the district level it is proposed to designate a number of village development centres as nuclei for rural development (TNDP 1979,81) 9).

However, the choice of centres for concentrating facilities is not even primary; first of all it will be necessary to ascertain areas - zones - where there is potential - for economic growth, making the investment of government funds a realistic proposal.

Actually, such considerations and spatial choice determination have been examined in various government plans (Chilczuk, 1979). The actual implementation of these plans
often breaks down because of political objections as the plans would create spatial differentiation and above all because no clear answer is given to the question of what sort of policy should then be followed in those areas which fall outside proposed development zones.

The policy followed up to the present by which all inhabitants, wherever they live in the country, receive certain services and are sometimes offered a certain degree of economic growth possibilities, such as agricultural extension service and tractor availability, creates a climate in which aspirations are raised which seem difficult to maintain in the long run. The policy contributes to a pattern where inhabitants remain settled at locations which offer no long term opportunities in economic growth. This situation is described by the Minister of Local Government and Housing (Human Settlements 1975,14) as follows:

'in areas which were not suitable for development or where villages were scattered, dispersion of public services has only helped to strengthen the pattern.' From this viewpoint, it is important that population concentration and permanent settlement of inhabitants be promoted only where future possibilities are present and service extension can be effectively realised. At the same time a more fluid settlement pattern might be retained in the rest of the district. The point of departure for regional planning in the district should then be:

1) Defining a number of zones which are particularly suitable for economic growth stimulation on the basis of agricultural potential, and fostering concentration and permanent settlement of population in these areas
2) A gradual rearrangement of service extension through a more efficient network of service centres and a division into essential basic services and services connected to economic growth
3) Serious attention to continuation of shifting cultivation and a fluid settlement pattern in the rest of the district and research on development potentials in these areas from an ecological point of view.
It would appear advisable to first establish which norms and goals are to be understood under 'economic growth' and 'basic services' before giving further attention to the above points.

7.4.2. **Basic needs and services**

The approach of ILO, as recorded in the report 'Narrowing the gaps' can be used in establishing 'basic needs' norms. Table 7.4. gives a summary of the minimum program set by the ILO report (ILO, 1977, 58):

**Fig. 7.4. Basic Needs and Minimum Target Levels**

<table>
<thead>
<tr>
<th>Basic Need Component</th>
<th>Minimum Target Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Household Consumption Needs</strong></td>
<td></td>
</tr>
<tr>
<td>(a) Food and nutrition</td>
<td>Reasonable diet with average consumption of 2,060 calories per day.</td>
</tr>
<tr>
<td>(b) Income for other purchases</td>
<td>Sufficient cash income for purchase of clothing, soap and other necessary personal and household goods.</td>
</tr>
<tr>
<td>(c) Housing</td>
<td>Occupancy of three or less persons per room in house of sun-dried brick with good thatched roof or better, at cost of not more than 12½% of total income.</td>
</tr>
<tr>
<td><strong>II. Essential Services</strong></td>
<td></td>
</tr>
<tr>
<td>(a) Clean water</td>
<td>Access to clean drinking water (own tap or piped water stands) within reasonable distance in urban areas; wells or boreholes or better in rural areas.</td>
</tr>
<tr>
<td>(b) Sanitation</td>
<td>Adequate public health standards (pit latrines as a minimum).</td>
</tr>
<tr>
<td>(c) Public transport</td>
<td>Access to public transport at reasonable distance, frequency, cost.</td>
</tr>
<tr>
<td>(d) Education</td>
<td>(i) Free primary education, with vocational and technical training in the last three years of school.</td>
</tr>
<tr>
<td></td>
<td>(ii) Mass adult education including functional literacy.</td>
</tr>
<tr>
<td>(e) Health</td>
<td>Access to health facilities offering minimum curative and preventive services (health centre, clinic, or hospital within 15 km.).</td>
</tr>
</tbody>
</table>

x) Of this at least 1/4 would need to be in cash which comes to K.25 per person for rural households largely producing their own food. A household reckoned to be 5.5 persons.
The following remarks can be made if we look at these points from the view of short and long term attainability in the core areas of the district as well as the more peripheral areas.

I Household needs

a) income:
This objective is not easily realised and certainly not for all areas in the district in the short run. The developments in the discussed growth area, as well as at the farmers' settlement schemes, already indicate that the minimum of K.25 cash per person attained through farming has only been achieved by a limited group of the participants, (assuming ca. 7-8 people per farm, an income of 8x25=K.200 is gained by ca. 50% of the farmers at the schemes). It seems that a policy is most important which is first of all aimed at realising this standard in a number of areas, before this norm is realistically attempted for the entire district. To stem the flow of emigration and labour migration to the cities, it is moreover a prerequisite that an income level can be reached in these areas that is comparable at the least to the unskilled town labourer.

b) food consumption:
In principle, the norm of 2060 Kcal. per person is realisable for the entire population either by continuation of shifting cultivation or by more permanent forms of agriculture. For production of enough calories, about 1 acre (2/5 ha.) land under cultivation per person is necessary. As discussed in Chapter 4, a critical level would be reached when the population density is above 9 people per km² if the traditional agricultural system is continued. This is not the case by far for most of the district. Continuation of shifting cultivation resulting in an adequate diet is therefore in principle possible. This is even more so in isolated areas where a mixed diet is achievable due to opportunities for hunting, fishing, and gathering forest products.

In the centre of the district with its higher and still increasing population density, application of modern agricultural methods make a higher population density possible. Production of sufficient calories can be achieved, but there is the danger that the diet variety is more limited with re-
gard to protein and vitamins. To this end, a varied farm set-up including e.g. livestock and fish ponds is a necessity (as discussed in Chpt. 5). This implies that in those areas where permanent and intensive farming is being attempted, radical alterations must occur so that an increase in production is not limited to a few cash crops.

c) housing:
This norm can be realised, in principle, by all inhabitants themselves. No non-local materials or high investments are necessary for constructing houses made of sun-dried brick with a thatched roof and wooden frames for doors and windows. The knowledge for this is available within almost every village group. The most important prerequisite is a considerable labour input by the head of the household for making and drying the bricks. That this type of house is only to a limited degree present in the district is due largely to present mobility and social factors. Only in those areas where permanent settlement is a policy objective, it will become very desirable to build this type of house. This is not so in areas where future emigration might be considered. In this case the mobility and more semi-permanent housing of inhabitants should be retained. Moreover, it can be noted that construction of good mud huts with well-finished floors and roofs is not inferior to a house of sun-dried bricks, provided the construction is maintained each year.

II Essential services

a) water:
Most of the district's inhabitants get their water supply from a nearby stream or river. A programme for making more windlass wells can be achieved in principle without difficulty and can be executed by the Rural Council. (There is also a new and inexpensive system of drilling simple bore-holes and attaching hand pumps, which has been applied at several locations on the farmers' schemes). Installing pumped water by means of bore-holes, diesel pumps, and supply through taps does not yet appear to be attainable. Where it has been constructed at the settlement schemes, it causes maintenance problems and works very irregularly.
Hand pump installations are particularly necessary at those locations where inhabitants live at a distance too great for hauling water from streams. A distance of 2-2.5 km. is considered as a minimum norm within which a reliable, clean, water supply must be present (Kaunda 1968).

From a viewpoint of quality, water from a stream within easy reach can be both reliable and hygienic and is often preferred by inhabitants.

b) sanitation:
Inhabitants can arrange their own latrines by digging a pit and placing partitions. That this has not occurred in many cases, even at farmers' schemes, is a matter of instruction and eventually of formulating regulations and controls. (In the colonial period, there was strict inspection in this respect and all villages were required to have and to maintain these facilities).

c) public transport:
Supplying public transport is not economically feasible for all parts of the district because the population is too limited and the local roads in too poor a condition. In the northern part of the district, the norm has been achieved for those inhabitants living along the main route. This can only be realised in the future for other parts of the district after further population concentration around centres.

d) education:
As already mentioned, the Zambian government has done much in this field. On the average, the situation is favourable in the district. Further population concentration is necessary for supplying this service to all within a 5 km. radius. In respect to education it would seem, moreover, very important to implement a primary school curriculum with emphasis on vocational and technical training, particularly for farming and related activities.

e) medical care:
The government has also done much in this area, but a further population concentration within the norm of 15 km. around centres would make for a more efficient service supply (cf.4.3.1.).
A policy directed at delivering the above listed essential services will need a clearly formulated government standpoint as well as adjustments made by the citizens themselves. As stated, it is not possible to supply these services to all inhabitants, wherever they live. A differentiation must also be made between service categories such as basic services and economic growth services. These last require even more concentration and a careful consideration of where potential lies. Planning which starts from a division according to service categories and regrouping of service functions has already often been discussed (Kay 1967; Siddle 1971; Van den Berg 1980) but usually is not further worked out in development plans. I would herewith propose the following division into service categories:

A. Essential basic services
Services which should be available as much as possible to all inhabitants of the district:

- education facilities and adult literacy services within 5 km.
- medical facilities within 15 km.
- community development and governmental informational activities concerning: sanitation and hygiene, possibilities and limitations of service supply, economic possibilities and limitations in the inhabitant's area as well as economic possibilities in other areas.
- water supply (hand pumps) if running water unavailable within 2 km.
- public transportation (long term aim).
- local administration and local courts within 15 km.

B. Economic growth services
These services should be delivered from a limited number of centres lying in a few development zones and could include:

- agricultural information service
- credit facilities
- supply of seed and fertilizer
- marketing depots
- communication network and public transport
- introduction of livestock and oxen traction
- veterinary service
- eventual tractor mechanisation assistance
A policy is suggested by which at least the basic services named above are available in a number of primary service centres spread all over the district, and delineation of a number of 'development zones' where, in addition to the basic services, the mentioned economic growth services are available.

7.4.3. Development zones

For a delineation of these zones particular attention must be given to the following factors:

I. Agricultural potential and natural circumstances
a) soil fertility
Farm production results for the market which have already been achieved can indicate further economic possibilities in a particular area. Moreover, a soil survey is obviously of great importance for which not only the production potential is studied for a few crops, but where emphasis is given to the possibility of a diversity of crop cultivation for both the rainy and the dry season.

b) tsetse situation
Based on initiating a diversified farm production, introducing livestock is of primary importance with regard to consumption as well as to traction availability. It is essential that those areas concerned, including directly adjacent land, be free of tsetse fly. This factor certainly limits the choice of development zones to a large degree. On the other hand, the central and northern parts of the district are sufficiently free from infestation that development zones can be implemented there. In other areas the cost and effectiveness of combatting tsetse fly has to be considered carefully. Generally these measures, as discussed in Chapter 1, are only effective when there is a large enough population concentration permanently settled in an area and the area is in any case at some distance from a national game reserve.

c) water supply
Obviously, the presence of perennial streams is essential and/or an underground water table within reach to implement windlass wells and/or handpumps.
Fig. 7.6  INDICATION FOR A REGIONAL PLANNING APPROACH IN KASEMPA DISTRICT

Development areas:
- Secondary centre
- Primary centre with basic growth services
- Primary centre with basic services

N.P. Nat. park
G.M.A. Game management area

20 km

0 20 40 km
II. Population and Migration
It seems realistic to first of all consider the growth potential in areas with increasing population densities. Moreover, the migration tendencies to certain areas and chances for reinforcing this migration are of importance. In this respect it would be desirable to study more precisely local social structure and spontaneous village relocations. Important in choosing areas is also a certain degree of neutrality; that is, whether or not the area is strongly identified as being the core area of a certain chief or regional headman. If not, the area is more open for greater and diversified migration from all corners of the district.

III. Communication and Marketing
Just as important is a location along or near to a main route, and the possibilities of opening up such an area further with a net of access routes. A local market is yet only present around the secondary centre Kasempa; development zones to be located elsewhere in the district will have to be completely dependent in the initial stages on government creation of marketing facilities.

As discussed in chapter 1, the physical milieu of the district is characterised by fairly scarce and extensively diffused natural resources (fairly small and scattered areas with good Cl soils, limited streambank areas suitable for cultivation, etc.). In the light of these natural environmental factors and in order to retain enough possibilities for subsequent population growth and economic expansion, it will be necessary to designate several zones. Moreover, considering existing social structure and local political relations, it is not realistic to assume one single development zone in the district.

Provided that further research is done the following areas can be considered as possible regions for development zones (cf. fig. 7.6):
a) At present the area directly southeast of Kasempa is in fact already such a region. It fits the above criteria. With reference to the suggestions made in chapters 5 and 6, the present policy there should be continued.
Expansion of development prospects around Kasempa centre could additionally take place in other directions within a 15-20 km. radius of Kasempa and which, considered environmentally (soil potential, tsetse free, sufficient water), offer interesting opportunities, such as: Njenga, Dengwe, Shivuma, Shibende and Nsuki. (From these last locations further extension possibilities might reach - depending on the tsetse situation - in the direction of Mukunashi in the future). In this way, the entire area within ca. 20 km. radius around Kasempa could become a development zone;

b) A zone along the main route to Solwezi: the area of Kasempa turnoff, Kaimbwe, and Kankolonkolo;

c) A zone along the road to Kaoma and near the Mushima resettlement, (although this certainly is dependent on further soil surveys, research into water resources and the tsetse situation);

d) In the newly-formed Kizela District, zones around the district centre and environs of Kashima could be considered first of all (here also special attention has to be given to the tsetse situation).

Existing and new centres in these zones should contain the basic services mentioned above as well as growth services; with the exception of some services not daily needed such as credit facilities, veterinary service which are to be provided by the secondary centre Kasempa and on the basis of regular visits by the departments concerned.

7.4.4. Basic service centre locations

With regard to the population outside the development zones proposed above, a number of primary service centres should be established spread over the district and equipped with the mentioned minimal basic services. However, no economic growth services would be available to the inhabitants of these centres and surrounding areas. This will avoid the inefficient dispersion of development investments already noted and reduce expectations which at least in the next years, cannot be realised in these areas.
This strategy is then based on the viewpoint that the population in these areas will continue to practise shifting cultivation and maintain a fairly fluid settlement pattern. Those wishing further economic possibilities could attain these by relocating in one of the development zones. Still, it will not be possible to enlarge all present centres in the district as primary service centres with the above mentioned set of basic services. A choice among the existing centres will have to be made, for which population size would be an important criterion.

Attention should be given particularly to the supply of basic services within the set norms and the possibility of inhabitants continuing with shifting cultivation without exceeding the critical population density. As discussed in Chapter 4, such a combination is possible. Supposing that people are living within 5 km. of a school and at a maximum of 2.5 km. of their garden plots a population of ca. 1600 can dwell around such a centre on the basis of a land carrying capacity in the district of 9 people per km$^2$ (cf.4.3.3.). Figures on land carrying capacity indicate, moreover, the norms which have to be taken into account in not exceeding the population size. Future policy should constantly be aware of this.

A population size of 1600 is still too small to warrant a well-equipped primary centre. A combination has to be considered of additional primary centres where the population within 5 km. can find some daily basic services (like a school and shop) and primary centres, (including full primary school, Rural Health Centre, community development and information service) at 15 km. radius. A situation would arise whereby a primary centre is surrounded by a number of additional primary centres. This is seen in idealised form in fig. 7.8. At least approximately 800 people could then live around a small centre and about $4 \times 800 + 1600 = ca. 5000$ people could then be settled within a 15 km. radius of a primary centre. This number would justify an efficient provision of basic services and at the same time an area of sufficient size for continuation of shifting cultivation without immediate danger to the environmental equilibrium. In reality, preference will be given to centres being situated...
Fig. 7.8 Population reached by primary and additional primary centres

along a main route so that public transport supply is facilitated in the future. A population can still be arrived at 2\times800+1600=3200 when a set-up is chosen whereby the centres are located along a main road and a primary centre is surrounded by only two additional centres. Future policy could be directed at relocating existing smaller centres and re-arranging certain services in such a way that a structure arises in the direction as described above. A functional hierarchy can then be built up between additional primary centres and primary centre, and between primary centre and the secondary centre Kasempa (although the distance to that centre will still in some cases be considerable, up to 100 km). Implementing such a policy must be done in close participation with the population so that consideration is given to existing social structures, retention of identity of regional headmen and their clan groups, and willingness to move certain villages within the 5 and/or 15 km. radius of a centre. Undoubtedly a small portion of the population will remain outside the spatial structure of this set-up and will not have services available within a reasonable distance. The choice is ultimately one for inhabitants themselves.
Fig. 7.7 POPULATION DISTRIBUTION KASEMPA DISTRICT 1978
(APPROXIMATION, POPULATION IN CENTRES NOT INDICATED)

- C. 500 pers. (based on
  O C. 250 pers. census 1969)
- road grade II and III (allweather)
- road grade IV
- stream

Kafue National Park

Road grade II and III (allweather)
Road grade IV
Stream
Figure 7.6 indicates possible locations for the primary centres in the district. Taken into account the population distribution in the 1970's (cf.fig.7.7) roughly 50% of the district's population will be located in the indicated development zones, 30% within a 15 km. radius of the indicated primary centres with basic services and 20% outside both 11). Thus a spatial pattern of three regions emerges in the district: in the periphery national parks and game reserves, infested by tsetse fly, followed by a transition zone where shifting cultivation continues, simple technologies are used, and no livestock is kept, and finally central, tsetse fly free areas, where investments are made consistent with further economic growth and livestock can be kept. A functional spatial differentiation will then arise in the district which does not necessarily involve unequal chances for the inhabitants as long as economic opportunities are offered in the central zones to all who wish to settle there.

In addition to this approach, it is just as important to direct further research at economic growth possibilities in the areas outside the development zones. Attention should not so much be given to cash crop production as to the opportunities stemming from the natural environment, in stimulating small surplus productions based on traditional activities, eventually with the help of newly introduced appropriate technology. Consideration could be given to hunting combined with game-cropping, programmes of intensification of fishing, bee-keeping, salt production, gathering certain forest products (fruit, mushrooms, rubber), and agroforestry methods. Marketing facilities would then have to be developed for this. One could imagine for example, periodic and mobile market systems for buying products in certain seasons in the proposed primary centres 12).
7.5. SUMMARY AND CONCLUSIONS

The main topic of this geographical study can be seen in the figures found in the various chapters.

In the past the society was characterised by a fluid settlement pattern and a high degree of segmentation into small social units such as clan-section and village. This was visible in the pre-colonial period in the numerous migrations of small groups through the region (fig. 2.1). This continued in the colonial period through frequent village fissioning and village relocations (fig. 3.4, 3.5). Village movements only partially correlated to means of subsistence (hunting and shifting cultivation) were as much determined by social and political factors. An abundance of land, game and streams offered sufficient resources for this pattern of territorial mobility. Villages were, moreover, very unstable in inhabitants composition, connected with factors such as residence pattern after marriage (uxorilocal), generation divisions in the village, conflicts around village headmanship succession (fig. 3.6).

Small village clusters, in which one or two clans were prominent, were located in a dispersed pattern along the streams until the middle of this century (fig. 3.2). Influenced by the cash economy and in particular labour migration to the cities this pattern changed during the 1940's-1970's to a linear pattern of small village clusters located along the roads and near service centres (fig. 3.2, 7.7). Nevertheless, village relocations continue to take place on a small scale (fig. 4.3).

At the same time a sharp decline in village size was caused by interrelated factors such as decrease of the position of the village headman, urban work experience of villagers, the rise of Christian denominations (fig. 3.7, 3.9).

At present, as well as during colonial period, policy has been opposed to the social forces described above, and directed toward maintaining the village as social unit, and toward stimulation of village concentration and permanent settlement. In practice this policy failed and ambitious plans for village regrouping schemes did not
sufficiently take social and ecological factors into account (fig. 4.1).

Since the 1950's small family-unit migrations have taken place to some areas in the region where economic possibilities are present (fig. 6.2) and since the 1970's to farmers' settlement schemes initiated by the government (fig. 5.1). In these areas a loosely structured pattern of small villages, homesteads, farms, and stores is found (fig. 6.3). Permanent settlement and intensive land use is especially characteristic of small groups of farmers who have developed into emergent-commercial and commercial farmers (fig. 6.4). Within a short period of about one decade, increasing internal economic differentiation has arisen between the farmers, both those settled independently as well as the settlers at the farmers' settlement schemes. Factors such as education, urban work experience and religious affiliation play an important role here. The best results are obtained by farmers who are not settled at the government schemes and who have built up a farm, producing a wide range of crops, applying simple techniques of irrigation and keeping livestock. Sometimes farming activities are combined with a trading enterprise. Permanent settlement of the farmers is accompanied by individual claims to land, to guarantee access to suitable areas and future extension opportunities (fig. 7.5).

Concerning the farmers' settlement scheme policy, promotion of the cultivation of a larger variety of crops, including traditionally known foodcrops, is recommended, as well as emphasis on the use of oxen ploughing. This last will be, moreover, a necessity in order to lessen dependency on tractor mechanisation and to avoid the sharply rising costs of these services.

In the district as a totality one can speak of the development of core areas, with a permanent settled population, increasing market production, and a closer network of services and the emergence of peripheral areas with a thinly spread population and a highly dispersed and scarcely functional net of services (fig. 4.2, 7.2).
Government policy directed at an equal distribution of services and economic opportunities for the entire population, wherever located, results in creating expectations of economic advancements in places with a very low population density, a limited infra-structure, long distances to the centre and situated in or near tsetse infested areas. Advancing permanent population settlement appears undesirable with an eye to the future in those areas.

A strategy is suggested here, which is directed at choosing development zones and at promoting concentrated settlement of small family groups around service centres and at farmers' schemes in these zones. Migration to these areas can be stimulated by making use of existing territorial mobility of the population, whereby it is important to offer economic opportunities as well as to take into account social structures. In the latter respect the choice of a number of development zones is recommended.

For the rest of the district it is recommended that less emphasis be given to concentration and permanent settlement. As long as there is no guarantee for economic growth opportunities in those areas, continuation of shifting cultivation and a more fluid settlement pattern is desirable. However, for an effective extension of basic services, such as education and health care, some degree of population concentration around service centres has to be promoted in these regions as well. Further research into headmanship, clan affiliations and village movements will be necessary to guide this policy. In regard to the land carrying capacity under traditional farming practices there is still room for such a policy, although critical population densities need to be observed.

Considering nodal policy it is recommended that the service pattern be rearranged to differentiate between delivering basic services to as many inhabitants as possible and economic growth services in the development areas.

A regional division is suggested of the district into three main zones (fig. 7.6 and fig. 1.4):
1) a zone on the periphery, of national parks and game management areas; areas practically without inhabitants and where tsetse infestation continues. Some game-cropping may be promoted and severe control of commercial poaching will be necessary.

2) a transit zone, where the population continues shifting cultivation, no large livestock can be kept and a small chance of tsetse infestation exists. A package of essential services should be available in a number of primary centres in these areas and further research is recommended on natural resources and improvements of traditionally known subsistence activities.

3) a central zone, in which a number of development zones will be chosen where permanent settlement and intensified agricultural practice is promoted based on a mixed farming system (cash crops, food crops, livestock, fish-ponds etc.). Close attention has to be given to erosion control measures.

In these zones an efficient network of nodes equipped with basic as well as economic growth services has to be built up. The choice of the development zones has to be based on natural circumstances (soil, absence of tsetse), social components (population structure, migration tendencies), and infrastructure (roads, markets). Further research will be needed into the framework for development and participation of the individual settled households in these areas.

This planning approach seems to favour inequality and not to be in agreement with the government's wish for rapid modernization and for participation of the entire population in the national economy. However, I suggest a policy of concentrating development efforts in certain areas, because such a policy parallels present tendencies in the spatial system, and could make limited governmental extension programmes and investments more efficient. A policy of this sort would be clear-cut for the government as well as for the inhabitants and would avoid creating expectations which cannot be fulfilled. Such a policy certainly needs to be based on a well-balanced and simple governmental information
programme and needs to be carried out in close co-operation with the population.

In this respect it should be recognised that development in terms of economic growth is a process in which not everyone participates at the same time. Some individuals will take part quickly, others are slower. Why not let those who want to continue an existence based on a more 'traditional' way of life, do so?

In such cases, then, this is not a policy of 'betting on the strong' but a parallel policy for advancing spontaneous growth tendencies exhibited by 'progressive' individuals (kept within certain limits), and, at the same time, continuing to offer possibilities to those taking part at a later stage in the process of economic growth. A prerequisite is certainly that possibilities remain open for those who follow later.

In Kasempa District the unique situation exists that various alternatives are still open because of the low density of population and the sufficiency of arable land. A regional plan which incorporates the entire district and which is based on a differentiated strategy would offer the most optimal use of present human and natural resources.