Settlement patterns and rural development: a human geographical study of the Kaonde, Kasempa District, Zambia
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CHAPTER 6

DEVELOPMENTS IN A GROWTH CENTRE: THE NKENYAUNA AREA

'Pakinkila nkulo pamwaba, kesha wabuka';
Where the waterbuck frequents it is shallow, tomorrow he will cross
(One returns again and again to a good thing)

6.1. A GROWTH CENTRE AREA

6.1.1. General

In the last chapter developments have been discussed which were planned and supervised by the government. In this chapter I will examine in more depth the changes over a period of about twenty years which have taken place relatively spontaneously - without much governmental intervention - in an rural area near the district centre.

The administrative post Kasempa has developed into the main centre of the district. This function is further supported by the location nearby of a mission post, together with a large hospital and a secondary girls' school. As in many other areas in rural Zambia, we see that permanent settlement of population and economic growth begins around such centres.

In general, national governments pay much attention to the larger industrial and/or agro-industrial growth centres in a country, much less attention is given to small rural centres and the areas around these centres. They are often not even recognised as growth centres, and if this is the case, they are certainly not seen as regions where developments can still be further stimulated and at the same time something can be learned that is applicable to rural developments in general; at most, they are considered as favourable areas created by 'chance' and needing no special attention.
Johnson (1970, 217) in discussing spatial aspects of rural planning, argues for selecting growth centres to advance rural development and to make use of the powerful forces of spontaneity. Roder (1973) and Siddle (1970), in their studies on rural districts in Zimbabwe and Zambia, also call for attention to small growth poles and the smaller service centres. Taylor (1974) does the same in his study on the spatial aspects of Kenya's rural development strategy.

But often regional development is not geared in this direction and the diffusion - 'trickle-down effect' - of concentrated investment in centre and adjacent areas is questioned. Moreover, to avoid spatial differentiation within a region and to aim as much as possible at an equal distribution of governmental means and equal chances for everyone, investments are ultimately scattered in a 'vague quest for balance or equity' (Taylor 1974, 180). In practice the danger exists that regional development stagnates and no optimal use is made of existing 'promising growth centres' (Johnson 1970).

North-Western Province is an example of this. Programmes and projects were simultaneously started on a broad front, often for political reasons, in this large underdeveloped province with its small, very dispersed, and moreover heterogeneous population. The general desire for advancing development as quickly as possible led to allocating available funds before completion of research and the working-out of detailed regional planning proposals.

Gruber (1975) points out in his study of North-Western Province that there are a number of centres in the province which can be delineated for further development. He argues for starting particularly with these centres and surrounding areas for advancing regional development. The area south-east of Kasempa centre, called Nkenyauna area, is one of these regions. In the sections below, I will discuss which growth inducing factors have been at work in that area, for what reasons population migrated to the area, and what can be learned from developments in such a growth centre area.
6.1.2. **Change and growth-inducing factors**

Since the mid-1950's, the Nkenyauna area experienced a growth in population and economic activity \(^1\). The area is an obvious contrast therefore to the rest of the district. The most progressive farmers of Kasempa District are located in the area, live in good, permanent housing, invest in land and enterprises, and make use of modern methods and equipment.

While the district population increased at the most by ca. 10% from 1950 to 1963 and even decreased by 3% from 1963 to 1969, a remarkable growth has taken place in the Nkenyauna area, as shown in table 6.1. below.

**Table 6.1.: Population growth in the Nkenyauna area 1952-1978 \(^2\)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pop. total</th>
<th>Villages</th>
<th>Average pop. per village</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>ca. 400</td>
<td>10</td>
<td>ca. 40</td>
</tr>
<tr>
<td>1969</td>
<td>1180</td>
<td>85</td>
<td>14</td>
</tr>
<tr>
<td>1978</td>
<td>1350</td>
<td>104</td>
<td>13</td>
</tr>
</tbody>
</table>

Although migration from the district to urban areas was large during the 1960's, internal rural migration also took place from peripheral regions to the vicinities of centres. While 10 villages were located in the area in the 1950's, 104 separate settlement locations were present 25 years later. A considerable number of small villages, farmsteads, and single houses have been established by migrants to the region.

Economic activity has also increased considerably, especially in the agricultural sphere. In 1959, ca. 5 farmers were producing for the market. This number had grown to 39 in 1969, while in 1978, 38 farmers sold a cash crop - a relatively large number when compared to other areas in the district. The farmers of the Nkenyauna area produced ca. 25% of the maize grown in the district, the two settlement projects excluded (cf. Appendix VIII). Besides maize, other products are also produced for market sale such as potatoes, beans, onions, various other vegetables and fruits. Several farmers of the area also raise livestock as well, and a few have fish ponds. Some have a lorry for transporting their produce to the
district centre or to towns in the Copperbelt and possess thriving shops in addition to their farms (cf. interview with farmers no. 7 and 8, Appendix XII).

Also with regard to housing, the area is the most advanced of the district. In contrast to the District in general where practically all of the dwellings are mud huts, a large number of the houses in the Nkenyauna area are made from bricks - either burned (here referred to as B-houses) or sun-dried (Kimberley brick houses: K-houses) - with in most cases corrugated iron roofs (cf. table 6.2.).

Table 6.2.: House types in the Nkenyauna area, 1969-1978

<table>
<thead>
<tr>
<th></th>
<th>B-houses</th>
<th>K-houses</th>
<th>mud-huts</th>
<th>Total</th>
<th>total % of B+K houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>8</td>
<td>108</td>
<td>267</td>
<td>383</td>
<td>30%</td>
</tr>
<tr>
<td>1978</td>
<td>28</td>
<td>140</td>
<td>224</td>
<td>392</td>
<td>43%</td>
</tr>
</tbody>
</table>

The 1969 census (CSO, 1974) shows that of the 7557 dwellings in Kasempa District, 830 are of type B or K, only 11% of the total; therefore, the Nkenyauna area is also better off as far as permanent housing is concerned.

Economic developments in an area are generally not determined by one factor alone. There are usually a number of favourable factors present which have led to regional advancement because of their mutual interrelationship, such as natural resources, human resources, and external circumstances which come about through planning or chance. The following points apply to the situation in the Nkenyauna area:

**Natural circumstances**
- the presence of areas of good clay soils (Cl soils), located not far from streams
- the presence of a number of small perennial streams and a number of places along their banks that are suitable for cultivation. Natural conditions also offer possibilities for simple forms of irrigation at a number of places
- the absence of tsetse fly which makes it possible to keep livestock.
Fig. 6.1 NKENYAUNA AREA, 1952

KASEMPA

Mukinge

Stream

Old mumbwa road

Alignment new mumbwa road

Village

Fig. 6.2 MIGRATION OF HEADS OF FAMILY TO NKENYAUNA AREA, 1953-1969

KASEMPA

NKENYAUNA AREA

Nyoka

Lubofu

Mpungu

Kalasa

Kasonso

Mushima

Mumbwa

Kolongwa

Mushima

Ingwe

13
Fig. 6.3 NKENYAUNA AREA, 1978

TO KASEMPA
TO NKENYAUNA
FARMERS
SETTLEMENT

TO MUKINGE
TO MUKUNASHI

stream
road
village/farm
large farm
store
well
school
church

0 1 2 km.
Socio-economic circumstances
- the area is located near the market of the district centre (including the mission post, hospital, and secondary school)
- the area had a limited population and sufficient space could be offered to migrants
- the area is part of Chief Kasempa's territory although it is not his traditional settlement area or of one of his regional headmen. This is also implied by being named after a geographical feature - the Nkenyauna stream - rather than after an individual as is the case with many other places in the district. Migrants therefore settle in an area which is not immediately identified with the core area of one particular chief or clan group. In this respect it is socially seen as a relatively 'neutral' area.

Governmental services
- a good road with some bridges was constructed through the area in 1952, by which the region became accessible and directly connected to the district centre
- the area was chosen by the colonial administration for relocation of farmers through the 'Peasant Farming Scheme' during the 1950's.

These last two factors have been most conducive to promote development of the area in the first instance. Construction of the road was part of the realignment of the Mumbwa road from Kasempa to Mumbwa. The route of the old road was over the crest, avoiding stream crossings. The new road was made straight through the country, crossing various streams (cf.fig.6.1). The combination of good clay soil, running water, and a good road connection with the district centre became factors advancing village settlement along the road in the newly opened area. A second factor which was certainly just as important was that of the possibilities offered through growth of the market at the nearby district centre and through those facilities made available by the government for producing for the market. These facilities were offered in the colonial period by the so-called 'Peasant Farming Scheme'. As this was important for development in the area and included some interesting development aspects, I will discuss this scheme briefly.
6.1.3. The Peasant Farming Scheme

In 1948, a start was made with the 'Peasant Farming Scheme' in Northern Rhodesia. The purpose of the scheme was the development of progressive individuals into small-scale commercial farmers (Allan 1970, Dodge 1977). The plan was based on allotting plots to subsistence cultivators or relocating them into new areas in order:

a) to terminate shifting cultivation through adoption of improved farming methods,
b) to create an income through sale of farm produce,
c) to stabilise the frequent population movements as a basis for further development.

This program was preceded by the 'Improved Farmers Scheme', of 1946, which involved African farmers who lived in the more central provinces and already produced for the market. The aim was the introduction of better agricultural methods and especially in drawing attention to measures concerned with soil conservation.

The scheme was based on small farm plots of 5 to 6 ha. each, introduction of crop rotation, and livestock rearing. Loans were given to clear the land of tree stumps, buying sowing seed, and a span of oxen, plough, and ox-cart. The farmer was required to follow the advice of the farm information service and to conform to the rules set up for soil conservation. Intensive agricultural training was given and a bonus was paid if products had been grown following the proper soil methods. The colonial administration has been reproached for this programme because soil conservation was given priority over quick economic advancement and because it paid less for the African's produce than for that of the white farmers (Makings 1966, Batwell 1962).

The programme was discontinued shortly before independence. Still, the programme had its values. For example, the number of farmers showed a spectacular increase in the Eastern Province where 26 farmers were registered in 1951 and over 2000 in 1963 (Heney 1973). In the North-Western Province developments in this respect were less, about 30 farmers were registered as peasant farmers in 1959 of which 17 in the vicinity of Solwezi, the provincial capital, and 5 in Kasempa District (Hellen 1968, 230).
These farms were established in the Nkenyauna area during 1955-1960. It is noteworthy that the first participants in the programme were two Angolan immigrants from the Mbundu tribe, a population already having permanent methods of farming for a long time. Only after these first farmers were established did Kaonde inhabitants apply (Farmers case no. 6, Appendix XII). After independence the peasant farming scheme was certainly not seen as the means for modernizing 'en masse' the rural population.

As we have seen, attention was given to a large-scale approach by which mechanisation through tractors was primary, and an attempt was made at production of only a few crops for the market.

The peasant farming programme, however, stressed a small-scale approach by putting the accent on small family farms, intensive cultivation using simple methods (hoe and oxentraction), livestock, use of organic manure, and production of small quantities of various crops. Attention was also given to simple irrigation systems to allow for cultivation during the dry season.

It is striking, though, that, although the number is not large, the 'peasant farmers' of the Nkenyauna area formed the core for further developments in the area. The farms functioned as examples and gradually more farmers of the area have started producing for the market. No programme directly aimed at developing the Nkenyauna area in particular was undertaken after independence. The inhabitants have made use of the facilities, offered in general to farmers in the district; being located near to the district centre gave in this respect an advantage.

6.2. MIGRATION AND MOTIVES FOR MIGRATION

6.2.1. Origins

Migrants to the Nkenyauna area originate from many places in the district. Table 6.3. gives the areas from which heads of families who had started their own village in the area arrived during the period 1953-1969 (cf.fig. 6.2).
Table 6.3.: Origins of villages in Nkenyauna area, 1969

- already settled in the area (along Nkenyauna stream) 10
- adjacent area (area along Lufupa River) 15
- southeastern Kasempa District 37
  - Mukanashi 5
  - Mpungu-Lubofu 8
  - Kalasa-Kasonso 9
  - Kelongwa 6
  - Nyoka 9
- western and northern Kasempa District 7
  - Mushima 4
  - Ingwe 3
- from outside the district 4
- split-offs from villages in the area 12
  85 total

Aside from those villages already present in the area and the split-offs which occurred there, 63 villages (i.e. farms) are a result of immigration. These are usually small families consisting of husband, wife, children, and some relatives. Other relatives sometimes joined as time went on, although, in general, the village/farmsteads remain small. The largest number of migrants originate from the southeastern part of the district - from places 25 to 75 km. distant. Even though the attempted village regrouping of entire village clusters failed in that area (cf. Chpt. 4), movement of small, single villages and migration by small family groups who fissioned from a village did take place during the same years.

Table 6.4. gives a summary of the villages settling in the Nkenyauna during the period 1953-1969.

Table 6.4.: Year of settlement in the area 1953-1969

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953:</td>
<td>1</td>
</tr>
<tr>
<td>1954:</td>
<td>1</td>
</tr>
<tr>
<td>1955:</td>
<td>3</td>
</tr>
<tr>
<td>1956:</td>
<td>2</td>
</tr>
<tr>
<td>1957:</td>
<td>2</td>
</tr>
<tr>
<td>1958:</td>
<td>3</td>
</tr>
<tr>
<td>1959:</td>
<td>-</td>
</tr>
<tr>
<td>1960:</td>
<td>6</td>
</tr>
<tr>
<td>1961:</td>
<td>3</td>
</tr>
<tr>
<td>1962:</td>
<td>6</td>
</tr>
<tr>
<td>1963:</td>
<td>5</td>
</tr>
<tr>
<td>1964:</td>
<td>10</td>
</tr>
<tr>
<td>1965:</td>
<td>8</td>
</tr>
<tr>
<td>1966:</td>
<td>16</td>
</tr>
<tr>
<td>1967:</td>
<td>13</td>
</tr>
<tr>
<td>1968:</td>
<td>6</td>
</tr>
</tbody>
</table>

The greatest migration to the area was in the 1960's, the largest single years of increase being 1966 and 1967. The restrictions applying to village relocation, hardly enforced in
the years directly prior to independence, were officially abolished in 1964, and since that time everyone was permitted to move and to establish his own village; consent of the regional headman or chief was only a formality.

One can speak of an explosion of relocations in the years immediately after Independence. Besides a large migration to the urban centres, considerable inter rural migration was noticeable in many parts of Zambia (Gruber 1975).

The Zambian census of 1974 indicates that there is a small decrease in migration to urban areas in the 1970's. Figures relating to the internal migration in the 1970's are not available, but data pertaining to the Nkenyauna area point to a decrease in the immigration since 1970. A decrease that can be attributed to the area filling up and to fewer chances for economic expansion for new migrants in the 1970's. Internal migration in the district presently takes place, however, toward the settlement projects discussed above and to some other areas near the district centre.

6.2.2. Motives for migration

In 1969, reasons for settlement in the Nkenyauna area were investigated with the help of a questionnaire. Table 6.5. lists the primary reasons given for settling in the area.

Table 6.5.: Reasons for settling in the Nkenyauna area

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having a farm and living near a market</td>
<td>33</td>
</tr>
<tr>
<td>Having a store situated near a road</td>
<td>7</td>
</tr>
<tr>
<td>Living near a hospital</td>
<td>14</td>
</tr>
<tr>
<td>Living near a road and having ready means of transport</td>
<td>5</td>
</tr>
<tr>
<td>Living in the vicinity of relatives</td>
<td>15</td>
</tr>
<tr>
<td>Having one's own village in the area</td>
<td>9</td>
</tr>
<tr>
<td>Already present in the area</td>
<td>2</td>
</tr>
</tbody>
</table>

It is noteworthy that economic motives are most often cited for present location: having a farm, being near a market for selling produce, or having a store along the road. In addition, proximity to service locations, such as the presence of a hospital and good communication with the district centre, are
reasons determining location; social considerations, such as the presence of family, are less important. Migrants originating from more distant areas mention economic reasons more often than those who were already living in the direct vicinity. The importance of economics as a primary consideration in migration is in agreement with research done on migration motives in general (Gugler 1968, Mitchel 1954). Kay's observation that economic possibilities for bettering the standard of living are more important than factors such as better services, is also supported. (Kay 1967, 53). This does not exclude the probability that family bonds are involved with migration and are an additional factor which determines moving elsewhere.

Data has not been collected concerning the mutual family relations of villages within the Nkenyauna area. From the information about clan membership of the headmen, it appears that of the 85 villages, 35 belong to the Bena Kyowa clan (cf. Appendix V). In addition, 15 belong to clans affiliated with the Bena Kyowa clan. A large number of Nkenyauna inhabitants is therefore directly or more remotely related to each other via clan membership. This does not apply only to villagers originally located in the area or in the vicinity, but also to inhabitants coming from further away. Of the 37 people arriving from the southeastern part of the district, 15 (40%) belong to the Bena Kyowa clan, whereas in the southeast itself, only 12% of the village headmen are of that clan. It then seems that relatively more Bena Kyowa members migrated to the Nkenyauna area than other clan members. This indicates that clan affiliation and therewith family bonds still play a part in migration, just as appeared to be the case with migration to the farmers' settlement schemes (cf. Chpt. 5).

6.2.3. Migration and permanent settlement

Migration to the Nkenyauna area took place in a manner typical of the way in which Kaonde villages normally relocate. The chief is informed of the plan to move and permission to settle is asked of the chief of the new location. Usually, this poses no problem and is a formality. If someone comes from another district, it is usual to have a statement from the headman there which refers to the good standing of the
migrant. Making good contact with one's new neighbours is a more important matter. Before building a village or occupying farm plots, consultation with the neighbours is first necessary. If they have objections, a discussion follows with the chief. Persons already established, thus, have the first say in the case.

The actual relocating takes place in a simple manner. Possessions are transported by bicycle or on foot, husband and wife often going first. The family builds a temporary grass hut, followed by a mud hut. Sometimes, relatives in the area offer the first pied-à-terre. After a time children and other family members follow. The village site left behind will sometimes have a garden to which is returned during the harvest season. A new garden has been started in the meantime near to the new location.

Although this relocating is similar to the manner followed traditionally, a number of migrants who had had a job in town, have arrived directly from town.

Within the survey of the 85 village headmen/heads of households, 53 had had work outside the district. They migrated by ways summarised in table 6.6.

Table 6.6.: Manner of migration to the Nkenyauna area by returning urban workers.

<table>
<thead>
<tr>
<th>Manner of Migration</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return first to original village followed by migration to Nkenyauna area</td>
<td>30</td>
</tr>
<tr>
<td>Direct migration from urban area to Nkenyauna area</td>
<td>10</td>
</tr>
<tr>
<td>Already living in the area</td>
<td>8</td>
</tr>
<tr>
<td>Unknown</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>53</strong></td>
</tr>
</tbody>
</table>

The large majority of those who worked in an urban area returned first to their villages and after some years moved on to the Nkenyauna area. In a number of cases, there is migration directly from the work area to a new rural area with no transition period in the village of origin. These are people who often, while earning wages in an urban area, commissioned a house to be built in the Nkenyauna area. They decided to live there after retirement or to start a farm.
or store with the help of capital earned in town.

The settlement pattern that emerged in the area is one of a linear development, consisting of a mixture of small villages, separate farmsteads, stores, and detached houses along the main route (cf. fig. 6.3). Only in a few cases are farms situated back from the road, connected by access roads constructed by the owners themselves (cf. fig. 6.3). In a few instances, villages of the area have much in common with traditional Kaonde villages, with mud huts arranged in a circle or oval form. Most settlements, though, consist of a mixture of house types. Permanent location of inhabitants appears from the fact that 43% of the houses are constructed of more lasting materials (B and K houses - cf. tab. 6.2.). In this regard, not only is the number of houses of importance, but also the number of villages/farms in which a more permanent house exists. In 1969, 66% of the villages/farms had permanent structures. This figure had risen to 78% by 1978. It is often so that headmen, or the heads of farmsteads, live in the better built houses and that those children and other relatives remaining in the village make use of mud houses.

The permanent settling of the population of the area does not mean that changes have not occurred at all, although this has been less so than at the settlement schemes. Of the 85 settlements present in 1969, 16 had moved or been dissolved between 1969 and 1978. The following changes took place:

Village disbanded in connection with death (usually because of the death of the headman) : 8
Village moved to another location (2 to the city; 2 elsewhere in the district; 4 to the new agricultural project): 8

The custom of abandoning a village after a headman's death, also including the disuse of a more permanent house, is still continued. In some instances it happens that an inhabitant of a more permanent house moves to a mud hut before his death in order to create the possibility of keeping the permanent house in use after his death. In recent years 3 cases occurred where the head of the household died and his house was used again and farming continued at the same site by relatives. The tendency to break with the traditional system of abandoning
a deceased person's house and leaving the site can be observed. In some cases, where people left the area or moved to another site, houses built of more permanent material were sold to others; these are all indications of the more permanent pattern of settlement in the area.

6.3. ECONOMIC ACTIVITIES AND DIFFERENTIATION

6.3.1. Occupation and personal characteristics

Nearly one-half of the village headmen/householdheads of a separate locality are engaged in one way or another in an economic activity. The majority are farmers, with some degree of market production; a few own a store, and some are craftsmen or have work activities outside the area. Among the farming group, a relatively large number have a store in addition to their farms or have a trade such as carpentry, brick laying, or tailoring. Table 6.7. summarises the occupations practised in 1969 and 1978 and the changes that took place.

Table 6.7.: Occupations practiced in the Nkenyauna area, 1969 and 1978.

<table>
<thead>
<tr>
<th></th>
<th>1969</th>
<th>1978</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer</td>
<td>39</td>
<td>38</td>
</tr>
<tr>
<td>and also</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- storekeeper</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>- tradesmen</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Storekeeper</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Tradesman</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Employment elsewhere</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>46</td>
</tr>
</tbody>
</table>

In 1969, information was gained on a number of characteristics, such as place of origin, age, education, work experience elsewhere, religion of the settlers in the area. In brief, I will relate these characteristics to the fact of whether the settlers in the area have taken up an occupation or not.
a) Origin
Differences in background between migrants are practically non-existent as far as their area of origin is concerned. They are all Kaonde coming from a traditional village environment. Before ca. 1955 there were hardly any differences in the district and no population group delivered a substantial amount of farm produce to the market. Only a few immigrants belonging to the Mbundu tribe have another background and were already familiar with sedentary agriculture. As mentioned, they were the first farmers in the area who began producing a market crop and they still belong to the group of the most successful farmers. With regard to origin, it can be noted that the Kaonde migrants coming from areas farther away include the highest percentage (60%) of those undertaking an economic activity when compared to inhabitants who were already living in or near to the area. Of these, 40% have become economically active. This indicates that migration to the area is, as previously mentioned, certainly influenced by the wish to develop an economic activity and to obtain a cash income.

b) Age
If we look at the age of the heads of the household and those involved in an economic activity, there appears to be no difference. The average age in 1969 was 48 years, as compared to 49 years for those with an occupation. Also in this case it appears that young people (< 40 years) are only rarely found within the group of farmers or businessmen.

c) Work experience in town
Certainly influential in whether or not an activity is undertaken is the experience built up during a stay outside the district. 53 of the 85 settlers have worked outside the district. Of these 53, 34 (64%) have started an enterprise. This is in contrast to that group of 32 who have never worked outside of the district and who have never had an economic activity to any extent within. Only 8 (25%) of these participate in a business. The type of work activity practised elsewhere also appears influential on the economic activity developed in the area, as shown in table 6.8.
Table 6.8.: Type of work elsewhere and economic activity in the Nkenyauna area, 1968

- job in mining sector 17 of which economically active 8 (=47%)
- job in service sector 14 " " " 10 (=71%)
  (cook, gardener, office/or shop employee)
- job in civil service 22 " " " 16 (=73%)
  (policeman, medical orderly, etc.)

Total with work-experience in town 53 " " " 34 (=64%)

Those having worked in the service sector - whether governmental or private - are found relatively more in the group of those starting an economic activity. The smaller number of mine workers doing this would seem to be connected to the unschooled nature of most of the work done in the mines.

d) Education
Of the 85 heads of households questioned in 1969, only 16 (ca. 20%) had had any formal education. This was divided as follows:

lower primary school 7
upper primary school 3
some years secondary school 2
primary school plus vocational training 4

16 total

Of these 16, 15 have an occupation. This correlation of education and practising an activity directed toward earning an income is in agreement with the findings of Vanzetti (1973) on education and motivation for developing economic activities among the farmers of Mumbwa District. However, the total group economically active is considerably higher (42 in 1969) so that it appears that education is not a prerequisite to start an economic activity.

e) Religion
As already discussed with regard to the farmers settled at the settlement schemes, there is also an obvious relation between church membership and the development of economic activities. Table 6.9. indicates this.
Table 6.9.: Church affiliation and economic activity

<table>
<thead>
<tr>
<th>Church affiliation</th>
<th>of which economically active</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.C.Z.</td>
<td>37 &quot; &quot; &quot; 23</td>
</tr>
<tr>
<td>J.W.</td>
<td>14 &quot; &quot; &quot; 7</td>
</tr>
<tr>
<td>R.K.</td>
<td>1 &quot; &quot; &quot; 1</td>
</tr>
<tr>
<td>sub total</td>
<td>52 31 (=60%)</td>
</tr>
<tr>
<td>no church affiliation</td>
<td>33 &quot; &quot; &quot; 11 (33%)</td>
</tr>
<tr>
<td>Total</td>
<td>85 42</td>
</tr>
</tbody>
</table>

Of those belonging to a church, 60% are economically active. The percent of those not belonging to a Christian church but who have embarked on an economic activity is considerably lower: 33%.

In addition to personal characteristics, a word finally about another factor that influences initiating an economic activity, and especially with regard to growth achievement, namely investment capital. No precise data could be collected about the availability of capital by those who started a business. In general, the majority of inhabitants such as farmer or craftsman, had no capital when they began an economic activity in the area. This is different for those starting a shop. These usually had some savings after returning from the city. This was used for building a house and setting up a shop or 'tearoom'. To obtain a traders' license, it is, moreover, obligatory to possess a storeroom built from permanent material. Often these people subsequently began farming and producing for the market. In several cases, as will be discussed in the next section, this group made the most spectacular progress.

The above shows that a complex of factors influences which type of people begin an economic enterprise. Of importance seem to be factors such as education, urban work experience, and, last but not least, religious affiliation.

Concerning labour migration to town it can be said that there is a positive effect for further embarking on an economic activity especially by those who worked outside the mining sector, in jobs such as the civil service and also
for those people who had saved investment capital from urban employment.

6.3.2. Categories of farmers

Statistical data on farm production, turnover in shops etc. are not available for the area. With the help of the inquiry done in 1968 and 1978 it was not possible either to collect reliable figures on farm production, income per business, etc. In order to gain some insight into the economic results of the farmers and the changes which have occurred during the period 1968-1978, a sub-division for the farmers in the area on the basis of cultivated farm plot size and other agricultural activities such as livestock and fishponds is made here.

The farmers in the area who sell (part) of their produce on the market can roughly be divided into three groups:

A) **Subsistence farmers with small surplus** - farms with less than 2 ha., cultivated for market production, having no other agricultural activities such as fruit sale or livestock raising

B) **Emergent commercial farmers** - farms of 2-10 ha., with 2 ha. or more under cash crop cultivation and some vegetable and fruit sales. In a few cases the farmer has some livestock

C) **Commercial farmers** - farms having more than 10 ha. under cultivation, with sales of many products and the raising of livestock.

A farm size of 2 ha. is used here as the division that is usually made between subsistence farmers with only a small surplus for marketing and emergent commercial farmers (Schultz 1976,153).

The net income of category A may roughly be estimated to be not in excess of K.200 and this group can be compared with the group of marginal and small farmers at the schemes. The net income of category B might be estimated at between K.200 to ca. K.1000. The commercial farmers (category C) delineated here, have an income of certainly more than K.1000 and for those farmers who additionally maintain a store presumably much higher.

In table 6.10. the farmers of the Nkenyauna area are classified into the three groups for 1969 as well as for 1978, and the changes are given that have taken place. The farmers who have discontinued cash crop sales and those who have started have been added.
Table 6.10.: Changes in farmers' categories in the Nkenyauna area, 1969 and 1978.

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Change to Farms within another category</th>
<th>Farms discontinued 1969-78</th>
<th>Farms started 1969-78</th>
<th>Total 1978</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) small farmers</td>
<td>20</td>
<td>-3</td>
<td>+1</td>
<td>-13</td>
<td>+12</td>
</tr>
<tr>
<td>B) middle group</td>
<td>14</td>
<td>+3</td>
<td>-4</td>
<td>-1</td>
<td>+5</td>
</tr>
<tr>
<td>C) large farmers</td>
<td>5</td>
<td>↓4</td>
<td>-1</td>
<td>+1</td>
<td>9</td>
</tr>
<tr>
<td>total</td>
<td>39</td>
<td>-19</td>
<td>+18</td>
<td></td>
<td>38</td>
</tr>
</tbody>
</table>

From this it appears that, although the population of the area has increased, as well as the production of various market crops, the total number of farmers has not risen but on the contrary has declined. Production, however, has grown especially for a small group of farmers who already belonged to the most successful group in 1969. In addition, some of the farmers in the middle group (category B) shifted to the group of commercial farmers. Although it could be expected that several of the group of small farmers (category A) would have shifted up to the next category over the years, this is only rarely the case. Instead many of this group discontinued farming activities.

It is apparent that further economic differentiation is taking place. A small group has strengthened itself; the middle group has become smaller and the group of small farmers has not advanced and several have dropped out, a differentiation tendency that is similar to the already discussed situation at the settlement schemes. Factors contributing to this are:

a) The marketing capacity of the district centre is very limited. Growth of this occurred primarily in the second half of the 1960's and early 1970's. A small group of farmers took advantage of that situation. Market satiation subsequently offered no further chance for expansion for others, except for the sale of maize to the National Marketing Board of Kasempa.6)

b) The small farmers in the area received no special attention from the government - partially because it was assumed that the farmers of the Nkenyauna area already enjoyed a favourable
position by being located in that area, but also because much attention was given to the new settlement schemes by the Department of Agriculture and it was considered that beginning farmers could best settle there.

c) The group of farmers which advanced its position in the 1960's could because of its growing experience in farming and capital accumulation subsequently expand further in the 1970's. They embarked on production of a great variety of produce. With the help of their own transport possibilities, they further broadened their marketing radius by delivery of higher valued crops (like onions, garlic, fruit) to urban centres.

d) The most successful farmers are situated on those areas of the best red clay soils as well as near land along streams suitable for growing vegetables and fruits. This does not imply, though, that farmers of category A have been kept from this type of location. But it can be observed that the most successful farmers had further advanced their position with regard to suitable acreage in the 1970's, limiting the possibility for expansion for others, who arrived later or developed more slowly. In that respect, no measures have been taken by the administration for stimulating the group of smaller farmers with regard to marketing produce or making more locations accessible through feeder roads, etc.

Information has been collected on the reasons for discontinuing farming by those 19 who were no longer producing in 1978. This is shown in table 6.11.

Table 6.11: Reasons for discontinuation of farming in the Nkenyauna area, 1969-1978.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Small farmers</th>
<th>Middle Group</th>
<th>Large Farmers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Sick (or too old for farm work)</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>No profits/debts</td>
<td>7</td>
<td>1</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>Started other activity</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Moved elsewhere</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>5</td>
<td>1</td>
<td>19</td>
</tr>
</tbody>
</table>
Two reasons clearly come to the forefront; those having to do with the farmer's physical capacity (death, old age, and sickness) and economic reasons. Concerning the first, this is clearly a matter of the relatively high average age of the farmers. People of a more advanced age starting farming means a greater chance of only short periods of activity and more frequent alterations.

The largest group which discontinued farming were those citing lack of profit, debts, and not having cash for purchasing fertilizer or hiring tractors as the reason. The complaint was also made that the government is not very helpful in tractor delivery and that the rental price has been raised. It is this group which is the most dependent on the government's help and as a result is the most vulnerable; poor harvest yields led to debts, no possibilities of getting a new loan, with as a result the end of activities in the field of cash crop production. In general, these farmers are not inclined or able toward more labour input in the farm through intensive cultivation of their land by hand. Personal factors cited above undoubtedly play a role here. When we compare the personal characteristics of the group of 9 successful commercial farmers with those 8 which have discontinued farming because of economic reasons (no profit/debts) the following picture appears (cf.table 6.12)

Table 6.12.: Farmer characteristics: successful farmers and those who stopped farming

<table>
<thead>
<tr>
<th></th>
<th>successful farmers</th>
<th>Those who have discontinued farming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>with: education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>work experience</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>elsewhere</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>church affiliation</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>average age (1969)</td>
<td>44 yr</td>
<td>49 yr</td>
</tr>
</tbody>
</table>

The farmers running a successful enterprise contrast clearly with those who explained that they stopped farming. The latter rank low in the number of those having some schooling, fewer have been to town and are affiliated with a church. Also age plays a role; on the average the successful farmers are younger than the ones who stopped farming.
Fig. 6.4 Layout of a commercial farm (not to scale)

- Main road
- Store
- Farmhouse
- Electricity generator
- Houses for farm labourers
- Storage for farm produce
- Houses for grown up children and relatives
- Well and diesel pump
- Shed for farm implements
- Maize (C1 soil)
- Sunflower
- Potatoes
- Banana plantation
- Canal
- Fishponds
- Stream
- Citrus plants
- Vegetable plots
6.3.3. The most successful farmers

Finally, a short summary will be given of the farming developments made by the commercial farmers (category C). This group has undertaken a variety of agricultural and livestock-rearing activities. Although growing maize was most important in the 1960's, this has gradually changed to include the cultivation of various products like vegetables and fruit. Mostly these products are not sold via the government marketing organisation, but are transported by the farmer himself to the Kasempa market or to town. Most of these farmers have livestock and several use oxen for ploughing, which has reduced cost and dependence on mechanical services. Much work is therefore done manually through the hiring of unskilled farm labourers. Some farmers even have permanent workers in their service. The farm plots are located on various types of soils - red clays as well as alluvial humus - the rich black soils along streams. This is in accord with the traditional systems of farming, which use different gardens for various crops, as has been discussed in Chapter 1.4.2. The system, though, has gradually altered to one of intensive land use, crop rotation, and periods of bush fallow. Over the years the farmers have gained much farming experience and knowledge of the agricultural potential in the region. In respect to irrigation, farmers began simply and not substantially differently from the system traditionally used. Irrigation has been expanded through construction of furrows and small dams. Further expansion has been done by some farmers by making fish ponds, connected to the irrigation canals (cf. Appendix XII, farmers case no. 7) (cf.fig.6.4).

Other farm products are tried out regularly as well. After one or two farmers have successfully grown a new crop, other commercial farmers quickly follow the example.

A connection exists also between the farm concerns and trading. Of the nine commercial farmers, four have a store, one in the area itself and three possess a large store in Kasempa township. They are actually entrepreneurs and the largest commercial farmers and also private store-owners of the district. They have their own private car and/or lorry
which are used for selling produce in Kasempa centre and in the city, as well as for stocking the store with goods from town. In this way, these economic activities support each other. Actually, these are cases of greatly diversified businesses of farming and trade.

It is this small group of farmers who started to make intensive use of technical equipment, in the late 1970's, such as:
- a diesel water-pump for irrigation and supplying water to livestock
- a diesel motor for grinding maize
- a generator for supplying electricity to their own living quarters

Table 6.13 gives a summary of the extent and attributes of the nine farms concerned.

Table 6.13.: Farm extent of the commercial farmers in the Nkenyauna area, 1978.

<table>
<thead>
<tr>
<th>Farmers</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>House type</td>
<td>K</td>
<td>K</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>K</td>
</tr>
<tr>
<td>Farm size (ha.)</td>
<td>20</td>
<td>20</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>36</td>
<td>35</td>
<td>55</td>
<td>15</td>
</tr>
<tr>
<td>Veg. (irrigated)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Orchards</td>
<td>x</td>
<td>-</td>
<td>-</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>-</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Livestock</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>-</td>
<td>x</td>
<td>x</td>
<td>-</td>
</tr>
<tr>
<td>Fish ponds</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>x</td>
<td>x</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Motorised transport</td>
<td>-</td>
<td>x</td>
<td>-</td>
<td>x</td>
<td>2x</td>
<td>x</td>
<td>-</td>
<td>x</td>
<td>-</td>
</tr>
<tr>
<td>Diesel pump</td>
<td>x</td>
<td>-</td>
<td>-</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>-</td>
<td>x</td>
<td>-</td>
</tr>
<tr>
<td>Electricity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>x</td>
<td>x</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Large shop concern</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>x</td>
<td>x</td>
<td>-</td>
<td>x</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

This group of farmers has reached a standard of living in the last ten years that is far above the Zambian average. The farmers do not form a close social group and they do not have much contact with each other. Of the nine, four are kin to each other (App.XII, case 6-7). The related farmers support each other in carrying out farm activities such as exchanging knowledge on farm experiences and technical equipment. But in other respects they operate very independently of one another.

Socially, as well as economically, these commercial farmers have an important place in the region and in their
various churches. While most belonged to the ECZ church in the 1960's, some have left this denomination to take the initiative in starting new branches of autochto ne African churches in the region. In these churches they fulfill leading roles and have many social contacts. In respect to politics, most of these farmers are inactive and even keep aloof.

Generally, it can be said that although prestige was traditionally gained through having the leadership of a large village with many relatives, today, within the context of today's small family settlements, prestige in the area is gained through economic wealth and in the social sphere through leadership in a religious group.

While a number of farm plots had been surveyed and mapped at the time of the Peasant Farming Scheme, during the last few years farmers, particularly those belonging to the most successful, have submitted requests to the Department of Agriculture for demarcating the land belonging to their farms, including land under fallow and land for further expansion. After demarcation, a title to the land can be obtained—a leasehold for a legally determined period. Certainty of tenure is thereby created as well as the possibility for using farmstead and land as loan security (see also Chapter 7.3).

6.4. CONCLUDING REMARKS

In summary, it can be stated that in an area with good natural resources, in the vicinity of a market, and with favourable conditions created by the government such as alignment of a road and an extension programme for individual farmers (the Peasant Farming Scheme) economic growth has begun and spontaneous migration to the area has started. Inter regional mobility in the district resulted in the settling of small family groups in the area, who were especially attracted by economic opportunities and to a lesser degree by nearby social services. The area exerted also pull on migrant labourers returning from the urban areas to settle there permanently. Economic growth and the presence of services have worked positively on permanent residence.
This is reflected in a high percentage of houses built from durable materials. In the region an agricultural system developed spontaneously that is in several aspects basically associated with that of the past, i.e. use of diverse soil types and cultivation of various food crops, both rain-fed and with the help of simple irrigation. Gradually methods were improved and new crops tried. The activities which have been undertaken are varied and take place during the entire year. Several people embarked both on farming and trading, building up their own enterprise in which activities mutually reinforce each other. The expansion in the region, though, remained limited, on the one hand because of the area's limited size and on the other hand, because of the moderate size of the local market. Migration to the area consequently declined and no spectacular growth in number of the group of better farmers took place.

In this respect the government did not pay due attention to developments in the area. Further extension of the areas' infrastructure through constructions of feeder roads to favourably situated points and enlargement of marketing opportunities other than for maize has not taken place. Neither has special attention been given to the less successful farmers. It must be realised, though, that personal characteristics among this group such as age, physical ability, education, work experience in town, church activity, do contrast unfavourably with the group of better farmers. The chances of successfully carrying out an extension programme with the 'poorest' is in this respect also much more difficult and is much more a question of a long term approach. 7)

Governmental organisations did not pay much attention to the way the better farmers booked their successes either. Techniques developed by them and results with cultivation of crops previously unknown in the region are not recorded nor is information disseminated. Research into this could give valuable indications for an extension programme based on a much broader plane than that carried out presently by the government.

It is argued that spontaneous developments in a small rural growth centre area should be fostered. Not a 'laissez-faire' policy as such is advocated, but a policy directed to extending
favourable pre-conditions (infra-structure, marketing) and at the same time following developments closely. In this respect new lessons can be learned for advancing economic growth for a wider population and undesirable developments, such as soil erosion threats, land occupation curtailing opportunities for those lagging behind or newly arriving, could be recognized on time. When we compare developments in this growth centre area with the settlement scheme approach, then we can see that developments in the growth centre area are more diversified, based on a wider range of cultivation of food and cash crops and other farming and trading activities and less dependent on government service availability.

It is striking, however, that in both situations, the growth centre area and at the settlement schemes, considerable differences have developed in income and extent of enterprise within a short period of time. In the case of the schemes more chances are given, however, to those with little education and limited urban work experience and/or capital. In this respect the intensive guidance at the schemes works as an important practical training, and yields success. But it must be noted also that there is a tendency by those who do well to leave the scheme and to settle independently. In this respect the schemes function as a transitory situation. The scheme strategy appears then to be especially applicable when it involves a population whose educational level and farming experience are very limited and where settlement pattern and land tenure systems are still fluid. It functions also positively in attracting migrants from a wide area (and from town) by providing an initial 'pied-à-terre' and a basic infrastructure to start farming.

In a situation in which a degree of agricultural development already has arisen and where the population is also, socially seen, more sedentary, it would seem that advancing spontaneous growth tendencies locally with the inducement of good service facilities, adjusted to different farmers categories present is the most acceptable strategy. An intermediate form is imaginable in which a settlement scheme is started that also extends its services to surrounding villagers.