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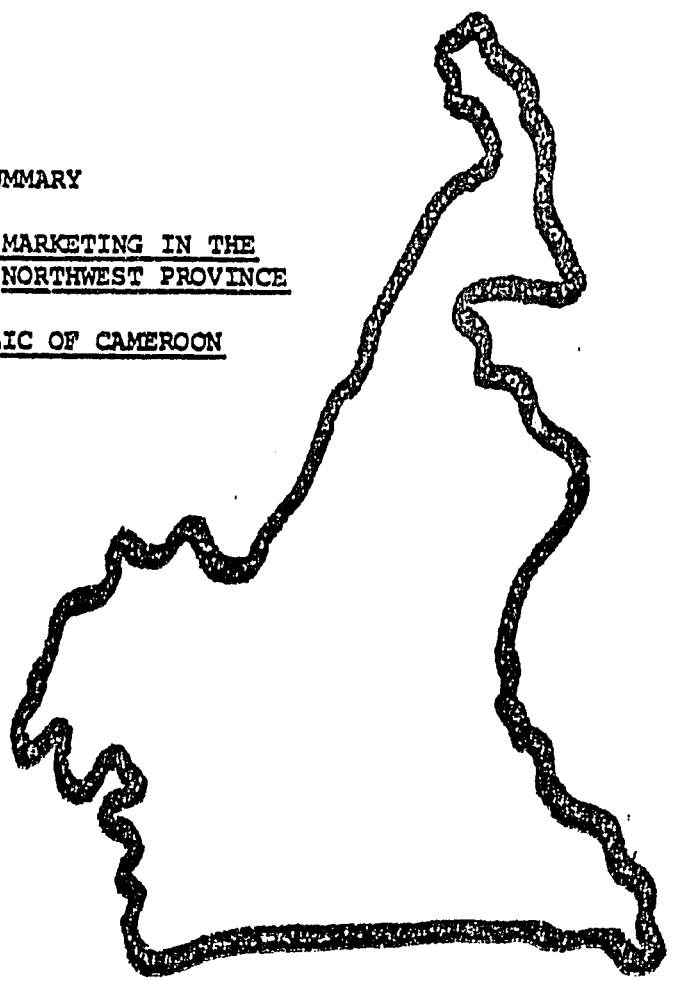
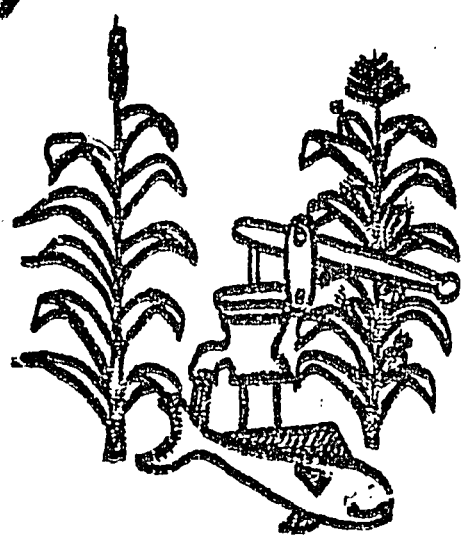


EXECUTIVE SUMMARY

AGRICULTURAL MARKETING IN THE NORTHWEST PROVINCE

UNITED REPUBLIC OF CAMEROON

William E. Scott and Miriam G. Mahaffey



A.I. Bergman

June 1980

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for

United States Agency for International Development
Office of Agricultural and Rural Development
Cameroon

Yaounde
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INTRODUCTION

The major objective of this executive summary is to outline the most important information contained in the 530 page study entitled Agricultural Marketing in the Northwest Province, United Republic of Cameroon, written principally by William Scott, Brian Schwimmer, Miriam Goheen Mahaffey, and a team from Michigan State University consisting of John Holtzman, John Staatz, and Michael Weber. Other contributions in the original study were made by Dean Mahon, Paul Nchoji Nkwi, Wilson Tafon, and Margaret Agbaw. The project was organized and managed by Dr. John Van D. Lewis for the Office of Rural Development and Development Administration, Bureau of Development Support, United States Agency for International Development (USAID), assisted by Richard Goldman and Eric Witt of the USAID office in Yaounde, with the cooperation and permission of the United Republic of Cameroon's Ministry of Agriculture, Department of Cooperation and Mutuality.

We have attempted to include the most useful quantitative data from the full study. In some cases, tables have been revised and updated according to new information available after the original date of completion in December 1979. We have also attempted to summarize the more relevant general discussions of policy issues and marketing problems, although for obvious reasons, much detail has been ommitted. The complete study, available only in English, should be consulted for further detail. No attempt has been made to attribute particular passages to individual authors, and hence, this report remains essentially the collective work of the researchers cited above. The French version of this report was translated from English by George Simon and Elizabeth Mollard. Our thanks to all those who have assisted in the preparation of this executive summary.

N.B. 210 CFA francs = 1 US dollar

BACKGROUND INFORMATION

Physical Environment

Geography and Climate. The Northwest Province covers an area of 1,730,000 hectares, or approximately 3.8% of the total territory of the United Republic of Cameroon. The province is part of an ecological zone known as the Western Highlands, a rich agricultural region producing both temperate zone and tropical crops. The high elevation and relatively cool climate prevents to a large extent tsetse fly-carried trypanosomiasis and other animal diseases, and hence the area has high potential for livestock and small animal development.

Figure 1 (see Annex I for drawings, maps, and tables) provides a schematic representation of the Northwest's major geographical features. The area is essentially a high lava plateau surrounded by successively lower plains and valleys and broken by volcanic peaks. The lowest areas in the province--Mentchum Valley in the west, and Donga Plain along the border of Nigeria to the north--lie below 500 meters in altitude. Intermediate plateaus, including the Ndop and Mbaw Plains, are in the 1,000-1,300 meter zone, above which are the high plateaus around Bamenda and Kumbo (Banso), at 1,400-1,700 meters. The highest mountain in the Northwest is Mount Oku, at 3,008 meters above sea level. It should be kept in mind that Figure 1 only gives an outline of the geography, and that the plateaus are frequently quite hilly, traversed by mountains with steep slopes, or cut by deep valleys.

Temperature and rainfall vary widely, largely as a function of altitude. The high mountain regions of the Northwest receive over 3,000 millimeters of rainfall annually, while lower regions average between 1,000-2,500 mm of rain. Temperature ranges from an annual average maximum of 16.7-18.9C° (62-66F°) and minimum of 8.9-10.6 C° (48-51 F°) in high altitude zones, to an annual average maximum of 28.5-35.3C° (83.8-95.5 F°) and minimum of 14.6-22.2 C° (58.3-72.0 F°) in the lowest zones. Hawkins and Brunt, in their 1965 study of the ecology of West Cameroon, identified ten distinctive climatic zones in the Northwest Province, ranging from "Cold, cloudy, and misty," to "Hot, very humid and extremely wet." Seasons vary considerably from one area to the next, but generally there is a six to seven month rainy season from April to October, a cool dry season from October to December, and a hot dry season from January to March.

Soils and Land Use. Land use in the Northwest Province is closely related to widely varying quality of the soils. Champaud (1973) identifies three major types of soils: 1) Ferralitic, 2) Hydromorphic, 3) Weakly developed. The most fertile farmland is in a humic, ferrallitic soil region extending in a crescent from Bamenda to Nkambe, and south from Bamenda towards Bafoussam. There is a large section of less fertile reworked or typical ferrallitic soils in the central and northern parts of the province, where much of the cattle grazing area is located. The Ndop and Mbaw Plains have hydromorphic soils of varying fertility, with a low drainage capacity in some areas that lead to seasonal flooding. The weakly developed soils in the Wum area and Mount Oku regions are quite fertile, although their capacity to hold water is low.

It is estimated that land use in the Northwest is as follows: (see Figure 1a for a useful, if somewhat dated, land use map)

Cultivated Land	10.6%
Developed Agricultural Land	11.0%
Forest Reserves	7.0%
Grazing Land	59.1%
Other	12.3%

The difference between cultivated land and developed agricultural land lies in the intensity of cultivation, with some land left fallow. There are indications that, due to a growing scarcity of land, land is left fallow for shorter periods of time with a consequent decline in soil fertility. Another problem related to land use is the increasing competition between farmers and graziers for land. For example, the development of irrigated rice cultivation on the Ndop and Mbaw Plains has restricted the amount of dry season grazing land available for Fulani herds transhuming from their rainy season pastures in the hills.

Human Environment

Population. The Northwest Province, with a population of over one million, is one of the most densely populated areas in the country, with an average of 53 inhabitants/km^2. Some 85% of the Northwest's population lives in rural areas, compared to approximately 72% in rural areas nationwide. As shown in Table 1, population distribution varies widely within the province, with the highest concentration in Mezam Division (104 inhabitants/km^2), and the lowest concentration in Mentchum Division (30.2 inhabitants/km^2). In general, the most densely populated parts of the province are the most fertile agricultural areas, with the best transportation and communication infrastructure. For example, Table 2 shows that Mezam Division, with the best roads and soil, has the largest number of farms, the greatest number of people on farms, the most active agricultural workers, and the greatest area of cultivated land. Average farm size in the province is 1.22 hectares, although this ranges from .7 hectares in Momo to 1.5 hectares in Mentchum.

Distribution of farm size in the Northwest is shown in Table 3. There is a wide range of farm sizes with a substantial number of small farms (26% of farms below .5 ha and 53% below 1.0 ha) and of quite large farms (10.5% of farms over 2.5 ha), the latter constituting some 32 percent of the surface area cultivated. There is therefore a distinct category of about 10 percent of farms substantially devoted to commercial crop production, a large middle category of about 36 percent engaged in mixed subsistance and commercial production, and a major part of the farming population producing primarily for the household with marginal production for the market. The province as a whole, however, is less involved in commercial farming than Cameroon nationally, as shown in Table 4.

Employment. The employment statistics in the 1976 Population Census show over 352,000 people as part of the active working population, or 44 percent of the

total provincial population over age six. The reported rate of unemployment in the Northwest is 10.4%, which compares to a national average rate of 6.1% (12.2% in urban areas and 4.3% in rural areas). As shown in Table 5, the majority (67.7%) of the active population in the Northwest is employed in agriculture. The commercial trading sector is one of the larger categories of people in the non-farming wage sector, second only to the category of non-agricultural manual labor and drivers. These figures tend to underestimate the number of people involved in agricultural trade, many of whom are self-employed part-time traders. Also, there are a substantial number of people, many of whom are women, who do part-time work for wages on farms other than their own. Young men who have left their village may engage in part-time trade or agricultural wage labor, or they may go to work in the Southwest or Littoral Provinces on the large plantations, for which the Northwest is a major supplier of labor. These temporary to part-time occupations are not reflected in the figures of Table 5.

Income. According to the few available estimates of personal income, the average annual per capita income in the Northwest ranges between 15,000-20,000 CFA francs, as compared with a reported national figure of 101,542 CFA francs in 1977. The national figure, in current CFAF, may be somewhat high. Although the national per capita income in current CFAF grew at an average annual rate of 12.1% from 1970-1977, real per capita income, in constant CFAF, which in 1977 was 49,737 CFAF, grew at a rate of 1.2% per annum. In any case, we can assume that the level of per capita income in the Northwest is somewhat below the national average. It is even more difficult to obtain reliable information on the distribution of income. However, given the number of farms smaller than the provincial average (at least 53.3%) as well as the number of considerably larger farms, it is likely that income in the Northwest is relatively unequally distributed.

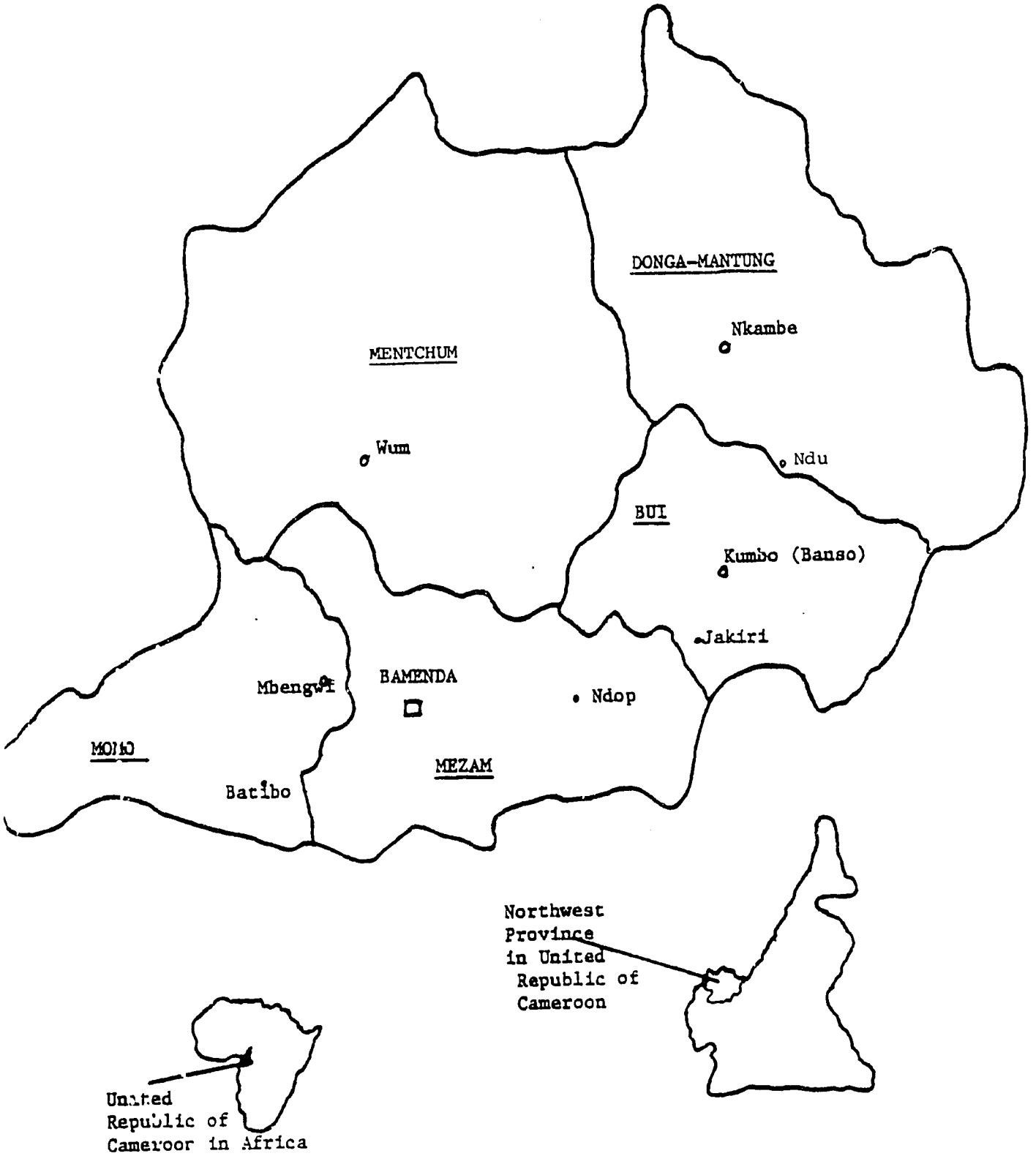
Transport and Communication

The transport system consists of two major arteries. First, the Ring Road, 368 kilometers long, forms the main circulatory road access in the Province. Laterite-surfaced and relatively well-maintained throughout the year, the Ring Road is the major evacuation route for agricultural commodities. Second, the recently paved road connecting Bamenda and Bafoussam is the major channel of external communication. Other roads leading out of the Province include a rather poorly-maintained road through Widekum towards Mamfe in the Southwest Province and a route connecting Jakiri to Foumban in the Western Province. A number of feeder and other secondary roads complete the transport infrastructure.

Many of the roads become almost impassable during rainy season, and are accessible only in four-wheel drive vehicles. In places, particularly on the plains, roads remain inundated for long periods. Where gradients are steeper, surface water erosion as a result of inadequate drainage is one of the main causes of damage to the roads. Inadequate maintenance, low design standards, and poor quality of construction contribute to the low quality of the road infrastructure in general. The institution of a system of rain gates, at which trucks are obliged to stop for four hours after the end of a rain storm, has helped to maintain the roads during the rainy season, although the system increases the already high cost of transport in the Province.

NORTHWEST PROVINCE

Divisions and Major Towns



Transport for agricultural commodities is provided by cooperatives and by individual vehicle owners. The latter are organized into a government-sponsored syndicate, which sets basic transport rates and regulations under government approval. Transporters may often charge at higher than official rates both during the rainy season and when there is a scarcity of vehicles, which, according to Transporter's Union officials, occurs most frequently between the months of June and August and during the period when coffee is evacuated from the Province. Operating costs are high because of heavy wear and tear on vehicles, occasional shortages of fuel, and the high rate of accidents on the sometimes steep and slippery road surfaces. In 1979, 35 privately-owned 12-ton trucks were registered with the Transporter's Union, as well as 17 seven and twelve ton trucks registered with cooperative unions in the province. Numerous privately-owned land rovers also carry goods on the smaller roads.

The basic official price of transporting goods from Bamenda to Douala varies between five to eight CFAF/kg, which compares to a basic charge from Bafoussam to Douala of three to five CFAF/kg. Transporting goods from places other than Bamenda can easily double the cost of transport to Douala. During dry season 1979, transport costs from Nkambe to Bamenda were another 7.5 CFAF/kg. From other locations, basic charges to Bamenda were as follows:

Banso:	5.0 CFAF/kg
Wum	4.2 CFAF/kg
Ndop:	3.3 CFAF/kg
Bali and Mbengwi:	1.6 CFAF/kg

The actual rate charged for transport may be considerably higher than the official rate, depending on road conditions and vehicle availability.

Telecommunications links between the Northwest and other areas in Cameroon are generally poor. It is often difficult to reach Douala or Yaounde from Bamenda, and equally difficult to telephone other areas of the Northwest from Bamenda. Telephone links between Bafoussam and the major urban centers are considerably better, due to the greater degree of infrastructure development in the French-speaking section of Cameroon.

Administration

Villages in the Northwest Province are organized into approximately forty area council units, the lowest level administrative district. In some cases--for example, Banso, Kom and Bali--these units correspond to centralized traditional political groups, but the rest are artifacts of native authority districts established by the British. Councils are grouped into subdivisions (arrondissements), pairs of which make up each of the five divisions (departements) of the province.

Administration is highly centralized, with central government appointees and civil servants responsible for policy implementation at the provincial, divisional, and subdivisional levels. The Governor, as the chief government official in the province, has the authority to coordinate the work of all government agencies.

For technical services, routine administration and field operations are undertaken directly under the authority of each Ministry. Area councils are elected, but de facto control is assumed by government officials.

Although markets are instituted by village communities, administration is in the hands of area councils, which collect tolls from producers and traders on market day. Fees are also collected for the use of open sheds or lock-up stalls. More makeshift stalls are constructed by individuals who collect fees for their use. The provincial government also exacts fees from the markets by issuing licenses (patentes) for full-time traders. Cattle markets are administered by representatives from the local Area Council and from the Ministry of Animal Breeding and Industries.

Conclusions

There are a number of conclusions we can draw from this brief summary of the physical and human environment in the Northwest Province. The high altitude and mountainous terrain have been both a hindrance and an asset for regional development. On the one hand, it has made transport and communication extremely difficult. The Province has in many ways remained isolated from the rest of Cameroon, due to both geographical and historical factors. On the other hand, the area has a healthy climate and a great diversity of agricultural production. The different climatic zones support specialized agricultural activities, ranging from palm oil and tubers in the low zones to coffee, beans, Irish potatoes, and garden vegetables in the high zones. Ecological conditions and specialized production have provided the basis for intraprovincial trade and also for the unequal distribution of wealth between divisions and between individuals. The hierarchical nature of the traditional political and social structures, which flourished in the relative isolation of the area, encouraged the unequal access to wealth, while at the same time providing for the basic needs of all individuals within the society. To understand the dynamics of development in the area today, it is important to think of society in the Northwest Province not as a homogeneous unit, but as one with stratified and differentiated rural, as well as urban, sectors.

BRIEF SOCIAL HISTORY OF THE PROVINCE

It is difficult to talk about "the Northwest Province" as though it consists of a uniform population undergoing uniform changes through time. There are, however, throughout the Province, basic historical similarities in customary social, economic and political organization, many of which have been retained to one degree or another up to the present time.

The Northwest Province is encompassed by the area commonly referred to as the "Bamenda Grassfields." "Grassfields" is the name given to the highlands of Western Cameroon, which extend immediately north of the tropical forest between 5 and 7 degrees north of the Equator, between the Cross River to the south, the Katsana Ala River to the north, and the Mbam River to the east. (Warnier, 1975) As a result of the ecological diversity and high population

densities in the area, commercial exchanges existed between complementary areas long before European colonial rule. The major ethnic groups in the Grassfields are the Tikar, Widekum, Mbembe, Bali and Aghem, of which the Tikar are the most numerous and have exerted the most influence culturally throughout the province. According to their own traditions, various groups of Tikar began to migrate to the Grassfields some 300 years ago from the Northeast, from what is now part of French Cameroon. They came primarily from Tabati, Banyo, Kimi, Ndobo and Rifum (modern Bankim). (Eyongetah and Brain, 1974) In addition, there are some 40,000 Fulani graziers in the province divided into two groups, the Mbororo who arrived in the early 1900's, and the Aku who are relative newcomers, migrating into the province from the hot, dry savannah of Northern Nigeria in the 1950's.

With the exception of the Fulani graziers, all the peoples of the Grassfields were organized in chiefdoms of various sizes; almost everywhere the chiefdomship was hereditary, and the chief a sacred symbol of his people. The chiefdoms of the Grassfields ranged in size and complexity from the small village chiefdoms of Widekum to the expanding conquest-states of Nso and Bafut, with populations estimated at 20-25,000 by their German conquerors. (Chilver, 1962) These chiefdoms were linked to each other in a complex relay trade of subsistance products, cross-cut by a long-distance trade network in which slaves were exchanged for European goods via the Bamileke chiefdoms to the south and various populations on the Cross-River to the southwest. (Rowlands, 1978)

Men's secret societies within these chiefdoms were numerous. The distribution of power between these societies, chiefs, lineage and quarterheads varied from one chiefdom to another. With few exceptions the peoples of the region have practiced patrilineal descent, and any given chiefdom combined principles of descent and residence into an interwoven pattern of social organization. (Warnier, 1975) The most basic unit within these chiefdoms was the compound, composed of the compound head, his wives, adult sons, children and other dependents. The prestige and power of an individual man was positively correlated with the number of people who lived in his compound as well as his membership and rank within the various men's secret societies. Land was inherited both individually and communally; the chief, Fon or village head held property in common, while de facto control was exercised to varying degrees by lineage and family heads.

The chiefdoms of the Grassfields were bound together in complex systems of political and marriage alliances, trade partnerships, and exchange of various status objects and royal gifts. Within this area there existed a high degree of local economic specialization, and therefore regional trade. It was wealth gained in this local trade that formed the basis for household expansion as the prerequisite to gain priviledged access to the trade in slaves and European goods. (Rowlands, 1978)

Ivory was also an important royal prestige and trade item and annual hunts were conducted on the behalf of the chiefs or Fons. Kola was produced and exported in large quantities and unlike ivory and slaves, whose trade was restricted to chiefs and notables, was traded by a large majority of the male population, serving to enrich all kin- or lineage-heads who controlled tree crops.

Production for consumption and exchange in all the chiefdoms was embedded within the compound economy. A rigid sexual division of labor acted to distribute male labor to craft production, hunting and military activities, and female labor to agriculture, domestic activities, and a limited range of low value crafts production primarily for household use.

SEXUAL DIVISION OF LABOR

Sexual Division of Labor in the Subsistance Economy

Most of sub-Saharan Africa has been historically, and remains for the large part today, a "female farming" area. The Bamenda Grassfields region stands out as an example par excellence of a female farming production system wherein women perform almost all agricultural labor. Within the customary sexual division of labor the primary--and often only--involvement of men in growing food crops was the performance of heavy tasks such as clearing fields, which usually involved fewer than two weeks per year. Women performed virtually all remaining tasks--tilling, planting, weeding and harvesting--which, in combination, required year-round, almost daily attention. These tasks were tedious at best, and much of the work arduous, especially given the level of technology available. Native hoes, while efficient in breaking up and tilling the hard soil, were heavy and cumbersome to use. Throughout most of the province, women cooperated together to work in the fields, especially at times when additional labor was necessary to break heavy seasonal labor constraints. Phyllis Kaberry (1952) estimated that most women spent 60% of their time in the field, often working 12 hour days. In addition to agricultural work, women have been and are today responsible for virtually all domestic chores.

Men's productive activities varied according to age and social status. Since men seldom involved themselves in any one task for more than a few hours, their actual labor time was hard to record. Major male occupations included trade, tailoring, bricklaying, carpentry and smithing; in addition, most men supplemented their income with a variety of tasks. They tapped and sold raffia wine and looked after and traded various tree crops--kola, plantain and banana. They gathered firewood and thatching grass and at times cooperated in constructing houses.

Within this subsistance economy, the principle responsibility of women was farming and providing her household with food. Farming was viewed as a woman's activity and one in which men did not feel competent to intervene. There was a prejudice in many areas against women selling in the market or handling relatively large sums of money. Inasmuch as they traded at all, they dealt with small quantities of foodstuffs, beer or articles such as pots and baskets which they manufactured. Their objective was to obtain small sums of money to purchase household items rather than to acquire capital. A woman's primary duty and responsibility was to supply food and the focal point of her life was her family. Although her workload was arduous, farming gave women considerable status, respect, dignity and economic independence in the community.

Sexual Division of Labor in the Monetary Economy

The integration of Cameroon into the world market economy created wage labor, cash cropping, increased involvement in a monetary economy and a growing government bureaucracy, all "public" areas overwhelmingly staffed by men. Older forms of societal relationships which retained at least some forms of traditional production were slowly disrupted, transformed, and distorted, losing much of their historic status as integral to the social labor of the community. In the subsistance economy, the family was the basic unit of all economic production--not the "wage-earning male" but the household as a whole. While there was an intense division of labor based on age and sex, there was no sharp division between the family and the world of economic production. A woman's sense of self as "outside" the larger society was limited by the fact that society was composed entirely of family units. With the necessity for wage labor and a cash income to meet increased demands for taxes and school fees, men became more involved in non-traditional forms of work, often migrating out of rural areas. There is today a high migration out of the province and out of rural areas into the cities within the province, especially for men between 18-30, with many of these men seeking employment on the plantations in the Southwest Province and in Nigeria. This puts an extra burden on women who have to work extra hours on their husband's cash crops in addition to growing food to supply their households and earn enough surplus to supply basic commodities for the household. In addition, many women send foodstuffs to male members of the household who are employed in urban areas.

Men concentrate their labor in cash-earning activities and perform domestic activities only in a family emergency, i.e., illness or absence of the wife for a long period of time on her farm outside the village. With the increased introduction of cash crops--particularly rice and coffee--men have become somewhat more involved in agricultural activities.[1] However, men will not use a woman's hoe and are therefore not "allowed" to till, plant or weed the major food crops. On the other hand, women have been "allowed" to join in men's work. Women now use machetes for clearing food fields along with their husbands, and also work on their rice and coffee farms. With no significant improvement in technology available to women, and with children--historically an important source of labor to the household economy--disappearing into the schools for a major part of the year, women's workload has substantially increased along with increased demands on her income for household goods such as kerosine, oil, salt, soap, sugar and cloth, all of which are new viewed as essential to the rural standard of living. Although women's workload has increased, in the context of a monetary economy, the economic and social meaning of the work women perform has become analogous to housework women do in more industrialized countries.

In areas--especially around Bamenda--where prices for agricultural produce are relatively high for the province as a whole, more men have begun to work plots for foodcrops. An additional factor in the increased involvement of men in

[1]Some men come into the Northwest to perform agricultural labor, especially around large agricultural projects such as those on the Ndop Plain. These men come primarily from the Bamun and Tikar areas in the Western Province, working at an average wage of 250-300 FCFA/day. Some work is done on a piecemeal basis so it is difficult to determine average seasonal or yearly agricultural earnings.

foodstuffs production is tied to the high migration rate out of rural areas, leading to labor shortages in many areas. Young men and an increasing number of young women are migrating out of the province and from rural to urban areas within the province to seek employment opportunities outside of the agricultural sector, viewing agricultural labor essentially as work for sheer maintenance because of low wages and cash flow problems.[1] In addition, many local young men are often merely given room and board as compensation for agricultural labor, especially within the kin group or family. This has led to an increased involvement of women working on other people's farms for wages in addition to the performance of their own agricultural work for the household and work on their husband's cash crops. Although more men are becoming involved in agriculture, the great majority of this work is still performed by women.

According to Simon (1978) an average woman in the Northwest Province spends about 50 days a year on housework and 170 days on farming, about 160 to cultivate her own fields and about 10 days to help her husband. No information on how many hours constitute a "day" are given in this study. Many traditional men's cash obligations are now assumed by women, including payment of school fees and even payment of their husband's taxes. The average proportion of women's produce consumed by the household is 85%, with 15% sold for cash. There is a fairly high rate of polygamy in the province with 26,910 men in rural areas married to more than one woman. This puts increased demands on a woman's income, since the man of the compound must divide his income among a greater number of women and children's needs. According to our study, women work 4-6 days out of the week on their farms, deperding on which "Country Sundays" are observed and whether or not Sunday is considered a day of rest. Observations from living for a year in compounds in Kumbo and Nsɔh in Bui Division suggest that a woman will typically begin preparing food and water for washing for the family by 6:00 a.m., cook enough for a morning and an afternoon meal, leave for her farm by 8:00, and often not return until 6:00 or later depending on the season. She will then still have 2-3 hours of work to perform, cooking the evening meal, washing the younger children and in villages without water systems, often trekking to the stream for water. Length of the working day varied seasonally with an average of five 10-15 hour days throughout the year, usually totalling 60 hours of work time per week, one-third allocated to household tasks (which must be performed every day) and two-thirds to farming. It is interesting to note here that participation in women's work groups seems to have increased since Kaberry's study, probably due to increased demands on women's time and income. Virtually all women interviewed worked in communal work groups in the fields.

Time spent in agricultural work by men was more difficult to estimate since it varied substantially from one man to another. Simon's estimates range from fewer than 100 to 200 days a year. A man's work in the field varies according to his participation in outside occupations, the size of his coffee farm, and whether or not he hires outside labor. Approximately one-half of the men in our sample hire outside labor on their coffee and rice farms. Labor is rarely hired for traditional women's work, with hiring done usually by women whose husband's have salaried jobs, or occasionally in cases of illness.

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[1]Many farmers do not pay workers until their crops have been harvested and sold.

Women have historically and continue today to work longer hours than men; however, men exercise more control over the production process. Men can mobilize women's labor to help on their farms but the reverse is seldom true. Women are dependent for help in their fields on their children and on mutual aid work groups.

Although women often have secure rights of usufruct, according to customary land tenure only men can own and control land. This becomes clear when we look at the difference today between permanent rights over land planted with coffee and other tree crops which are men's property, and the absence of such rights over land utilized for food crops which are within the woman's domain. Even the fertility of the fields depends customarily on rituals performed by men; these rituals are viewed as important even today and often women have to wait until the landlord gives his permission before she can harvest her crops.

Food production is still first and foremost a subsistance activity and the rise in food prices is not changing this orientation. The average annual rate of increase in the general price index over the past seven years has been 11.6%, while that for food prices has been 12.7%. However, the average increase in coffee prices has only been 8.4%. Coffee as a cash crop is the major source of agricultural income in the Northwest. As food prices go up relative to coffee prices, it becomes increasingly essential that the rural family retain its capacity to produce its own food.

Male-Female Employment and Contribution to Household Expenses

Education. Until fairly recently, education for women was viewed by most rural people not only as unimportant but as a detriment. This idea has changed substantially over the years and the discrepancy between male and female children 6-14 years enrolled in school in the Northwest Province has narrowed considerably. The percentage of children 6-14 enrolled in school in the province has narrowed considerably. The percentage of children 6-14 years of age enrolled in school in the province is low by national standards: 58.5% compared with a national average of 64.8%, second lowest only to the North Province. In the Northwest, out of the 58.5% of children enrolled in school, 64.4 are male and 52.1% female. While primary school education on the part of some parents is due more to the hope of recouping their investment in a higher bridewealth payment than education for the girl's own sake, increased school enrollment for girls is a step in the right direction.

Discrepencies do become larger after primary school. According to figures published in the 1976 population census, 5.2% of the Northwest's population 15 years and older have reached secondary school or above; of these 3.7% are male and 1.5% female. Only 0.3% of the female population 15 years years and older have been educated beyond secondary school, while 1.2% of the male population in this category have received a higher education. The percentage of the population in the province in this latter category is below the national average of 8.5% with only the East and North Provinces having lower percentages. However, increased enrollment in primary school along with the expressed desire by a large majority of girls today to continue on to secondary school indicate that education for women will likely continue to increase in the province.

Employment. As shown in Table 5, the vast majority of salaried and wage-earning jobs are held by men. Category 8, "Looking for the first time," of which 34% are women, shows the expressed desire by young women interviewed to secure employment before marriage and to continue working for wages afterwards. Women who are engaged in wage labor still continue to farm, often working on their farms after hours and on weekends in addition to hiring some wage laborers to help them out. We can assume that the greatest number of women in category 6, "Farmers, Fishermen and Hunters," are farmers. Only 7% of non-agricultural workers and drivers are women.

A woman's subsistance and domestic labor obligations which stem from her duty to grow and prepare the family food actually leave her little time to expand her cash-earning activities. While virtually all women farm, few sell more than 10-15% of their produce. Although women have become increasingly involved in petty trade, for most of them trading profits are small, at best providing for sheer maintenance rather than growth. The majority of provision stalls selling manufactures in rural markets are run by men--either local men who travel to Kumbo or Bamenda monthly for supplies, or traders--usually from Kumbo or Bamenda who travel around the rural market circuit. Outside of the Bamenda area, very few women act as middlemen in trade, although most of the small stalls in Kumbo and Bamenda markets selling small amounts of foodstuffs and a few provisions are run by women.

Contribution to Household Expenditures

According to Simon (1978) the average man in the Northwest Province has an annual income of 79,880 FCFA, 67% of which is monetary and 33% the value of his subsistance contribution to the household. The average woman has an annual income of 56,040 FCFA, 32% of which is monetary, and 68% the value of her subsistance contribution.[1] While women work more consistently and longer hours than do men, returns to their labor are lower. We might note here that changes in the sexual division of labor within the monetary economy are not only shaped by customary cultural categories, but also by the interests of the dominant political economy. The introduction of cash crops--especially of coffee--has created basic changes in the subsistance economy. Coffee has brought the agricultural economy under the influence of world market conditions. Monetary value attached to all agricultural produce now gives a means by which men's and women's products can be compared. When evaluating the economic contribution to the household by sex, we should note that women's subsistance and monetary contributions, while accounting for less than men's contribution in monetary terms, not only require more labor time, but also subsidize the modern economy by making it possible to employ men at wages below the cost of supporting a family. While it is fair to say women's labor is exploited by men, men are often in a structural position within the monetary economy which gives them little choice but to do so, especially if they are to marry and raise a family.

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[1]Monetary income comprises all cash (profit) received by sale of products, work done against pay, gifts, etc. Subsistance income comprises all products, materials and articles self-supplied or received without pay.

Conclusion

Women's access to income and jobs has increased within the monetary economy as they have gained greater entry into petty trade. Increasing numbers of girls are being educated, and even with the prejudice by most men against hiring females, women do have access to employment formerly denied to them. Women's access to increased income and job opportunities has raised their standard of living and given them some freedoms from the domestic context. At the same time the labor they perform has become to some extent socially devalued, and the value of their labor vis-a-vis men's labor has declined. It is a case of the same problem which goes back at least to Hegel: the distinction between "freedom from" and "freedom to." Women are now free from many of the constraints of precolonial social structures, and free to work in the market economy at a low wage. (Guyer, 1979).

Women as a group will only become equal to men when there is a change in the structure of rural production as a whole with both sexes realizing the value of their labor. Increased production for the market must necessitate the entry of men into what has traditionally been viewed as "women's work." At the same time development and resettlement programs must give women equal access to land, technology and education as well as equal monetary benefits for their labor.

AGRICULTURAL PRODUCTION

Crop Production

The Northwest Province is largely self-sufficient in the production of basic foodstuffs, although palm oil, onions, rice, fish and salt are imported. With the estimated value of total agricultural production in the Province at approximately 32 billion CFA francs, agriculture accounts for over 65 percent of the total provincial gross domestic product, which is estimated at over 50 billion CFA francs. The area makes an important contribution to the nation's foodcrop production, accounting for over 18% of the value of agricultural production in the Cameroonian economy (valued at 174.4 billion CFAF in 1976/1977). Agricultural census results shown in Table 6 indicate that the Northwest cultivates significant percentages of the country's hectarages of the following crops: beans, 29.3%; maize, 27.4%; Irish potatoes, 20.4%; sweet potatoes, 19.8%; yams, 18.2%. Over 30% of the national arabica coffee hectarage is in the Northwest, as well as 64.6% of the national hectarage in tea. Other major foodcrops grown in the Northwest include cassava, cocoyam, groundnuts, and tomatoes.

Mezam Division is by far the most important foodcrop producing area in the province. The majority of bananas, plantains, and cassava are produced there, as well as large amounts of maize, tomatoes, and cabbage. Bui Division is particularly strong in the production of Irish potatoes and beans. Donga-Mantung produces large amounts of cocoyams (macabo), maize, and beans. Mentchum Division produces important percentages of the province's supply of cocoyam, sweet potatoes, maize, and groundnuts. Momo, the smallest division in terms of population and land area, has relatively large hectarages of cocoyams, yams, sweet potatoes, and pineapples. Momo also supplies some of the palm oil consumed in the province. Rice farming has been established in the lower lying basins of the Mentchum Valley, northwest

of Bafut, and on the Ndop and Mbaw Plains. Arabica coffee, the region's main cash crop, is widely cultivated, but is grown most successfully in the higher areas around Banso and Njinikom. In value terms, the most important crops produced in the Northwest Province are (in order of importance): cassava, cocoyam (taro), beans, maize, arabica coffee, yams, cocoyam (macabo), groundnuts, and bananas (see Table 16).[1]

Livestock and Small Animal Production

The Northwest Province ranks third among Cameroonian regions in cattle and swine population (after Center-South and Western Provinces), and fifth in small ruminant population. Using a 1976 count as a basis, and projecting forward at an annual rate of 5% for cattle, 7% for sheep, goats, and poultry, and 8% for pigs, Table 7 gives the projected livestock population for the Northwest Province in 1979/80. Goat and poultry production has been hampered by epidemics of caprine pleuropneumonia and fowl cholera, newcastle disease, and pullorum. Pigs have been relatively untouched by epidemic outbreaks, although they suffer from internal and external parasites.

From Table 8, we observe that Donga-Mantung and Mentchum Divisions together contain over 68% of the cattle grazing area in the Northwest Province. For the province as a whole, there are 2.84 hectares of grazing area per head of cattle. This figure varies from 1,87 hectares in Mezam to 3.51 hectares in Mentchum. In addition, bracken fern infestation has greatly reduced available pasture in Donga-Mantung, a fact not reflected in official statistics. Although the average land to cattle ratio is low by Sahelian standards, it could be lowered further if more intensive range management practices were adopted. Local informants speculate that the grasslands of the Northwest Province may be able to support a cattle population of over one million, such that the land/animal ratio approaches 1:1 with the available grazing land.[2]

From Table 9, we observe that sheep are concentrated most heavily in Mezam (40.4%), and to a lesser extent in Donga-Mantung (20.0%). Goats (53.8%) and poultry (54.6%) are very heavily concentrated in Donga-Mantung. The largest goat population is found around Ndu on the border of Donga-Mantung and Bui Divisions, although the 1978 outbreak of caprine pleuropneumonia greatly reduced the number of goats in the area. The highest concentration of swine is found in Momo (57.6%) and Mezam (37.6%), with very limited pig production in other divisions.

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[1]The production figures used to calculate Tables 6 and 16 are those of the Provincial Delegation for Agriculture, which do not agree with national agricultural statistics. All production figures must be treated with caution, as their statistical reliability is questionable. The Ministry of Agriculture is presently attempting to improve the reliability of its agricultural production figures.

[2]Note that the increasing number of cattle in the Province is largely a twentieth century phenomenon. Official reports (Ngala, 1978) suggest that there were some 10,000 head of cattle in the Northwest Province in the early 1920's.

Systems of Crop Production

Farming systems in the Northwest Province are generally oriented towards producing food for home consumption, although the introduction of coffee and of cash crops such as rice has modified the way in which production inputs are combined. The small farmer producing to meet family subsistance needs is primarily interested in assuring a year-round supply of food for the household, while maximizing the efficiency of the scarcest factor of production, which is generally assumed in Africa to be labor. The method of shifting cultivation used in the Northwest Province, combined with the common practice of intercropping and burning of the fields before plowing, responds to these goals of the small, subsistance farmer.

To prepare land for planting, the dry grass is either burned on the land as it stands, or gathered into heaps, covered with soil, and then lit and left to smolder for several weeks. Either method, while ultimately destructive because of the damage done to the general organic content of the soil, does release some minerals that give a quick start to the crops and may check the spread of insects. Hence, in the short run, the practice of burning may maximize output and help to minimize the risk of crop failure. Once the burning has taken place, soil is often gathered into ridges, upon which several different crops may be planted. The principal tools used to accomplish these operations are the machete and the short hoe. The 1972/73 Agricultural Census reported over 98% of farmers in possession of these tools, while 70.5% owned axes, 30% owned shovels, and 19.5% owned pickaxes. Fewer than 5% of the farmers owned seeders, rakes, wheelbarrows, or watering cans. There are only a small number of tractors in the Northwest, but most belong either to the government or to heavily subsidized development projects. Animal traction is being encouraged but its use is not yet widespread.

The agricultural calendar followed by farmers in the Northwest varies considerably between areas. Generally, burning and tilling of the fields takes place from January through March; planting begins with the first heavy rains in March, and harvest begins in July and continues through November, with the coffee and rice harvests completed last (see Figure 2 for a generalized agricultural calendar). Some areas can get double crops of corn, beans, and potatoes. Local soil and climatic conditions and the availability of land determine the length of time an area is farmed. Under the system of shifting cultivation, the cultivation period can vary between two and six years and the fallow period between one and twelve years, depending on the region. Where land pressure is high, the period of fallow may be reduced to only one year, and in farming areas around Bansc and Bamenda, there is an increasing amount of permanent cultivation.

A rather complicated system of intercropping is practiced in the Northwest, a system which minimizes the risk of the total production of an individual farmer falling below the minimum necessary for subsistance, and which also maximizes the productivity of the labor expended in clearing and plowing the land. According to Simon (1978, pp 13-15) in his description of a typical four-year intercropping cycle in the Wum area, first year plots are planted with up to ten crops including maize, cocoyam, cassava, pumpkin, yam, melon, okra, and beans. Second year plots are planted with a leguminous crop such as groundnuts, intercropped with maize, sweet potatoes, and cowpeas. Third year plots are often groundnuts and maize,

while fourth year plots consist of cowpeas and maize. There are, of course, many variations of intercropping, according to local conditions. For example, a two year cycle may consist of maize, cocoyam, and some vegetables in the first year, with a leguminous crop introduced in the second year. The use of fertilizer is limited largely to coffee and rice, and the Agricultural Census estimated in 1972 that some 73% of the plots farmed in the Northwest received no fertilizer whatsoever.

Various methods of storage are practiced by farmers in the Northwest Province. In some areas, corn is harvested and dried in cribs standing in the fields, and in other areas corn is harvested, carried to individual compounds and dried and stored under the roof of the kitchen. Estimates of the loss of corn in storage range from 10-15 percent. Crops such as beans and groundnuts are dried and stored in individual compounds, which in some areas, have granaries separate from the kitchen. Tubers are often left in the ground and harvested upon need, although reported storage losses were as high as 20 percent. Rice stores well in paddy form, and the development projects involved in the production of rice have been able to store rice with minimal loss for over two years. The largest storage facilities in the province belong to the cooperative system, and are used generally for the storage of coffee until it is transported to Douala. Traders in Bamenda have some storage facilities, but their turnover is rapid and few items are held longer than two or three months in storage.

Systems of Production--Cattle and Small Ruminants

Cattle are owned and raised primarily by Fulani graziers, although in recent years, other groups, including local farmers and civil servants, have begun to invest in cattle, hiring Fulani and some non-Fulani herders to take care of the cattle herds. There are two groups of Fulani in the Northwest: The Mbororos, who settled in the eastern part of the province in the early 1900's, and the Aku, who migrated from northern Nigeria in the 1950's to settle in the western part of the province. The Mbororo and Aku people reportedly do not get along well. The Mbororo charge that the Aku usurped their traditional dry season grazing areas and that the disease tolerant Aku cattle carried diseases that infected the Mbororo stock. Furthermore, the two groups differ markedly in social structure and political organization.

Neither the Fulani graziers nor the farmers possessing cattle generally own the land on which they graze their animals. They obtain permission to graze from the Farmer-Grazier Service, a subdivision of the Ministry of Animal Breeding and Industries which is responsible for issuing grazing permits and handling farmer-grazier problems. Permission to graze must often also be obtained from the local chief or Fon in a given area. The Farmer-Grazier Service demarcates the boundaries between farming and grazing land, and divides grazing areas into blocks under the authority of individual ardos. It then issues grazing permits to individual graziers, who are authorized to graze their cattle within specific rainy season and dry season grazing blocks. The demarcation of boundaries between farming and grazing land is often a matter of dispute, as are the numerous claims of crop damage by cattle. These problems are discussed in further detail in the section on land tenure.

The Fulani graziers within a particular block tend to be members of the same extended family or clan, and the ardo is their most senior or most respected member. Each grazier is granted a specific grazing area surrounding his rugu (compound), while the rest of the grazing block is open to grazing for the herds of all graziers within the block. The Mbororo graziers stay in one grazing area in the hills during the rainy season, and the young men or hired herders then transhume with most of the herd to lowland grazing areas during the hot dry season. Lactating female cows are left in the rainy season grazing area, attended by the older males, women, and children. The principal dry season grazing areas for the Mbororo are the Ndop and Baligham Plains in Mezam, the Ndi Plain in Bui, and the Mbaw Plain in Donga-Mantung and Bui. The Aku graziers prefer to graze their highly disease-resistant cattle in lower altitude zones year round. Transhumance for the Aku consists of moving from one lowland area to another. Their main dry season grazing areas are the Misaje and Dumbo Plains in Donga-Mantung, and the valleys around Wum, Mungong, and Marshi in Mentchum. The local farmers who have purchased cattle may hire herders to take their cattle on transhumance. Less prosperous farmers tend to take care of their own animals and are less likely to go on transhumance.

Sheep are raised primarily by Fulani graziers, who herd them in groups of five to fifty. Some graziers and farmers keep a few sheep to sell as a source of additional income during the Moslem holidays and at Christmas, when demand is highest. Goats are raised almost exclusively by farmers, who do not fence in their goats but instead stake them during the rainy season and allow them to browse freely during the dry season. Pig production tends to be carried out on a small scale, although a few farms in Mezam and Momo produce for the market. Producers usually fence their pigs, since they will destroy crops if left free. Poultry are raised by many farm families in the Northwest. Most fowls are left free to forage in the compound for their food. Disease problems and the lack of a ready source of feed mix are major constraints to increasing production. According to the 1972/73 Agricultural Census, 77.5% of the farm families in the Northwest raise poultry, 21.7% raise pigs, 22.1% raise goats, 8.3% raise sheep, and 3.3% raise cattle. Hence, ownership of small stock, particularly goats and poultry, is much less concentrated than that of cattle. The development of small stock raising, therefore, might have a greater direct impact on small farmer income than the development of cattle production.

CHANGING PATTERNS OF LAND TENURE IN THE NORTHWEST PROVINCE

In Cameroon, as in most of West Africa, "agriculture is the matrix in which all other indigenous activity is set." (Hill, Polly, p. 3, 1962) The question of rights of allocation and control over land becomes a central issue as the population--both human and animal--grows, while the amount of arable land available remains static.

Even with a high population density and relatively high rate of population growth, it would still appear that, province-wide, land is an abundant resource in relationship to the number of people available to work the farms. Land disputes, however, especially disputes between farmers and graziers are frequent,

and while not a new phenomenon, have grown rapidly over the last decade.

The purpose of this section of the report is to look at the ways in which the peoples of the province view their relationship to control of and access to land, and at the interrelationships between the traditional land tenure systems of the Northwest and the land laws of Cameroon as they exist today in order to identify points of articulation and disjunction as the rural areas become increasingly developed and involved in growing cash crops with a resultant increasing involvement in a monetary economy. Whereas in the pre-coffee period the greatest part of agricultural land was exploited primarily for subsistence, today it is increasingly seen and utilized as a source of cash income. The idea of economic scarcity of land is a relatively new concept in Africa, since land has always been abundant in proportion to the people available to work the land; therefore wealth and power have historically been measured in labor rather than land. This is one of the reasons kinship relationships or relationships couched in kinship terms have been so important in Africa and remain so up to the present time. Those who could demand fealty--and labor--from others have been the powerful men in the social structure, and African leaders traditionally have invested in social or symbolic capital rather than material wealth per se, since the former is ultimately transformable to the latter.

Principles of Traditional Land Tenure

When we talk about "ownership" of land in the traditional or customary land tenure system, we must disregard ideas of absolute ownership of land as a commodity which can be bought or sold by individuals at will and instead think of control over land as a bundle of rights vested in different individuals at various levels of society. Out of the many rights that can be identified, two stand out clearly. First, there is the right to own land. This right is not vested in individual persons but rather in the group to which they belong, symbolically represented by the chief's or Fon's titular control over all land within his domain. Secondly, there is the right to use land--often in perpetuity--and this right is vested in the individuals within the group. With few exceptions, the occupation and use of land was individual and a person enjoyed a security of tenure as long as he was in occupation of the land and abided by customary law and by decisions of customary authority. However, the individual's right was to the product of the land; to its use and inheritance of its use rather than to the land itself. Land was not viewed as a commodity which could be alienated by individual owners.

The underlying contradiction in this system of land tenure lies in the fact that the ideology stresses the supremacy of the group over its individual members, and yet these individuals possess pieces of land as long as they identify themselves with the group. While at the level of facts it would appear as if individuals own land, at the level of ideas it is the group which owns the land. The contradiction becomes more apparent as land begins to take on a market value of its own and begins to be treated as a commodity. With a movement towards an increased separation of economic from non-economic activities, there is a relaxation of traditional tenure constraints while at the same time there is a contradictory ideological attempt to maintain the dominance of traditional values over those developing activities, to defend the integrity of the customary pattern.

The system of land tenure will closely follow the pattern of leadership within the society, reflecting the structure of social relationships within the community. Therefore, as these patterns and relationships undergo significant changes, the system of land tenure will begin a process of transformation. This process in turn affects the pattern of social relationships, although the traditional and modern systems will remain interconnected for some time.

Throughout most of the Northwest Province eminant domain or titular ownership in land is vested in the Chief, Fon, or Village Head as trustee of the community and the settlement of outsiders requires his permission. De facto control is exercised by lineage or extended family heads; this control often extends to trees planted by male dependents. In the more centralized chiefdoms like Nso[1], land is controlled or managed by a varying number of landlords, depending on the size of the chiefdom. These landlords are claimed to be descendents of original settlers of their respective areas and the ideology is that the areas they control today were originally hunting areas controlled by their ancestors. Landlords are almost invariably lineage or sub-lineage heads; however, not all lineage heads are landlords. Landlords are also called the "priests" of the land and are required to perform sacrifices and rituals to ensure the fertility of their land and the well-being of all persons working on their land.

The Fon makes annual sacrifices geared towards the productivity of the soil but usually[2] has no particular piece of land to allot to an individual. Instead he must go through a traditional landlord. In most of the Grassfields region, the overlordship of a chief or Fon represents the territorial aspect of his authority over persons. De facto control by landlords, lineage or family heads is an aspect of the recognition of their general competence as the political and religious leader of a group of persons. Traditionally, and in many areas today, the privileges of the landlord include calling on his dependents and people working on his land to assist in the cultivation and clearing of his farm; in addition he customarily inherited permanent tree crops planted by his descendents as well as property such as livestock, guns, ornaments and money. This remains true in some rural areas today, although only if one of his descendents dies leaving no male heir. Otherwise, while symbolically he inherits these items, in fact they remain the property of the dead man's male heir. The privileges of a landlord include obligations to his dependents, the foremost of which is to keep the patrimony of

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[1]The major portion of the fieldwork for this report was done in Bui Division, in Nso and sub-chiefdoms of Nso, with research also conducted in Donga-Mantung and Mezam Divisions. While different areas of the province have been affected differentially by the process of urbanization and development, for the most part the various areas share basic similarities in land tenure patterns and problems. Variations on this pattern are found in some Widekum groups and some Fungom villages, where residential land is vested in family heads but arable land is allocated among lineage heads by the Village Head. In some areas--i.e., Fungom and Ngwo, land is allocated to women on a temporary basis only, with the lineage head or village chief annually choosing appropriate farmland and leaving the demarcation of individual plots to the women.

[2]In some of the chiefdoms of the Grassfields, the Fon can allocate land to an individual, although it is controlled by lineage and extended family heads.

the lineage intact for future generations. If he abuses his privilege, he can be deposed. Once a man allocates land to an individual member of his lineage, it essentially comes under the control of the individual. Agricultural land allocated to individuals outside the lineage can be reclaimed upon proper notice.

Throughout most of the province women cannot own or control rights over land but have in practice exercised considerable control over plots they cultivate, and traditionally could loan them to other women or even transmit them to close kin. (Kaberry, 1952) One piece of evidence of the growing scarcity of land is the fact that in extensive interviews with 18 landlords, all of them stated categorically that a woman could no longer exercise this privilege. Women customarily have farmed on the land of their husband's lineage and continue to do so today. They do, however, in some cases have rights of usufruct in lands belonging to their mother's or father's lineages.

Several points emerge from this brief discussion which are pertinent when looking at how this pattern of land tenure has or has not changed: 1) the landlord's role in allocation of land carries moral as well as legal connotations; he is expected to ensure all his dependents enough land for their individual needs in addition to safeguarding the patrimony of the lineage; 2) tree crops such as raffia and kola have traditionally been regarded as "things of the lineage"; if a man planted tree crops he could exploit them while he lived, but the landlord rather than his own heir inherited these upon the man's death. Tree crops could not--and cannot--in any case be planted without the express permission of the landlord; 3) once allocated, plots within the lineage tended to be handed down from father to son so that certain areas of land have become vested in smaller segments of the lineage; 4) once land was lent to non-kin, if not claimed for the use of the lineage--usually within one generation--there was a tendency for the land to become permanently alienated; 5) most importantly, land, while it could be loaned, could not be sold, pawned or bartered.

Contemporary Forces for Change in Land Tenure

Several factors have had significant effects on the customary system of land tenure, especially in more densely settled areas, although the ideology that farmland, especially land for foodcrops, cannot be bought or sold remains strong. The greatest impact has stemmed primarily from three factors: 1) the introduction and expansion of cash crops, coffee in particular, as the primary source of income in the province; 2) the monetary value now attached to land and the growing tendency to view land as a commodity and source of cash income rather than as a means to satisfy subsistence requirements; 3) population growth in general; in particular the growth of an urban population leading to heavy demand and inflated values for land within the more densely populated areas.

Coffee, along with kola, raffia and other tree crops, are viewed as a permanent crop which should not be planted without the permission of the landlord. Today, permanent crops as well as buildings are considered individual property and are inherited by individual heirs rather than reverting to the landlord upon the death of the owner, although in rural areas the landlord can claim these resources if a man dies without a male heir. In rural areas too, if a man wants to sell his

coffee farm or compound he first must obtain consent from his landlord. Landlords have become extremely reluctant to give out land for any use other than foodcrops and will refuse to do so to anyone outside their own lineage. When giving out land to non-kin for subsistance crops, many landlords will often put a definite time limit on the amount of time the land can be used before it is reclaimed. Length of fallow has decreased considerably, especially around land near to towns. Even in some more rural areas, women are reluctant to let land lie fallow for long in fear that the landlord may allocate it to someone else.

Political Responses to the Evolving Market for Land

As land has taken on a real monetary value, especially in and around towns, landlords have begun to ask for cash as well as the customary gifts of a fowl and a calabash of palm wine and occasional labor in return for use of farmland. Although in rural areas the amount of cash asked for land rent is low--500-1500 CFAF for the length of time involved which is almost invariably a long period of time--the practice has been denounced by many local Fons and by the people. As one Nso man said, "Now they (the landlords) ask for compensation. Compensation for what? Do you compensate a man for grass?" The fact that rural landlords are reluctant to lend out land outside the lineage even for subsistance crops has led to problems which most likely will become more serious in future years. Although there are still alternate means available for acquiring land--usually involving a cash payment--a man's claims are strongest in regard to the land of his own lineage. Individuals who belong to lineages which do not have sufficient land to meet the demands of all members may have difficulty obtaining enough land to meet their needs. Children of people who "begged" land or were tenants have sometimes had their land taken from them after the death of the original landlord, especially around more populated areas. Land is now sold in urban areas both for residential and farming purposes.

The problem of growing scarcity of land in economic terms is more acute around the more densely populated areas, especially around Bamenda, where land available for farming is both scarce and expensive. In Nkwen women are paying rent of 1000-2000 FCFA/year for one-fourth hectare of farmland. Even with payment of rent it is beginning to be difficult to get land to farm "because the rich people are buying up all the land." Costs for farmland around this area are reported to be around 70,000 FCFA for one quarter hectare of fertile land. After the land is purchased, the buyer still has to "dash" the Fon for permission to work it. Many people around Bamenda can't afford to hire land for extra production. Most women in Bamenda farm in Nkwen, Bambui and Bambili. Many men and women who migrated to Bamenda from outlying areas will try to maintain access to land in their natal villages, with the women travelling periodically back to the village to farm. Even so, most women around the Bamenda area who try to farm as much land as possible still buy at least 25% of foodstuffs required to maintain their households and have to purchase more from March to June.

Around Kumbo, Ndu, and some of the other more populated towns, although land in town requires an--often substantial--cash payment, it is still possible to get land within a reasonable distance from town through the customary land tenure system if you want a very small plot, otherwise you must go far out into the countryside

to farm. Traditional values have so far persisted so that families with little land have been absorbed and accomodated into traditional society, though sometimes unequally. These latent inequalities are beginning to come to the surface. Although enough land is so far available to satisfy subsistence requirements, without the money for transport costs and hired labor it is difficult to farm large plots out in the countryside.

Land Tenure and State Land Ordinances

In 1974, the Cameroon Government issued Land Tenure and State Lands Ordinances No. 74-1, 74-2, and 74-3. This was viewed as a land reform law intended to protect the small farmer, assure him a permancy of tenure, and encourage development in rural areas. It divides all land into National Land, State Public and State Private property, appoints the State as guardian of all lands and guarantees rights of ownership (private property) to "all natural persons and corporate bodies having landed property." All persons legally occupying or holding such land as of 6 July 1974 are entitled to file directly for a land title certificate; however, if land was occupied after that date a person must apply for formal allocation of land through the land commission or land consultative board. In order to fuse the new land laws with the traditional rules governing land tenure, the Fons and two traditional councillors or notables must constitute part of the consultative board set up within each sub-division in the province. Other members are the District Officer as Chairman, Land Representative as secretary; members other than these can vary according to the nature of an individual development proposal. Although the government technically has declared itself owner of all lands, these lands are held in trust by the traditional rulers and landlords.

National land is comprised of all lands, "which, at the date on which the present Ordinance enters into effect are not classed into the public or private property of the State...or are not covered by private property rights. National lands are divided into two categories: 1) Land occupied with houses, farms and plantations, manifesting human development , and 2) lands free of any effective occupation. These lands are to be administered by the State "in such a way as to ensure rational use and development thereof." All developed land within the former category of national lands has a set value attached to it and can be sold for building. The value of this land varies from division to division (see Table 10). We should note that these are "correct prices," the actual price charged is often higher, especially in preferred parts of towns like Bamenda and Kumbo.

National lands which are non-allocated or exploited can be given out for development purposes by the government. These are initially usually five-year temporary grants for right of occupation. An application must include a program for development and proof of financial ability to carry out this program. If approved, the land is granted for a period of five years during which time the land must be developed as per the program submitted. At the end of five years, if development is substantial, a land title certificate is granted.

Effects of Interaction Between Customary and State Land Laws

The land tenure and state land ordinances emerge as fairly ambiguous, both in terms of exactly which kinds of occupancy and/or "ownership" are to be included within categories designated as private property, and in terms of rights of allocation of land to individual farmers. Essentially two forces have now become opposed as aspects of the development process, creating an ambiguous system of land tenure which is at one and the same time consolidated as some people claim authority over the allocation and disposal of land, and fragmentary as other people repudiate these claims of authority. This has created essentially a dual system of tenure: for the small, uneducated rural farmer without the knowledge or means to implement a development plan, the only access to land is within the customary land tenure system.

Those persons who are now aware of the law, know the procedure and have capital to develop land, can acquire rights of occupancy and land title through government channels as well as by traditional means. It can be quite expensive to go through the land commission for a land allocation grant, and a substantial amount of capital is required to institute a development plan. To file for title for farmland, a man has to have at least an acre of permanent crops already planted and a scheme designed to develop the remainder of the land to be allocated. In addition, due partly to historical circumstances and partly to methods of cultivation, in most cases the lands of a single landlord do not form one continuous tract. Farmers usually have several plots, often several miles apart and sometimes separated by a distance of 15-20 miles. This further exacerbates the process of submitting a development plan since various pieces of land may have to be taken into account and a man may have to deal with more than one landlord.

The typical pattern of investment as well as the poor transport infrastructure in the province have limited somewhat the amount of land in outlying areas brought under cultivation to date. Most men with sufficient capital to do so will invest in urban properties or otherwise make investments which assure a steady income. The primary reason given for filing for title to land is to acquire access to credit in order to invest further in urban areas, which assures faster and more lucrative returns than investment in agriculture. Although some men have started to invest in large farms as well as urban property, they do so usually only after establishing a secure income from other investments. Most of the larger farms are owned by civil servants, government officials, and some large traders, i.e., men who can afford both transport and labor costs in outlying areas.

Relatively few people have filed for land title certificates although the number of people filing for land allocation is steadily increasing. Those who have filed for title have done so primarily for building land and/or coffee farms, although some government officials have filed for land allocation certificates for farms of 30-40 hectares (the State law theoretically limits the amount of land held by a single individual to 50 hectares; for more than this amount a presidential decree must be secured). Most people still take farmland for granted; many people in villages say they could not file for allocation certificates because they would lose the land to the landlord who still maintains right of control. Not only is filing for land costly, but traditional councillors on the land board are often reluctant to grant title because the dominant ideology in rural areas remains: farmland should not be bought or sold.

The Government is trying by the land act to keep down land profiteering, but actually has done just the opposite. In the words of one senior government official, "the intention of the Government was to protect the small farmer but the new professional class is taking advantage of their superior knowledge and acquiring more than their share of land. Those who have money are investing in suburban areas and speculation is becoming scandalous." The major source of social differentiation in the rural area is not apt to come from the traditional system per se nor from the differences between small farmers and large farmers, but lies rather in the relation of rich farmers to the bucraucracy through which they can gain differential access to resources: land, capital (loans), and thus increased ability to hire wage labor.

Land Conflicts

Disputes over land are usually settled through the traditional land authorities. Farmer-grazier problems are first handled by the Ministry of Animal Breeding and Industries'(MINEL) Farmer-Grazier service which specializes in problems of crop damage. If a dispute goes beyond this, the case goes to the Administration, first to the District Officer of the sub-division,and lands officer. If they can't settle the dispute it goes to the Land Consultative Board pertinent to the nature of the dispute. In every dispute, rights to land must be traced to a former landlord or to a relative, but this is often a long and difficult process, and there are frequent claims of bias and unfair practice. Land disputes arise over boundaries and inheritance as well as between the original landlord and families who have held the land for long periods of time, especially if the latter try to sell the land. As various groups of people expand and begin to farm further out in the countryside there is friction between villages, paramount chiefs and sub-chiefs who have acquired an increased measure of independence and assertion of territorial rights. These latter conflicts are often couched in political terms; however, control over men is essentially control over land, and as the amount of desirable land decreases these conflicts become more prevalent.

All of the above disputes, while important, amount to a small proportion of land problems and disputes in comparison with farmer-grazier disputes which constitute the vast majority of land conflicts in the province at the present time. As population increases, agriculture and cattle production compete for land which is well-suited to both activities. Although the fertile grasslands of the Northwest are potentially as productive as any other region in West Africa, much of this potential has not been realized on account of uncertainty of land tenure facing Fulani graziers. Traditional native authorities often do not recognize grazier's rights to land. They may grant permission to indigenous farmers to cultivate land that has been grazed for decades. With this encroachment taking place and no effective means of counteracting it, Fulani graziers have no incentive to upgrade pastures and make investments in fencing, cattle treatment crushes, night paddocks and the like. Consequently, they have basically ignored MINEL's efforts to promote these improvements as well as cultivation of fodder crops, since they feel it is not in their interest to improve grazing sites which might be brought under cultivation before an adequate return on their investment has been realized. Increasing numbers of native graziers who are cultivators seeking to diversify have entered cattle production. Many of the latter are more receptive to improved range management practices, not because they are more rational than the Fulani, but

rather due to more certainty of tenure. If cattle production is to be encouraged, grazing permits need to be replaced by certificates of occupancy before larger numbers of graziers will respond to attempts to improve range management.

FONADER*, whose loan recipients are expected to obtain certificates of occupancy which gives them a 20 year lease-hold for land on which improvements are expected to be made (i.e., fencing, night-paddocking, rotational grazing and cultivation of fodder grass (Guatemala grass))--has circumvented the traditional rulers by not requiring graziers who are applying for loans to obtain certificates of occupancy. An absence of complaints on the part of neighboring farmers and graziers and continuous use of the land for five years or longer have served as adequate proxies for land titles. In order to induce some graziers to make improvements voluntarily that are presently funded almost exclusively by FONADER, and to increase the number of loans available to graziers, this sort of flexibility will have to be continued and eventually land title granted to graziers.

A large majority of farmer-grazier problems have been exacerbated by the promotion by the government, working through the cooperatives and various development organizations and agencies, of rice production in low-lying areas of the province which have served for decades as dry season grazing lands for Fulani livestock on transhumance. In addition to damage to rice which has been harvested past the dry-season deadline, cattle often cause considerable damage to the dikes of the surface irrigation system and repairs are costly in terms of farmer labor and/or payment of occasional laborers. Proposals by UNVDA* such as fencing and gathering rice stubble to be piled outside the fences for grazing have been ignored by both farmers and graziers, neither of whom want to supply the necessary labor and/or capital involved in such a project.

Although there has been much discussion between UNVDA officials, livestock and agricultural representatives and traditional authorities including chiefs, Fons, and Fulani ardos, no solution to cattle grazier problems has been reached. An important question underlying this issue is whether it makes sense economically to promote rice production in place of dry season grazing. It is clear that improved range management practices need to be implemented. Cattle have to be assured adequate grazing area; however, the needs of the farmer, especially the small farmer, must be taken into account. Possible solutions to farmer-grazier problems suggested have included restricting agricultural development in dry season grazing areas; allowing further development of these areas and encouraging a shift in livestock production to small ruminants; and encouragement for graziers to cultivate drought resistant forage crops.

Any changes in traditional land holding patterns are apt to be frought with political problems, since the system of land tenure closely follows that of the social structure in general. Local Fons and their peoples are not likely to easily give up what they view as their inalienable right to control, manage and use local lands.

Land Tenure and Market Access--Political Constraints

Although it is difficult to sort people out into groups, broadly speaking

* UNVDA- Upper Noun Valley Development Authority
FONADER- Fonds National pourle Developpement Rural

we can identify five categories of people regarding access to and ability to respond to market opportunities: 1) a relatively small non-resident group which has left the rural areas for professional jobs in the larger cities of the country or hold such jobs in the provincial capital. These men invest primarily in urban properties and, while retaining claims and interest in family farms in their natal villages, their primary interest is not in agriculture at this time; 2) a larger group of local entrepreneurs for whom investment in agriculture is often secondary and is in any case oriented towards cash crops and more recently, cattle. The wives of these men, while retaining foodcrop farms, will usually use capital from their husbands to make entrepreneurial investments in the towns hiring labor for farmwork. If foodstuffs production does become a more profitable enterprise, these households will have the capital to respond to the market; 3) a fairly large group of the population--roughly 20% of men and women who are "progressive farmers" but not large-scale entrepreneurs. Many of these men have occupations outside of farming which enables them to hire labor during seasonal bottlenecks. These households are interested in increasing production and utilizing novel farming techniques. Many of them have obtained fairly large tracts of land in outlying areas; however, at the present time transport to these areas is costly and difficult. While these farmers are anxious to increase production for the market, roads must be improved, and transport costs lowered to enable them to do so; 4) with some exceptions, the largest group--the small village farmer--is at a disadvantage locationally and politically. Where few employment opportunities are available to men, a greater part of the financial burden of the household is assumed by women. Land is available for foodstuffs production however, many farms are located a substantial distance from compounds and plots are not contiguous, requiring women to spend a substantial amount of time daily walking to the farm. Transport of agricultural goods from the farms is usually by headload. Even where there are roads, transport is expensive, and many farms are impossible to reach by vehicle. Unless substantial price incentives are given, these women will have a hard time increasing production for the market; 5) there is an increasing number of young men whose family lands have diminished. Many of these men have at least a primary school education and rising expectations, and do not want to farm at a subsistance level. These young men--along with increasing numbers of analogous young women--migrate to the cities seeking employment which is usually difficult to find. A substantial number of these people are likely to remain in the cities. However, if encouraging resettlement programs can be implemented and funds made available to encourage profitable farming, many of them may be encouraged to return to the rural areas.

Conclusions

Despite the scarcity of land around more heavily populated areas, there is still land available for farming in outlying areas. Land, however, in many areas is becoming both scarce and costly. Despite the ideology to the contrary, it is difficult to obtain and exploit substantial amounts of farmland without considerable capital investment. However, a number of areas could be opened up for greater agricultural production if better roads were built to them. Ministry of Agriculture officials in the Northwest estimate that it would be possible to more than double the area of land under cultivation, without affecting the use of areas used for cattle grazing, assuming the use of improved production techniques, availability of sufficient labor and opening up of new areas.

Pecple in most areas are aware of the increasing scarcity and rising value of land and are attempting to hold onto and/or obtain as much land as possible. Landlords in rural areas have tried to resist encroachment on their land holdings by lending less land to people outside the lineage, and by refusing to give them permission for planting of permanent tree crops. At the same time there is a contradictory movement on the part of the new professional class to invest as individuals in large tracts of farmland as well as urban properties.

Increasing production will require resettlement programs requiring considerable improvement in infrastructure, particularly building and improving roads. Resettlement programs on an individual household basis have often failed because the people involved have difficulty organizing effectively for production when they are removed from their political and social networks. The resistance of alienation of family lands by many landlords has potential for the organization of such programs if portions of a lineage could move simultaneously to outlying areas to farm, thus ensuring continuity of social networks.

There is a real need, especially given the increasing farmer-grazier problems, for a land use survey to determine the best and most feasible economic and social use of land within the province. Finally, any program for development and resettlement should take into account the role of women in agriculture in the Northwest Province. The information and access pattern to farmland must not overlook women's needs. Where only men can hold rights to land use occupancy and title, women will have problems obtaining credit or other services for which legal and permanent possession of land is a requirement.

CONSUMPTION AND DEMAND

Diet

People in the Northwest Province generally eat what they have produced on their own farms. Because of this and because of the low level of exchange between rural areas in the Province, local diets are determined largely by local production. Cocoyam is the main staple in the southern and western parts of the province, and corn in the north and east. Both are eaten as a thick paste (foufou), along with a sauce composed of several condiment and protein items including palm oil, salt, vegetables, beans, beef, and fish. Potato is an important staple in the higher altitude zones. Cassava, grated and dried to produce gari, is a complementary item, as is plantain. Rice is generally eaten on special occasions, such as Christmas, although rice consumption is growing in urban areas. Palm oil forms the basis of all types of sauces and is a major purchase item in the domestic economy. A wide variety of vegetables and beans are produced and consumed largely within the household. Recently, commercial production of "European" vegetables, including tomatoes and cabbages, has been introduced into some highland areas. The urban areas are the primary consumption points, although rural households located in or near major production zones may occasionally purchase these items for consumption. Animal proteins are basic rural and urban purchase items. Beef is the major source of animal protein. Fish from coastal regions and from lakes in the Northwest

are also consumed.

Little quantitative data on caloric intake in the Northwest Province is available. However, it is instructive to calculate per capita consumption figures using the available data (aggregate production figures of the Provincial Delegation of Agriculture, which take into account exports out of the province and consumption by animals). In Table 11, daily per capita consumption figures in grams are shown, and consumption per year in kilograms, using an average storage loss figure of five percent and then adjusting for standard loss in preparation by commodity. Interpretation of these figures requires caution; their reliability depends heavily on aggregate production figures, some of which are of doubtful accuracy. This problem is underlined by comparing the figures with those of a recent World Bank mission. Given the relatively good slaughter statistics available, meat consumption can be calculated with somewhat greater accuracy.

Several conclusions can be derived from these tables. Although both corn and tubers are major stables, tubers as a group seem to be consumed in higher quantities than corn. Tubers are inexpensive relative to corn, and are probably among the items widely purchased by lower income groups, particularly in years of a poor corn harvest. Second, per capita beef consumption appears to be declining in the Province as a whole. This is probably due to a combination of rising beef prices and decreasing availability of meat, particularly in rural areas, because of increased exports of cattle. Consumption of meat has remained highest in Mezam/Momo Divisions due to the relatively higher incomes and greater percentage of people in urban areas there, while consumption is substantially lower in Bui and Donga-Mantung, where a greater percentage of the population lives in rural areas. From Table 11, we see that bean consumption appears to be relatively high. It is probably the case that beans serve as a substitute for meat in the diets of those people who can no longer afford to purchase much meat.

In general, there is little evidence of any acute malnutrition in the Northwest. The National Nutrition Survey suggests that there is some chronic undernutrition among young children, although this may be due to reasons other than lack of food per se. There is probably a lack of protein in the diet, particularly among the rural population and among lower income classes in urban areas.

Demand and Market Prospects

Demand for agricultural products is influenced by a wide range of factors including consumer income and the distribution of income, population growth, prices, and availability of other commodities, and consumer tastes and preferences. The information available makes it difficult to make demand projections which reflect more than population increase and the effect of increasing urbanization, the latter of which leads to an increase in the consumption of cereals at the expense of tubers. In general, the prospects on the local market appear to be best for maize, beans and groundnuts, although demand for these goods should not grow at a rate much higher than that of population. Demand for tubers should remain at its present level (which is significant in the Northwest), and decline as per capita income increases. The local demand for vegetables is growing somewhat, although the market is confined largely to Bamenda and does not represent a significant portion of the total

agricultural market.

Demand Outside the Northwest Province

Markets in Douala and the Southwest Province are the most obvious areas for expansion of food exports out of the Northwest. Lowering transport costs will be a key element in allowing the Northwest to take advantage of increasing urban demand. The profitability of trade between the Northwest and Douala is seasonal; i.e., sometimes the price differential between the rural markets in the Northwest and the Douala markets is not high enough to overcome the cost of transport. Hence, the lowering of transport costs would allow the Northwest to export its crops for a greater period of the year. Furthermore, it would improve the competitive position of the Northwest vis-a-vis Western Province, which is presently the major supplier of maize and vegetables to both Douala and Yaounde markets.

A recent World Bank study (1979, p. 14) estimates that national cereal and grain consumption will rise at 3.0 percent per year through 1990, with maize consumption increasing at 3.1%, rice at 8.1%, and wheat at 5.4%. Consumption of tubers, except potatoes, is expected to rise at a little under one percent per year. Demand for fruit and vegetables is expected to rise at 3.6% per year. The proportion of foodstuffs marketed would have to rise from an estimated 30 percent in 1978, to over 40 percent in 1990, and over 55 percent in 2000. The report concludes, "Two key features to emerge from this analysis are firstly the need to raise production of cereals well above existing trends; secondly, the need to develop a market structure capable of handling over 55 percent of production in order to cope with the move into urban areas." This would suggest that the prospects for some Northwest agricultural goods in urban markets are relatively good, although for the moment, a rapid expansion of this trade may not be possible because of the problems cited previously such as high cost of transport and seasonal gluts in urban markets. To meet marketing needs ten to fifteen years in the future, the infrastructural problems in marketing must be solved. There must also be improvements in storage at the producer level and at the trader level, as well as better milling and processing facilities. By-product utilization must be developed and linked to animal production. But in the 1980's, it is not clear that major production increases in the Northwest will do anything but lower prices there, unless new market outlets--perhaps in neighboring African countries--are found.

It is difficult to assess the extent to which there may be opportunities for foodstuff export to nearby African countries. Price levels in Gabon and Nigeria are higher than in Cameroon, although recent figures for Nigeria suggest that they are not inordinately high. The scope for the expansion of trade may be limited by several factors. First, it is not clear that the country has a competitive advantage in all foodstuffs. For example, the price of maize from the Northwest has recently been more than 50% more expensive than the world price of maize. It is not clear, then, that Nigeria would be willing to import large quantities of Cameroonian maize when maize could be purchased on the world market for a much lower price. There may, however, be some trade opportunities with areas farther away from the coast such as eastern Nigeria, Tchad, and the Central African Republic. Export possibilities for other food crops need to be further investigated.

The second possible limitation on the export of food crops may be a concern to avoid food shortages and higher prices in Cameroon. It would be necessary to

carefully control the export of foodstuffs according to local supply if these problems are to be avoided. This control might be organized and carried out by an organization such as the cooperatives. In any case, the export of foodstuffs, if well organized, could be a viable way of encouraging more production in the Northwest without lowering the price paid to the producer.

MARKET STRUCTURE - FOODSTUFF MARKETING

Locational Structure

The structural characteristics of the overall marketing system in the Northwest Province can be identified through the investigation of three features: hierarchy, spacing, and periodicity.

a) Hierarchy - Hierarchical ordering of market centers is a common feature of regional economic systems, even under conditions of low productivity. Periodic market places are distributed and interlinked in space and time with respect to the different range of functions and products that each may offer. Such differences allow market places to be sorted into a limited number of ranks, on the basis of which a hierarchy can be formulated.

b) Spacing - The basic characteristics of locational patterning are identified by recording the number of markets of various ranks that are present within the regions and divisions, by measuring the distances between markets of the same and different orders, and by charting the alignment of markets with respect to their position in the hierarchy.

c) Periodicity - Additional characteristics of market structure are revealed by the relation of hierarchical differences and spatial distances to the frequency and sequencing of market meetings over the weekly cycle.

Hierarchy. Markets in the Northwest can be classified broadly into two classes: 1) class one - markets which assume importance as centers of intra-regional and inter-regional trade; 2) class two - markets of only local importance. Hollier (1975) places 59 markets in class one and approximately 250 in class two. This report will deal only with the class one markets, using a somewhat impressionistic ranking system based on observation of the system (see Figure 3). All 59 markets in class one serve as points at which agricultural producers sell their goods to wholesalers from consumption centers within and outside of the region. They also supply the basic range of regular consumption items. Different ranks within the class differ primarily in degree according to size and range of goods available but there are some discrete differences marked by redistributive flows of some commodities between lower and higher order markets. Hence, markets in class one can be placed into four ranks:

1. Regional centers. The Mankon market in Bamenda is the only market in this category. It is a daily market, but has a major meeting every Saturday, when well over a thousand sellers attend. A great variety of manufactures are available, some

of which--electric blenders, radios, phonograph records--are available in no other markets of the system. It also acts as a major wholesale distribution point for some commodities sold widely throughout the region.

2. Subregional centers. This category includes Kumbo and Guzang and possibly Ndop, Ndu, and Wum. (Because of the somewhat tentative nature of this classification, ranks 2 and 3 are aggregated into "major markets" in some parts of the discussion.) These markets meet on a set day during the market week and are attended by several hundred sellers. They have relatively large sections devoted to the sale of manufactures and provide more variety than do lower ranking centers. The characteristic feature of these markets is that they act as redistribution points for some flows between subregions and for distribution of some goods to smaller dependent markets. Thus Guzang coordinates exchanges between its immediate hinterland--Widekum, Bali, and to a lesser extent, Meta--and is also an important center for wholesaling beans, which are purchased by merchants from the Southwest Province. Kumbo, and to some extent, Ndu, serve as redistribution points for Bui and parts of Donga-Mantung Divisions and are bulking centers for corn, potatoes, and beans from the hinterland for sale to merchants from Bamenda and from other regions. A somewhat smaller market, Wum, does serve as a redistribution center in Mentchum, although traders often go directly to markets in Weh and Essimbi to buy goods to be retailed in Bamenda.

3. Local centers. This rank differs from the former more in degree than in kind, but the markets classified within it tend not to serve redistributive functions. They differ from lower order markets in size and in the range of manufactures sold. Their hinterlands incorporate those of lower order centers for consumer purchases of special manufactured items, particularly clothing, which are not available in small markets.

4. Standard markets. These markets contain approximately 100 sellers and constitute the basic rural exchange points for the sale of agricultural produce and the purchase of regularly consumed items such as soap, palm oil, salt, cloth, and condiments.

Spacing. The basic structure of market location can be analyzed from two perspectives: that of the general incidence of markets in respect to population and that of the specific alignment of markets into a system. Table 13 summarizes the incidence of markets and major markets (ranks 1-3 collectively) in each division and subdivision and compares average population and area[1] served by markets in each unit. For the region as a whole, there are 59 commercially significant markets, each serving an average population of 16,619 within an average radius of 10 km. There are 13 major markets, each of which serves an average population of 75,425 within an average radius of 21 km. The ratio of major markets to standard markets to village markets (class two) approximates a 1:3:6 ratio. Although this indicates

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[1]Average areas are compared in terms of average radii (r) of areas on the assumption that they will be more or less circular. Actual areas will differ somewhat from circular forms. Market spacing can be computed by doubling the figure for radii. Thus for the province as a whole, markets occur every 20 km over the landscape on the average.

a distribution that allows access to markets at all levels for much of the rural population, subregional breakdowns indicate a great deal of intraregional variation. A geographical plotting of population density and market access areas allows us to summarize intraregional variation in terms of three areas:

1) a core area of dense population and a high degree of accessibility to marketing and other services in Mezam division, around Bamenda and Ndop;

2) an intermediate area of average density and market accessibility in parts of Momo, Bui, and Donga-Mantung, lying along the main transport axis;

3) a peripheral area of low density and poor accessibility incorporating the northern and western parts of the province lying above a line joining Widekum, Meta, Bafut and Nkambe.

In general, markets occur more frequently in higher population density areas because of the economies-of-scale provided. They are sparser in low density areas because they require larger hinterlands to provide the necessary number of users.

The intraregional inequities of market location are also evident in the pattern of market alignment. Bamenda constitutes the center of the system and a core marketing area surrounding it is delimited by a circle of markets, which approximate a circumference of 17 km (36 km by road). The marketing system spreads out from the core along the main transport axis from Widekum to Nkambe. Nine major and eleven standard markets lie along this axis. The spacing and alteration of markets of different ranks along the road approximate a consistent pattern. Regional and sub-regional centers (ranks 1 and 2) occur regularly at an average distance of 36 km (56 km by road). Local major centers (rank 3) tend to occupy the interstices between higher ranking markets and provide for the occurrence of a major market every 21 km (31 km by road). Similarly, standard markets (rank 4) occupy the interstices between major markets and provide for the occurrence of a market of any rank every 10 km (14 km by road). However, the regularity of spacing and alteration is not fully exhibited in the actual distribution. Between Widekum and Bamenda, no standard markets occur and major markets are more evenly spaced. Between Bamenda and Jakiri, there is a proliferation of standard markets and major markets are more distantly spaced. Between Kumbo and Nkambe, a more regular alternation is observable.

The pattern of market location in the Northwest Province can be summarized in terms of a "dendritic system," a standard location model identified in many under-developed and dependent regions. Route and market alignments follow a tree and branch pattern. A major truck line extends from a major service center and markets of descending rank, offering ever more limited ranges of services, occupying successive branch points and route terminii. However, the Bamenda alignment differs from the dendritic pattern in one respect. Whereas distance from the center is correlate with a decay of services in the model, the main road axis in the Northwest provides a regular alternation in the ranks of markets located along it. Further implications of correspondence to this model and differences from it will be discussed in the final portion of this section.

Periodicity. The pattern of market day synchronization is rather straightforward

and unrevealing. Most markets meet on one day of an eight-day cycle. However, eight markets do meet on a European weekday, six of them on Saturday. Bamenda is the only daily market, but it too is substantially more active on Saturday. Eight-day weeks are widely recorded in West Africa and no theories have been put forward to account for differences in week lengths. The frequency of meetings seems adequate but in a few centers, "small markets," three to five days after the main market day, have been instituted. No systematic synchronization of groups of markets is apparent. This random patterning probably results from a tendency for customers to regularly use only a single market. However, one principle is evident: markets meeting on the same day in the cycle are spaced farther apart than markets which do not.

Assessment

In the major details of subdivisional differences and of market alignment patterns, the market structure of the Northwest closely conforms to the characteristics of a dendritic model. A core area clearly emerges around Bamenda and along the main transport route. A peripheral area tapped by branch routes extends away from the core area and receives lower levels of service at higher costs. However, the extent of the importance of regional inequality must be measured against two conditions:

1. Dendritic patterns have been associated with dependent economies in which a colonizing power has created an infrastructure which contributes to the appropriation of rural surplus while offering a minimal level of rural service. In the absence of historical documentation in the Northwest, an alternative interpretation of the location pattern can be put forward. Core and peripheral sub-regions have very different population patterns. Basic ecological factors seem to have generated higher population densities along the main transport axis and better services in this zone seem closely related to economies-of-scale created by higher densities. Consequently, a major proportion of the provincial population is located near the main marketing centers.

2. The sequence of markets of different ranks along the main transport does not decrease directly with distance from Bamenda. Ranks tend to alternate. Consequently, complete ranges of marketing services are made available throughout the major habitation zone.

Recognition of these two conditions indicates that in the context of population distribution, markets appear to be uniformly and competively spaced. However, the population distribution itself presents an additional set of development problems.

1. The proportion of rural residents that is peripherally located is clearly in a disadvantaged situation.

2. Major areas of the province, especially in Wum sub-division, remain in a vicious cycle of low density and poor services, marked by an especially high out-migration rate. (Ardener 1960).

3. Several high density areas located off the main axis, particularly in the Oku-Djortin and Oshie areas, are subject to the same limitations as low density areas.

Commodity Flows

Analysis of market location pattern does identify some gross characteristics of the marketing process, but more detailed consideration of the actual flow of commodities through the system is needed in order to more fully understand the relationship between market structure and production and consumption patterns. Table 14 presents a summary compilation of flows in terms of movements between different levels in the provincial marketing system,[1] and between the province and other areas of the country. It should be noted that the data were gathered from a small sample of markets in July, 1979, and do not as such completely describe flows for the province as a whole or average annual patterns. Generalizations formulated from these data are instructive but should be viewed as hypotheses rather than demonstrated conclusions.

A concise summary of commodity flows in the system as a whole is difficult because of the diversity of patterns identified. Nevertheless a rough picture can be drawn by grouping commodities in regard to four salient flow patterns: extraprovincial flows, intraprovincial rural to urban flows, intraprovincial rural to rural flows, and intraprovincial urban to rural flows.

1. Extraprovincial flows. This category includes the flows of potatoes, cabbages, and beans. All crops are specialty products of the highland areas and have higher value to weight ratio and consequently involve lower transport costs than other agricultural goods. External movements proceed directly from producer markets to the main urban consumption centres of the country, although Bamenda does perform a wholesale bulking function for about 20% of potato exports. Bamenda acts as a secondary consumption centre for all goods, but there is no distribution to rural areas outside of the producing areas except in the case of beans.

2. Intraprovincial rural to urban flows. This is the largest category, including tomatoes and the basic staples: cocoyam, gari, maize and plantain. Flows are directed almost exclusively to Bamenda, the primary consumption centre. There is little direct or redistributed movement to rural markets. There is as well little movement of produce to other provinces. Limits to movement involve high transport costs because of the value to weight ratio of the staples and high damage losses for tomatoes. The demand level in Bamenda is evidently high enough to create economics-of-scale that allow these costs to be absorbed.

3. Intraprovincial rural to rural flows. This category includes palm oil and lake fish which are in high demand in rural areas and have quite a high value to weight ratio. Bamenda is an important consumption centre as well.

4. Intraprovincial urban to rural flows. This category includes seafish and rice. Seafish are carried over long distances in large quantity lots and must be bulk broken in Bamenda before rural distribution is possible. Imported rice follows the same pattern. Local rice is redistributed through Bamenda because of processing requirements. In all instances Bamenda provides the economics-of-scale that allow produce to be efficiently shipped and processed.

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[1]Because of the limited amount of data available, all rank 2, 3, and 4 markets are classified as "rural" and the Bamenda market as "urban."

One basic conclusion is evident from the data gathered: although the province's environmental variability has fostered the production of a wide range of crops, there is relatively little exchange of subregional specialties between rural areas and relatively little exchange with other regions. However, Bamenda's consumers receive the full benefit of the region's diversity, because of its situation as a large urban centre within the region.

Quantity Variation

Variation in commodity stocks in sample marketplaces (see Table 15) is difficult to analyze because of a number of factors. Markets are of different sizes and base hinterland population figures for each market were not available. Quantities sold to local consumers and to urban traders cannot be factored out of the total quantity available. Yet a rough index of differences in quantities available for local purchase can be obtained by comparing the coefficients of variation for amounts of each commodity across the different market places.

The coefficients of variation vary from 0.6 to 2.0 and can be divided into ranges of 0.6-1.0; 1.1-1.5; and 1.6-2.0 to yield three categories of variability in which the lower the range of variability, the greater the general availability of the commodity in the market. The category of lowest variability includes plantain, gari, rice, fish, and palm oil, which are well distributed in the system. The distribution of rice, fish, and palm oil is evened out by extensive redistributive and rural to rural flows, while the broad distribution of plantain and gari derives from widespread production throughout the sample area. The intermediate category includes cocoyam, corn, tomatoes and beans. These goods tend to be consumed in greater proportions in the areas where they are more widely produced and in Bamenda. In the case of cocoyam and corn, poorer distribution is offset by the availability of substitutes so that the variability of starches in general (V=0.6) is quite low. The category of highest variability includes potatoes and cabbages, which are produced for urban consumption and export rather than for a widespread rural demand, and hence are generally less available in rural markets.

The quantity variability patterns support the general interpretation of commodity flow data. Redistribution of subregional specialties to rural areas is poor, except for a few items that have fairly high value to weight ratios and a well-established rural demand. Accordingly the distribution system limits the range of food items available in rural markets to locally-produced crops, and may possibly lead to scarcities and higher prices when local production is insufficient. Thus aside from palm oil and fish, sauce ingredients are erratically distributed. Basic starches as a group are better distributed because of the range of substitutes produced, but seasonal fluctuations in local supply may very well create a problem. Further investigation of this problem depends on the collection of comparable quantity data over the course of the year.

Aggregate Commodity Flows

In Table 16, we attempt to estimate the total value of agricultural commodities entering the market system in the Northwest, using the production figures and estimates of percentages of goods marketed published by agricultural officials in the Northwest. These aggregate figures must be treated with caution, since the production figures are of questionable statistical reliability and the percentages

of goods marketed are estimates based on the opinions of local officials, rather than on an actual study of aggregate commodity flows. However, the figures do provide a sense of the relative importance of various crops in the marketing system.

According to the calculations presented in Table 16, the major crops marketed within the Northwest Province in value terms are (in order of importance): 1) cassava; 2) cocoyam (taro); 3) yams; 4) bananas; 5) cocoyams (macabo); 6) beans; 7) groundnuts; 8) plantains; 9) sweet potatoes; 10) maize; 11) Irish potatoes. This list tends to confirm, as shown in Table 14, the relative importance in local markets of tubers and beans, crops which are sources of relatively cheap calories an proteins. Maize, an item widely produced for home consumption, ranks relatively low on the list of goods marketed within the province. However, it is the third most important export from the Northwest in value terms, ranked below arabica coffee and beans, and above Irish potatoes, groundnuts, robusta coffee, and rice. In aggregate terms, the 1978 market values of total agricultural production and crops marketed are:

	Value (Million CFAF)	% of Total
Total Agricultural Production	32,208	100.0
Total Marketed Production	20,479	63.6
Total Marketed in NWP	15,531	48.2
Total Exported	4,669	15.4

Hence, with over 60% of agricultural production in value terms entering the market system, and the internal Northwest market carrying almost 50% of the total production in value terms and over 75% of the total marketed production, commercial participation in the market would seem to be widespread among farmers in the Northwest. We suspect the figures used to arrive at these results may somewhat overestimate the actual level of participation in the market. Clearly, however, as shown in Table 17, substantial numbers of farms do produce for the market. If we assume that the percentages of farms in the "Sold or Home-Consumption" category are generally the larger farms with a good deal of surplus to sell, it is plausible that the amount of agricultural goods commercialized by Northwest Province farmers could be in the range suggested by the estimates of aggregate marketing figures.

CATTLE MARKETING

Structure and Operation

In an attempt to control cattle marketing, the government has established sixteen cattle markets in the Northwest Province. These markets meet weekly (in accordance with the seven day Islamic week), and they may not be held the same day as foodstuffs markets, which fall once every eight days in most places. The cattle markets of the Northwest can be classified broadly into two groups (See Figure 4). The first group is made up of assembly markets, where producers buy breeding stock and sell excess males, unproductive females, and diseased and weakened stock to traders who trek the cattle to larger markets. The second group consists of redistribution-consumption markets, where cattle are sold for local slaughter

or assembled into larger herds for shipment south.

Representatives of the local Area Council and of the Ministry of Animal Breeding and Industires' veterninary centers of post are present at each of the cattle markets to collect revenue and observe cattle sales and movements. The money collected is to pay for market improvements, such as fences surrounding markets, cattle enclosures, vaccination crushes, and structures to house market representatives and protect buyers and sellers from rain. These improvements have been made at more important markets such as Mendankwe, Misaje, Mbiame, and Binka, but many of the markets lack enclosures and protective structures.

Flows of Cattle

A large number of cattle for slaughter are exported from Northwest Province, while some are imported for breeding purposes, mainly from the Adamaoua Plateau. The major recorded flows of cattle within the province are from the producing areas of Mentchum, Donga-Mantung, and Bui Divisions to Bamenda, as shown in Table 18. Trekking is by far the most common means of moving cattle within and out of the Northwest. Virtually all cattle move into the Bamenda market on hoof. Cattle from Wum area are trekked along the Ring Road to Bamenda, while cattle from the Banso, Konene, Fundong, and Nkambe areas follow cattle trails away from the roads. Some of the cattle are sold for slaughter in Bamenda, while others continue by foot or by truck to markets in the south. Cattle trekked to Kumba, the most important cattle market in the Southwest, and major market for the Northwest, travel either through Mamfe and then to Kumba (a 14 day trek), or through Bafoussam and Loum to Kumba (a 10-12 day trek). Some cattle are trekked directly to Kumba from Wum and Banso, but it appears that the bulk of the animals shipped south pass through Bamenda.

Trucking and rail transport are alternative means of moving cattle from Bamenda to southern consumption points. Twelve-ton trucks are used to transport ten head of cattle from Bamenda to Douala or Kumba. Only the wealthier traders transport their cattle by truck due to the high outlay of capital required. The number of cattle trucked from Bamenda during July and August, 1979, was on the order of 40-80 per month, compared to an estimated 600 per month on foot. There is no rail line from Bamenda, but there are railways from Nkongsamba and Kumba to Douala and Yaounde. When supplies are short in Douala, traders from Douala buy cattle from the Northwest in Nkongsamba and ship them by rail to Douala. The railway between Kumba and Douala is not equipped to handle shipments of cattle; consequently during periods of shortages, cattle may be trucked from Kumba to Douala.

Official aggregate cattle movement statistics (see Table 19) show that the large majority (63-80 percent) of the cattle leaving the Northwest over the past five years have gone to the Southwest Province, although some of these animals undoubtedly were sold in Western or Littoral Provinces. Fewer cattle (10-30 percent) were recorded as destined directly for the West or Littoral, and fewer still (3-7 percent) were sent to the Center-South. The recorded volume of cattle exported to other provinces has declined markedly since 1975/76; much of the decline is due to increased flow of cattle to Nigeria, the exact magnitude of which is unknown. The Cameroonian government licenses a few traders to export to Nigeria, but they are in theory limited to exporting ten head per month. In addition to licensed exports,

a large number of cattle are apparently smuggled into Nigeria, attracted by cattle prices which are reported to be roughly twice as high. Records indicate that these exports began around 1976, and originally many of them passed through Ekok. The government strengthened export controls along this route, however, and it now appears that most animals exit from the Dumbo and Wum areas, where the border is harder to control.

There are several possible factors contributing to the decline in cattle exports from the province. One factor simply may be a change in the method of recording flows, and the accuracy and thoroughness with which flows are recorded. Another could be an increase in the amount of beef consumed in the Northwest, although slaughter statistics for the Province would suggest instead a decline in provincial beef consumption. It might be possible that the decline in slaughters and exports may come from decreased sales by Fulani graziers in response to higher prices. The hypothesis is that since cattle prices have been rising rapidly, the Fulani may have been able to meet their basic cash needs through the sale of fewer animals, while the value of their remaining stock has appreciated. This assumes that the prices of the goods they buy have risen less rapidly than cattle prices in recent years, which is true for some goods, but not for all, as shown in Table 21. Further research is needed to fully test this hypothesis.

MARKETING OF SMALL STOCK

Location and Organization of Markets

Goats, sheep, pigs and poultry are sold in and alongside foodstuffs markets. Small ruminants and fowl are generally purchased live by consumers, and then taken to individual compounds for slaughter, while pigs are usually slaughtered by butchers and retailed in the market as dressed meat. In theory, the Veterinary Service supervises all slaughter and regulates the movement of all small stock. In practice, it is extremely difficult to do this, particularly in the absence of adequate staff.

The largest small stock markets are located in major production areas. Ndu, Kumbo, and Ndop are the most important small ruminant markets. Traders come primarily from Western and Center-South Provinces to assemble goats and sheep for shipment via small pickup trucks to Mbouda, Bafoussam, Nkongsamba, Douala, and Yaounde. Pigs are sold in large quantities in the Guzang, Tad, and Widekum markets of Momo, and the Bali, Ndop, Santa, and Bambili markets in Mezam. Fowl are marketed throughout the Northwest, with large numbers found in the markets around Bamenda, such as Bali, Big Babanki, Bambili, Tad and Guzang.

From the livestock movement statistics kept by the Veterinary Service, it is possible to get an idea of where small stock is flowing, although these statistics probably underestimate total flows. Table 20 shows that most of the goats and sheep leaving the province go to Littoral and Western Provinces. Pigs are sent to the Southwest more frequently than elsewhere, with a lower overall volume of exports than for small ruminants. Poultry flows appear to be more evenly divided between Littoral and Western Provinces (34-39 percent), Southwest Province (23-64 percent), Central-South Province (10-16 percent).

MARKETING CHAINS AND TRADER ORGANIZATION

Rural Distribution

The supply of food items to rural markets is primarily in the hands of local entrepreneurs, thus creating an important income activity for rural households. In general, men and women engage in trade in different fashions. Trading has traditionally been one of the possible cash income earning activities undertaken by men. Women in the Northwest Province however, are still primarily subsistence farmers and it is only fairly recently they have begun to actively market their agricultural produce. Income women make from agricultural sales is often handed over to the husband, so that women have little disposable income and little capital to invest in production or trading. Nevertheless the growth of local markets has created a number of new economic niches, and women often supplement agricultural income through petty retailing and gari production.

Participation in rural marketing involves several sets of sellers and buyers. Rural merchants and itinerant traders come to market to sell to rural consumers. At the same time, local producers sell their goods both to rural consumers or to merchants or their agents who will later sell the goods in other markets. Participation in rural markets varies in relation to the wholesaling and retailing of different commodities. Rice and ocean fish, because of the need for processing and the scale-economies based merch. nts, either by large scale retailers, who sell in a circuit of rural markets, or wholesalers, who supply locally resident retailers. Locally retailing of these items is largely a woman's occupation.

Other locally purchased foods--for which assembly costs are substantially lower, such as lake fish and palm oil are distributed by rural merchants who obtain supplies directly from producer markets. They engage in both wholesale and retail distribution and can maintain moderate sales volumes by working a circuit of nearby rural markets. These activities provide an important economic niche for rural men, although a small proportion of women have also entered this market. Women are much more likely to participate as stationary retailers, obtaining goods from male wholesale traders and selling them in the nearest market. Some women retailers maintain small provision stalls, particularly in Banso and Bamenda. An initial capital investment of approximately 30,000 CFAF is the minimum necessary to set up such a stall, with women usually obtaining their capital from their husbands or from their local credit or savings and loan associations known as njanjis.

Local producers may sell their goods to a number of different agents, with the first point-of-sale taking place either on the farm or in rural markets. At the farm level, purchases may be made by local assemblers under agreement to sell to a particular trader, by local assemblers who plan to sell to anyone at a nearby local market, or by the hired agents of traders who travel in different areas to purchase from the farmers to later wholesale or retail the goods in urban markets. Traders interviewed in the Banso area estimated that approximately 25% of the produce is purchased at the farm level by local assemblers or buying agents. This estimate was not able to be confirmed for other areas of the province. The remainder is bought in rural markets by traders with wholesale and/or retail operations in

urban areas both within the province or elsewhere, local agents who assemble and sell to traders from the outside, local consumers, or by consumers from the outside. A small percentage of produce is collected on the farm or at rural markets by cooperatives or development organizations, such as the Bamenda Cooperative Vegetable Society, women's cooperatives of Nso, Nkambe, Mbengwi, and Upper Noun Valley Development Authority.

Bamenda Marketing

Wholesale trading in Bamenda is both a male and female activity. Men engage primarily in the moderate and long distance trades, and women generally trade in crops distributed from markets nearer to Bamenda, although a few women transport produce to Buea, Victoria, Kumba and Douala where they sell to hotels, colleges, and larger traders. For the most part, middlemen, especially large-scale traders, are men. Male traders come from a variety of ethnic backgrounds and typically have primary educations, adopting food wholesaling as a second or less preferred occupation after failing to establish a salaried job or a trade in manufactured goods. Capital requirements for male trading occupations range between 20,000 and 40,000 CFAF. Female traders in Bamenda were quite resistant to providing personal background data, so no discussion of modalities of entry is possible. Capital requirements for female trading occupations are approximately half those of male occupations.

Time constraints limited the investigation of the organization of trade to only a few commodities distributed in Bamenda: palm oil, rice, corn, beans, gari (grated cassava), cocoyam, and plantain. Palm oil wholesaling for the Bamenda market is based primarily on supplies of oil from Widekum and from plantations in the Southwest Province. Bamenda traders as a group are not organized into a cohesive unit, but do travel to palm oil producer markets together and tend to cooperate in the establishment of producer prices in Widekum. Their influence on the price, however, is moderated by the producers, who also act in concert. Traders are price takers in the market for oil obtained from the Southwest plantations. Women's cooperatives have also become involved in the palm oil trade over the past ten years.

Corn, beans, and rice form a commodity group that is distributed by a single group of wholesalers who utilize a variety of supply areas. Rice is purchased directly on the farm in Tingo, Wum, and Ndop. Bamenda wholesalers have special supply relations with producers depending upon the payment of crop advances to farmers. Additional rice is obtained from stocks of imported rice in Bamenda warehouses. Corn and beans are usually purchased together, and Bamenda wholesalers have developed a variety of purchase arrangements. They travel directly to the larger supply centers and purchase supplies from producers as well as from local wholesale assemblers, who may have acquired goods from outlying markets or directly from producers. Neither mode of purchase necessarily involves any exclusive buyer-seller relationships. However, regular agreements have been developed for the supply of goods in more remote areas. Bamenda wholesalers contract local commission agents to accumulate stocks over one or two weeks, after which they will make a journey to pick up their goods. Commissions are set at 10%, which would seem to be the same margin at which independent local assemblers in the supply area operate. Both modes of sale lower producer prices accordingly since the Bamenda wholesaler sets his price according to the producer price in the main

supply centers.

Gari, cocoyam, and plantain fall into a second group of starchy staples whose supply zone is nearer to Bamenda and which are marketed primarily by women. Their trading chains are fairly simple. Bamenda traders visit circuits of nearby markets, purchase goods from producers, and then transport them to Bamenda for retailing. Each commodity introduces minor complications to the general pattern. Cocoyam from Oshie, the most distant supply market, is transported to Bamenda by Oshie wholesalers, usually farmers who ship their own goods along with a supplemental amount purchased in the Oshie market. Some plantain stocks are supplied by Bamileke traders from Western Province markets. Some gari is wholesaled in Bamenda to Littoral and Southwest Province merchants.

In general, there is little evidence of restrictive competition among wholesalers or retailers in the Bamenda market. Traders operate independently of one another and there is little apparent cooperation or collusion in the setting of producer, wholesale, or retail prices or of exclusive buyer-seller arrangements. Entry into trade is essentially open, with capital as the basic limitation on establishing a market operation. Competition is enhanced by the participation of farmers living near Bamenda, who sell their produce to consumers in open sections of the Nkwen and Mankon markets of Bamenda. Net profit margins range from 10% to 30%, as will be more fully discussed in the section on margins as an indicator of market performance.

External Trade

Douala and urban areas in the Southwest Province serve as major markets for exports from the Northwest such as beans, maize, Irish potatoes, groundnuts, cabbage, and tomatoes. Only a few goods--Irish potatoes and beans--are sent to Yaounde, with traders citing high transport costs, considerable risk, and stiff competition as the major disincentives to trade. Much of the produce transported to Douala and the Southwest is purchased directly at rural markets in major producing areas. Bamenda serves as a bulking point for certain goods, such as Irish potatoes. Larger traders charter 12-ton trucks to carry their goods south. Smaller traders sometimes band together in groups of three or four to fill up a truck. Trucks and traders often leave in the evening, traveling all night to arrive in Douala by early morning. If the market there is moving well, the produce can be sold quickly, allowing traders to return to the Northwest the same day. If the Douala markets are moving more slowly, traders may be forced to store goods for several days. The market system in Douala is large and complex, with five major markets and numerous smaller markets and retailing points. Wholesale dealers buy much of the produce coming into the city, and distribute to retailers selling in various markets. Traders reported that they usually sold to one or two wholesalers with whom they had had previous contact, but also said that they sometimes attempted to sell directly to retailers who would purchase from trucks entering the market area.

Other market areas for Northwest foodstuff exports include Nigeria and some UDEAC countries. Transport costs to Nigeria for foodstuffs are high because traders must carry the goods across very poor and sometimes dangerous border

roads in land rovers. Although prices for foodstuffs are quite high in Nigeria[1], transport costs reduce profit margins. Hence, most traders sell foodstuffs and use the money to purchase manufactured goods to be sold in Cameroon. The export of fruits and vegetables to UDEAC countries is carried on by several trading firms based in Douala. According to the officials of one company, the major producer areas are in Western Province, but their refrigerator truck occasionally goes to Bamenda to buy vegetables when demand is high. The vegetables are trucked to Douala, then put on planes to UDEAC countries, and sometimes to France. The major clients of the company are European wholesalers supplying restaurants, and retailers catering to the expatriate communities in Central African countries. Several Cameroonian traders interviewed also were involved in export of foodstuffs and vegetables, principally to Gabon. Major purchases were made in Western Province, with some produce coming from the Northwest. Goods were either sent by air or by ship, with the produce marketed in Gabon by agents working for the Cameroonian exporters.

Market Chains for Cattle

In the smaller assembly markets for cattle, traders and butchers buy directly from graziers who trek their cattle to market. Producers generally refuse to sell on credit, so most purchases must be made in cash. In the larger assembly markets, there are brokers who negotiate between buyers and sellers who do not know each other, as well as guaranteeing credit in larger transactions. Cattle are not weighed; traders and butchers estimate liveweights by sight. Graziers learn about current prices from discussions with other producers. Most of them refuse to sell outside the market place, since this increases the risk they might be cheated. Traders who assemble herds for trekking usually buy in several rural redistribution-consumption centers. Another common buying arrangement is for several traders to buy as a team under the name of only one licensed trader in order to avoid paying for three separate licenses. Finally, it is common for smaller traders to assemble cattle which they have each bought separately for the trek south, sharing in the payment of the drovers' salaries. Traders who do not want to go to Bamenda to sell their cattle may trust an associate with the task.

Wholesale butchers in the towns and villages near assembly markets have to compete with traders in order to obtain cattle for slaughter. There are usually one or two licensed butchers in the smaller towns and as many as six in larger towns. Each of these has two or three apprentices who retail under him. The licensed butcher wholesales most of the slaughtered animal out to the retail butchers on one day credit, usually keeping some of the meat to retail himself. He may give

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[1]December, 1979 prices in Nigeria were reported by the USDA Agricultural Attache in Lagos:

Corn	86 CFAF/kg	Cocoyam	143 CFAF/kg
Cassava	142 CFAF/kg	Groundnuts	149 CFAF/kg
Potatoes	214 CFAF/kg	Beans	393 CFAF/kg

(one Naira equals 367 CFAF)

his apprentices preferential access to the meat, or he may sell only to the highest bidder. The apprentices also perform tasks for the licensed butcher, such as leading slaughter cattle from the market to the slab, dressing out the slaughtered animal, and transporting meat from the slab to the market. A wholesale butcher may also purchase directly from producers in the bush. The grazier sends word to the butcher that he has an animal to sell, often because the animal is sick, weak, or injured. In smaller towns and villages, only one animal may be slaughtered every few weeks. Since there is no refrigeration, meat not sold after several days is smoked for preservation. The butchers do not usually loan each other money, but they often coordinate slaughter to keep competition from driving prices below operating costs.

External Cattle Markets

Traders who take cattle to southern markets do not always know exactly what prices will be in final markets. However, they often have a good idea of the range of prices, receiving price information from traders who have recently sold cattle. Short-term supply fluctuations may cause prices to change suddenly, and traders evaluate prices in each market along the trek southward, selling those animals for which the prices offered yield an acceptable return. This process continues as they trek southward, until the final market in Kumba is reached. In the event of a poor market in Kumba, the only alternative to selling at low prices is to graze the cattle in the surrounding area, and hope for better prices at the following week's market. Further trekking to Douala is generally not feasible economically, since the cattle would lose too much weight to compete effectively against animals trucked or sent by rail from the Adamaoua Plateau.

Butchers in Kumba buy several animals at a time for slaughter throughout the week. Traders often grant credit to the butchers for as long as two weeks to a month. Usually a trader will return to Bamenda or other Northwest assembly markets to organize another shipment south while awaiting repayment of the credit. He then picks up his money upon returning to Kumba with the second herd. To do this, a trader must have enough capital to finance two shipments of cattle.

Marketing Chains for Small Stock

Most of the people selling goats, sheep, pigs, and fowl in the market are producers who sell directly to traders or local consumers. In the larger assembly markets, local traders do much of the selling. They acquire their animals by buying from producers on their farms or in smaller markets. They may also buy from producers who come to the assembly market early in the day to sell quickly and spend the rest of the day buying and selling other items. A number of the local traders buy in assembly markets and ship the animals by public transport to urban markets. There are also larger traders based in the West or Northwest who assemble fowl, for example, for shipment south in small pickup trucks.

MARKET PERFORMANCE

In this section, we will evaluate the marketing system by examining the available quantitive measure of market performance, such as historical trends and seasonal patterns of prices, price variation across the province, and trader margins. In general, prices for agricultural commodities in a competitive market situation fluctuate widely, usually much more so than non-farm goods. The principal causes of this instability are the biological and environmental factors affecting supply, although the frequency and magnitude of price changes depend on both demand and supply factors. Imperfections in the market such as lack of complete information by buyers and sellers in the system, seasonal difficulties in the transport sector, lack of sufficient storage facilities, and widely fluctuating demand for exports may also cause price fluctuations. Although the government has been concerned about the rise of food prices over the past years, effective government control of prices in the sector is quite limited. Officially, upper price limits are fixed (valeurs mercuriales) annually at the national and provincial levels. Practically, such administered prices are set only for locally manufactured goods, imported goods, and for certain agricultural commodities such as coffee, cocoa, and rice, at the national level. At the provincial level, the commission responsible for setting prices in the Northwest has not met in several years. There appears to be little political interest in attempting to enforce price controls in agricultural markets. The price control service does monitor the prices of manufactured and imported goods sold in the Northwest, and has the capacity to levy fines on merchants charging above the officially set prices.

Historical Price Trends

Long-term price trends are associated with general inflation, changes in tastes and preferences, population and income growth, government policy, and technological changes in production. An examination of Table 21 shows that for most agricultural commodities, prices have risen considerably over the past nine years, with the most rapid increase occuring during the last four years. The average annual increase in current prices for the 26 commodities in the table is 11.9%. This compares to an 11.4% annual increase in the general consumer price index and an annual 12.7% increase in a composite index of retail food prices, with both indices computed for middle-income Cameroonian families in Yaounde. Demand-pull inflation, where the demand for farm products outpaces the growth in supply, is probably the major reason for rising food prices in the Northwest. The rise in prices for tropical root crops and other staples can be attributed to increasing urban demand, particularly from lower income sections of the growing urban population. Supply difficulties have also contributed to rising prices. The lack of technological improvements in the agricultural sector has undoubtedly constrained the growth of production. Biological conditions--for example, a serious cocoyam blight--and climatic conditions resulting in poor harvests have contributed to the price increases for some crops. Increased export of cattle to both Nigeria and urban markets in Cameroon has contributed to rising cattle prices.

Prices for coffee, rice, yams , onions, and tomatoes rose at significantly lower rates than the average. The relatively low price increase of tomatoes

and onions can best be explained by increasing local supplies and by large imports of these commodities (tomatoes from Western Province and onions from the the North Province and France). The decline in yam prices is most likely due to a decline in demand, given the high price of yams relative to other tubers and the switch of consumers to cassava, or wheat and rice in urban areas. Prices for rice and coffee are subject to government price-setting. Competition from imported rice has kept rice prices down, as well as a government policy of limiting the price rise of this increasingly important urban food source. Prices paid to coffee producers are determined by the National Produce Marketing Board, and the percentage of the rapidly rising world price of coffee paid to producers has declined in recent years as part of a policy to insulate farmers from price fluctuations on the world market.

Existing annual production figures are not precise enough to allow for an empirical examination of the effect of supply on prices. However, the deflated price series shown in Table 22 give an idea of yearly price variability. Annual foodcrops--particularly grains and vegetables--exhibit the greatest price variation from one year to the next. Tubers and tree crops show less annual variation. We can infer that annual supply variability--greatest for annual foodcrops--does seem to have a substantial effect on retail prices. Obviously, market prices go down in good harvest years, implying that substantial production increases--due, for example to a successful project to increase production--might lower the price of a given commodity unless new market outlets could be found. Since the demand for most agricultural commodities is relatively inelastic, i.e., for ten percent decrease in price, demand for a product increases by much less than ten percent, a price decrease for an important marketed commodity could lower farmer incomes in the Province.

In general, if present price trends continue in the agricultural sector, greater food production will be encouraged. From the viewpoint of maintaining food self-sufficiency and increasing rural incomes, the price rise is desirable. From the viewpoint of welfare considerations for the urban consumer, price increases are obviously undesirable, particularly if wages do not rise as rapidly as food prices. Balancing the conflicting interests of rural producers and urban consumers is a difficult task for all governments. In many developing countries, urban consumers have been able to exert a strong political influence to keep food prices low, to the detriment of the agricultural sector. At the same time, further increases in agricultural production and the maintenance of adequate rural incomes requires stable, sufficient returns to farmers for their labor. Price policies to achieve these goals may be necessary to encourage production in the agricultural sector.

Seasonal-Price Variation

The seasonal price patterns of agricultural commodities depend on intra-seasonal supply and demand, inter-seasonal carry over, and storage costs. The usual price pattern for storable goods is a seasonal low at harvest time rising over the year to a seasonal high in the months preceding the new harvest. In general, we see that average price fluctuations during the year correspond quite closely with the agricultural calendar (see Table 23 Average annual price fluctuation is greatest for Irish potatoes, with a 79% difference

between the seasonal high and low. This wide range of prices is explained in large part by the high cost of storage, with storage losses estimated at 15-20 percent. Maize has the second highest range of annual price variation with 47%. Estimated storage losses for maize (10-15 percent) are less than for Irish potatoes. However, higher than average demand for this important staple in bad harvest years contributes to price variability. The estimated range of the seasonal index for tomatoes is 28%. Prices are steady during the long summer harvest and rise sharply until the winter harvest comes onto the market. Beans and groundnuts, crops that can be stored with relatively low losses, have ranges of 26% and 21% respectively. The fact that beans are harvested several times during the year and are imported from other areas of the country helps to keep the range of seasonal price variation down to 25%.

Despite relatively well-behaved average seasonal price indices, actual seasonal variation from year to year can vary considerably, as shown in Table 24. Furthermore, the range of the seasonal index of a given crop in a given year can vary greatly from the range of the average seasonal index, as shown in Table 25. For example, the widest range for the seasonal index of Irish potatoes in 1978 was 177, with the narrowest range of 61 in 1977, while the range of the average seasonal index was 79. The widely differing ranges of seasonal indices and the changing pattern of seasonal price behavior from one year to the next indicate that the marketing system is subject to considerable irregular fluctuations. Climatic change is one obvious source of irregularity. Difficulties in the transport sector is another. The condition of the roads during rainy season increases the cost of transport substantially, and in some very rainy years, the evacuation of crops, particularly from remote areas, is prohibitively expensive and sometimes physically impossible. Lack of accurate information about the size of the crop in a given year and the location of the largest marketable stocks also increases price fluctuations, although traders do have information networks that allow for the determination of supply. Uncertainties and wide fluctuation in export demand may also contribute to price fluctuation.

The general pattern of seasonal meat prices is generally one of low prices during rainy season and high prices during the dry season. Highest prices occur in November and December when demand is high during the holidays and when people have begun to receive income from the coffee harvest. In the rainy season, consumers substitute fresh vegetables and newly harvested maize for meat in their diets; hence, demand is lower. In the dry season, demand for meat increases, with fewer substitutes available. Furthermore, fewer animals are sold by graziers because the animals are generally farther away from cattle markets as they graze in their dry season pasture, and the animals are at their lowest weight of the year. Sales pick up after the rains start and herds return to normal grazing areas. Butchers also report an increase in demand for meat at this time as people celebrate Easter. Although no monthly statistics were available, the same general price pattern for small stock was reported: high prices in dry season, and low prices in rainy season.

Price Variation between Markets

Relatively little information was available to measure price differences between markets at a single point in time or over a longer period of time.

Data collected over six weeks in the summer of 1979 (see Table 26) indicates a low degree of price variability for most items and thus a basic coordination of prices. Prices for commodities that are widely distributed throughout the rural market (palm oil, fish, and rice) are subject to little variation. Prices of commodities channelled into rural-urban flows tend to vary more widely. Nevertheless, rural producer prices are set in a standard pattern related to Bamenda demand and transport costs to consumption points. However, the few years of time-series data for other markets would indicate that prices fluctuate somewhat more widely than in Bamenda. Prices in rural markets are determined by local supply and demand conditions, transport costs, and the strength of urban demand, which may be indicated to rural producers by the number of outside traders present in the market. In the more remote markets poorly served by the transport system, only a few outside traders may attend, often coming on an irregular basis. In this situation, a trader may be able to collect monopsonistic profit from producers who have little choice but to sell to the few traders present. It is difficult to fully judge to what extent this may take place, and in general, trading margins are not excessive, as discussed in the next section.

Market Margins

As shown in Table 27 and 28, the relative efficiency of traders and the general absence of collusion from the marketing process is reflected in the level of traders' profits. Normal margins vary between 10% and 30% on total expenditure. These profits seem to be reasonable and competitive considering the time and capital invested in the business, the nature of the risks, and the possibility of profit fluctuations.

However, there would appear to be one important problem in the profit structure. The data collected suggest that traders' profits increase in relation to the distance between supply and sale markets, at least within the Northwest Province. This trend can be interpreted as an imperfection that results from the small number of traders with capital to finance long distance runs. However, higher profits on longer runs can be more simply explained as a return to greater labor and increased risk that more traveling introduces. Accordingly, the profit structure entails a hidden cost of distance, an additional transport cost. Palpable transport costs comprise an important component of the total marketing cost, adding on the average between 5% and 22% over the producer's price. Handling costs are more modest, adding another 5% or less. Since both transport costs and profit margins vary with distance and are ultimately deducted from the producer price, producers living far away from Bamenda are disadvantaged, sometimes receiving as little as half the price for their produce as do those producers living near Bamenda.

The figures for estimated average costs and returns of Irish potato trade from Banso to Douala shown in Table 29 do not necessarily confirm the hypothesis that profits increase with distance. However, it is possible that trading in Douala is so competitive that profit margins are reduced, despite the long distance involved. Furthermore, profits in trade between the Northwest and Douala can vary widely, according to market conditions, losses in transit, and the cost

of labor, transport, maintenance, and storage. The estimated net return to the trader in our example is 174,300 CFA francs, or a 15.3% return when expressed as a percentage of total sales receipts. A breakdown of trader costs shown in Table 30 shows that transportation is a major expense (62.6%) to the trader. Even a small percentage (5%) of loss makes it an important cost item for the trader. Other cost items are within a modest range. In any case, long distance trade remains a risky business, and the estimated profit margin does not seem excessive.

Costs and Returns in Cattle Trade

Table 31 presents an example of costs and returns of trekking cattle from Nkambe to Bamenda. This data was obtained by interviewing a trader based in Nkambe who assembled a herd of 39 cattle and trekked them to Bamenda, losing one animal en route at a loss of 27,000 CFAF. Eight cattle were sold in the Bamenda cattle market and because of low prices, the rest were sent to Kumba. For those animals sold, the gross margin averaged 5,000 CFAF per head, which according to the trader was a usual figure, with average margins ranging from 500 to 10,000 CFAF per head. The trader's net margin would have only been 66,588 CFAF or 2.8% of his sale receipts, had he sold all his cattle in Bamenda at the 5,000 CFAF per head figure. Had the trader not lost the sick cow, but instead sold it for the same gross margin as the others, his net margin still would have only been 3.9% of his receipts from cattle sales. Returns in cattle trade are subject to considerable variation, with much risk and uncertainty involved. If traders lose animals on the trek or if the gross margin per animal is lowered by brokers' commissions or low prices in the market, losses can be heavy. Obviously, returns may also be much higher, but given the risk involved, such returns are not unjustifiable.

Table 33 presents the costs of trekking and trucking cattle from Bamenda to Kumba or Douala. Depending upon the losses during a trek, costs of trucking can be up to three times greater than the costs of trekking. Trucking has the advantage, however, of allowing merchants to react quickly to changing market conditions and to obtain a rapid rotation of capital. It would appear that trucking is profitable mainly when there are spot shortages in southern markets and intermarket price differentials are temporarily large. Trucking does not appear to be more profitable on an everyday basis, which explains why most cattle are still trekked to markets in the south.

The Problem of Rice Marketing

The marketing of rice presents some interesting problems. Over the last two years, a number of development organizations involved in rice production have been able to sell relatively small amounts of their harvest, and large stocks have built up. The UNVDA has some 3,000 tons of stored paddy rice; Nso Cooperative Union, which buys rice from farmers working the Mbaw Plain, has 600 tons on stock; Soderim, in Western Province, reportedly has 590 tons of stored paddy. Farmers are paid 42.5 CFAF for a kilogram of paddy, which equals a price of approximately 65 CFAF/kg when converted into clean rice. When transport and other costs are added in, the cost of production of a clean kilogram of

white rice is almost 100 CFAF/kg. A wholesale price is set by the government, and it has been set between 100-110 CFAF/kg for the past several years. When transport costs and wholesale and retail margins are added, the local rice sells at around 115-120 CFAF per kilogram, depending on location. The marketing problem derives mainly from the policies regulating the import of foreign rice. When the price of imported rice is low enough, as it has been over the past few years at 50-60 CFAF per kilogram, wholesalers prefer to import rice which they can sell for the same price as local rice, plus transport and margins and make larger profit margins. To import rice, the merchants must obtain a license, for which they must agree to purchase a certain amount of Cameroonian rice under a system of "jumelage". Unfortunately for local producers, the merchants can often afford to not even pick up the local rice because they have made such large profits importing rice. The consumers do not benefit from this system because they must pay the price of locally produced rice when they might be paying the lower prices of the world market. Neither does the rice producer ultimately gain from this system because, although the development agencies have continued to purchase all of the paddy rice produced by the farmers, donors will not continue to provide the funds necessary to finance such large stocks of rice in the long run. There may be some ways of reducing the cost of production; certainly higher yields would help, as would more efficient systems of processing. Farmers may also have to be more alert to the taste preferences of consumers. Many people in the Northwest said they preferred the imported rice because it was easier to cook and tasted better. Producers may need to find new varieties better liked by consumers, and use better equipment and methods of processing, such as parboiling and grading, to improve marketability. But change in rice import policy will probably be necessary to resolve the problem fully.

MARKET INTERVENTIONS AND COOPERATIVE INVOLVEMENT

Brief History of Cooperatives in the Northwest Province

Arabica coffee production - introduced in 1932 - was the original impetus for the formation of cooperative societies in the Northwest Province. By 1950, enough farmers in the Bamenda area were producing coffee to be able to form a viable cooperative organization. It was soon evident that a single cooperative would not be able to effectively handle the marketing of the total production of coffee in the Province, and new cooperative societies were formed. By 1979, there were some 106 primary marketing cooperatives organized into eleven unions, with a total membership of over 24,000 farmers. Important changes in cooperative structure and functioning occurred over this 30 year period. Cooperatives were granted monopoly rights for the marketing of coffee, regulated by the National Produce Marketing Board after 1976. Following the formation of the United Republic of Cameroon in 1972, the Department of Cooperation and Mutuality within the Ministry of Agriculture was created for the overall supervision of all cooperative societies in Cameroon. In 1978, an apex organization, the Northwest Cooperative Association Ltd., (NWCA Ltd., formerly the Bamenda Cooperative Association), was formed, taking on most of the marketing responsibilities for cash crops in the Northwest cooperative system. Finally, in addition to the marketing of coffee, cooperatives began to perform other functions, including the sale and distribution of building materials, the marketing of foodstuffs and palm oil through women's cooperatives, and the encouragement of savings and loan through a system of credit unions affiliated with the cooperative movement and through a program of loan distribution in conjunction with FONADER. The following discussion will focus primarily on the women's cooperative program and the possibilities of further cooperative involvement in diversified marketing operations.

The original women's cooperatives in Cameroon were begun at Nso by a Catholic Relief Services worker Ms. O'Kelley, in the early 1950's as corn mill societies. Although these societies operated successfully for a number of years, they disintegrated rapidly after the departure of Ms. O'Kelley, primarily because of the lack of education given the Nso women in the planning, organization, and management of the groups. The experience of women in these early groups disillusioned them for some time and facilitated against group efforts of this sort until the 1970's. At this time, the WCNU, the women's wing of the Cameroon National Union, initiated a platform calling for a concerted effort to involve women in development programs. Due primarily to the impetus of the WCNU, the old women's cooperatives were revitalized and new societies were formed. In the Northwest Province today, there are a number of women's cooperative societies and cooperative shops organized to provide a range of services and projects including:

- operation of corn mills
- supply, sale, and distribution of palm oil
- supply and sale of commodities such as soap, sugar, salt, hoes

- cooperative or group farming endeavors
- marketing of members' produce

The officially recognized women's cooperative societies in the Northwest are Mbengwi, Nso, and Donga-Mantung, affiliated with the coffee unions in their divisions; Mezam, directly responsible to the Department of Cooperation and Mutuality in Bamenda: and Kom, presently in the process of becoming officially registered.

The supply, sale and distribution of palm oil was the first activity undertaken by the women's cooperatives. It is also the most successful and financially viable venture to date. The cooperatives have generally been able to guarantee a fairly regular supply of oil, and appear to have substantially increased consumption in the areas served. Although the palm oil program can be considered successful, it is not without substantial problems. Storage facilities need to be improved. The organization of transport is often difficult and transport costs are high, often accounting for two-thirds of overhead (administrative and operating) costs. Payment of bonuses is often delayed and sometimes not made. Finally, there seem to be a number of women utilizing the cooperative essentially as a wholesale supplier, buying cheaply from the cooperative and selling on the local market at a profit. This practice often creates tensions among the women, creating an atmosphere of competition between individuals and between groups.

The buying and marketing of foodstuffs is a fairly recent program and has operated on a much smaller scale than the supply and sale of palm oil. The management involved in such an operation is quite complicated, requiring substantial investment in both management expertise and financial support. So far only the Nso and Donga-Mantung societies have made a serious attempt at foodstuffs marketing, although the Mbengwi society has recently been involved in marketing cocoyams. The foodstuffs programs have encountered a number of problems, which according to one report include: 1) Mismanagement of transportation facilities; 2) Competition with traders who are seasoned in the business, have good contacts, and have lower overhead costs; 3) Lack of trained staff with the initiative to find markets and arrange farm-to-market transport profitably; 4) Erratic market prices making storage very risky; 5) Unwillingness of members to accept cooperative prices when market prices are higher; 6) Inadequate storage facilities; 7) Lack of well-defined system of purchase and sale. Furthermore, "the (apparent) profitability of the foodstuffs program is masked in the accounts of the cooperative. Profit statistics for foodstuffs reflect a very small percentage of actual transportation and handling charges. If, in fact, these costs were correctly taken into consideration, it is doubtful that a profit would be reflected for foodstuffs." (Matt, 1979, p.6) Although the goal of cooperatives is not to make profit, programs that lose money can hardly be continued. The financial viability of the foodstuffs project remains unclear and requires further investigation.

However, more training of women and greater financial backing are needed to help the women's cooperative foodstuffs program find solutions to the problems listed above. The following discussion examines some of these problems in more detail. We cannot hope to provide a detailed plan of action for cooperative involvement in foodstuff market, but rather will attempt to suggest several possible ways of improving the viability of the operation, suggestions that will require much further discussion between cooperative officials and members to be translated.

Production and Marketing

One of the most important aspects of marketing is the ability to assure customers of a reasonable regular supply of goods. This is particularly important in the case where contracts are signed to supply institutions on a regular basis. For example, the Bamenda Cooperative Vegetable Society (BCVS) was forced to buy produce on the Bamenda market to fulfill contracts because its regular producer groups could not meet customer demand with the produce available from its members. (See Bomers, 1973, and Van Wulfften Palthe, 1977).

Regular supplies must also be obtained at a competitive price. Again, we can point to the experience of the BCVS, which lost several contracts when institutions decided they could generally obtain better prices in the market. A knowledge of where supplies can be obtained at a good price is an essential part of a marketing operation. This is not always easy in the Northwest Province, as prices do tend to vary considerably between markets. A group trading in foodstuffs must be flexible and knowledgeable enough to make purchases in surplus areas when necessary, particularly when its own producer groups cannot supply sufficient amounts of a needed commodity.

One strategy of assuring the regular supply of a commodity would be to encourage the specialization of production according to regional comparative advantage. It is likely that, if markets were reasonably assured, farmers would be willing to specialize in one or two food crops for the market in addition to their subsistence production. This is particularly important for villages in marginal areas which are isolated by poor roads and sporadically visited by traders because of greater per unit costs of marketing, high risk, and low volume. Specialization would facilitate the ability of these villages to attain a sufficient level of volume to allow for bulking operations. Of course, the poor roads are in large part the major problem for these areas. Until transportation at a reasonable cost can be assured, it will be very difficult for these villages to break out of the vicious cycle in which producers are not assured of a market, receive low prices when they can sell their goods, and hence have no economic incentive to produce more.

Transport

It is obvious that better roads which assure the regularity of transport are absolutely essential to greater participation in the market, particularly for perishable foodcrops. Improvement of the roads must be a shared responsibility of the national government and local communities. From the viewpoint of financial feasibility, cooperatives can hardly be expected to supply regular transport to remote areas, given the low volume produced in these areas and the high risk involved. On the other hand, cooperatives might be able to target several remote areas for regular evacuation. The financial ability of the cooperatives to do this would depend on the profitability of its operation in the more accessible areas.

The cost of cooperative vehicle operation has generally been quite high. Unless cooperatives can operate their vehicles on a relatively full-time basis, handling large volumes of commodities, it may be cheaper to hire private transport. Cooperatives should resist the temptation of purchasing more vehicles for foodstuff marketing until the volume of turnover warrants such purchases.

Storage

Adequate storage is an important aspect in improving marketing in the Northwest. There are a number of problems as to how cooperatives should become involved in storage. First, there are substantial risks involved in any large-scale storage operation. Seasonal price fluctuations in the Northwest can vary widely from one year to the next. For example, the annual range of the seasonal price index for corn was 91% in 1972 and 38% in 1973. For groundnuts, the range was 19% in 1973 and 98% in 1974. The changes in the range of seasonal variation from one year to the next make it difficult to predict the rate of return for a storage program. However, if storage operating costs were kept lower than an average seasonal range, then a storage program over time should be financially viable.

Trial programs undertaken in 1977-1978 by the Bamenda Cooperative Association suggest that storage operating costs were approximately 30% of total costs. Corn was purchased that year at an average of 35 FCFA/kilogram, and sold at an average of 54 FCFA/kilogram, a 54% increase in price. Two methods of storage were tried: one using jute bags and the other with silo storage. Net returns to the two were 7.0% and 6.9% respectively. Grain storage specialists working in the Northwest have generally recommended that the jute bag method be used, since transporting and wholesaling are done in bag lots and risks are lower than with silo storage.

Location of storage units would depend largely on the volume of cooperative foodstuff marketing and the nature of the program in terms of risk bearing.

Centralized storage operations for corn in the Northwest Province have been plagued by insufficient quantities and the difficulties of transport.1/ Storage facilities should probably be no more centralized than the Union level until the scale of operations of the NWCA warrants further investment in larger units. Improved storage facilities at the farm level should also be encouraged by the cooperatives, which could provide technical assistance and insecticides to interested farmers.

The arrangements under which the risks of marketing are shared would also influence the nature of a storage operation. Farmers would most likely not be willing to use the coffee-type of bonus system for foodcrops. Most farmers interviewed depended on the revenue from foodcrop sales for daily cash needs, and would not be willing to take anything less than the market price for their produce even if there was a bonus to be paid later. This would imply that financing for a wide-scale foodstuffs program would need to be such that it could pay at or above market prices to producers at the time of collection, as well as bear the risks of storage under price uncertainty. A fund would need to be available to finance the operation - either built up from profits in the foodstuffs program, or available from other sources, such as banks or credit unions.

Several groups in the Northwest Province -- most significantly the UNVDA and the Nso Cooperative Union -- have accumulated large stocks of rice. To avoid the costly build-up of large stocks, storage operations should be undertaken as a function of the cooperative's ability to market the stored goods. Aggressive marketing measures must be taken if stocks do accumulate, including price reductions to move stocks, discounts to large purchasers, better methods of processing such as parboiling, and an active search for institutional buyers. Some of these measures have been implemented by the Nso Cooperative Union, and rice stocks are reportedly being reduced.

Development of Inter-Provincial Trade

The build-up of rice stocks serves as an example of moving too quickly into a marketing operation without reasonably assured outlets. Cooperatives cannot rely on local markets to absorb large production increases, given the slow growth of local demand and the intense competition from traders. The greatest opportunity for sales growth will eventually come from inter-provincial trade, as urban areas grow and transportation networks are improved. There may also be room for the expansion of trade with neighboring countries, if favorable political and economic conditions prevail.

1/ The final report (1977) of the Grain Storage Project of the Federation of Evangelical Churches and Missions in Cameroon states that seven 26-tons silos were built in the Northwest but never used.

Cooperative involvement in these longer-distance marketing operations is certainly not without risk. There is competition from traders as well as from producing areas in other provinces. Also, prices in the market, particularly in Douala, may not always be high enough to make trading worthwhile. It is essential that sufficient storage be available to allow cooperatives the flexibility to take advantage of seasonal price fluctuations in distant markets. More research needs to be conducted to further determine prospective demand, size of external markets, and where to concentrate sales. The creation of a market service at the level of the Northwest Cooperative Association has been under discussion for some time. This would seem essential if the cooperative becomes heavily involved in foodstuff marketing. The major task of such a service would be to search for market outlets, make contracts with institutions and other buyers, and disseminate information about products from the Northwest. Someone in the service should have good contacts in the business community, and could be paid partly on a commission basis. Another member of the marketing service could collect information on levels of production, prices, and market potential, as well as conduct studies on optimal storage, transport, handling, and pricing practices. Improved training to equip cooperative workers with the skills necessary for foodstuff marketing would be essential to a successful program.

Involvement in export operations of foodstuffs could potentially be one of the most useful cooperative programs. A problem with exporting foodstuffs to neighboring countries might be the creation of food shortages particularly in the urban areas of the Province, with a resultant rise in food prices in local markets. Granting a quasi-monopoly on food exports to cooperatives would be one way of controlling the flow of foodstuffs out of the Province, assuming that unauthorized private trade was also effectively controlled. This would give cooperatives a situation in which they could take advantage of economies of scale and control over a certain segment of the market.

The political situation in the country is such that increased trade in foodstuffs with neighboring countries may be possible, although it is most likely that such international trade arrangements will take some time. Cooperatives, however, may want to begin to lobby for increased trade by applying for export licenses and putting forth proposals concerning the improvement of transportation links with neighboring countries. Again, this is an area deserving considerable further research and discussion.

The extent to which cooperatives can compete successfully with private traders remains an open question. It depends on the degree to which cooperatives can organize efficiently, utilize transportation effectively, exploit economies of scale, and react quickly to changing market conditions. On the one hand, cooperatives should try to avoid high fixed costs initially by renting storage space rather than building new facilities and by hiring transport rather than investing heavily in new vehicles. On the other hand,

cooperatives must be willing to invest sufficient resources in marketing to allow foodstuff operations a reasonable chance of success. Personnel must be trained and hired. Communication networks must be set up to allow marketking managers to react quickly to trading opportunities. Feasible methods of financing and risk-sharing must be developed.

Cooperatives should probably try to avoid direct competition with private traders locally. Rather, they should concentrate on institutional buyers and long distance marketing. Cooperatives should also develop contacts with private traders. We talked to several exporters in Douala who were quite interested in working with cooperatives to develop export possibilities.

In conclusion, we can say that there is some scope for cooperative involvement in foodstuff marketing, although the operation is not without risk. The experiences of the women's cooperatives and the BCVS must be taken into account in the design of a more ambitious program. Fixed costs should be kept to a minimum as the program expands. Marketing efforts should expand as both a function of increased production and market demand. A cooperative marketing program, in addition to being financially viable, must provide services to farmers in the form of fair prices and assured markets. This is not an easy task and must be undertaken with care.

CONCLUSIONS

The high altitude and mountainous terrain of the Northwest Province have been both a hindrance and an asset for regional development. On the one hand, it has made transport and communication extremely difficult, and in many ways, the area has remained isolated from the rest of Cameroon. On the other hand, the Northwest has a relatively healthy climate and a great diversity of and potential for agricultural and animal production. To understand the dynamics of development in the area today, it is important to think of society in the Northwest Province not as a homogeneous unit, but as one with stratified and differentiated rural, as well as urban, sectors.

The marketing system in the Northwest works reasonably well. Large amounts of agricultural commodities are moved through the system. Average seasonal price fluctuations correspond generally to seasonal availabilities. There is little evidence of restrictive trading practices and traders' margins--averaging between 10% and 30%--seem reasonable, given the risks involved in trading. Information about economic conditions travels through the system and prices generally reflect changing conditions of supply and demand. In short, the marketing process has not in itself discouraged economic development.

The marketing system is also faced by a number of important problems. More isolated areas of the province are relatively poorly served, both in terms of distribution of goods and regular evacuation of produce. Seasonal price fluctuations from one year to the next can change dramatically suggesting imperfections in the transport, storage, and information sectors. High transport costs make it difficult for the province to compete in urban markets with other similar producing regions, especially the Western Province. Therefore, although long-term prospects for increased marketing to urban areas are relatively good, short-term prospects are less encouraging.

Local demand will probably not be able to absorb large increases in production. External markets--both in Cameroon and in neighboring African nations--must be identified and developed. Lowering marketing costs by developing the road and communication infrastructure is the fundamental step that must be undertaken to allow for the further development of external markets. As consumption centers are increasingly linked to the agricultural sector in the province through the transport network, the economic incentives will exist for farmers to produce more, for traders to invest in storage and more efficient handling, for local councils to improve market places, and for the government to invest more in information gathering and dissemination. Resources--credit, technical assistance, extension, and investment in infrastructure--must be made available to encourage the various participants in the marketing system.

To encourage production, a number of problems must be solved. Women are still the major producers of foodstuffs in the Northwest. Development programs must give women equal access to land, technology, and education as well as equal benefits for their labor. Furthermore, increased production for the market must necessitate the entry of men into what has traditionally been viewed as "women's work," as well as infrastructural improvements such as water supplies and improved health facilities to lighten the workload of women and improve health among the rural population. Agricultural research and extension services must

attempt not only to improve agricultural practices and planting materials, but also to find ways of working with both men and women.

Land in many areas of the Northwest is becoming both scarce and costly. It is difficult to obtain and exploit substantial amounts of farmland without considerable capital investment. However, a number of areas could be opened up for greater agricultural production if better roads were built to them. There must be increased efforts to educate farmers about land laws and to develop more efficient and equitable procedures for filing for land allocation and title. Those who understand the present procedures of filing land allocation and title applications and can afford to do so are at a clear advantage over those who neither understand the laws nor can afford to file an application. Given the increasing land conflicts between farmers and graziers, there is a need for a land use survey to determine the best and most feasible economic and social use of land within the province.

There is some scope for increased cooperative involvement in marketing. Fixed costs should be kept to a minimum as the program expands, and marketing efforts should expand both as a function of increased production and market demand. Cooperatives may best become involved in the marketing of specialized crops for which there is a high demand. Cooperatives could also be involved in the development and control of foodstuff exports to neighboring African countries.

The unequal distribution of farm size and wealth in the Northwest Province is important to keep in mind when developing strategies for improved marketing. Various categories of farmers will be affected differentially by a given intervention in the marketing system. Obviously, larger farmers with more agricultural surplus have a greater interest in market improvements than do the smaller, subsistence farmers who produce mostly for their own consumption. Efforts must be made to assure the livelihood of those farmers who, because of unequal access to land or capital, cannot expand their production to reap the benefits of better marketing arrangements.

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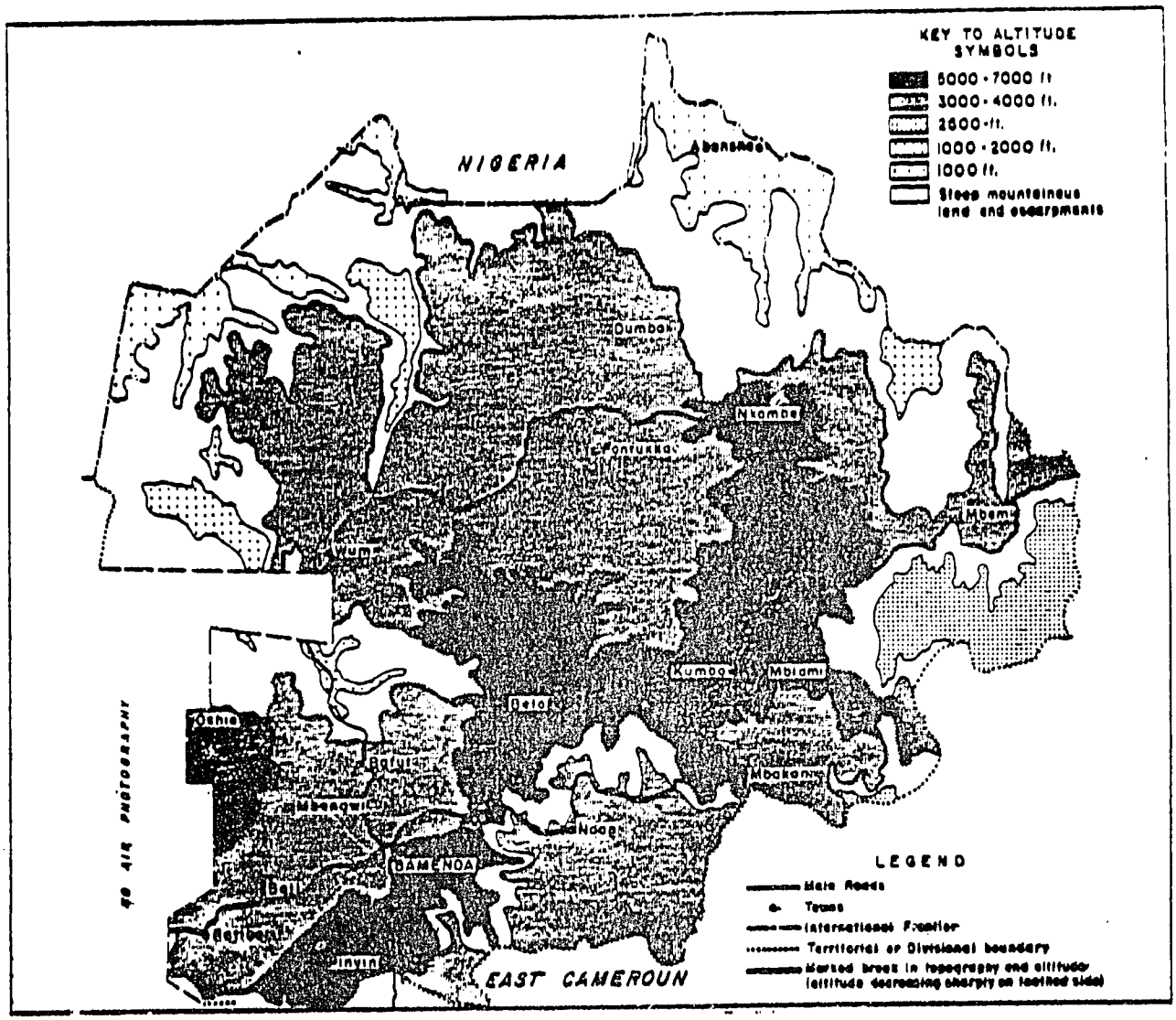
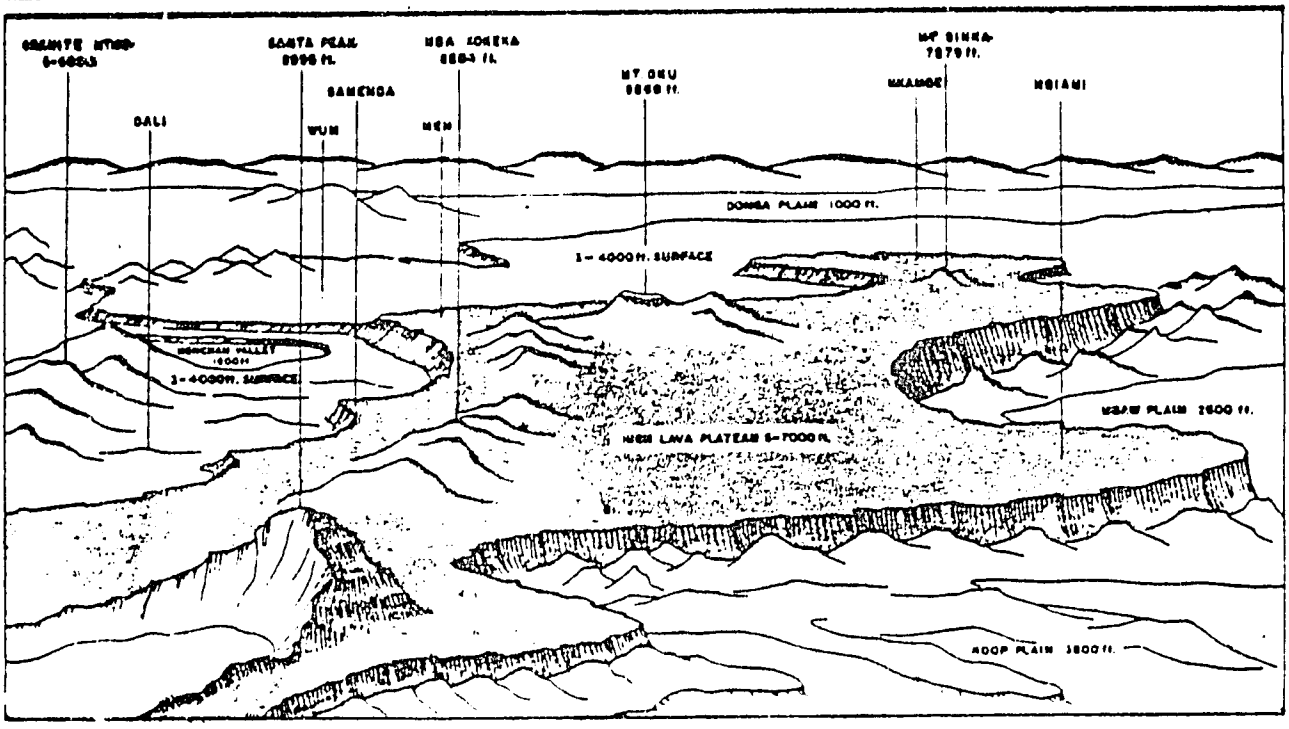
Figure 1 - The Bamenda Area/La Region de Bamenda



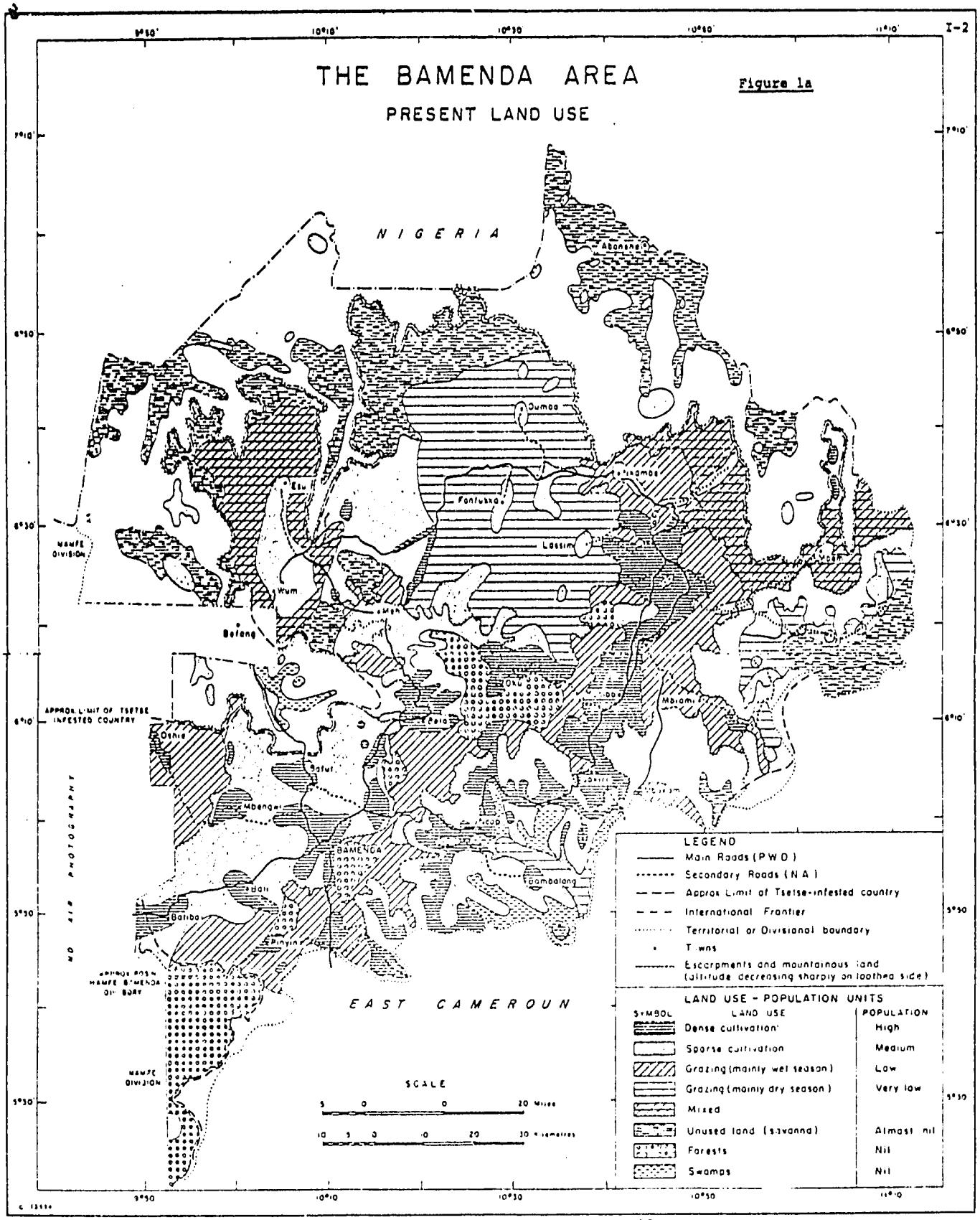


Source: Hawkins and Brunt, Soils and Ecology of West Cameroon, p.15

THE BAMENDA AREA

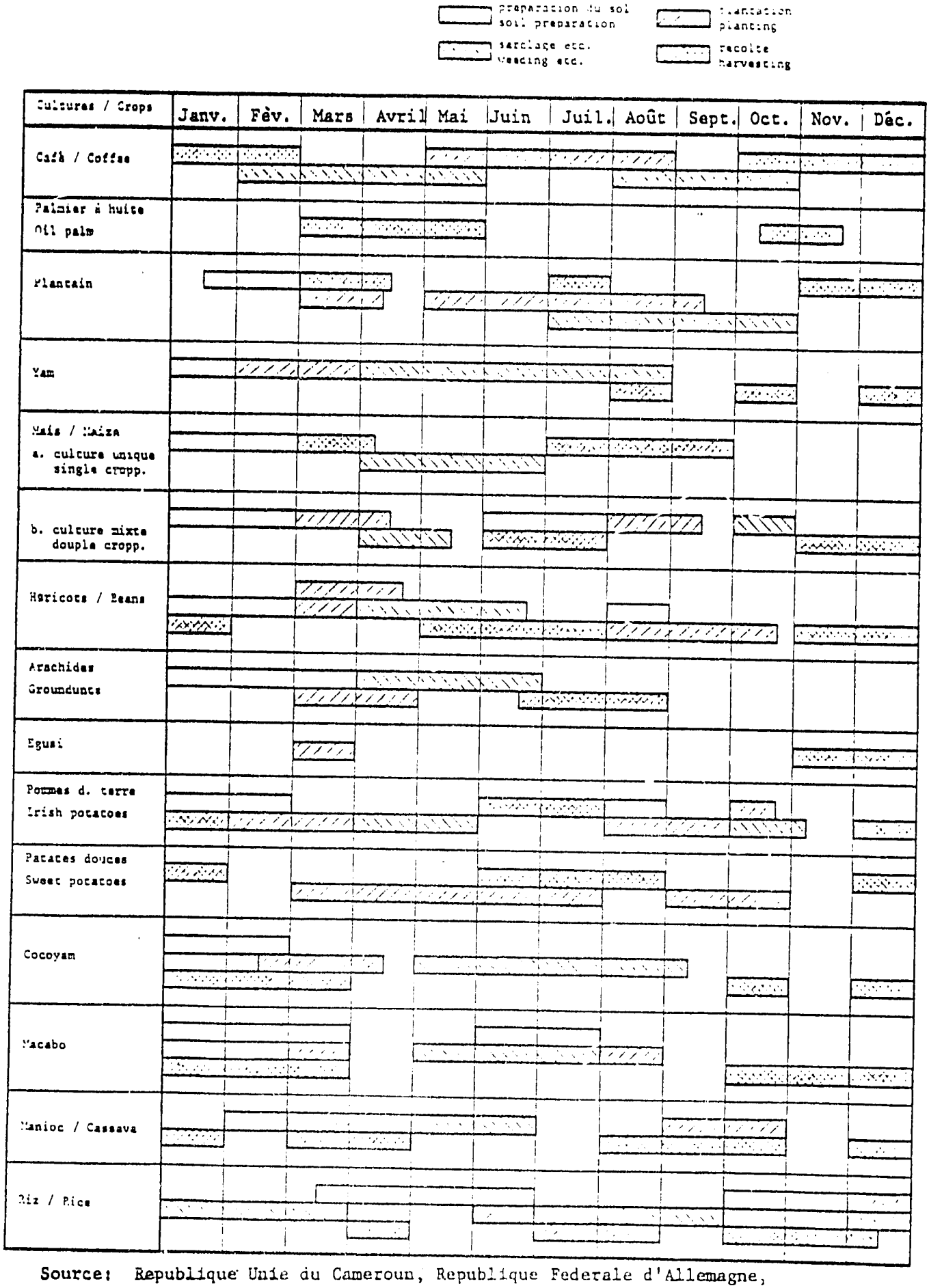
Figure 1a

PRESENT LAND USE



Source: Hawkins and Brunt, Soils and Ecology of West Cameroon, Map 10

Figure 2 - Agricultural Calendar/Calendrier Agricole



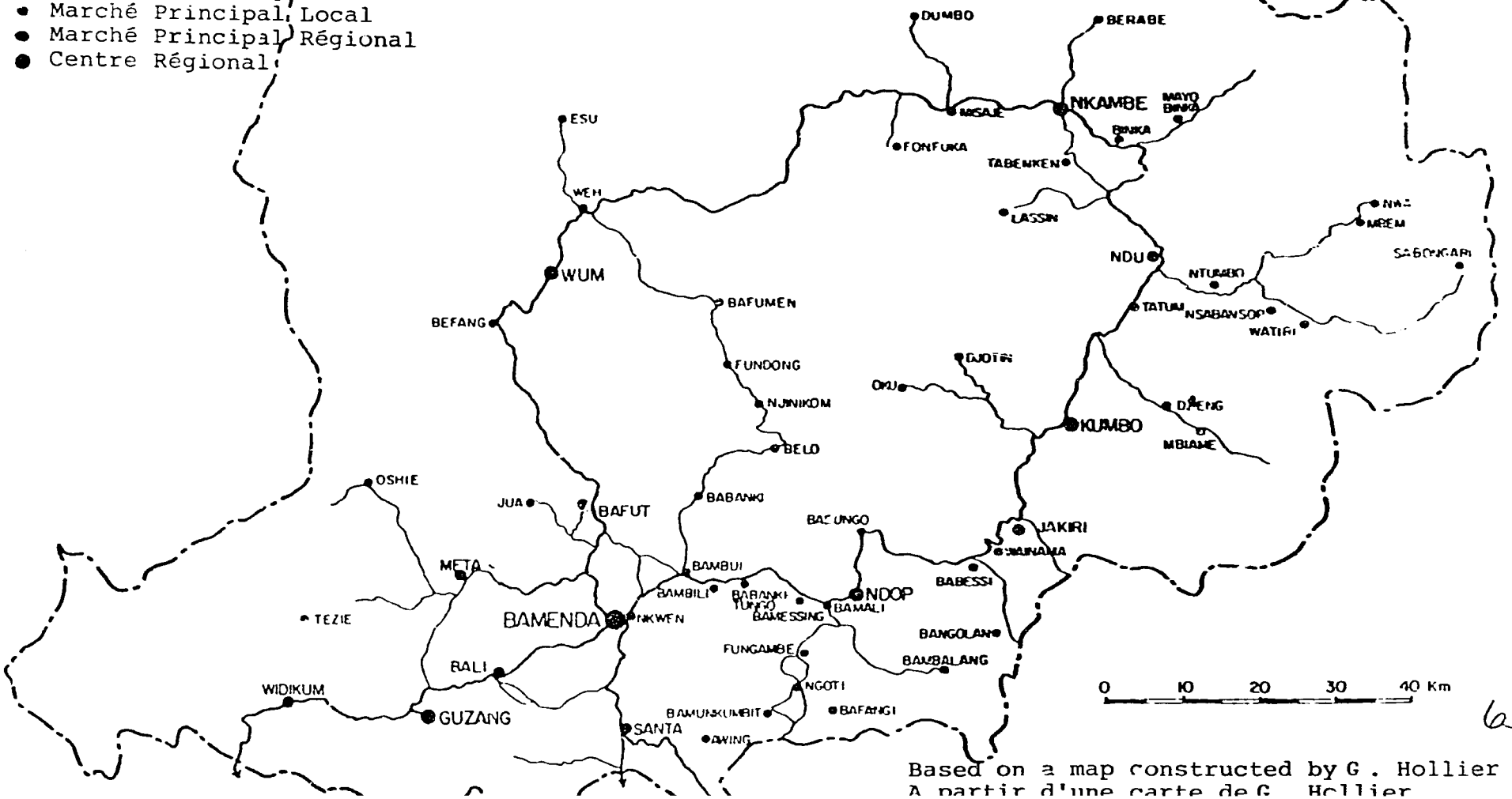
Source: Republique Unie du Cameroun, Republique Federale d'Allemagne, Developpement Rural dans la Province du Nord-Ouest Etude de Factibilite-Annexes, 1978, p. 49.

Figure 3 - Markets of the Northwest Province

Figure 3 Marchés de la Province du Nord-Ouest

KEY
- Standard Market
- Major Market - Local Center
- Major Market - Sub-regional Center
- Regional Center

LEGENDE
- Marché de village
- Marché Principal, Local
- Marché Principal, Régional
- Centre Régional



Based on a map constructed by G. Hollier
A partir d'une carte de G. Hollier

Figure 4 - Cattle Flows from Northwest Provinc

Figure 4 - Itinéraires du Bétail dans la Province du Nord-Ouest

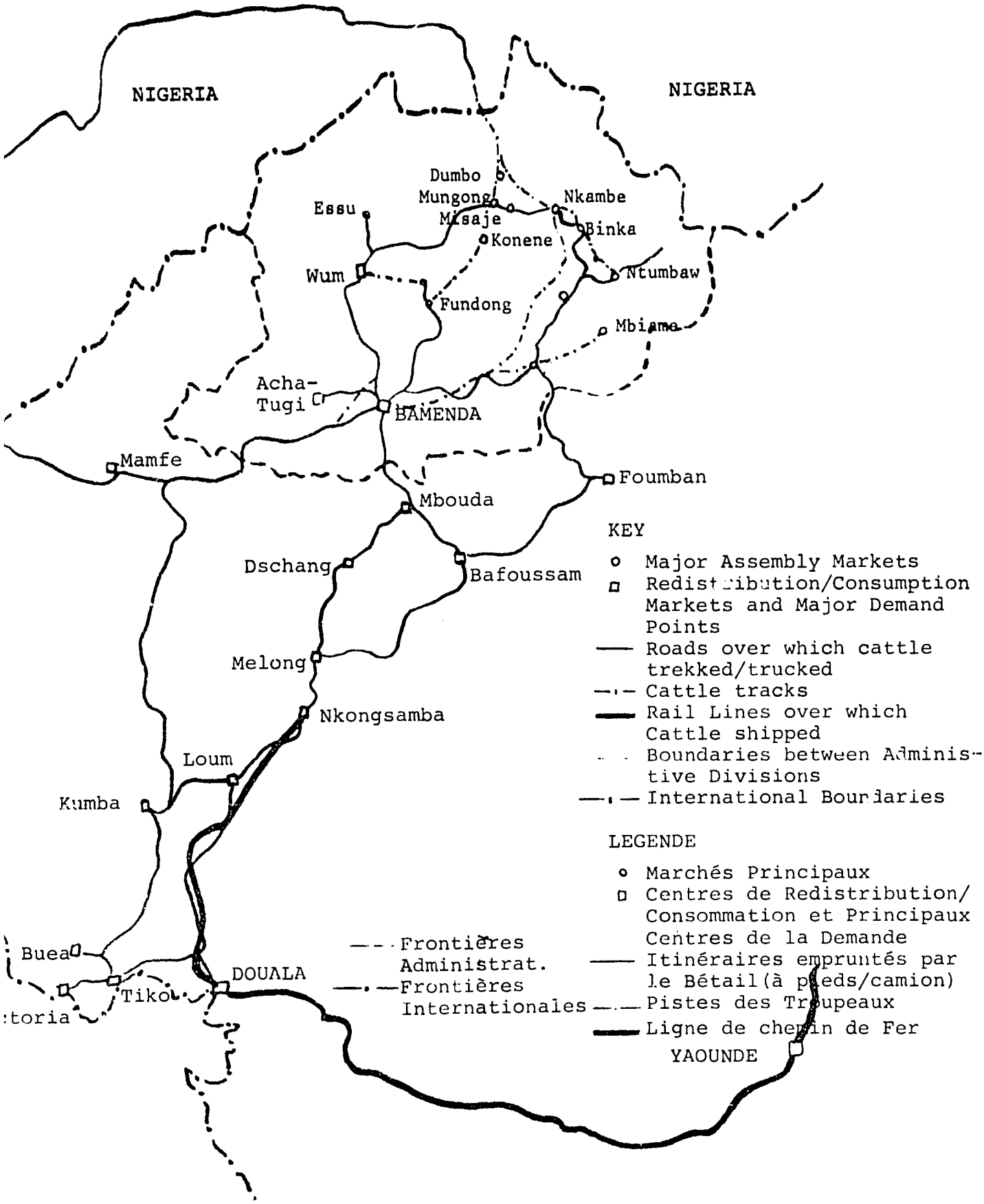


Table 1 - Population Density in Northwest by Division

Tableau 1 - Densité de Population dans la Province du Nord Ouest par Département

Division Département	Total Population Population Totale		Surface Area Superficie		Inhab / Km^2 Hab / Km^2
	No	%	Km^2	%	
Bui	142,015	15.5	2,300	13.3	61.7
Donga-Mantung	172,712	19.9	4,280	24.7	40.4
Mentchum	183,055	20.0	6,060	35.0	30.2
Mezam	298,911	32.7	2,870	16.6	104.2
Momo	118,219	12.9	1,790	10.3	66.0
TOTAL	914,912	100	17,300	100	52.9

Source : Recensement Général, 1976, Vol. I, Tome 3, p. 96

Table 2 - Population and Farm Distribution : Northwest Province

Tableau 2 - Répartition de la Population et des Exploitations Agricoles : Province du Nord-Ouest

	Farms Fermes		Population on Farms Population des Fermes		Active Workers on Farms Travailleurs Actifs sur les Fermes		Surface Area Cultivated Superficie Cultivée		Average Farm size Taille moyenne des Fermes
	No	%	No	%	No	%	Ha	%	
Mezam	36,141	32.8	227,205	32.0	93,331	29.7	51,349	38.2	1.42
Momo	15,432	14.0	106,728	15.1	49,420	15.7	10,823	8.1	.70
Donga-Mantung	18,610	16.9	126,782	17.9	53,938	17.1	19,779	14.7	1.06
Mentchum	16,756	15.2	135,132	19.0	64,265	20.4	25.183	18.7	1.50
Bui	23,293	21.1	113,297	16.0	53,652	17.1	27,284	20.3	1.17
Northwest Nord-Ouest	110,242	100	709,144	100	314,636	100	134,349	100	1.22

Source : 1972 / 73 Agricultural Census, p. 360.

Table 3 - Distribution of Farms and Cultivated Surface Area

Tableau 3 - Répartition des Exploitations et des Surfaces Cultivées

	Cultivated Area / Surfaces cultivées (Ares)											
	<25	25-50	50-75	75-100	100-150	150-200	200-250	250-300	300-400	400-500	500-1000	Total
No of Farms Nbre de Fermes	11,623	17,342	14,750	15,139	22,519	10,766	6,553	4,279	4,676	769	1,820	110,242
%	10.5	15.7	13.4	13.7	20.4	9.8	5.9	3.9	4.2	.7	1.7	100
Surface Area Cultivated Surfaces Cultivées	1,685	6,630	9,180	13,089	27,589	18,864	14,511	11,755	15,924	3,253	11,938	
%	1.3	4.9	6.8	9.7	20.5	14.0	10.8	8.7	11.8	2.4	8.9	100

Source : 1972/73 Agricultural Census, p. 178

Table 4 - Type of Cultivation by Area : Northwest Province & Cameroon

Tableau 4 - Type de Cultures par Région : Province du Nord-Ouest & Cameroun

	Commercial Cultivation Cultures Commerciales	Mixed Cultivation Predominantly Commercial Cultures Mixtes à Prédominance Commerciales	Mixed Cultivation Cultures Mixtes	Subsistence Cultivation Only Cultures Vivrières Uniquement	TOTAL
Northwest Nord-Ouest	622	30,979	32,701	93,792	158,094
%	.4	19.6	20.7	59.3	100
Cameroon Cameroun	60,824	479,420	260,978	752,234	1,553,457
%	3.9	30.9	16.8	48.4	100

Source : 1972 / 73 Agricultural Census

Table 5 - Structure of Employment for Active Population: Northwest Province and Cameroon

	Northwest Province		N.W.P. Total as % of National Total/Sector	Cameroon		% Male in Province	% Female in Province
	Number	% Province		Number	% of Cameroun Total		
1. Liberal and scientific professions	7,468	2.4	11.2	66,973	2.4	84	16
2. Legislators and top civil servants	127	0.04	4.7	2,699	0.1	94	6
3. Administrative personnel	3,355	1.1	6.4	52,060	1.9	85	15
4. Commercial sellers	8,413	2.7	9.5	88,649	3.2	77	23
5. Hotel and service workers	5,834	1.9	10.7	54,755	2.0	64	36
6. Farmers, fishermen and hunters	211,984	67.7	10.4	2,032,136	73.6	43	57
7. Non-agricultural workers and drivers	43,202	13.8	13.9	311,035	11.3	93	7
8. Looking for first time	29,243	9.3	23.8	123,045	4.5	66	34
9. Undetermined	3,278	1.06	12.3	26,547	1.0	56	44
Total active population	312,904	100	11.3	2,757,899	100		

Source : Recensement Général, Vol. I, Tome 3, p.138

Table 6 - Agricultural Production in Northwest Province

Tableau 6 - Production Agricole dans la Province du Nord-Ouest

	Ha (a)	% Country's Ha (b)	Production Tn (a)	Ave. Yield Récolte moy kg/ha (a)	(c) % of Total Ha in Northwest % des Ha Totaux du Nord Ouest				
					Mezam	Bui	Mentchum	Donga Mantung	Momo
1. Arabica Coffee Café Arabica	32,550	30.1	9,808	300	35.2	28.9	20.0	10.4	5.5
2. Robusta Coffee Café Robusta	2,520	1.4	349	138	9.5	-	11.8	8.0	70.7
3. Tea / Thé	608	64.6	880	1,450	-	-	-	100	-
4. Plantains	4,152	6.2	39,170	9,000	65.3	5.5	17.7	4.8	6.7
5. Bananas / Bananes	5,770	1.4	61,420	11,000	81.2	1.2	12.5	1.5	1.6
6. Rice / Riz	1,390	8.8	2,230	1,600	35.0	12.3	35.0	11.8	5.9
7. Maize / Maïs	105,510	27.4	84,410	800	17.1	19.6	25.5	36.0	1.8
8. Cocoyams / Taro	17,030	17.7	85,140	5,000	32.4	1.3	48.2	0.3	17.8
9. Cocoyams / Macabo	11,350	17.7	45,410	4,000	44.0	0.1	11.5	0.3	54.1
10. Cassava/ Manioc	14,910	8.7	223,630	15,000 (d)	63.0	3.5	20.3	2.1	11.1
11. Sweet Potatoes Patates douces	2,790	19.8	22,320	8,000	16.5	0.9	47.8	3.0	31.8
12. Irish Potatoes Pommes de terre	2,260	20.4	11,360	5,000	5.8	93.5	0.2	0.2	1.3
13. Yams / Igname	6,720	18.2	26,870	4,000	43.4	1.6	2.8	3.6	48.6
14. Onions / Oignons	53	1.2	220	4,150	100	-	-	-	-
15. Groundnuts Arachides	30,860	10.5	12,340	400	45.3	10.7	32.0	9.8	2.2
16. Beans / Haricots	33,800	29.3	33,800	1,000	20.7	27.0	13.7	37.2	1.4
17. Okra / Okro	130	1.0	150	1,150	31.9	7.7	44.2	10.1	6.1
18. Tomatoes Tomates	130	15.0	260	2,000	67.7	4.4	8.7	6.1	13.1
19. Sugar Cane Canne à Sucre	420	5.4	12,620	30,000	35.3	5.3	26.4	28.6	4.4
20. Pineapples Annanas	200	5.9	2,960	15,000	67.5	2.4	4.8	6.0	19.3
21. Cabbages / Choux	100	n.a.	628	5,700	73.3	9.5	9.0	4.5	3.7
22. Oil Palm Huile de Palme	3,110	n.a.	1,555,000 lit.	500 lit.	9.6	0.3	28.9	13.0	48.2

Sources :

(a) Figures from Provincial Delegation's Evaluation of Agricultural Development from 1959/60 - 1979/80, which use the 1972/73 Agricultural Census figures as the basis for its estimates, projecting forward to 1978/79 at a 5% annual increase.

Chiffres provenant de la Délégation Provinciale: Evaluation of Agricultural Development from 1959/60 - 1979/80, utilisant les résultats du recensement agricole de 1972/73 comme base de ses estimations, projetant pour 1978/79 avec un taux d'accroissement annuel de 5%.

(b) Calculated from 1972/73 Agricultural Census, using "dense" column.
Calculé d'après le recensement agricole de 1972/73, en utilisant les colonnes "denses".

(c) Calculated from 1978/79 Production figures published by the Provincial Office of Agricultural Statistics for Northwest.

Calculé d'après les données sur la Production de 1978/79 publiées par le Bureau Provincial des Statistiques Agricoles du Nord-Ouest.

(d) The yield figure used by the Provincial Delegation is much higher than the 3,000 - 4,000 kg/ha estimate found in national agricultural statistics. However, given the way in which hectarage is calculated for this table, total figures for cassava are within an acceptable range, if somewhat on the high side.

Le chiffre de la récolte utilisé par la Délégation Provinciale est beaucoup plus élevé que les 3,000 - 4,000 kg/ha, estimation trouvée dans les statistiques d'agriculture nationales. Cependant, étant donné la manière dont les hectares ont été calculés pour cette table, les chiffres totaux de la production de manioc sont situés dans une fourchette acceptable, même si ils sont plutôt élevés.

n.a. non available
non disponible

Table 7 - Projected Livestock Population for Northwest Province, 1979-80

Tableau 7 - Projection de l'Effectif du Cheptel de la Province du Nord-Ouest pour 1979-80

	Mezam	Momo	Donga-Mantung	Mentchum	Bui	Total
Cattle Bétail	56,395	41,175	105,360	118,460	51,655	373,345
Sheep Moutons	23,635	9,710	11,700	8,775	4,620	58;440
Goats Chèvres	36,620	18,135	85,290	8,660	9,945	158,640
Pigs Cochons	19,850	30,390	850	1,520	120	52,730
Horses Chevaux	1,335	1,005	1,675	725	1,590	6,330
Poultry Volaille	177,000	74,500	374,700	35,900	83,800	745,900

Source : Ministry of Animal Breeding and Industries, Report for 1976/77 p. 44; projected forward to 1979/80.

Ministère de l'Elevage et des Industries Animales, Rapport pour 1976/77, p. 44; projeté pour 1979/80

Table 8

CATTLE GRAZING AREA BY DIVISION IN NORTHWEST PROVINCE

Division	Grazing Area (HA)	% Of Total Grazing Area In N.W.P.	Grazing Area As % of Land Area In Division	Grazing Area As % of Total Land Area In N.W.P.	Projected Cattle Population 1979/80	% Total Cattle Population In N.W.P.	Grazing Area Per Head (HA)
Momo	124,200	11.7	60	6.9	41,475	11.1	1.99
Mezam	105,667	10.0	33.4	5.9	56,395	15.1	1.87
Bui	108,000	10.2	50	6.0	51,665	13.8	2.09
Mentchum	415,143	39.2	66.6	23.2	118,460	31.7	3.51
Donga/ Mantung	305,714	28.9	71.8	17.1	105,360	28.2	2.90
Total	1,058,914	100.0	-	59.1	373,345	100.0	2.84

Table 9 - Percentage Distribution of Land Area and Livestock Population among Divisions in the Northwest Province

Tableau 9 - Superficie et Répartition du Cheptel par Département dans la Province du Nord Ouest (%)

Division Département	Human Population Humaine %	Total Surface Area in Prov. Superficie Totale de Province %	Cattle Population Bétail %	Sheep Population Moutons %	Goat Population Chèvres %	Pig Population Cochons %	Poultry Population Volaille %
Bui	15.5	13.3	14.8	9.9	6.4	0.2	10.0
Donga-Mantung	18.9	25.7	28.2	20.0	54.8	1.6	54.6
Mentchum	20.6	35.0	31.7	15.0	5.5	2.9	2.8
Mezam	32.7	16.6	15.1	40.4	23.1	37.6	24.4
Momo	12.9	10.3	11.1	16.6	11.4	57.6	8.2

These percentages are based on 1976 Census data (Recensement Général de la Population et de l'Habitat d'Avril 1976) and 1976 Livestock census data for Northwest Province.

Ces pourcentages sont basés sur les données du Recensement Général de la Population et de l'Habitat d'Avril 1976 et sur les données du Recensement du Cheptel dans la Province du Nord-Ouest en 1976.

Table 10 - Land Costs per Square Meter

Tableau 10 Prix du Terrain au Mètre Carré

Division / Département	Area / District	Land Cost per m^2 Prix du terrain au m^2
Mezam	Bamenda	250 frcs CFA
	Bali	80
	Ndop	50
	Santa	60
Momo	Mbengwi	80
	Batibo	20
Bui	Kumbo	100
	Kakiri	50
Mentchum	Wum	80
	Njinikom	50
	Fundom	50
Donga-Mantung	Nkambe	80
	Nwa	30
	Ndu	60

Table II - Consumption of Agricultural Products in Northwest Province

Tableau II - Consommation des Produits Agricoles dans la Province du Nord-Ouest

	Estimated consumption Consommation estimée		Per capita consumption Edible portion Consommation par personne de part comestible		IBRD per capita consump. est. (b) BIRD per capita estimation de consom.	Estimated loss in preparing Estimation perte en préparant
	(T)	% tot.prod. % prod.tot.	g/day g/jour	kg/year kg/an	kg/year kg/an	%
1. Plantain	37,210	95	64	23	100	34
2. Bananas/Bananes	57,080	90	98	36	25	34
3. Rice / Riz	1,110	50	3(a)	1 (a)	3	-
4. Maize / Maïs	67,530	80	158	58	80	10
5. Cocoyam/Taro	76,620	90	167	61	35	16
6. Cocoyam/Macabo	36,330	80	80	29	30	16
7. Cassava/Manioc	190,090	85	371	135	n.a.	25
8. Sweet Potato Patate Douce	21,200	95	43	16	25	21
9. Irish Potato Pomme de terre	6,750	60	15	5	15	15
10. Yams / Igname	25,520	95	55	20	25	16
11. Onions/Oignons	240	90	(a) .6	(a) .2	n.a.	-
12. Groundnuts Arachides	8,640	70	20	7	15	10
13. Beans/Haricots	27,040	80	66	24	4	5
14. Okra / Okro	150	100	.4	.1	n.a.	-
15. Tomato/Tomates	200	80	(a) .5	(a) .2	n.a.	-
16. Sugar Cane Cane à sucre	12,610	100	28	10	n.a.	15
17. Pineapple/Ananas	29,600	100	65	24	n.a.	15
18. Cabbage/Choux	314	50	.8	.3	n.a.	-

(a) Does not include substantial imports into Province.

Importations dans la Province non-compris.

(b) World Bank, 1979, Annex 3, Appendice Table 1

Source : Evaluation of Agricultural Development from 1959/60 - 1979/80
Provincial Delegation of Agriculture

Table 12 - Cattle Slaughter

Tableau 12 - Abattage du Bétail

	Cattle slaughter Bêtes abattues (1)	Total Quantity of Beef Consumed Quantité tot. de Boeuf consommé (KG) (2)	Population (3)	Beef Consumption Per Capita Consommation de Boeuf (KG)	Index of Consumption Per Capita Indice de Consommation 1974/75=100
TOTAL 1974/75	16,520	2,973,600	888,264	3.35	100.0
Momo/Mezam	11,186	2,013,480	404,981	4.97	100.0
Donga-Mantung	2,180	392,400	167,682	2.34	100.0
Bui	1,899	331,020	137,879	2.40	100.0
Mentchum	1,306	235,080	177,723	1.32	100.0
TOTAL 1975/76	16,710	3,007,800	914,912	3.29	90.2
Momo/Mezam	11,450	2,061,000	417,130	4.94	99.4
Donga-Mantung	2,134	334,120	172,712	2.22	94.9
Bui	2,053	369,540	142,015	2.60	108.3
Mentchum	1,813	193,140	183,055	1.06	80.3
TOTAL 1976/77	11,911	2,143,980	942,359	2.28	68.1
Momo/Mezam	7,779	1,400,220	429,644	3.26	65.6
Donga-Mantung	1,992	358,560	177,893	2.02	86.3
Bui	1,051	189,180	146,275	1.29	53.8
Mentchum	1,089	196,020	188,547	1.04	78.8
TOTAL 1977/78	14,081	2,535,660	970,630	2.61	77.9
Momo/Mezam	10,166	1,329,880	442,533	4.14	83.3
Donga-Mantung	1,020	201,600	183,230	1.10	47.0
Bui	1,431	258,660	150,663	1.72	71.7
Mentchum	1,364	245,520	194,203	1.20	95.5
TOTAL 1978/79	3,793	2,482,740	999,749	2.48	74.0
Momo/Mezam	9,528	1,715,040	455,809	3.76	75.7
Donga-Mantung	1,202	216,360	188,727	1.15	49.1
Bui	1,543	277,740	155,183	1.79	74.6
Mentchum	1,520	273,600	200,030	1.38	104.5

(1) Slaughter Returns from Annual Reports for Northwest Province, Ministry of Animal Breeding and Industries
Données provenant des Rapports Annuels de la Province du Nord-Ouest, Ministère de l'Elevage et des Industries Animales.

(2) Carcass weight, including offals, is assumed to average 180 kg per head.
Poids de la carcasse , y compris les tripes, estimé en moyenne à 180 kg pièce.

(3) Population figures for 1975/76 are from the Recensement Général de la Population. Figures for other years were calculated by assuming a 3% annual population growth rate.
Les chiffres de la population pour 1975/76 sont tirés du Recensement Général de la Population. Les chiffres des autres années ont été calculés en estimant le taux d'accroissement annuel à 3%

Table 13 - Distribution of Market Places in the Northwest Province

Tableau 13 - Répartition des Marchés dans la Province du Nord-Ouest

	Population	Area Superficie KM^2	Density Densité	Total Markets Nbre de Marchés	Major Markets (x) Marchés Principaux	Market Pop'n Pop.des Marchés	Major Market Pop'n Pop.des Marchés Princip.	Market Area Aire des Marchés	(r)xx	Major Market Area Aire des Marchés Princip.	(r)
ui	151,744	2,218	68	9	2	16,860	75,872	246	(9)	1,109	(19)
onga-Mantung	184,516	4,279	43	14	2	13,180	92,258	306	(10)	2,140	(26)
entchum	198,452	6,601	32	9	1	22,050	198,452	678	(15)	6,106	(44)
Wum	107,387	4,512	24	5	1	21,477	107,387	902	(17)	4,512	(38)
Fundong	91,065	1,592	57	4	0	22,766	-	398	(11)	-	-
ezam	319,504	2,914	110	22	5	14,523	63,901	132	(6)	583	(14)
Bamenda	220,720	1,792	123	11	4	20,065	55,180	163	(7)	448	(12)
Ndop	98,784	1,117	88	11	1	8,980	98,784	102	(6)	1,117	(19)
mo	126,315	2,420	52	5	3	25,263	42,105	484	(12)	807	(16)
Mbengwi	69,719	928	75	3	1	23,240	69,719	309	(10)	928	(17)
Batibo	56,596	1,492	38	2	2	28,298	28,298	746	(15)	746	(15)
orthwest ord-Ouest	980,531	17,937	55	59	13	16,619	75,425	304	(10)	1,308	(21)

(x) including Mankon Market
Le Marché de Mankon compris

(xx) average radius of market area
rayon moyen de la superficie déservie par le marché

Table 14 — Flow Hierarchies (Percentages)

Tableau 14 - Direction des Flux (Pourcentages)

	Rural to/vers Rural	Bamenda to/vers Rural	External Externe to/vers Rural	Rural to/vers Bamenda	Rural to/vers External Externe	Bamenda to/vers External Externe	External Externe to/vers Bamenda	Weekly Flow Flux Hebdom. Total (100%) (T)
Cocoyam Macabo/Taro	00	00	00	90	10	00	00	29.9
Maize Maïs	11	00	00	56	25	03	00	10.1
Gari	09	00	00	70	05	15	00	19.0
Plantain	00	00	05	50	00	00	45	13.3
Potatoes Pommes d.terre	1	00	00	18	65	17	00	83.2
Rice Riz	00	100	00	a	a	a	a	2.4
Palm Oil Huile de Palme	17	02	1	35	01	00	44	41.3
Beans Haricots	04	03	00	18	69	06	00	31.3
Tomatoes Tomates	00	06	00	33	00	00	61	3.3
Cabbage Choux	00	00	00	22	88	00	00	1.8
Lake Fish Poisson d'eau douce	100	00	00	a	a	00	00	1.5
Ocean Fish Poisson de mer	00	100	00	00	00	00	a	2.0

(a) Substantial flows are present but not indicated in survey. Table indicates pattern of rural distribution only.
D'importants flux sont observés mais non indiqués dans l'étude. La table ne concerne que le modèle de distribution rurale.

Table 15 - Stocks of Produce in Sample Markets

Tableau 15 - Stocks de Produits dans les Marchés de l'Echantillon

Market Marché	Rank Rang	Cocoyam Taro Macabo kg	Plantain kg	Gari kg	Maize Maïs kg	Rice Riz kg	Potatoes P.d.terre kg	Total Starch Total Fécules	Fish Poisson kg	Beans Haricots kg	Cabbage Choux No	Tomatoes Tomates kg	Oil Huile Gal
Santa (a)	3	460	660	1440	170	120	1800	4650	150	ND	1800	240	280
Bali	3	4420	910	5440	1600	480	130	12980	1300	2100	260	45	820
Guzang (a)	2	4560	1130	3750	0	500	100	10040	470	1800	300	30	1040
Meta	3	7200	300	1750	0	700	100	10050	615	760	0	20	300
Batut	3	1200	2200	5350	70	300	0	9120	390	120	0	30	300
Babanki	4	360	1560	400	290	100	0	2710	300	100	0	0	180
Bambui	4	160	1750	320	470	200	100	3000	270	200	50	120	110
Bambili	4	1410	1360	350	250	340	240	3950	315	200	100	120	90
Babanki-Tungo	4	0	0	820	100	0	2500	3420	150	0	50	0	80
V (b)	-	1.2	0.6	1.0	1.5	0.7	1.7	0.6	0.8	1.3	2.0	1.2	1.0

(a) Quantities were lower than usual because of rain during the day of the main survey
Les quantités étaient moins importantes qu'habituellement à cause de la pluie durant l'enquête principale.

(b) Coefficient of variation = Standard Déviation ÷ Mean
Coefficient de variation = Ecart-type ÷ Moyenne

Table 16

Value of Agricultural Production Marketed in N.W.P. and Exported

Crop	Production (M. Tons) a)	CFA/Kg Ave. Price 1978	(000,000 CFA) Value of Production	% of Total Export a)	Est. Quantity of Export (t.)	(000,000 CFA) Value of Exports	% of Total Sold in N.W.P. b)	Est. Quantity of N.W.P. (t.)	(000,000 CFA) Value of N.W.P. Goods	Total % Marketed c)	Est. Quantity of Goods Sold	(000,000 CFA) Value of Goods Sold
1. Arabica Coffee	9,808	300	2,942	100	9,808	2,942	0	-	-	100	9,808	2,942
2. Robusta Coffee	349	280	97	100	349	97	0	-	-	100	349	97
3. Tea	880	n.a.	n.a.	60	530	n.a.	40	350	n.a.	100	880	n.a.
4. Plantains	39,170	30	1,175	-	-	-	85	33,294	999	85	33,294	999
5. Bananas	63,420	33	2,093	-	-	-	95	60,249	1,988	95	60,249	1,988
6. Rice	2,230	110	245.3	30	669	73.6	50	1,115	123	80	1,784	196.6
7. Maize	84,410	40	3,376	10	8,441	338	10	8,441	338	20	16,882	675
8. Cocoyams (Taro)	85,140	48	4,087	-	-	-	50	42,570	2,044	50	42,570	2,044
9. Cocoyams (Macabo)	45,410	48	2,180	-	-	-	80	36,328	1,744	80	36,328	1,744
10. Cassava	223,630	25	5,591	-	-	-	40	89,452	2,236	40	89,452	2,236
11. Sweet Potatoes	22,320	40	893	-	-	-	85	18,972	759	85	18,972	759
12. Irish Potatoes	11,320	71	804	40	4,528	322	30	3,396	241	70	7,924	563
13. Yams	26,870	101	2,714	-	-	-	75	20,152	2,036	75	20,152	2,036
14. Onions	220	100	22	10	22	2.2	80	176	17.6	90	198	19.8
15. Groundnuts	12,340	174	2,147	10	1,234	215	65	80,230	1,396	75	92,580	1,610
16. Beans	33,800	100	3,380	20	6,760	676	45	15,210	1,521	65	21,970	2,197
17. Okra	150	141	21	-	-	-	40	60	8.4	40	60	8.4
18. Tomatoes	260	88	23	15	39	3.5	80	208	18.4	95	247	21.9
19. Sugar Cane	12,620	n.a.	n.a.	-	-	-	95	11,989	n.a.	95	11,989	n.a.
20. Pineapple	2,960	30	88	-	-	-	70	2,072	61.6	70	2,072	61.6
21. Cabbages	628.2	51	32	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	40	251	12.8
22. Oil Palm	1,555,000 Lits.	192	298	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	90	1,399,500 lits.	268
Total	-	-	32,200	-	-	4,669	-	-	15,531	-	-	20,479

Sources:

a) Based on figures from Provincial Delegation's, Evaluation of Agricultural Development From 1959/60 - 1979/80.

b) Calculated by subtracting percentage estimates for exports from percentage estimate for amount of the total marketed.

c) Based on 1978/79 Production Figures published by the Provincial Office of Agricultural Statistics for the Northwest.

n.a. - Not Available

Table 17 - Distribution of Farms According to the Utilization of their Production in Northwest Province

Tableau 17 - Répartition des Fermes selon l'Utilisation de leur Production dans la Province du Nord-Ouest

	% of farms / % de fermes			
	not producing crop ne produisant pas produit	selling crop completely produisant pour la vente uniquement	producing for home consumption only produisant pour l'auto consommation uniquement	producing to sell or for home consumption produisant pour vente ou auto-consommation
1. Coffee / Café	20.6	79.3	-	-
2. Plantain	15.5	-	39.8	44.7
3. Bananas / Bananes	16.9	-	38.9	44.2
4. Rice / Riz	97.1	-	0.4	2.5
5. Cocoyam Taro/Macabo	6.0	-	61.5	32.5
6. Cassava / Manioc	27.4	-	33.6	39.0
7. Yams / Igname	30.6	-	43.4	26.0
8. Groundnuts Arachides	37.6	-	21.1	41.3
9. Vegetables Légumes	10.9	-	63.4	25.7
10. Fruit	23.4	-	32.5	44.1
11. Palm Wine, raphia Vin de Palme, "	47.8	-	17.6	34.5
12. Palm Oil Huile de Palme	67.7	0.1	14.4	17.8
13. Chicken & Eggs Poulets & Oeufs	22.7	1.0	21.5	54.8
14. Maize / Maïs	4.9	-	50.6	44.4

Source : 1972/73 Agricultural Census, p. 329

Table 18 - Origin of Cattle Arriving at the Mendankwe (Bamenda) Cattle Market August 1978 - June 1979

Tableau 18- Provenance du Bétail arrivant au Marché de Mendankwe (Bamenda) Août 1978 - Juin 1979

Area of Origin Provenance	Number of Cattle Effectif de Bétail	% Total
MENTCHUM	5,878	42
Wum	(3,067)	(22)
Kom (Fundong)	(1,133)	(8)
Bum (Konene)	(1,314)	(9)
Essu	(92)	(1)
Unspecified/Indéterminé	(288)	(2)
DONGA-MANTUNG	3,246	23
Nkambe	(1,501)	(11)
Ndu	(698)	(5)
Dumbo-Misaje	(256)	(2)
Nwa	(708)	(5)
Unspecified/Indéterminé	(83)	(1)
BUI	2,972	21
MEZAM	1,274	9
MOMO	523	4
Subtotal	13,893	
Unspecified/Indéterminé	254	2
TOTAL	14,147	100
Number slaughtered in Bamenda Nombre de bêtes abattues à Bamenda	5,428	38

Source : Records of Area Council representative at the Mendankwe Market.

Données du représentant du Conseil Régional au Marché de Mendankwe

Table 19 - Cattle Movement from Northwest Province to Southwest, Littoral, Western and Central South Provinces, 1974/75 - 1978/79

Tableau 19 - Déplacements du Bétail de la Province du Nord Ouest vers les Provinces du Sud-Ouest, du Littoral, de l'Ouest et du Centre-Sud, 1974/75 - 1978/79

	Total	Southwest Sud-Ouest	Western & Littoral Ouest & Littoral	Central South Centre Sud
Total 1974/75	33,343	22,651	9,692	-
Total 1975/76	33,170	26,700	6,470	-
Total 1976/77	9,112	7,371	1,425	316
Total 1977/78	9,128	7,714	922	492
Total 1978/79	15,144	9,577	4,531	1,036

Source : Ministry of Animal Breeding and Industries, Provincial Delegation, Northwest Province, Annual Reports, also Divisional Quarterly Reports.

Ministère de l'Elevage et des Industries Animales, Délégation Provinciale, Province du Nord-Ouest, Rapports Annuels, ainsi que les Rapports Trimestriels de la Division.

Table 20 - Flow of Goats, Sheep, Pigs and Poultry from Production Area in Northwest Province to Consumption Points in and outside of the Province

Tableau 20- Flux des Chèvres, Moutons, Cochons et Volaille de la Région de Production dans la Province du Nord Ouest vers les Régions de Consommation à l'intérieur et à l'extérieur de la Province

Type of Livestock Type de Cheptel	Total Leaving Total au Départ	Southwest Sud-Ouest	Littoral & Western Littoral & Ouest	Central South Centre Sud	Northwest Nord-Ouest
1974/75					
Goats / Chèvres	8,844	1,435	7,364	40	-
Sheep / Moutons	3,875	379	3,496	-	-
Pigs / Cochons	567	322	245	-	-
Poultry / Volaille	20,107	12,877	6,898	322	-
1975/76					
Goats / Chèvres	6,662	2,012	7,247	403	-
Sheep / Moutons	5,157	953	3,669	535	-
Pigs / Cochons	1,857	1,292	549	16	-
Poultry / Volaille	22,254	7,719	11,013	3,522	-
1976/77					
Goats / Chèvres Sheep / Moutons	15,155	754	11,094	209	323
Pigs / Cochons	1,045	175	185	49	636
Poultry / Volaille	20,868	4,886	9,532	2,114	1,423
1977/78					
Goats / Chèvres Sheep / Moutons	8,036	1,382	5,326	363	965
Pigs / Cochons	465	162	5	208	90
Poultry / Volaille	19,797	5,443	6,770	2,593	3,251

Source : Annual Reports, Ministry of Animal Breeding and Industries, Provincial Delegation for Northwest Province.

Rapports Annuels, Ministère de l'Elevage et des Industries Animales, Délégation Provinciale du Nord-Ouest.

Table 21 - Annual Retail Food Prices, Bamenda, 1971-79 (CFA/kg)

Tableau 21 - Prix au Détail Annuels des Produits Alimentaires Bamenda, 1971-79 (CFA/kg)

	1971	1972	1973	1974	1975 (a.)	1976 (b)	1977	1978	1979	Ave.Annual Increase (c) Accroissement Annuel moyen
1. Arabica Coffee Café Arabica	170	165	170	175	200	190	245	325	300	6.4 %
2. Robusta Coffee Café Robusta	125	125	125	130	135	145	195	250	280	10.6 %
3. Plantain	12	12	14	15	18	20	31	32	22	11.4%
4. Bananas Bananes	12	13	12	14	21	20	25	35	30	12.2%
5. Rice / Riz	67	57	67	124	n.a.	n.a.	105	110	126	7.6 %
6. Maize / Maïs	16	25	20	17	51	50	47	n.a.	48	15.6 %
7. Cocoyam Taro/Macabo	17	17	14	20	24	n.a.	40	48	39	14.6 %
8. Cassava Manioc	9	9	10	11	13	n.a.	23	24	25	15.4 %
9. Sweet Potatoes Patates douces	12	12	14	16	n.a.	n.a.	33	37	30	15.9 %
10. Irish Potatoes P. de terre	33	26	35	29	42	51	53	51	73	10.9 %
11. Yams Ignames	73	70	75	83	55	45	84	101	56	-0.4 %
12. Onions / Oignons	135	135	133	136	104	200	200	99	2 0	6.6 %
13. Groundnuts Arachides	n.a.	67	62	107	174	n.a.	176	175	174	16.1 %
14. Beans (white) Haricots blancs	49	67	57	85	98	n.a.	119	152	99	11.4 %
15. Okra / Okro	99	94	83	104	212	n.a.	86	140	290	10.1 %
16. Tomatoes Tomates	84	85	74	75	86	n.a.	86	88	114	3.1 %
17. Pineapple Ananas	n.a.	16	17	19	28	n.a.	30	30	37	11.7 %
18. Cabbage / Choux	19	23	20	21	n.a.	50	62	50	46	15.8 %
19. Palm Oil Huile de Palme (1)	99	95	90	128	n.a.	n.a.	170	194	202	11.9 %
20. Salt / Sel	43	4	43	57	n.a.	n.a.	86	109	90	13.1 %
21. Eggs (1kg) Oeufs (un)	13	13	13	17	n.a.	n.a.	20	25	30	11.2 %
22. Dried Crayfish Langouste séchée	346	433	435	604	562	n.a.	663	1025	1224	14.6 %
23. Bone-in Meat Viande avec os	162	156	151	181	249	300	337	388	440	14.9 %
24. Boneless Meat Viande sans os	191	193	201	213	281	350	438	451	512	14.3 %
25. Intestines Abats	n.a.	n.a.	138	169	n.a.	n.a.	284	361	380	18.4 %
26. Pork / Porc	192	199	201	213	n.a.	n.a.	475	510	503	15.1 %
General Consumer Price Index (a) Indice Général des Prix à la Consommation	100	105	116	136	155	170	195	220	238	11.6 %
Annual Increase C.P.I. Accroissement annuel I.P.C.	-	5.0	10.5	17.2	13.9	9.7	14.7	12.8	8.2	-
Food Price Index Indice Prix Aliment.	100	112	123	140	162	181	203	249	258	12.7 %
Annual Increase F.P.I. (c) Accroissement annuel I.P.A.	-	12.0	9.8	13.6	15.7	11.7	23.2	11.7	3.6	-

Source :

Ministry of Economy and Plan, Provincial Office of Statistics, Northwest Province, Bamenda. Retail prices are simple averages of bi-monthly recordings except where noted. Prices indices (Moderate Income Families in Yaoundé) from Bulletin Mensuel de Statistique.

Ministère de l'Economie et du Plan, Office Provincial des Statistiques, Province du Nord-Ouest, Bamenda. Les prix de détail sont de simples moyennes relevées deux fois par mois excepté lorsqu'il y a une note spéciale. Les indices des prix (famille à revenu moyen de Yaoundé) proviennent du Bulletin Mensuel de Statistique.

(a) Based on prices collected during the first five months of 1975.

Basé sur les prix relevés durant les cinq premiers mois de 1975.

(b) No prices were collected by the Provincial Office of Statistics in Bamenda during 1976, as all available staff were collecting national census data. Available retail prices were taken from the records of the Bafreda Cooperative Vegetable Society and the meat prices were drawn from the Annual Report for Northwest Province, Ministry of Animal Breeding and Industries (p. 30).

L'Office Provincial de Statistiques n'a collecté aucun prix durant l'année 1976 à Bamenda étant donné que le personnel procédait à la collecte des données pour le recensement national. Les données sur les prix des récoltes sont issus les registres de la coopérative de légumes de Bamenda; tandis que les prix de de la viande sont tirés du Rapport Annuel de la Province du Nord-Ouest, Ministère de l'Elevage et des Industries Animales.

(c) Trend based on semi-log regression of the form: log Y = a + bx
Tendances basées sur la régression semi-log de forme : log Y = a + bx.

(d) Prices paid to producer, including transport, except for 1979, taken from the records of Northwest Cooperative Association.

Les prix payés au producteur, y compris le transport, excepté pour 1979, sont tirés des rapports de l'Association Coopérative du Nord-Ouest.

(e) Prices indices in this table use 1971 = 100. Calculated from using 1968 = 100.

n.a. non available
non disponible.

(1) litres

Table 22 - Deflated Annual Net II Food Prices, Bamenda, 1971 - 1979 (Constant CFAF / kg)

Tableau 22 - Prix des Produits Alimentaires, Bamenda, 1971 - 1979 (en FCFA constants / kg)

	1971	1972	1973	1974	1975	1976	1977	1978	1979
1. Arabica Coffee (a) Café Arabica	179	157	151	129	129	112	126	148	126
2. Robusta Coffee (a) Café Robusta	125	119	108	96	88	85	100	114	117
3. Plantain	12	10.7	11.4	17.7	15.1	11	13.9	12.4	8.5
4. Bananas Bananes	12	11.6	9.8	10	13	11	11.7	14.1	11.6
5. Rice / Riz	67	60	71	89	n.a.	n.a.	47	44	49
6. Maize / Mais	16	22.3	16.3	12.1	31.5	30.9	21.1	n.a.	18.6
7. Cocoyams Taro/Macabo	17	15.2	13	14.1	14.8	n.a.	17.9	19.3	15
8. Cassava / Manioc	9	8	8.1	7.9	8	n.a.	10.3	9.3	9.7
9. Sweet Potatoes Patates douces	12	10.7	11.4	11.1	n.a.	n.a.	14.8	14.9	11.6
10. Irish Potatoes Pommes de terre	34	32.1	28.5	20.7	25.9	28.2	23.8	20.5	28.3
11. Yams / Ignames	73	62	62	59	33.9	24.9	27.7	40.6	21.7
12. Okros / Légumes	105	96	108	77	64	119	94	46	78
13. Groundnuts Arachides	n.a.	60	50	76	107	n.a.	79	70	67
14. Beans (White) Haricots blancs	49	60	46	61	60	n.a.	53	61	38
15. Okra / Okro	99	84	67	74	131	n.a.	39	56	112
16. Tomatoes Tomates	64	76	60	54	53	n.a.	29	35	44
17. Pineapple Ananas	n.a.	14.3	14.8	13.6	17.3	n.a.	13.5	12	14.3
18. Cabbage / Choux	19	20.5	16.3	15	n.a.	27.6	27.8	20	17.8
19. Palm Oil (liter) Huile de Palme (l)	99	85	73	91	n.a.	n.a.	76	78	78
20. Salt / Sel	43	38.4	35	39	n.a.	n.a.	39	43.8	35
21. Eggs (one) Oeufs (un)	13	11.6	12.2	10.7	n.a.	n.a.	9	10	12
22. Dried Crayfish Langoustes séchées	396	387	518	431	447	n.a.	297	411	474
23. Bone-in Meat Viande avec os	163	139	123	127	154	166	166	159	179
24. Boneless Meat Viande sans os	191	172	163	149	174	193	196	181	198
25. Intestines Abats	n.a.	n.a.	112	121	n.a.	n.a.	127	145	147
26. Pork / Porc	193	178	163	157	n.a.	n.a.	213	205	195
Food Price Index Indice des Prix Alimentaires	100	112	123	140	162	181	223	249	258
Consumer Price Index Indice des Prix à la Consommation	100	105	116	136	155	170	195	220	238

Source :

Table 21, deflated by the Food Price Index for Middle-Income (Cameroonian Families in Yaoundé)

Tableau 21, prix constants pour l'indice des prix alimentaires au détail pour les revenus moyens (famille camerounaise à Yaoundé)

(a) Deflated by Consumer Price Index.

(1) litres

Table 24 - Seasonal Indices for Selected Agricultural Commodities in Northwest Province (Five Year Average)

Tableau 24 - Indices Saisoniers pour quelques Produits Agricoles dans la Province du Nord-Ouest (Moyenne sur cinq Ans)

	Month / Mois												High Month Mois Max.	Low Month Mois Min.	Range Index Etendue Indice
	J	F	M	A	M	J	J	A	S	O	N	D			
Irish Pot. P.d.terre	103	132	110	111	82	72	80	84	74	96	61	105	Apr	Jun	79%
Maize/Maïs	91	96	94	112	119	131	123	100	90	64	83	86	Jun	Oct	47%
Beans Haricots	85	93	99	102	105	111	98	110	104	101	100	96	Jun	Jan	26%
Groundnuts Arachides	99	102	102	112	107	102	101	97	91	93	99	96	Apr	Sep	21%
Tomatoes Tomates	102	97	96	97	97	95	90	95	94	103	112	118	Dec	Jul	28%
Cocoyams Taro/Macabo	103	89	90	95	99	99	103	104	100	115	107	94	Oct	Feb	25%

Source : Own Calculations, Prices from Provincial Office of Statistics.

Table 24 - Annual Ranges of Seasonal Indices (%)

Tableau 24 - Etendues annuelles des Indices Saisoniers (%)

Year Année	Irish Potat. P. de Terre	Maize Maïs	Beans Haricots	Groundnuts Arachides	Tomatoes Tomates	Cocoyam Taro/Macabo
1972	116	91	43	31	72	16
1973	64	76	56	19	92	36
1974	62	49	31	26	57	42
1976	-	96	-	-	-	-
1977	71	54	73	90	51	74
1978	163	-	58	104	49	44

Source : Own Calculations

Table 25 - Ranges of Annual Seasonal Indices & Average Seasonal Index

Tableau 25 - Etendue des Indices Saisoniers Annuels et Indice Saisonier Moyen

	Annual Ranges/(5 years) / Etendues annuelles (5 ans)				Ave. Seasonal Index Range Indice Saisonier Moyen
	Lowest Le + bas	Highest Le + élevé	Standard Deviation Ecart-type	Mean Moyenne	
Irish Potato / P. de Terre	61	177	44	95	79
Maize / Maïs	80	176	28	64	47
Beans Haricots	56	107	18	50	26
Groundnuts Arachides	76	128	14	39	21
Tomatoes Tomates	68	140	9	58	28
Cocoyams Taro/Macabo	61	137	21	42	25

SOURCES : Own Calculations
Calculs personnels

Table 26 - Prices of Produce in Sample Markets (in CFA francs)

Tableau 26 - Prix des Produits sur les Marchés de l'Echantillon (en francs CFA)

Markets Marchés	Palm Oil tin(a) (bidon)	Palm Oil btl(b) (bout)	Cocoyam (basket) Taro/Maca. (panier)	Maize (basket) Maïs (panier)	Potat. (basket) P.d.ter. (panier)	Ocean Fish (cup) Poisson (verre)	Gari (cup) Gari (verre)	Rice (cup) Riz (verre)
	Huile de Palme							
Santa	4100	150	450	650	750	30/50 (d)	7.1	33
Bali	4000	150	350	600	e	30/50	8.3	29
Guzang	3600	140	300	e	e	30/50	6.7	29
Meta	3700	140	300	e	400	30/50	6.7	29
Bafut	3600	140	400	e	e	30/50	6.7	29
Babanki	4000	150	300	550	e	40/70	7.1	33
Bambui	4100	150	450	550	e	30/50	9.1	29
Bambili	4000	150	400	550	600	30/50	10.0	29
Babanki-Tungo	4100	150	400	500	600	30/50	6.7	e
Bamenda	3900	140	500	650	750	30/50	9.1	29
V	.05	.04	.17	.10	.23	.11	.16	.07

(a) 4 gallons = 18 litres
(b) 1 pint = .6 litres
(c) 4 gallons = (approx) 12.5 kg
(d) Two types of fish are sold : dried crayfish and dried sardine.
Deux sortes de poisson sont en vente : des langoustes séchées et des sardines séchées.
(e) not available / non disponible.

Table 27 - Marketing Costs for Basic Commodities Sold in Bamenda

Tableau 27 - Coûts de la Mise sur le Marché de Certains Produits à Bamenda

Origin Provenance	Road Distance to Bamenda Distance par route de Bamenda	Price (100kg) Prix (100kg)	Transport (a) Transport (a)	Handling (b) Manutention (b)	Profit Profit	Bamenda Price Prix à Bamenda
A. COCOYAM / TARO - MACABO						
Bambui	12 km	3150	150	100	100	3500
Bambili	16	2800	150	100	450	3500
Bali	24	2450	300	100	650	3500
Bafut	24	2800	300	100	300	3500
Badanki	32	2100	450	100	850	3500
Meta	35	2100	450	100	850	3500
Guzang	45	2450	500	100	450	3500
Oshie	65	1400	1200	50	850	3500
Average (c) Moyenne	35	2290	510	90	610	3500
B. GARI						
Bali	24	3859	300	100	300	4550
Bafut	24	3550	300	100	600	4550
Average Moyenne	24	3670	300	100	480	4550
C. MAIZE / MAIS						
Bambui	12	3850	150	100	450	4550
Bali	24	4200	300	100	-50	4550
Bali-Kumbat & Babessi	70	3500	400	100	550	4550
Ndu	145	2500	800	200	1050	4550
Average Moyenne	86	3270	500	130	650	4550
D. PALM OIL / HUILE DE PALME						
Meta	35	40700	750	100	1350	42900
Guzang	45	39600	900	100	2300	42900
Widekum	67	37400	1500	150	3850	42900
Lobe (Palmol)	400	31900	2000	150	5550	39600
Average Moyenne	250	34600	1720	150	4600	41070

(a) Includes cost of personal transport.
Y compris le prix du transport des personnes.

(b) Includes paiment to carriers, market fees and patente fees.
Y compris le paiment des porteurs, les taxes de marché et la patente.

(c) Costs are weighted according to quantity shipped
Les prix sont pondérés par les quantités transportées.

Table 28 - Costs as percent of Producer Price

Tableau 28 - Coûts en pourcentage des Prix au Producteur

Origin Provenance	Distance Distance	Transport Transport	Handling Manutention	Gross Profit Bénéfice brut	Net Profit Bénéfice net	TOTAL
A. COCOYAM / TARO - MACABO						
Bambui	12 km	5	3	3	(3)	11
Bambili	16	5	4	16	(15)	25
Bali	24	12	4	27	(23)	43
Bafut	25	10	4	11	(9)	25
Babanki	32	21	5	40	(32)	66
Meta	35	21	5	40	(32)	66
Guzang	45	20	4	18	(14)	43
Oshie	65	85	4	61	(32)	150
Average Moyenne	35	22	4	27	(21)	53
B. GARI						
Bali	24	8	3	8	(7)	19
Bafut	24	8	3	17	(15)	28
Average Moyenne	24	8	3	13	(12)	24
C. MAIZE / MAIS						
Bambui	12	4	3	11	(11)	18
Bali	24	7	2	-1	(-1)	8
Bali-Kumbat & Babessi	70	11	3	16	(14)	30
Ndu	145	32	8	42	(30)	82
Average Moyenne	86	15	4	20	(17)	39
D. PALM OIL / HUILE DE PALME						
Meta	35	2	-	3	(3)	5
Guzang	45	2	-	6	(6)	8
Widekum	67	4	-	10	(10)	14
Lobe	400	6	-	17	(16)	23
Average Moyenne	250	5	-	13	(13)	18

(a) Gross profit divided by the cost of product, transport and handling
Bénéfice brut divisé par le prix du transport, le prix du produit et la manutention.

Table 29 - Estimated Average Costs and Returns of Irish Potato Trade : Banso - Douala

Tableau 29 - Estimation des Coûts et Recettes Moyens du commerce des Pommes de Terre : Banso - Douala

	Total Cost / Coût Total	Per unit (100 kg) / Par unité (100 kg)	% of Total Cost / % du Coût Total
1. Cost of buying 150 bags of Irish Potatoes / Coût de l'achat de 150 sacs de pommes de terre	750,000	5,000	77.8
2. Market fees - Banso / Taxes du marché de Banso	15,000	100	1.5
3. Handling charges - Banso / Manutention - Banso	3,750	25	.4
4. Transport Banso - Douala	135,000	900	14.0
5. Handling charges - Douala / Manutention - Douala	7,500	50	.8
6. Storage - Douala 50 CFA/ sack/2 days, for 75 bags / Entrepôt - Douala 50 CFA/ sac/2 jour / pour 75 sacs	7,500	50	.8
7. Losses 5% X 750,000 CFA / Pertes 5% X 750 000 CFA	37,500	250	3.8
8. Return transport for trader Douala - Banso / Voyage de retour du commerçant Douala - Banso	3,800	25	.4
9. Trader lodging & meals in Douala / Hébergement et repas du commerçant- Douala	4,000	27	.4
10. Cost of capital 750,000 X 20% X .011 / Capital	1,650	4	.1
TOTAL	965,700	6,438	100
Return from sale of 142.5 bags - Douala (8,000 CFA/bag) / Recette de la vente de 142.5 sacs - Douala (8,000 CFA/sac)	1,140,000	7,600	-
NET RETURN TO TRADER / BENEFICE NET DU COMMERÇANT	174,300	1,162	-

Table 30 - Breakdown of Trader's Cost (excluding Potato purchase cost)

Tableau 30 - Ventilation des Coûts du Commerçant (non compris l'achat des pommes de terre)

	Costs / Coûts	% of Trader Cost / % du Coût du Commerçant
Transport	135,000	62.5
Losses / Pertes	37,500	17.3
Market Fees / Taxes de Marché	15,000	7.0
Handling / Manutention	11,250	5.2
Trader Transport / Voyage Commerçant	7,800	3.6
Meals, Lodging / Repas, Hébergement		
Storage / Entrepôt	7,500	3.5
Cost of Capital / Coût du Capital	1,650	.8
TOTAL	215,700	100

Table 31 - Costs and Returns of Trekking 39 Head of Cattle from Nkambe to Bamenda, August 1979 (CFA)

Cost Item	Total Cost	Cost/animal
1. Cost of buying 39 head in Donga-Mantung assembly markets	2,238,600	57,400
2. Market toll at assembly markets	3,900	100
3. Cattle movement permit	1,950	50
4. Commission for brokers in assembly markets	9,750	250
5. Three drovers at 8,000-10,000 each for 8 - 10 days	27,000	692
6. Food for drovers: 3 x 2,000	6,000	154
7. Forced sale of cow (mortality) (2)	(27,000)	(692)
8. Weight loss	Negligible	Negligible
9. Crop damage	--	--
10. Market toll at Mendankwe	3,800	97
11. Salaries at Mendankwe herder/night watchman	3,800	97
12. Commission for brokers in Mendankwe	19,000	500
13. Amortization of trader's license (21,840 per year for 360 animals or 30 head per month)	2,360	61
14. Round trip transport for trader	2,800	72
15. Taxis from Bamenda to Mendankwe market and back (1 round trip)	600	15
16. Cost of capital (2,238,600 invested for 21 days at 12% interest)	15,446	396
TOTAL COST	2,335,012	59,872
Return from sales of 38 head at Mendankwe (38 X 62,400) and 1 cow en route (30,400) at a 27,000 loss	2,401,600	61,579
Net return to trader's labor, management and capital	66,588	1,707

(1) The cost per animal of 57,400 is obtained by subtracting a gross margin of 5,000 per head from the average price (62,400) paid by butchers at slaughter cattle of Mankwe in July 1979.

(2) The loss from the cow sold is listed for illustrative purposes but it is not considered a cost item, since including it would overstate costs. The cow that was sold en route was already paid for in Nkambe. Adding 27,000 to costs would "double" count. The correct way to account for the 27,000 loss is to note the low return (30,400) on the animal in the return category.

Table 32 - A breakdown of Trader's Costs (excluding cattle purchase)

Labor Costs	Brokers' Commissions	Cost of Capital	Taxis, Drivers, Travel	% for Transport
1. Drovers' Salaries and Food Money 2. Herder at Mendankwe				
38.2 %	29.8 %	16.0 %	12.5 %	3.5 %

Table 33

COMPARISON OF THE COSTS OF TREKKING AND TRUCKING 30 HEAD OF CATTLE FROM BAMENDA TO KUMBA/DOUALA, JULY 1979 (FCFA)

ITEM	TREK		TRUCK (3 TRUCKS)	
	Total Cost	Cost per Animal	Total Cost	Cost per Animal
1. Drovers' salaries.[1]	3 x 10,000 = 30,000	1,000	3 x 8,000 = 24,000	800
2. Food for Drovers.	3 x 3,000 = 9,000	300	3 x 500 = 1,500	50
3. Vaccinations & Cattle Movement Permit	4,500	150	4,500	150
4. Round trip to market	4,000	133	4,000	133
5. Truck Rental	---	---	3 x 40,000=120,000-50,000 150,000	4,000-5,000
6. Food for truck driver and his apprentice.	---	---	3 x 1,500 4,500	150
7. Amortization of Traders License.[2]	598 - 838	20-28	60	2
8. Indemnities for crop damage.[3]	?	?	0	0
9. Forced Sales, Mortalities.[4]	0 - 84,400	0 - 2,813	?	?
10. Weight loss.[5]	?	?	---	---
11. Cost of Capital.[6]	5,661 - 13,210	189-440	566 - 944	19-31
TOTAL COSTS	53,759-145,948	1,792-4,864	159,126 - 189,504	5,304-6,31
TIME IN TRANSIT	10 - 14 DAYS		1 DAY	

[1] The Drovers accompanies each truck to watch over the cattle.

[2] The annual charge for a business license is 21,840 F CFA for traders who sell 301-400 head per year. Multiplying 21,84 by the fraction of a year needed to transport the animals yields the amount of license amortized over that period of tim

[3] We were unable to obtain this data.

[4] The assumption here is the same as that used in Table . To facilitate comparison of the costs of trekking and trucking, where returns are not being compared, losses due to forced sale and mortality are considered explicit costs. Hence, they are added to the total cost of trekking.

[5] Animals trekked to Fo'a lose weight in the dry season, but they lose little if any weight during the rainy season. The amount of weight lost and the cost of losses were not determined.

[6] Capital Cost = Capital outlay for Cattle x Opportunity Cost of Capital x Fraction of Year during which Capital is in Cattle. Capital Cost = 1,722,000 x 12-20 percent x Fraction of Year for Trekking/Trucking