

PART II FIVE CASE STUDIES

6 KANTINDI, N.TOGO

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6.1 Introduction

This first case study area is located in the Région des Savanes in northernmost Togo, about 20 km south of the Burkina Faso border and 35 km east of the border with Ghana (Figures 6.1 and 6.2). The nearest urban centre is Dapaong, which has some 15,000 inhabitants. The whole area is referred to as Kantindi; within this area there are three dispersed rural settlements ("villages"): Kantindi Centre (2,200 inhabitants), Baniame Kantindi (700) and Tossiegou (300). The village of Korbongou (Figure 6.3) is not included in this study. The first two villages are located on a slightly undulating penneplain, at an elevation of about 260m above sea level. A large number of semi-permanent streams (*marigots*) cut through the land. The valley floors (*bas-fonds*) lie about 5m below the

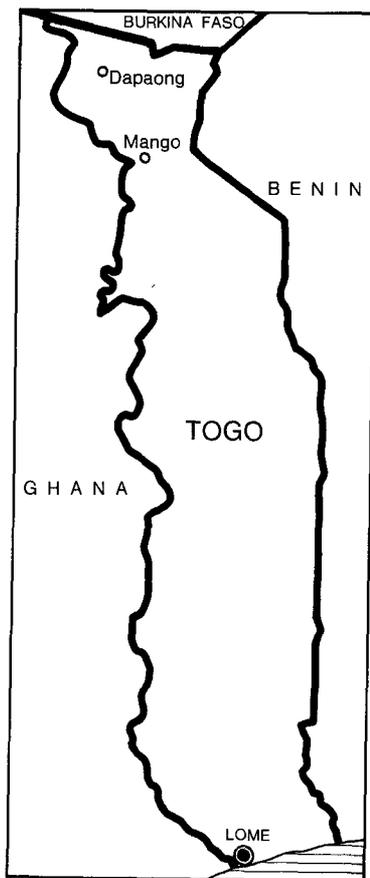


Figure 6.1 Togo

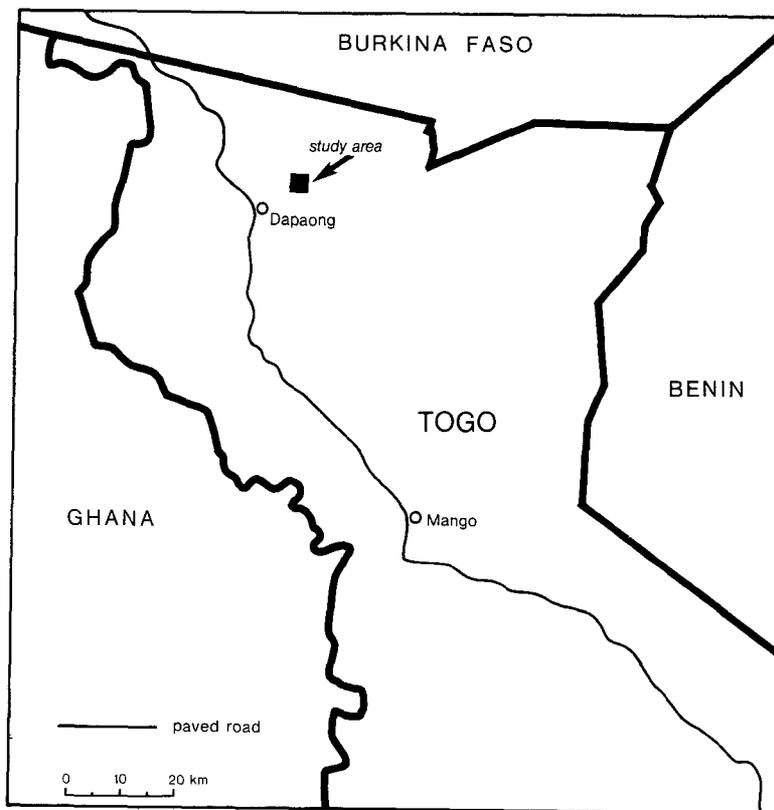


Figure 6.2 Location of Togolese fieldwork area

surface of the plain. The third village, Tossiégou, is located on an escarpment, stretching all the way from the bottom (at 260 m) to the top (at 365 m). Even the steeper slopes are used for crop production.

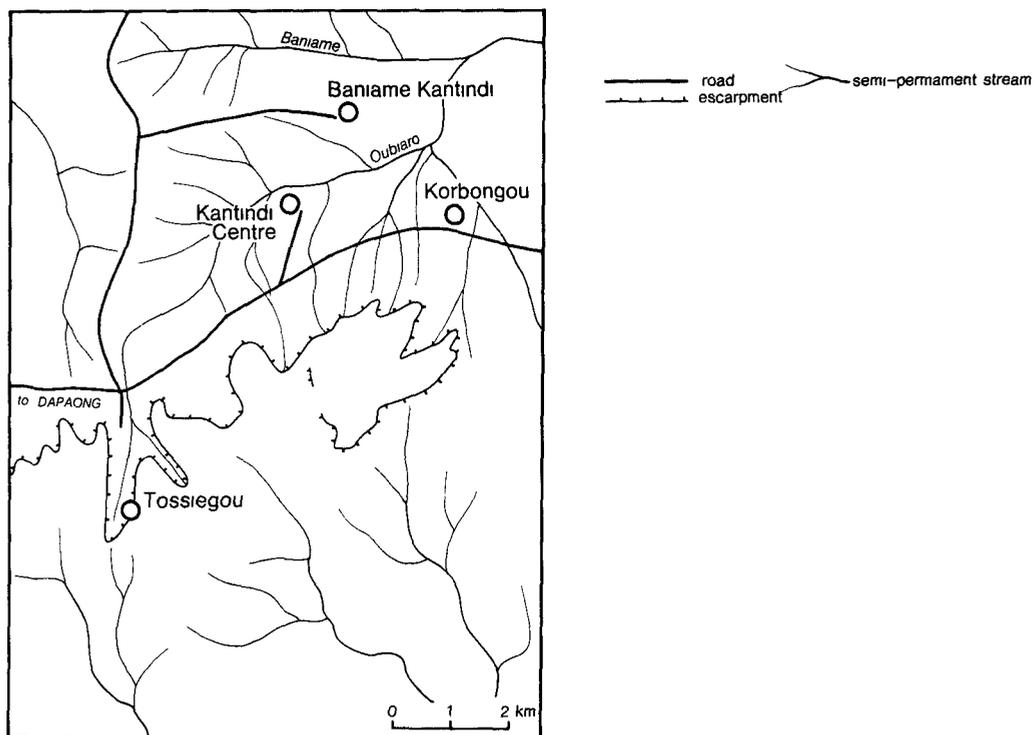


Figure 6.3 Kantindi area

The study area measures about 19 km². Total population is approximately 3,200, and average density is 160 persons per square kilometre - a value which far exceeds that found in most of the rest of northern Togo. Until about 1950 there were no signs of overpopulation and land shortage. In the preceding decades small groups from other areas even came to Kantindi to settle. But between 1950 and 1960 villagers began to cultivate the outer zones of the village territory of Kantindi Centre, and after 1960 land shortage became common. Nowadays fields are cultivated continuously, resulting in land degradation.

The number of people in the *canton* of Kantindi rose by an average of 2% per annum in the period 1960-1970, and by as much as approximately 3% per annum in the period 1970-1981. The increasing rate is mainly due to the decreases in the death rate that have accompanied improved health facilities. Population density is over 130 persons per km² (see table 6.1). Population density around Kantindi Centre had already surpassed 100 inhabitants per km² by 1965.

Table 6.1 Kantindi: number of people and population density in 1959-1981

Year	Population number	Density per km ²
1959	6008	77
1970	7172	92
1981	10396	133

(De Haan, 1988, p.175).

There are some 320 households, varying in size from a few individuals to 20-25 persons. Children account for just over half the population, resulting in an average age of only 19. Birth rates, death and infant mortality rates are high, but precisely how high is unknown. In addition to having a broad base, the population pyramid is "indented" on the male side due to the relative shortage of men in the 15-35 age group. Over time, quite a few men have spent a number of years as labor migrants in Ghana, Ivory Coast, Nigeria or the Togolese capital Lomé. After returning to their villages, some decide to migrate for a second, or even third, time. The overwhelming majority of the population (some 80 percent) is illiterate, and less than one quarter of the children receive an education. Three ethnic groups are represented: the Peul (who make up 5 percent of the population), the Moba (10 percent) and the Gourma (85 percent). The Moba and Gourma have intermingled freely for centuries. The Peul live somewhat separately, and do not mix with the other groups.

Climatically, the Kantindi area may be said to straddle a line separating subhumid from semiarid conditions. The average annual amount of precipitation is about 1,000 mm, but yearly totals vary from 1,330 to 600 mm. The rainy season (April-October) usually lasts about six to seven months, but may be considerably shorter in any one year. In the course of the dry season, all hand-dug wells dry up. Only one drilled well (*forage*) in Kantindi Centre - and another one just outside the study area - produce clean drinking water throughout the entire year.

Even in years with an average amount of precipitation human existence is rather precarious. Given the increase in population density, conditions are not likely to improve in the coming years. Very little irrigation is practised, and prospects for increasing the area under irrigation on a permanent basis are extremely limited. In view of the ongoing deterioration of the physical environment, there is reason to believe that water shortages will become more severe. Originally a dry savanna with scattered trees and shrubs, the landscape is turning more and more into a grassland steppe. Before long, the Kantindi area can be expected to have a serious shortage of fuelwood; if the population

continues to grow and income levels remain too low to allow the purchase of kerosene or bottled gas, this is certain to occur. All in all, food security and simple survival are becoming increasingly endangered as population increases and the carrying capacity of the region is literally eroded away.

6.2 Natural environment and agricultural possibilities

Between 1958 and 1986 average annual rainfall in Kantindi was 1006 mm (see table 2.3). The average for the period 1981-1986 was much lower (826 mm) than the average for the period 1958-1976 (1063 mm). This corresponds with the general trend in West Africa, where precipitation has decreased since 1970. Nevertheless, the amount of precipitation is not Kantindi's biggest problem. Except for 1984 annual rainfall has exceeded 600 mm; and in 85% of all years, it has even been over 800 mm. This is sufficient for all important food and cash crops in Kantindi, including millet, sorghum, beans, groundnuts, and cotton (De Haan 1988, pp.205-207). It is striking that even the low average (826 mm) for the period 1981-1986 is equal to or greater than the optimum range of precipitation for staple crops in Kantindi like millet, sorghum and beans. Cotton too could manage with less rainfall. Looking at the average amount of rainfall in Kantindi, one might expect to find maize as the most important staple crop, because maize requires more moisture and contains more calories per kilo than do millet or sorghum. Two tentative explanations can be given. Firstly, everybody in Kantindi assures the outsider that maize does not taste as good as millet and sorghum. In fact little maize is grown; it is only eaten roasted in the cob. This cultural phenomenon is certain to be connected with the origin of the groups who have successively settled in Kantindi. They came from the north and thus from the drier Sahel zone, where millet and sorghum are the staple crops. Secondly, it is quite possible that the peasants have continued to grow millet and sorghum because these crops are less susceptible to drought than maize.

The variability of rainfall and especially the often hesitant start of the rainy season pose more problems rainfall per sé. Because the rainy season is only 180 days long and because food shortage is always most acute as it ends, peasants prepare their fields and sow the *petit mil* after the first rains. But a short dry period often follows these first rains. If this dry period is too long, as in 1984 and 1985, the crop dries up and the peasants must sow all over again.

In addition to the variability of rainfall, soil conditions limit agricultural potential. Using data on precipitation, potential evaporation and capacity of the soil to hold moisture, Coenen and Spaanderman (1987) have shown that in Kantindi more rainfall does not mean a more favorable situation for crop cultivation. For example, in 1974 the annual amount of precipitation was almost twice as high as in 1984. But there was only one month in 1974 in which more soil moisture

available to crops than during the rainy season in 1984. Usually soil moisture peaks in August, but the amount available in the preceding months may vary considerably from one year to the next, causing great variation in the growth of crops. The capacity of the soil to hold moisture is more limited on the *cuesta* of Tossiégou than on the plains of Kantindi Centre and Baniame Kantindi. Therefore soils in Tossiégou are generally dry a few weeks earlier than in the other two villages. Especially in relatively dry years, lack of rainfall is felt more severely in Tossiégou than in the other villages. In addition to overall soil moisture, it is important to note that every crop has its own specific moisture needs, which vary with the phase of growth. Whether a given distribution of rainfall in a certain year will be favorable or not depends on the type of crop and the time it was sown.

Soils on the escarpment of Tossiégou are relatively poor. In contrast, soils of the plains of Kantindi Centre and Baniame Kantindi were originally relatively fertile. This, incidentally, was an important factor in the settlement of the Gourma in this area in the 18th century. However, fertility has decreased because of intensive exploitation without fallow, especially in the central part of Kantindi Centre. The fields in the survey area were classified with respect to suitability for crop cultivation, using both chemical and physical characteristics of the soil. The situation is worst in Tossiégou. The quality of about 80% of the fields in this village is moderate to bad. Field quality in Baniame Kantindi, however, is satisfactory to good in almost 70% of all cases. Kantindi Centre occupies an intermediate position: 12% of the fields are of bad quality, 29% moderate, 41% satisfactory and 18% good (De Haan 1988, p. 210).

Soil erosion is a problem on the sloping parts of the escarpment near Tossiégou, where about 10 percent of households are located, as well as on the plains around Kantindi Centre. Apart from some terracing activities by a state agency, SEMNORD, and some minor activities of individual peasants, no countermeasures have been taken.

In summary, it appears that it is not the amount of rainfall but its distribution, plus the amount of soil moisture, that are the limiting factors for crop cultivation in Kantindi. Field quality is generally not bad. The natural environment does limit the possibilities for crop cultivation, but these constraints become problems for the way of life in Kantindi only because of population pressure and the shortage of land.

The drought of the 1942-1944 period was the most severe in the written history of northern Togo. Although famines were not reported (just as there were no famine reports after droughts of 1911 and 1927) the French colonial government became concerned about the food situation in the region and tried to stimulate local storage of grain. It was clear then that the region was no longer producing large surpluses of food as in the 1920s, because export

production of groundnuts was using labor and land that previously had been devoted to food production. In the 1950s population growth accelerated, and a decade later land became scarce in the densely populated areas. This resulted in a very bad food situation during the period of dry years in the 1970s, although once again no famines were reported. The state has sent food aid only a few times, as for instance in 1961/62 and in 1984.

6.3 Seasonality

In Kantindi the rainy season is from May to October. As noted, the short growing season and shortages of food at this time of the year mean that field preparation starts when the first rains fall, and the fields are sown immediately after preparation. If a dry spell follows, it may be necessary to repeat the sowing. The first crops are harvested in July, and the harvest continues until December. In following months only the irrigated crops in the small gardens in the *bas-fonds* are harvested.

Feasts take place primarily in January and February, when the agricultural work is done and there is still enough food. Too, huts are repaired, new *soukala's* are constructed, and pottery is made. In most years food becomes scarce after February. The agricultural work for the next growing season must be done by ill-fed men and women.

The government pays farmers for the cotton harvest in January or even later. In former days forced labor was recruited immediately after the rainy season to repair roads and bridges. Nowadays most of this work is done by machines, but communal working parties - for example, to dig a well for the school - are always organized in the dry season.

Seasonal labor migration is rare. Until the 1960s married men travelled to northern Ghana in the dry season for a few weeks to sell goats, but this market has collapsed. On the other hand migration patterns do show some degree of seasonality. Young men tend to leave home about the time food is becoming scarce and preparation of the fields is starting. A few years later they return home, mostly at the time when the harvest is done and the granaries are full.

6.4 Government presence and activities

During the German colonial period (1888-1914) Northern Togo was hardly touched. In the 1920s and 1930s government control became more effective as infrastructure developed to collect taxes more effectively. To provide a source of monetary income to the peasants to enable them to pay taxes, the French colonial government introduced the commercial production of groundnuts.

Villages had to deliver certain quantities to the government, who in turn sold the groundnuts to trading firms in Lomé. As a result of this taxation, labor migration to the cocoa areas of the Gold Coast began.

After 1955, political opposition forced the government to change its policy to one of support for the local ways of life. This new approach became even clearer after Independence in 1960. Although commercialization of agriculture and modernization went hand in hand, the government used various means in an attempt to improve the local standard of living. Before Independence, a dispensary had been built and a small dam constructed to provide water for the dry season, and a school had been built by the mission. After Independence, wells were dug; recently a borehole was made to provide clean drinking water.

In practice, government support for subsistence food production is limited, although it is an important objective on paper. Cash crops like groundnuts, and more recently cotton, have received the bulk of government attention. New varieties have been introduced, chemical fertilizer and even ox-drawn plows have been made available on credit, and an extension service is present. However, modern agricultural inputs - in particular chemical fertilizers - have had positive effects on yields of food crops, especially on sorghum and millet, even though they were primarily meant for cash crops.

Togolese village chiefs and cantonal chiefs are locally recruited, and thus belong to the local community. The village chief of Kantindi Centre (the largest village in the research area), is the main chief in the canton of Kantindi, the *Chef de Canton*. He is the only traditional authority receiving an official state salary. The other two village chiefs (*sous-chefs*) in Baniame Kantindi and Tossiegou occupy unofficial positions. This places them in a subordinate and thus inferior position vis-à-vis the village chief/canton chief of Kantindi.

In the colonial period the canton chief of Kantindi Centre had much more freedom of action than today. In fact, he was quite important to the successful implementation of colonial policies at the local level. The lowest 'foreign' colonial administrator (the French *commandant de cercle*), who had his seat in Mango until 1943 and thereafter in Dapaong, was one administrative level above the canton chief. Without the support of 'intermediate rulers' like the *Chef de Canton* of Kantindi a *commandant* would not have been able to govern the whole region. In addition, almost every village has a Council of Elders and a *chef de terre* (land chief). He is the eldest of the *clan propriétaire*: the clan which, according to tradition, holds the oldest rights to the land and is thus the formal owner. As head of the *clan propriétaire*, the *chef de terre* occupies a central position at village level, especially because the more serious conflicts within these local communities - where land scarcity is becoming ever more acute - always concern land. In Kantindi Centre, the clan of the *chef de terre* also happens to dominate the Council of Elders.

Virtually no state officials live in Kantindi. The Ministry of Health is represented by a medical assistant and a midwife. The teachers in Kantindi are not employed by the state of Togo, but by the Roman Catholic Mission. This mission began activities in Kantindi in 1947. Two government *encadreurs* (extension officers) are based in Kantindi, both working for SOTOCO (*Société Togolaise de Coton*, the Togolese Cotton Society). They owe primary responsibility to their superiors. But in their daily work, they must be on good terms with the cantonal chief and the village headmen; for more ambitious plans, cooperation with the *chef de terre* is necessary as well. After all, the *encadreur* is not a member of the village, although he comes from "not too far away" to avoid language problems. Many services for the canton as a whole are provided in Kantindi Centre, and most take place near the compound of the *Chef de Canton*. This chief rules in Kantindi, but he cannot interfere with the day-to-day work of the other officials there.

The number of officials in Kantindi is low in part because not all officials who work in the area reside there. Many of those providing Kantindi's services are civil servants stationed in Dapaong, the regional capital. They include veterinary assistants, officials of the Ministry of Public Works (road construction), representatives of the Togolese Cotton Society and the Ministry of Agriculture, and officials of a parastatal organization for family well-being (family planning). If these "visitors", as well as the employees of the Roman Catholic mission in the area, were included, the number of officials would be at least twice as great, although still low. This accounts in part for the fact that only 2 percent of total cash income in the area is from government salaries (if we include salaries paid by the mission - especially to teachers - the figure rises to 7 percent). An additional reason for the low figures is the relative importance of agricultural commercialization, which makes the share due to government salaries less important.

Togo has long had a one-party system. Each canton in Togo has its own division of the R.P.T. (*Rassemblement du Peuple Togolais*), headed by the cantonal chief. Membership is obligatory for all adult males. Women and youth are organized in special Women and Youth Branches. Likewise, the national, party-affiliated trade union has a division at cantonal level; in Kantindi the union is headed by the local school principal. The RPT in this village serves mainly as a vehicle through which the state can mobilize the population politically and implement certain 'modern' communal tasks. It does not offer the villagers a formal means of influencing government policies, nor are any informal means available.

In Kantindi the Togolese government has invested primarily in infrastructural works like roads, and in health. Government subsidies have been restricted to chemical fertilizers. The Togolese government stopped levying direct taxes in rural areas in 1978. The flow of indirect taxes is very small. *Togograin* skims off

a small part of the food production, as does the army when it buys livestock (sometimes 15% of total annual livestock sales). Both the army and *Togograin* pay below current market prices.

Finally, unpaid labor - forced or voluntary - can be seen as a form of outflow, because without this labor there might have been an inflow of money. In Togo, forced labor was quite common until 1952, when this system of "labor tax" was officially abolished. However, recruitment of workers did not stop then, but continued on a more or less voluntary basis (for example when requested by the local RPT branch), providing free labor to build schools, medical facilities, roads, etc.

6.5 Household livelihood strategies

6.5.1 Household composition and tasks

In Kantindi, "household" refers to the group of people who cultivate food crops on a common field, each receiving a share for consumption from the *chef* of the group. They do not necessarily eat from the same cooking pot. On average, these groups comprise 10 to 11 persons. Every household has communal fields for food production, in which men, women and children have specific tasks with respect to preparation, cultivation and harvesting. The harvest is stored in the communal granary and distributed by the head of the household to the women, each of whom prepares meals for her own children. In addition to the communal fields, men (and some women) have their own fields. The men grow cash crops. Apart from cotton and part of the groundnut crop, all products are traded by women. The men spend their earnings mostly on schooling for the children and private ends, and only to a minor degree on food and other consumer items for their households. It is chiefly the adult men who participate in labor migration. The women produce vegetables and rice for the households. Not uncommonly they sell part of their output at the marketplace. Additional monetary income is derived also from pottery making, beer brewing and baking, and is spent on food and child care. The women are also responsible for collecting firewood and hauling water.

Various events may change the size and composition of the household. Sons may migrate to the Ivory Coast or Lomé, a young bride may settle in the household, a daughter may be given in marriage to another household, or the household may split up when a man with his wife (or wives) and children decides to leave the household of his father or oldest brother to build his own *soukala*.

6.5.2 Food production strategies

The importance of agriculture in Kantindi stands out very clearly, as it occupies almost all households. Kantindi households have their fields in the plains. In addition, some 40 percent of households have one or more tiny patches of land near the streams in the *bas fonds*. Vegetables can be grown on these more humid parcels by using irrigation water from shallow wells and from floods. Only a few percent of the total acreage under cultivation is located in these *bas fonds*. These parcels contribute only 4 percent to the total value of crop production (see table 6.2), and some 8 percent to the total value of commercial agricultural production.

Table 6.2 The use of ecological zones in Kantindi

Contribution to total value of crop production	Percentage of crop-growing households
4% from irrigated (<i>bas fonds</i>)	40% have (also) irrigated fields
96% from dry land (plain)	

In 1957, SEMNORD built a dam in the main stream running through Kantindi, raising the ground-water level and permitting vegetable production in a larger area, including Kantindi Centre. When this dam collapsed in 1979, that year's crops were largely washed away; afterwards the ground-water level dropped, causing the *bas fonds* to dry up. Since the dam has not been rebuilt, cash income from horticulture has gone down by 25 percent.

On the fields nearest the house, early maturing millet (*mil de trois mois* or *petit mil*) is grown, the first crop to be harvested after the dry season. Other millet and sorghum are often grown together with beans, and are harvested two or three months later. The plots closest to the homes are fertilized with sweepings from homes and droppings from small animals. Cattle manure is only used by their keepers, the Peul. Artificial fertilizer is applied to other fields.

The average output per ha of millet and sorghum is about 550 kg, but production ranges from more than 900 kg on fertilized fields to only 150 kg on the slopes of Tossiegou. In general, yields are likely to diminish when fertilizer is not used. Interannual fluctuations in yields are caused chiefly by variable weather conditions and by the amount of fertilizer used.

Most households keep some livestock: a pig and/or a few chickens. Cattle are owned by fewer than one-third of households. These animals are hardly ever consumed - not even in times of famine - and only the keepers of the cattle,

the Peul households, drink milk. Small animals are sometimes used in religious ceremonies and subsequently eaten.

In addition there is some gathering of wild fruits and vegetables (*nééré* for sauces, leaves from the *baobab*; nuts from the *karité*, for making soap and butter). Water for food preparation and drinking is obtained from two deep drilled wells (*forages*) constructed in 1982; but for 10 percent of the population, chiefly those living in Tossiegou, this is too far away, involving more than an hour's walk. The many wells dug by households usually stop providing water in the dry season.

Of the 1900 hectares belonging to the three villages, 63 percent is used for crop production. This is all the land that is suitable; no expansion is possible. Fallow periods occur only occasionally, and for short periods. Today, most households use on average about 3.75 ha, although a few have as much as 10 ha or more. All land belongs to the clans that first settled the area. Other clans are *clans non-proprétaires*, which include 37 percent of households. They are allowed to use the land of the *clan propriétaire*, but in return they cannot refuse invitations made by households of the *clan propriétaire* for work parties. Until about 1960, newcomers to the area could borrow land from the *clan propriétaire*. Land has become increasingly scarce since 1960, so this is no longer possible. Resident households belonging to *clans non-proprétaires* without permanent rights to land find it increasingly difficult to obtain an extra field. At most, needy households can borrow only one small plot, and for a short time. The user returns this favor with a commensurate gift, ranging from a chicken to 1/3 of the harvest. Conflicts over the use of this and other land have increased in recent years. Conflicts also arise between crop growers and livestock herders, because the animals must pass along narrow tracks between the crops to reach food and water. Rights regarding land distribution and ownership are untouched by government institutions, and there is also no land registration.

Since the end of the 1960s, fertilizer has been widely used to maintain the quality of the land under intensive use. 15 per cent of households were already applying fertilizers before 1975; for others its use is more recent. All fertilizer is bought from the state *encadreur*. Most fertilizer is used on the cotton fields, rather than to produce food crops. Due to diminishing state subsidies, the price of this input rose steeply after 1980. A number of households reacted to this rise by discontinuing or reducing the use of fertilizer. Recently, fertilizer use has returned to 1970s levels, despite higher prices, because households could not afford the decrease in yields. In 1984, about 50,000 kg were bought - an average of nearly 40 kg per cultivated hectare.

After 1975, new, more drought resistant varieties of sorghum were planted by 60 percent of households, primarily in Kantindi and Baniame Kantindi. The

seeds were distributed through private channels; they came from Burkina Faso and could be bought in the local marketplace or from other households. Until recently no improved millet or sorghum varieties were available from state agencies. Seed for cotton is distributed by the SOTOCO extension officer. The farmers do not pay until after the harvest, which is also bought by SOTOCO. Seed for an improved groundnut variety is distributed by SOTOCO and DRDR, but local varieties are easily obtained from neighbours or at the market.

6.5.3 The significance of food deficits

In Kantindi, food production is inadequate to meet the needs of the 3,200 people, just as it has been since the early 1960s. Due to increasing population density, gathering of wild food has lost much of its former significance. Households buy on average one-quarter of their annual food requirements. Grain accounts for most purchases. Tossiégou suffers a particularly large food shortage. There, 85 percent of households have a food deficit during 'normal' years. In Kantindi Centre 70 percent of households have a deficit. In Baniame Kantindi, the situation is generally more favorable; only half of households have a food deficit. Altogether, 69 percent of all households in the area are unable to produce and/or to buy sufficient food.

Hardly any millet or sorghum surpluses are sold on the market. By contrast, 50 percent of the beans and two-thirds of groundnuts are sold. Part of the rice some women in Baniame Kantindi produce on the *bas fonds* is also sold. The ceremonial offering of animals often coincides with periods of food shortage. The animals are subsequently consumed. When animals are sold, the money is chiefly used to buy food.

As noted, the state has provided food aid only a few times. However, since 1983, the children at the school in Kantindi Centre have obtained free school meals from the mission, sponsored by the USA Christian Children Fund. This has helped to decrease the significance of food deficits somewhat.

6.5.4 Non-cash supplementary strategies

There are several ways household production can be supplemented. In times of shortage, gathering wild fruits and leaves becomes more intensive. Households in need of food can borrow small quantities of food or money from others without necessarily having to "repay" it. In former days barter provided supplements: the Kantindi area participated in long-distance caravan trade, although only minimally, from the 18th century onward. Local products like sorghum, millet and soap were exchanged for foreign items and slaves were shipped off to the southern coast.

Supplementing the household labor force with labor from other households, especially during very busy phases of the production cycle, is common. A man can ask another man to lend him a hand during the harvest or to do other work in his fields. When the work is done, they eat together; after some time the help is reciprocated. A man can also invite a group to come and help, in return for elaborate meals in the evening. Women, too, may help each other, for instance in brewing beer for a ceremony.

People owning cattle give their animals into the custody of the Peul, most of whom live somewhat separately at the foot of the escarpment. The Peul take care of the animals in return for some grain, the manure, a plot of farmland and part of the proceeds if the stock is sold.

6.5.5 Cash income strategies

Income from agriculture

Agriculture contributes three-quarters of the average per capita money income; this plus the value of production for home use accounts for 91 percent of the monetary-plus-non-monetary income per capita. Three cash crops have been important in this area: kapok, cotton and groundnuts. Kapok was introduced by the Germans around the turn of the century. In the thirties, the French encouraged kapok production and enforced the planting of groundnuts. In 1962, a parastatal cooperation tried to develop commercial production of cotton and groundnuts, and stationed an agricultural extension officer in Kantindi Centre. This resulted in increased commercialization of agriculture.

In 1975, SOTOCO made new attempts at producing these cash crops, and after an extension officer (*encadreur*) was stationed in Baniamé in 1979 cotton production developed rapidly. By 1985, 45 percent of households in the area were growing cotton, together producing some 165 tons. The cotton is mainly grown on the men's personal fields as a monocrop. It is grown in particular by the larger households, especially those with relatively large amounts of land. Small households with little land usually grow no cotton. Most cotton plots cover 0.25 to 0.75 ha; yields are between 700 and 1,450 kg per hectare, depending mainly on soil quality and the cultivator's ability to implement improved methods of cultivation. The seed is distributed free by the extension officer. Other inputs are not paid for until after the harvest. Cultivating cotton requires a great deal of labor, which is provided chiefly by household members. It also requires fertilizer and pesticides. These are distributed by SOTOCO *encadreurs*. Because subsidies are shrinking, the price of fertilizer - of which producers are supposed to apply 200 kg per ha - has skyrocketed, going from CFAF 15 per kg in 1976 to CFAF 115 in 1985 (see Table 6.3). Since the prices producers receive for cotton have gone up much less, their revenues have experienced a dramatic decline.

Table 6.3 Kantindi: payments to producers for cotton, versus fertilizer prices

Year	Payments to producers in CFAfr/kg	Purchase price of fertilizer in CFAfr/kg
1970	35	-
1971	35	-
1972	35	-
1973	37	-
1974	46	-
1975	48	-
1976	50	15
1977	60	15
1978	60	15
1979	60	15
1980	60	15
1981	65	45
1982	65	45
1983	75	60
1984	90	100
1985	-	115

Source: Schmieman, 1986.

Like cotton, groundnuts are grown as a monocrop. About 65 percent of the output is sold, partly through state buyers. Fertilizer is applied. Improved seed is sold by state officials from DRDR and SOTOCO. Local varieties of groundnuts are preferred for home consumption. Yields are on average 500 to 600 kg per ha. Use of new varieties was reported by 40 percent of households, but for Tossiégou the figure is much lower. For the new varieties, yields vary between 800 and 1,600 kg per ha. Commercial production of groundnuts seems to be rather more profitable than growing cotton nowadays, and the labor input required is not as great (Schmieman, 1986, p. 28).

When a household does not have the seed needed to grow a particular crop, seed can be borrowed from a neighbour, a friend, or a relative, without necessarily having to give something in return. Money to be invested in agricultural production can also be borrowed from other households. It is repaid after the harvest, sometimes with 3 to 5 percent interest. Sometimes repayment

is in kind. In the 1960s, it was possible for a group of about five households to obtain a *prêt de campagne*, a short-term loan to finance cultivation of an improved groundnut variety, from the *encadreur*. Nearly all households in Baniame Kantindi and Kantindi Centre have received this sort of credit one or more times. Nowadays some 45% of households receive short-term credit to grow cotton, mainly in Baniame Kantindi. The credit is repaid by deducting the loan from the proceeds when the harvest is sold to the SOTOCO *encadreur*. As noted, a government program makes available inexpensive credit to buy animal-drawn plows; but thus far only seven households have taken advantage of this possibility.

In addition to the major commercial crops discussed, some minor cash crops should be mentioned. Sugar cane is chopped into small pieces and sold to other households. Fruits like mangos and papayas are picked from the trees and sold by 75 percent of households. About one-third of the *nééré* (now also a cultivated crop) and *karité* is sold. Beans are sold by nearly all households. New varieties of this crop have been introduced not by state agents but via the market.

The state has tried to fix the prices of sorghum, millet and rice, but without much success. Stabilization of food producer prices has not been effective. Some millet and sorghum is sold to TOGOGRAIN at the official state price. Prices for groundnuts, *karité* and rice are officially determined by DRDR, but do not apply in private trading. For instance, private buyers offer much better prices for rice than does DRDR. In 1961, the state opened a *karité* processing plant near Korbongou, but this failed because the state offered lower prices than other buyers.

Income from secondary and tertiary activities

Processing of agricultural products is primarily for home consumption. However, about 43 percent of households do process products for the market, which contributes 7 percent of total cash income. A large number of women make pottery, using locally mined clay and buying the paint in the marketplace. This involves about 20 percent of households. The products are sold locally or at other markets, sometimes through intermediaries. Women also make large quantities of *chapalo* (sorghum beer), part of which is sold in the village. Selling home made bakery products is a minor activity. *Karité* is used by women to make butter and soap, and one third of the output is sold. A few men, too, take part in artisan's activities. Work in these activities is clearly related to the amount of labor available in the household. Smaller households must spend all their time on food production. On the other hand, opportunities for secondary activities have expanded somewhat due to the development of markets nearby and to improved road connections. In the isolated settlement of Tossiégou, these activities are far less developed.

Almost all households are active in trading. Women are the main participants. However, the more professional traders, who trade larger volumes, devote more time to trading, and generate more income, tend to be male. Only cotton trading is controlled by the state.

There are almost no industrial activities in the area. Traditionally, most of the necessary industrial goods were purchased in nearby market towns, although sometimes a blacksmith was available locally. At present, there are a few bicycle repairmen, basket weavers, etc. There are no shops in any of the three villages.

Income from local wage labor opportunities

The system of mutual exchange of labor between households is still largely intact, but wage labor is very slowly being introduced: in 1983 15 households, chiefly in Baniame Kantindi, hired laborers, and 18 households, mainly in Kantindi Centre, hired out one member as a wage laborer in agriculture - usually for a very short period of time.

Five households in the case study area receive income from a government salary; all except one live in Kantindi Centre. On average, income from this source amounts to CFAF 200,000, about 1.5 times the average local household income. But, except for the chief, this concerns non-locals, who are there only temporarily (usually for not more than a few years). The mission contributes about the same total amount as the state. It employs eight (non-local) teachers, each of whom receives CFAF 2,000,000 per year. In total, this source makes up 3 percent of local income and 7 percent of total cash income.

Income from labor migration

Migration first began at the end of the last century, when forced laborers were recruited by the Germans to perform jobs elsewhere. Later, the French used the area as a labor reserve. After 1930, the imposition of taxes resulted in long-distance circular migration of adult men. This movement continued for a long time, although its intensity varied with fluctuations in demands for labor in the cocoa regions of Ghana. It remained important until Ghana closed its borders to Togolese migrants in 1969/70. Labor migration is still important today, when the major destinations are Lomé and the cocoa fields of the Ivory Coast. For a brief period Nigeria was also popular. It is still predominantly young, unmarried men who go away. Most (60 percent) stay away for more than a year, usually up to four years.

In 38 percent of households at least one member was absent as a labor migrant in 1982/83. Considering that half of all households have at least one returned migrant - Baniame Kantindi, 82%, Tossiégou, 85%, Kantindi Centre, 36% - migration must have been a widespread phenomenon in previous years. Members of larger households in particular leave for some time. About a third

of migrants send some money home, and most return with some (durable) consumer goods. This makes up about 4 percent of total income and 9 percent of cash income in the area. In the past, the bulk of the money remitted was used to pay taxes. Now that the villagers no longer (since 1975), have to pay rural taxes, the money they earn goes to buy food and clothing, or consumer durables and fertilizer. Furthermore, a little money is "accumulated" in the form of cattle.

At the time of our fieldwork, 25 percent of the male population in the 15-35 year age group was absent from Kantindi Centre, 13 percent from Baniamé and 20 percent from Tossiégou. Their contribution to the total cash income of the villages was 11 percent, 3 percent and 7.5 percent, respectively. For the households involved, the contribution was of course much larger, varying from 15 to 35 percent. Although remittances are an important additional means of support for the households, this aspect rarely plays a role in the migration decision. Often it is the individual migrant who decides to go away "to get to know the country", as they say, because he feels economically or emotionally constrained at home. Whether or not he will send money - and how much - depends on his success in finding a job and on the intensity of family ties.

6.6 Conclusion

The mode of existence in Kantindi is mainly agricultural. Food production provides about half the food needed, 91 percent of total income (monetary plus non-monetary), and 78 percent of cash income. Nevertheless income and food consumption lag far behind average income in Togo, and consumption is low with respect to FAO/WHO food standards. In short, the mode of existence in Kantindi fails to provide a decent life for the people. Climatic and soil conditions are not in themselves unsatisfactory, but given the present population pressure and the simple agricultural techniques in use, these conditions tend to have a negative effect on the primary means of existence. However, Kantindi is commercially integrated into both national and world markets; it should be stressed that part of the problem lies in the prices received for crops on these markets.

Labor migration in Kantindi is an important phenomenon that is related to the meagre possibilities for earning an income within the area. Because migration occurs predominantly among young men who migrate to enlarge not family income but first of all personal income, it provides little money to Kantindi. Only 4 percent of total income and 9 percent of total cash income comes from labor migration, although it is a source of income for some 38 percent of households. This means it is almost equal to total income from local non-agricultural sources, such as making pottery and brewing beer, which for 43 percent of

households in Kantindi provide about 3 percent of total income and 7 percent of cash income.

The integration of Kantindi into colonial and post-colonial Togo was initially brought about by the state. Just after 1945 a shift in government activities - from a colonial approach, aimed at increasing government income from taxes and at skimming off agricultural surpluses, to an approach more and more centered on rural welfare - was already visible. Medical care has been made available to the population, and to a lesser extent education has been provided. With respect to agriculture the recent success of cotton production should be mentioned, but most noteworthy is the increased yield per acre for staple crops. Population growth and land shortages have kept this success from being manifested in an improved food situation. However, had these increases in yields per acre not occurred, Kantindi would have had Sahel-type famine disasters, or massive out-migration.