Settlement patterns and rural development: a human geographical study of the Kaonde, Kasempa District, Zambia
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Notes to Chapter 1, pp. 10-22


2) The official spelling of the district is Chizela (sometimes also written Chizera). In Kaonde orthography the spelling is Kizela and this spelling is used in the Chapter on Kaonde history. While this publication was in preparation (1979/80), the administrative boundary between the Kasempa District new style and the Chizela District was not yet officially gazetted. In an official meeting (May 1980) at Solwezi between senior Chief Kasempa, Chief Kizela and Chief Mushima, it has been proposed that the new district will incorporate the chief's area of Chief Kizela as well as Chief Mushima. In this way Kasempa District is roughly divided in two equal parts with two chiefs in each district. It has been noted that implementation of this plan will depend on establishing an all weather direct route between Chizela and Mushima via Kalenjo mine. The district boundary indicated on Fig. 1.3 and Fig. 1.4 is only a rough indication.

3) In the national parks no inhabitants (except game wardens' camps) are located. The Game Management Areas are first class controlled hunting areas, and they act as buffer zones around the National Parks. In a few cases villages are present in these areas, but excessive population settlement is not stimulated. Inhabitants of these areas can get special permits for hunting; other hunting permits for these areas are only issued on a very limited basis. The Jange-Luswishi Game Management Area is a closed area due to heavy poaching occurrence. Reports draw attention to the heavy poaching rampant in all the GMA's in the North-Western Province and especially in the Jange-Luswishi area, which is most easily accessible to the Copperbelt (Johnson 1979, 16).

4) Both big and small anthills ('kukutu') are built by (white) termites (Rangara bellicosus). Some of these structures reach a height of 6 m, with a base diameter of 30 m, and a volume of 350 m³. Several of these structures are still in use and new anthills appear regularly; this is especially noticeable in the dams.

5) The WDNP (1975, p. 2) indicates that the central and south-eastern part of the district is an area with good agricultural soils. The rest of the district and province is not further classified. Refer to a discussion on contradicting (unpublished) recent reports on the occurrence and locational spread of red clay soils in the province (Johnson 1980, 95). This discussion reveals that much further investigation and field research is necessary to map the agricultural potential of the North-Western Province.

6) Melland (1967, 22) states that the water of the mineralised hot springs at Kaimowe have been found on analysis to be almost identical with those of Eomberg in Germany. Analysis of a water sample at the soil laboratory of the Royal Tropical Institute at Amsterdam in 1972 gave NaCl content of 9 gram per liter and a 85.6% NaCl content in the locally fabricated salt.
In reality, this is higher since not all cases are reported to the hospital at Kasempa, and in many cases, the direct cause of death is not registered as sleeping sickness but as the result of accompanying complications such as pneumonia and general weakness. This section is only concerned with tsetse fly and sleeping sickness. This does not imply that other sicknesses of endemic and serious nature do not occur in the district. Cases of malaria are frequent - ca. 200 are admitted to the hospital per year of which about 1% are deadly. Aside from these, many malaria cases are handled at the local rural health centres. TB, pneumonia, bilharzia, and particularly measles and whooping cough among children, are diseases which occur frequently.

Kasempa district inhabits entirely a Kaonde speaking population, except in Kasempa township where a number of inhabitants, mainly government personnel, lives from all over the country. The new Kizela District is inhabited by a Kaonde, Chokwe, Luchazi, and Luvale-speaking population. Kaonde is also termed Kikaonde, with the prefix "ki" indicating the language, and as Bakaonde, indicating the population (Wright 1977). In older publications in French, the Kaonde are referred to as Bakahonde, Kahonde and Kawonde (Verhulpen 1936; Boone 1961). Here, as is now usual, Kaonde refers to the population group as well as the language.

On the basis of archaeological excavations in Zambia, especially during the last two decades, main pottery-cultural groups have been further defined for Zambia (Phillipson 1974; Roberts 1976). Three cultural traditions are generally delineated: the Luangwa tradition of a relatively recent (since ca. 1500) group of migrants to Zambia, the Lungwebungu tradition and the Tonga diaspora tradition. The last two groups have been settled in Zambia for a longer period. There is a clear difference between the pottery of these groups as well as the method of manufacture. Luangwa pottery is made by the women while the men make the pottery of the other two groups. The Kaonde area is not considered in the above publications because of lack of archaeological data and information about present-day Kaonde pottery. The most western border of the Luangwa tradition is considered to be the Lamba area, and the most eastern border of the Lungwebungu tradition extends to the Lunda, Ndembu and Luvale (Roberts 1976, map p.70). Roberts (1976,71) assumes that 'the culture of the Kaonde area has long developed relatively independently from those of the surrounding regions'. This is correct to a certain extent. On the basis of the (scarce) information known to me about the pottery made by the Kaonde, one can conclude that stylistically, and taking into consideration that pottery-making is done by Kaonde women, the pottery is clearly related to the Luangwa tradition. Also in this respect the Kaonde can be reckoned to be culturally related the most to the eastern neighbouring groups e.g. the Lamba, Bemba, etc.

Frequent village movements are not very detrimental to banana plants. After some years old banana stools will become infected by eelworm (nematodes) and a new site for the plants is a necessity. At a new village site, young banana plants will give fruits within about a year and sometimes villagers go to the old village site to collect fruits.
Notes to Chapter 1, pp.39-44

11) A village and population enumeration carried out by the author in the Kalasa-village group in 1968 gives a figure of 10% polygamous marriages. For the Mukumbi area, Solwezi District, in 1967 12½% of all marriages were polygamous (N.W. Planning report, 1968).

12) Refer Chapter 2, note no. 6 (installation of a headman).

13) Douglas (1964,302) defines pawnship as the system of transferring rights over persons as compensation for offences and settlement of debts. Douglas gives examples of the existence of this institution among various matrilineal Central African tribes. In Kaonde oral traditions the subject of women given as tribute to an important chief, like the Lunda paramount chiefs, is mentioned. Melland (1967,65,73,75) reports also the transfer of people as payment of compensation. Also Doke (1931) gives an account of domestic slavery among the neighbouring Lamba (cf. also to Chpt. 3.2.4.b).

14) The mission was established in the district in 1912 as a branch of the South African General Mission (SAGM); later the name changed to African Evangelical Fellowship (AEF). (cf. Appendix X - Chronology Kasempa District). Locally the mission is often called 'Free church'. Today the mission name is Evangelical Church of Zambia (ECZ) (cf.also to Chpt. 3, note 14).

Notes to Chapter 2, pp.48-50

1) Systematic-etymological-research of the clan and clan leaders praise names (often in an archaic language) which occur in oral traditions and comparative research on clan myths over a wide area - Zambia as well as Zaire - could give more information about clan origin and former clan affiliations. In historical studies of the Nsenga, Apthorpe explicitly points out the significance of the clan as 'the prime differentiating unit by the Nsenga' (Apthorpe 1960 b, 69). This also applies to the Kaonde.

2) Written history before 1900 is not available. Early European travellers did not travel through the centre of the Kaonde region and apparently did not visit any Kaonde chiefs. There were also no important trade routes through the area. Europeans travelling in the north-western area were: N.Cappello and R.Ivens who trekked from Angola via the Zambezi, along the Kabompo River towards Bunkeya in Zaire in 1884; and, I.da Silva who travelled in 1853-54 from Lealui on the Zambezi, through Barotseland, along the south of the Busanga swamps to the East Lunga and from there to Macambo on the Luangwa River, (Early European Travellers, map 1964). In the north the Hungarian traveller Magyar Laszlo visited the Lunda kingdom and passed the court of Chief Musokantanda and the region of the Lunda (Ndembu Chief Kanongesha (Gann 1969,25). Livingstone on his 1853 journey along the Zambezi to the west coast met the Lunda Chieftainess Nyakulenga, who brought him to the court of the Lunda Chief Ishinde, located in the present Zambezi District.

3) Richards (1959,243,note 2) says: 'The Kaonde are divided into sixty-two exogamous clans, but their functions are described as insignificant except for the performance of reciprocal burial rights (Melland,1923). The number of 62 clans must be an error, Melland does not give that number and mentions most of the same clan names listed in Appendix III.
4) The report 'Military intelligence - Kasempa sub-district' 1921 (KDD 1/5) states: 'Formerly about June or July, the tribe used to assemble at the village of a powerful chief for a big beer drink, and to discuss the prospects of forthcoming raids. In this country the prime objects of such raids is said to have been the acquisition of women as slaves'. This can imply that clan members and their chief did indeed gather in the past and as such functioned as a corporate unit. Capturing women was important for keeping young marriageable men within the village. Today as well, clan members living widely dispersed come together for burial ritual (pers. observation) and installation of an important headman (cf note 6).

5) The author is indebted to Prof. Dr. R.J. Apthorpe for bringing the occurrence of different types of clan relations to his attention. Apthorpe (1968, 19) defines four types of relations between Nsenga clans, on the basis of the personal papers of E.H. Lane Poole (1910/1920) and his own research in 1958/61:

1) clan equivalence ('umo') - two clans are asserted to be one or the same.
2) kinship or sister clans ('pokwao') - intermarriage between these clans is prohibited.
3) clans linked by mutual understanding ('pa cendo') - leading to inter-visiting and inter-marriage.
4) joking partnership between clans ('cinungwe') - there is no case-at-law whatsoever between members of these clans.

Apthorpe reports that there is no great difference between types 1 and 2. The Nsenga types correspond closely to the types which are delineated here for the Kaonde.

6) During installation of a new headman or chief, the 'wunungwe' clan plays an important role. This clan is responsible for instructing the new chief and fulfills the leading part during the installation ceremony (pers. observation of installation of regional headman Kamimbi (Bayanga clan), Oct. 1978). That the ceremony, and particularly the nocturnal instruction, is carried out by members of the 'wunungwe' clan can be attributed to the fact that this clan is acquainted with the rites and spirits of the area. It also deters eventual efforts by a fellow member of the headman's clan from obtaining the insignia belonging to the headman position. The hut in which the new headman is instructed and where he receives the headmanship insignia (such as mpande shells) may not be entered by persons of the headman's clan. The hut is guarded by members from other clans who are responsible for seeing that the installation is orderly and not interrupted by clan members of the headman to be installed. In the case of Headman Kamimbi of the Bayanga clan the nocturnal instruction was carried out by members of the Bena Kyulu clan, their 'wunungwe'. The formal installation took place the following morning by raising the blanket under which the headman was concealed, followed by a speech, given by a representative of Chief Kasempa. Kasempa of the Bena Kyowa clan is not a member of the 'wunungwe' clan of the headman. It appears from this that a differentiation can be made between the ritual and political installation. The ritual installation and the whole ceremony is carried out by the 'wunungwe' clan, the factual political installation is done by the chief in whose territory the headman is located. It seems from this that original traditions and later developed political relations have come together within the installation ceremony.
Notes to Chapter 2, pp.53-56

7) Bride exchange can take place also between 'wunungwee' clans. Whether or not this was a later development or structurally bound to 'wunungwee' clans was not ascertainable.

8) In addition to 'wunungwee' between clans, there is also reference to 'wunungwee' between tribes, such as between the Kaonde-Lunda and Kaonde-Lozi (cf. Melland 1967,254, concerning 'muzenze'). As explanation, the following is said: 'In the past we fought each other; now we are friends'.

9) Ref. Apthorpe 1960b,73.

10) Ref. note 16.

11) This sub-division is based on Melland (1967,32), a typed manuscript by Chewemukulu (Kasempa 1942) and data collected by the author (Jaeger 1971/1972).

Chewemukulu (1942) divides the Kaonde as follows:
1. Bakaonde-Lunda-Lubasanga: the chiefs Kasempa, Matebo, Chizera, Munyambala and Ingwe

2. Bakaonde-Buluba: Mujimanzovu, Chibanza, Kapiji Mpanga, Mushima, Chinsengwe, Nyoka, and Kasonso

3. Bakaonde-Busanga: Mumena

This division is based on mutual kinship between clans as well as on language affinity. Groups 1 and 2 correspond to Bl + B2 and A1 + A2 respectively. It is not clear why Chewemukulu places Mumena separately. Maybe because this chief was a recent (late 19th c.) immigrant. Mumena is moreover related to the Bena Kyowa of Kasempa as well as to the Balonga (Mujimanzovu).

12) Melland (1967,32-33) defines three groups:

the mentioned group A1, the group Bl, the group B2. Melland assumes that this last group, as the A1 group, migrated originally far southward to eventually return in a northern direction. Oral tradition does not support this analogy. The A1 group migrated over a much longer distance and period southward than is the case with the B2 group.

13) The name Mbwela is a collective applied to various groups at present living in the northern and eastern parts of Western province. In common parlance Mbwela means 'people of the east'. The Mashasha, Lukolwe and Nkoya are often referred to by the term Mbwela. The Lunda speak of 'Kabwete wa Mbwela', meaning 'southerly direction'. Turner (1957,p.3) says the term Mbwela appears to have been widely applied by in-coming groups of Lunda stock to the peoples whom they encountered to the south and west of their homeland.

14) The Twa had inhabited Zambia for a long time and are referred to as pre-Bantu, probably of Bushmen or pygmy origin (Clark 1950; Brelsford 1965,109). They were a fishing population which inhabited the Lukanga and Busanga swamp areas, among others. The people are short, have a very limited technology, and lived in simple reed huts on islands in the swamp areas of Zambia (Moubray 1909). (It is interesting to note that Verhulpen (1931,81) mentions that the name of the pygmy population in Zaire is Batwa). Melland (1947,45) mentions a small swamp tribe, the Ba-Usanga (usa=swamp) under Chief Jimbo, and notes that it is 'apparently a branch of the Wa-Twa'. A number of villages near Busanga plain reported during my survey of southeastern Kasempa, in 1968, that Busanga was their tribal designation and not Kaonde. They speak a Kaonde dialect, mixed with Mbwela, and report that they belong to clans which are represented among the Kaonde. Possibly it concerns here an originally Twa population where assimilation took place first with the Mbwela and later with the Kaonde, accompanied by inclusion in their clans.
15) Brelsford (1965,56), based on Moffat Thomson (1934), reports that a so-called Luba-pocket is also to be found in north-eastern Mwinilunga District. This is a Bena Kyowa clan-section under Lubango which for a long while lived relatively isolated by the Jivundu swamps. According to Bantje (1971,46), this group, presently considered as Kaonde, speaks a dialect strongly akin to the Luba-Sanga language.

16) Similar legends about origin of the mushroom clan are also found among other tribes (e.g.Richards 1937,188). Legends of clan origin are often related with burial rituals which may be indicative of conflicts associated with the death of a headman, succession, and subsequent clan-section fissioning. It is not clear why a name alteration occurred in the Kasempa group and why the name Batemba fell in disuse. Clan-sections of the Bena Kyowa are known in Zaire, under various chiefs such as Katanga, Ngalu and Tenke, with which the Zambian Bena Kyowa kept contact; it is told that Chief Jipumpu went to them in Zaire. The Bena Kyowa clan has a joking relationship with the Bena Luo. An oral tradition says that the Bena Kyowa had split off from the Bena Luo and the legend cited is referred to. Informants mention as well that the Bena Kyowa did not pay tribute to the Bena Luo and that this was the source of their joking relationship. This myth may point to a conflict, refusal to pay compensation and a fissioning which led to a reciprocal fulfillment of certain ritual functions as groups related to each other.

In the case of funeral customs, it applies to the fact that the deceased must not be touched by a direct relation and not by a stranger. Members of a split-off group are therefore suitable as they are no longer considered to be direct relations but neither are they complete strangers.

17) Bayanga clan members say: 'we liked the power of Kasempa and we came nearer to him .... In cases of war we fled to his village on the hill' (comm. to the author, 1978).

18) Clark (1955,66) relating the history of Jipumpu Kasempa speaks even of the 'royal mushroom clan'.

19) Refer to the location of mineral resources in the district (cf.1.3) (Guernsey 1951,69).

20) Many chief's names relate to elephant hunting and ivory trade (e.g. Mujimanzovu: the one who grows tusks; Kinsengwe: elephant hunter). A relatively large increase in the sale of muzzle loaders to Africans occurred between 1880-1900 as a result of European armies switching to automatic weapons (Marks 1976,72).

Notes to Chapter 3, p.70

1) Refer for a chronology of events in the Kasempa District - 1875-1975: Appendix X. Chibanza erroneously records 1898 as date of European arrival in the Kasempa area. The expedition of Colonel Harding with a detachment of Barotse Native Police trekked through the area from October 1900 until January 1901 (Harding,1904). The first mining exploration expedition through the North-Western Province was the expedition of Grey from April until December 1899 (Grey,1901). Melland (1967,17) erroneously implies that the Grey expedition reached Kansanshi mine in 1897; this had to be 6th September 1899 (Bancroft 1961,106).

2) The BSAC (The British South Africa Company) was empowered by Britain to exercise administrative control, to open trading posts, to keep a police force, and to give concessions to mining companies in this part of Africa (Hall 1965;Gann 1969).
Notes to Chapter 3, pp.70-73

Rhodesia was divided into 'North-Eastern Rhodesia' with the capital at Fort Roseberry (present Chipata), and 'North-Western Rhodesia' with the capital at Kalomo. The two territories were united as Northern Rhodesia in 1911 with the capital at Livingstone. Britain took over the function of the BSAC, the area becoming a protectorate under the Colonial Office, London, in 1924. Lusaka was established as capital in 1935.

3) In 1902 there was a detachment of 30 men Barotse Native Police at Kasempa, as compared to Kalomo 156, Nkala 21, Lealui 20, Victoria 10, and Monze 3 (Brelsford 1954,19). The relative strength of this force at Kasempa, gives an indication of the military position of the Kasempa station in those years.

4) Except Kakoma's unpublished study (1977), there is no full account of the reaction and resistance against the new rulers in the northwestern part of Zambia and the internal politics preceding independence comparable to Meebolo's study (1971) on the Northern Province. There was both overt and indirect opposition (Ref.: Clark 1955, Copeman 1952, 1956, Gann 1969).
For instance, Chibanza relates that: 'Chief Jipumpu was more than once put into goal .... so that he might be tamed and obey the administrative officers' orders' (Chibanza 1961,69).
A reaction of an indirect character were the numerous religious movements, mainly of an eschatological character in the northwest (Beech 1953, Chibanza 1961,78; Gann 1969,124; Van Binsbergen 1979,188,235;note 39). A very active movement in the Kasempa District with a strong anti-European and anti-mission character was the Watch Tower Movement, especially in the 1920's and 1930's (KDD 1/4/1, Hooker 1965,22; Chibanza 1961,81).

5) Kasempa was also the capital of the whole province for several periods: 1901-1916, 1923-1933, 1942-1946. Refer to the history of the administrative changes in the North-Western Province Appendix XI and Stone 1980,67.

The name Boma, for an administrative centre, originates from the Swahili word Boma for an enclosure (stockade), a thorn fence built to keep out lions. The first European administrators pitched their tents in the fenced enclosures of chiefs' villages and subsequently built their own fenced camps (Gann 1969,150; Johnston 1897,175). At Kasempa heavy earth walls were erected in the early 1900's around the Boma buildings (ref. photo Clark, 1955,63).

6) Refer to Chapter 3.2.4.b for influence of slavery on settlement pattern and to chapter 1, note 13.

7) Source Zambia National Archives, ZA 1/9/27/1e and 5e; for 1929 the Kasempa District Note Book, KDD 5/1 gives details on the number of inhabitants per chief area. In the Solwezi District the following Kaonde chiefs were appointed: Chibanza, Shilenda, Kapiji Mpanga, Mujimanzovu, Mukumbi, Mumena, Katotola and Matebo (the last three were registered for some time in the Kasempa District) and further the Lunda Chief Musokantanda and the Lamba Chiefs: Mulonga Kalilele and Kambilombilo. In addition to these, a small number of 'autonomous headmen' were appointed, in the Kasempa District: Kajilikwenda, Lutowa, Chifwabantu, Kayamba, Lubinga, Kavalamboko and Muwonki. This also points to the diversity of small groups and the autonomy of village clusters. The administration gave a small salary to the chiefs. Kasempa, Kanongesha, and Sailunga were the first to receive £6 annually in North-Western Province. Later, other chiefs received 15 up to 60 sh. annually (Kakoma 1977,160).
Notes to Chapter 3, pp.74-81

Boundaries of the chiefs' areas were set usually through the (large) uninhabited areas between village clusters. In a number of cases, the boundaries were not precisely fixed, especially in areas where discussion was still going on between chiefs as to who had gained control over a certain village cluster. These discussions also continued in later years so that even today no exact borders exist in all places. This has sometimes confused population registration per chief area. Fig. 3.1 gives only a rough indication of boundaries between the chiefs' areas based on a map drawn by Shone (1949).

8) There are exceptions such as, for example, Chief Kapeshi (Bena Kyulu clan), a headman who moved with some villages considerable distances during the colonial period. At the beginning of the century, he was located in Mwinilunga District. Subsequently he moved to Chief Munyambala's area in Kasempa District, and then, finding no place to settle, he moved to the Lufupa and Ntemwa river area where he was appointed by British administration as chief of a Bena Kyulu group of villages. In 1937, he lost his title due to disorderly conduct (burning his relatives' gardens). Kapeshi then moved to Chief Kapili Mpanga (Bena Kyulu clan) in Solwezi District.

A gradual migration of primarily Chokwe and Luchazi villages took place especially in the west of the district, along the Kizela-Kabompo road. A small number of Luvale villages settled near to the Busanga swamps to start fish trading. Migration of a group of 25 villages under headman Samuzimu took place from Angola, via the Kabompo River, to the lower Musondewezi River. In 1948, this group settled in Kasempa District (pers.comm. Cuthbert Chipala). The village group still has a rather isolated position in the district, but is active in the field of agricultural production for the market (Short 1973, 59).

9) The Lunda Paramount Chief Musokantanda resided in Zambia in the period 1916-1919. At that time the then Native Commissioner in Solwezi, F.H. Melland, emphasised the links between the Lunda and the Kaonde and the overlordship of Musokantanda. In 1920, Sailunga, a Lunda chief in Mwinilunga District, became the representative of Musokantanda in Zambia. In 1930 the Lunda-Kaonde Chief Musele was appointed as representative of Musokantanda for the Kaonde, but Musele never became very influential under the Kaonde chiefs (Kakoma 1977, 206). Kaonde chiefs in the south who maintained contact with the Lozi kingdom were Munyambala, Mushima, Kapeshi, Kasonso and Kalasa.

10) The wards do not always cover socially homogeneous groups; boundaries sometimes follow geographical features (road or stream) and incorporate village clusters which have little contact with each other.

11) Changes in the length of stay of the migrant workers are indicated clearly by figures, given by Menzies (1962, 141, 143). The average worker's length of service in the Copperbelt mines was:

<table>
<thead>
<tr>
<th>Year</th>
<th>Length of Service</th>
</tr>
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<tbody>
<tr>
<td>1930</td>
<td>0.4 year</td>
</tr>
<tr>
<td>1934</td>
<td>1.2 &quot;</td>
</tr>
<tr>
<td>1938</td>
<td>1.6 &quot;</td>
</tr>
<tr>
<td>1958</td>
<td>6.6 &quot;</td>
</tr>
<tr>
<td>1960</td>
<td>7.5 &quot;</td>
</tr>
</tbody>
</table>

Labour turnover was 83% annually in 1938, and in 1960, 22%.
Notes to Chapter 3, pp.83-88

In the Copperbelt relatively many Kaondes have been employed at the Nchanga mine at Chingola. Townships where many Kaondes live are Chililabombwe, Kitwe and Kalulushi (Brelsford, 1965, 130; Mitchell 1954, 32).

12) There are no indications that migration from the district has a step-like character of moving first to a centre in the district and then to an urban centre. In this respect the Kasempa centre was (certainly in the 1960's) too small to function as an intermediate centre for seeking employment. (cf. Van Spengen (1976) for a discussion on internal migration in the Eastern Province).

13) In fact, a separation took place in the Kasonso village group. Some of the villages refused to go in the direction of Kasempa and moved to Mumbwa District with headmen Shamapango and Jilumfumi, where they settled in the area of Chief Kaindu.

14) The ECZ Mission (in former days SAGM - refer to Chpt.1, note 14) settled in the area of the Lalafuta and Lower Musondweji-river in 1912. Subsequently, the mission station was moved several times along the Musondweji because surrounding villages moved their site (pers. comm. 1968 Rev. C.S. Foster, Mukinge Mission). In 1926, the decision was taken to move the station to Kasempa, as a more central place among the Kaonde, and with the expectation that a more stable population would settle around the station. A site was chosen along the Lufupa river in an area that is not the core area of Chief Kasempa. In that respect, the area had a 'neutral character', and could easily attract people from various places in the district (regarding factors in locating mission-posts, cf. Van den Berg, 1975).

15) Source for 1923: KDD 5/1, gives a list of names of village headmen and number of huts per village. Based on total number of inhabitants in the area and total number of huts, the average number of people per hut can be estimated at 2,7; according this figure the number of villages with a population of 50-100 and above was calculated. 
Source for 1963: CSO 1968. The figures do not represent all the villages and their population in the district because the 1963 census does not give specified figures per village for all the enumeration areas in the district. 
Source for 1969: CSO 1974. The table does not give the overall total of the district population; not included are the population of Kasempa township, surrounding locations, service centres, game and agricultural camps, Kalengwa mine, etc.

16) In the last century, the Kalasa group moved through the present Ndola Rural District where it was closely affiliated with Chief Shibukinya (of the Bashishi clan) (Jaeger, 1972). Brelsford (1965,65) considers the group of Shibukinya a mixture of Kaonde, Lamba, and Seba. Doke (1931) regards Shibukinya as a Kaonde but originally a Lunda. In Kasempa District Kalasa was known as Lamba in the early 1900's, and later as Kaonde. Kalasa took active part in the slave trade, delivering slaves to the Bayeke. As oral tradition tells, the chief was given the honourable name of Kalasa by the Bayeke. Doke (1930, 41) notes that when a group surrendered to the Yeke, it could take the name of the rulers. The name Kalasa occurs by the Bayeke. In 1899 and 1901 the expeditions of Grey passed the village groups of Kalasa along the Lunga and it is said that some shots were fired (Thornhill, 1915). Some oxen-wagons were left in the area due to the death of oxen from sleeping-sickness. The location of Kalasa's village is indicated on Grey's map (Grey 1901,67).
Notes to Chapter 3, pp.89-96

17) In most cases the entire population, including the chief, moved their villages. This pattern changes when a chieftainship developed into an influential political centre. The settlement then becomes more permanent in one area and displays more specialisation and dependance on the surrounding population, for food and supply of goods. The Kaonde did not develop this to any extent in the precolonial period. Since 1900, Chief Kasempa remained in the same vicinity but the succeeding Kasempa chiefs still altered the site of their capital over short distances, because of the custom that a new chief is not using the residence of his predecessor (even though it may be a well-built brick house). Also, the newly installed Kaonde chiefs such as Kasempa and Kapiji Mpanga (installed in the 1970's) have not used their predecessors' burnt brick houses but have built a new house on a site nearby.

18) KDD 1/3 Native reserves, 1927, mentions that in the area of Chief Kalasa the average residence of a village is 3 years, that average distance of a move is 2.8 miles; as reasons for moving are stated:
   New village : 5
   Sickness : 3
   Hippo in crops : 1
   Decayed huts : 5
   Poor soil : 2
   Bad water : 1
   Crop failed : 3
   Bad site : 1

   Peters (1950,51) records for the Lala that the average length of time spent on one site is 5.5 years and the average distance of each move made, 5.0 miles. Moves of less than a mile (usually of about a quarter of a mile) made occasionally for the purpose of rebuilding huts when these are old or ant-eaten, are not included in foregoing averages calculated by Peters.

19) Source for 1923: KDD 5/1; for 1949: Map Shone 1949 with names of villages; for 1969 enquiry carried out by author.

20) The leader of this group of Bapumpi villages was headman Ntonto, who died in 1968 (ref.also Short, 1973,56).

Notes to Chapter 4, pp.112-118

1) The Tsetse Control Officer North-Western Province R.L.Morris played an important role in the project formulation and the initial implementation of the village regrouping plans until his untimely death in 1965. He was especially involved in the relocation of the Kalasa village group from the lower Mpungu area to Kanongo-stream.

2) The Dutch volunteer team, known as Rural Training Team, has been stationed in the area from 1966-1973. Failure of the resettlement plans, the thinly spread population, and meagre progress results led to the withdrawal of the team. Dutch volunteers were subsequently stationed at Kasempa Boma and at two farm settlement schemes (cf.Chpt. 5) for assistance within government departments.

3) In 1978 an attempt was again made to promote agricultural market production by setting up a farmers' settlement scheme such as the Mpungu and Nkenyauna schemes discussed in Chapter 5. In 1979 about 15 farmers joined the scheme.
Notes to Chapter 4, pp.119-124

4) Population figures are based on a survey carried out in the area by the author in 1968 (cf. Jaeger 1969) and a rough estimate of the population based on number of huts per village in 1978. An inventory of available services in the area took place in 1968 and 1978. The following services spread over the area are available: upper and lower primary schools, rural health centres, local courts, shops, agricultural camps, marketing depots, tractor mechanisation centre, community development assistants.

5) Based on the age structure in the Kasempa district, it can be calculated that 21% of the population is of the schoolage group, 7-14 years. Considering that an upper primary school is made up of 7 classes (grades 1-7) and that a norm for a class is 40 pupils, given an enrollment of 280, proportionally, the minimum population needed is 1300 inhabitants. Disregarded is that in practice, the actual school attendance is often not more than 70-80% on the lower primary schools and 50-60% on the upper primary schools and during some seasons this is even lower (Gruber 1975). If we consider only a lower primary school (grades 1-4) with two teachers and two classrooms, then still ca. 80 pupils of the age group 7-11 years, i.e. 12% of the population are needed. A population of not less than 660 is then a minimal requirement.

6) In planning policy sometimes a distinction is made between a Rural Health Centre type A (with a staff of 2) where an accessibility of no greater distance than 8 km. is strived for and a Rural Health Centre type B (with a staff of 4, a capacity of 16 beds and curative as well as preventive health care activities) within a distance of 25 km. (Gruber 1975). A 'catchment area' of about 3000 persons for a simple clinic (dispensary) or rural health centre type A, is based on the calculation that on an average the clinic is visited 3 times a year per person. For 300 working days this gives an average of 30 patients a day. For a well equipped rural health centre a catchment area of at least 10,000 people is considered as a minimum. In these calculations much is, moreover, dependent on the local health situation, accessibility of the clinic, availability of transport, and on the demand and expectations of the population. Here again a feedback relationship is present. It does occur that a nearby simple dispensary with an incomplete supply of medicines is passed over in favour of a visit to a well equipped larger centre or hospital, at a much larger distance.

(For a discussion on coverage, effectiviness, and efficiency of health services, refer to internal documents International Course in Health Development, Royal Tropical Institute, 1980).

7) Although Zambia has switched to the metric system, this section uses acres as surface measure in reference to other literature (1 acre = 0.4 ha.).

8) Data were gathered by agricultural assistants together with Dutch agricultural volunteers in the Kalasa area in 1968. Calculations are based on household, man and/or wife and children, having their own gardens. Within an extended family, there is usually more than one household.
9) Estimates vary widely for crop yield per acre (cf. e.g. Peters 1950,57). As a very cautious starting point, 500 lb of sorghum per acre is calculated here, as reported in the Agricultural Report, North-Western Province, 1967. Calorie estimates are based on 1 kg. of unground grain equivalent to 3400 Kcal. About 210 kg. of unground grain per person per year is taken as the subsistence minimum. Such an amount of grain gives a sufficient protein intake (Clark 1967,54).

10) The following land capacity classes are distinguished (Department of Agriculture, Kasempa Land Use Survey, 1965):

**Arable land**

Red clay soils: (C-soils previously indicated with R)

C1: Land capable of being maintained at a high level of productivity under an intensive cropping system. No special limitations of erodability or hindrance to cultivation.

C2: Land capable of being maintained at a high level of productivity under a moderately intensive cropping system. Increased hazard of erosion due to steep slopes or shallow soils necessitates the use of suitable rotations and erosion control practices.

Sandveld soils:

S1: Land capable of being maintained at a moderately high level of productivity under suitable rotations which include a rest period under grass (lay or fallow). There are no special limitations of erodability or hindrances to cultivation, but normal conservation practices are essential.

S2: Land which is more difficult to maintain at a moderately high level of productivity, or land similar to S1 in productivity but with an increased hazard of erosion. Normal conservation practices are essential and the rest periods under grass should exceed the period under crops.

S3: Land which is difficult to maintain at even a moderate level of productivity or which has a severe hazard of erosion (due to steep sloped or shallow soils). Special attention must be given to conservation measures, and long rest periods under grass should follow short cropping periods.

**Non arable land**

D: "Dambo" National depressions where the soils remain waterlogged for long periods.

W.G.: Winter Grazing. Land which due to prolonged waterlogging during the rainy season is unsuitable for cultivation.

11) A survey carried out under 25 households (112 persons) in the Mukumbi area, eastern part Solwezi District in 1967 gives an average of 0.4 acre land under cultivation per person (Hartoungh 1970, Regional Planning Report, Mukumbi Area 1968). It concerns here a mixed Kaonde-Lunda population which raises cassava as the main staple food; subsidiary crops are maize, sorghum and beans. It was found that during the yearly food scarcity period (Dec.-Jan.), the calorie intake is too limited for nearly 50% of the population and very low for 21.5% (1000-1100 Kcal.).
Note 11, Chapter 4, continued: During the 'normal' food period period (April-Oct.) a substantial increase was observed both of calorie intake and protein. General improvements in the dietary situation were suggested through:
1. increase in the local production of maize, sorghum and beans;
2. improvement of storage facilities.

Notes to Chapter 5, pp.137-168

1) The Mpungu farmers cooperative was given a blockloan by a commercial bank in 1976 for the purpose of buying two tractors and for funds to issue seasonal loans to the coop members.
The regular breakdown of the government tractors at the scheme and the desire to be less dependent on government services, prompted the farmers' committee to accept the offered loan. Due to this loan the farmers have a long term, heavy financial burden, which after two years already led to requests for suspension of payments.

2) Source: Annual reports, District Agricultural Officer Kasempa. In table 5.1 figures are given of the production of hybrid (SR 52) maize, based on the reports of the agricultural assistants in the various areas of the district (refer also Appendix VIII), excluded is the cultivation of local maize varieties grown in subsistence gardens.
About 80-90% of the total maize production is sold to Namboard. The rest is sold locally and a small amount is sometimes kept by farmers for their own consumption.
The total Kasempa figure for the season 1978/79 excludes Kizela area and is an estimate based on a sale to Namboard of 11,148 bags (Agricultural report, Kasempa 1979). Market maize production in Kizela District was 503 bags in 1978/79.

3) Source: Annual report, Farm manager Mpungu and Nkenyauna settlement scheme. In 1979 at Mpungu together with the Kabusenga extension 106 farmers were settled.

4) In this table, the Kanjibiji section is included. In 1978/79 there were 14 farmers settled at that section and serviced from the Nkenyauna centre at a distance of about 15 km.

5) The total capital investment over the period 1972-1981 is estimated to be K 450,000. When ultimo 1981 about 300 farmers are settled as planned, investments cost per farm come to K 1500.
In respect to investment costs the schemes belong to the group of low capital investment schemes in the country (Schultz 1976,181).

6) In the season 1978/79 a small scale cultivation and credit plan, the 'K 80.- plan', was promoted by the settlement staff. The plan tried to promote, especially for farmers with debts at the credit organisation, the cultivation of not more than 1 ha. maize, to be worked intensively by hand or oxen plough and to avoid the costs of tractor hire. The results were fairly well in that season.
Notes to Chapter 5, pp.168-172

In the season 1979/80 this small scale credit and cultivation plan was not continued and again the normal seasonal loans, including tractor hire, were granted to the farmers.

For the emerging commercial farmers, however, it seems much better to give small loans, excluding tractor hire, and to promote the intensive cultivation of a small acreage, to be worked by hand or oxen.

In this respect the recently introduced Lima extension system, which works with seed and fertilizer portions for exactly 1/4 ha., could be a step in this direction.

When we consider the advantages of small scale cultivation with the use of oxen ploughing the following points can be listed (Parmentier, 1979):

- the farmer does not plough more than he can handle, subsequently farming activities, such as weeding can be overseen more easily.
- more attention can be given to every single crop, because the total area under cultivation is smaller
- the farmer does not have to wait for the tractor, before he can start to cultivate his fields
- the farmer can finance the oxen himself and learns to handle the financial aspects of his enterprise
- full-fledged stumping of the plot is less necessary, because oxploughs can easily avoid stumps.

7) In 1980 the decision was made to build a lower primary school along the road between the Nkenyauna scheme and the Kanjibiji extension, to serve part of the Nkenyauna scheme and also the new Kanjibiji section.

8) Most settlement schemes in Zambia do have a lay-out of smaller plots, about 10 ha. (Hedlund 1977, Parmentier 1979).

9) Research into the feasibility for small or medium scale agro-processing industries in the Kasempa centre is also recommended. With the introduction of small-scale milling equipment both for service milling as well as market milling production might be promoted. Refer: R.S. Forrest and G. Yaciuk, 'Sorghum milling, a new agro-industry for Botswana', International Development Research Centre, Ottawa 1980,

In a district such as Kasempa with a considerable local sorghum production, further production increase and market sale of that commodity can be envisaged. But it is not the policy of the Department of Agriculture to encourage production of that commodity (refer Annual reports Department of Agriculture, Kasempa).
Notes to Chapter 6, pp.175-196

1) Under discussion here is the Nkenyauna area, in contrast to the Nkenyauna scheme. Nkenyauna area, is an area of about 15 km. long and 2 km. wide, situated along the (new) Mumbwa road. It consists of the sections Nkenyauna, Kantenda, Kabukafu, and Kanjibiji, the adjacent neighbourhoods of Mukinge and Kivuku are not included.

2) Figures in table 6.1. are based on a map indicating village location (Shone 1949) and on the assessment of an average village size of ca. 40 people in the 1950's, refer table 3.2. The district population, based on enumerations in the chiefs' areas, comes to 28,000-30,000 people in the 1950's (cf. KDD 5/1 and Bands 1964, refer Bibliography F1 and I). In 1969 an enumeration was done by the author with the help of Mr. N. Kubikisha and L. Kaliombe and again in 1978 with the help of Mr. Kubikisha in the Nkenyauna area.

3) The word 'village' is used here in the colloquial sense and includes the more traditional village, as well as all separate spatial entities such as a homestead consisting of some houses, a farmstead or a store with living quarters.

4) Interviews were held with all village headmen (including heads of separate spatial entities such as a homestead, farm or store) in the area. Not included were other family members, living in the village, having occupations such as farmer, labourer etc. But in general these are few, with the exception of day labourers; people starting a farm or a store nearly always settle at a separate location.

5) Although in studies on East African farmers which analyse correlation between religious ethics and entrepreneurship (cf. 5.1.2.) attention is focussed on groups such as the Jehovah's Witnesses and Seventh Day Adventists, from this outline and from the data on the scheme farmers, it appears that this is just as true for other Christian denominations, such as the Protestant ECZ mission in Kasempa District.

6) Marketing problems, moreover, occur in some periods, when at the same time large amounts of one crop (e.g. cabbage, tomatoes) are offered for sale. Too little attention is given to research and planning to promote a wider spread over the season of the delivery of perishable products.

7) Research is, moreover, needed on the institutional framework necessary to reach these groups. The government's population participation programmes are directed at creating 'Village development committees'. Considering the general tendency of village entities to fall apart these committees do not function. In general the proposed 'Ward development committees' cover too wide an area to be effective. Attention should be focussed in a region on the small farming family and emerging informal groups (such as religious congregations), as well as the chances to form cooperative associations (see also Administration for Rural Development, NIPA 1977).
Notes to Chapter 7, pp.199-215

1) Some sections of this chapter have been published in Jaeger 1980, cf. bibliography F12.
3) Main labour routes through the district were the route from Zambezi and Kabompo District via Kizela, Kankolonkolo and Nyoka toward the Copperbelt and an older route from Kizela to Kasempa Boma and from there along the old Mumbwa road to Lunga and further to Mumbwa/Kabwe/Lusaka and from Kasempa Boma to Nyoka. Labour restcamps were at Kizela, Kankolonkolo, Kasempa, Nyoka and Lunga pontoon.
4) Refer Van den Berg (1980) for a comprehensive review and bibliography of central place studies in Africa, and Zambia in particular. Refer also Funnell (1967,86) who points to applicability of Christaller's administrative principle in explaining the location of central places in East Africa. Refer also Roder (1969) on the genesis of central places in Zimbabwe.
5) Service centres in the districts bordering Kasempa District are left out of consideration here. They have practically no influence because of long distances to these centres, except Manyinga and Kabompo Boma, which with a distance of 30 and 55 km. do serve to some extent the western part of the new Kizela District. The distance to the provincial centre Solwezi is 100 km. from the border of Kasempa District and Mumbwa and Kaoma are respectively at 150 km. and 75 km. from the East-Lunga and Lalafuta rivers.
6) In Zambia the following hierarchy of centres is generally delineated:
Metropo - the large urban and industrial centres
Tertiary centres - mainly the provincial capitals
Secondary centres - mainly the district capitals
Primary centres - small centres with daily services.
Refer Chilczuk(1979) for a discussion on regional planning and service centrality indicators in Zambia.
7) Road classification: Grade I - tarred roads, Grade II - well maintained, all weather, gravel roads, Grade III - all weather roads, Grade IV - other roads.
8) In Kasempa District there were never any white farmers settled. The Mukinge mission area was located on Crown land (cf. map Kasempa 1965).
9) To foster rural development the TNDP (1979,83) proposes the following hierarchy of centres:
- Provincial centres of development
- Regional centres of development
- Sub-centres of development / villages development centres. A number of primary centres per district are suggested as sub-centres of development. TNDP map 9, p.76 indicates 6 centres in Kasempa District. An explanation of the choice of these centres is not given. Location of some of the centres corresponds with the zones and primary centres proposed here, cf. p.223.
Notes to Chapter 7, pp.222-227

10) Refer Regional Plan, Central Province for a very detailed review of criteria to determine the development potential of an area (Jayarayan 1978). Refer also Report Integrated Rural Development in Kabompo District (GTZ 1978) and Johnson (1980,204) for a comprehensive development plan in the Kabompo-Manyinga area.

11) Fig. 7.7 gives an approximation of the population distribution in the district in the 1970's, mapped on the basis of field observation and local information in 1978. Population figures are based on the CSO enumeration 1969. The total district population located in villages and mainly grouped together in village clusters comes to 28,000. The population in the centres, of which the main ones are Kasempa and Kizela, comes to about 5,000 people.

12) For a discussion of the opportunities and limits to introduce agroforestry as a farming system refer to Wassink 1977 and Royal Tropical Institute, 1978. Agroforestry is a method aimed at permanent land use, by making full use of forest, perennial and annual crops, grasses and small livestock. A system of rotation is applied in an area of arable land of ca. 5-6 ha. per household. The aim is to optimise an output sufficient to feed a family, without inputs from outside. Refer to Kabompo Integrated Rural Development Project (GTZ 1978) for projects to stimulate local production, local handicraft and introduction of small scale and mobile marketing systems for buying products.