

AGRICULTURAL CHANGE IN THE NORTHERN
PROVINCE OF ZAMBIA, 1948-1978: A CASE STUDY
OF MAIZE PRODUCTION IN KASAMA DISTRICT.

236143

BY

DONALD HEZIE JOSAMU BWALYA

A DISSERTATION SUBMITTED TO THE UNIVERSITY
OF ZAMBIA IN PARTIAL FULFILMENT OF THE
REQUIREMENTS OF THE DEGREE OF MASTER OF
ARTS IN HISTORY.

THE UNIVERSITY OF ZAMBIA

LUSAKA

1989

APPROVAL

This dissertation of DONALD HEZIE BWALYA is approved as fulfilling part of the requirements for the award of the degree of Master of Arts in History by the University of Zambia.

DECLARATION.

Signature:..... Date: 25-09-89

This dissertation represents my own work 18-5-90

and it has not previously been submitted
Signature:..... Date: 18.5.90

for a degree at this or any other
University. Signature:..... Date: 21/05/90

Signature

Date 18/5/90

APPROVAL

This dissertation of DONALD HEZIE BWALYA is approved as fulfilling part of the requirements for the award of the degree of Master of Arts in History by the University of Zambia.

Signature: L. K. Lungu Date: 25-09-89

Signature: Fay. Baddalen Date: 18-5-90

Signature: A. M. K. Mulenga Date: 18.5.90

Signature: Chif. g. Date: 21/05/90

DEDICATION

Dedicated to the living memory of my
late mother and father, Rachel Mulenga
and Josamu Kashimu.

ABSTRACT

This dissertation studies agricultural change in the Northern Province of Zambia. It analyzes the agricultural policies and practices of both the Northern Rhodesian Colonial and Zambian Governments between 1948 and 1978. The focus is maize production in Kasama District. There has been misplaced emphasis on the agricultural potential of Northern Province. By analyzing the indigenous agriculture in Kasama District and the agricultural policies and practices of the colonial government, this study establishes why Northern Province in general and Kasama District in particular, did not pick up in maize production during the period of colonial administration.

When the British South Africa Company (BSAC) extended its operations to North-Eastern Rhodesia, it introduced tax in 1903. The introduction of taxation in Kasama District pushed males into migrant wage employment thus depriving the indigenous agriculture of able-bodied men. At the same time, the Company also tried to ban chitemene system in Kasama District between 1905 and 1909, in an effort to shift people from producing millet to producing cassava. In the Company's opinion, cassava made tax collection and administration easy because it encouraged permanent settlement. The result was that by the 1940s and 1950s, there was a significant swing from millet to cassava among most families.

The colonial government's demand for maize as both cash crop and food for urban workers after the second world war, led to the creation of settlement schemes in Kasama District and elsewhere, in an effort to shift the local population from subsistence to cash cropping. But despite the support given to maize production, peasants in Kasama District did not break away from millet and cassava production. This was due to a number of factors such as the absence of male labour and the competition in labour requirements between subsistence and maize production. Above all, maize itself was not a staple food and this problem was further compounded by the absence of markets and communication networks in the Northern Province.

The study has also shown that the agricultural policies and practices of the Zambian Government since the attainment of political independence in 1964 have followed colonial practice closely, extending and adapting it in certain areas. A case in point is Zambia's choice of maize at independence as a major cash and staple crop to the exclusion of other important crops such as cassava, sorghum and millet. Unlike the colonial government which concentrated agricultural infrastructure in Southern and Central Provinces, the Zambian Government, however, in its effort to boost maize production, expanded agricultural

infrastructure to the areas which had been neglected during the colonial period. There is no doubt that through the expansion of agricultural infrastructure, coupled with the new duo role assumed by maize as a source of both food and cash income, peasants of Kasama District, like the rest of the Northern Province, were drawn into maize production. The result was substantial increase in maize output from 1964.

ACKNOWLEDGEMENT

Works of this nature usually result from the labours of their authors and the ideas, support and encouragement of many people. Specifically, I owe much to my supervisor, Professor Martin H.Y. Kaniki, under whose guidance this study developed from inception to fruition. I am also indebted to all the academic staff of History Department at the University of Zambia who not only guided me towards a heightened understanding of the study, but made me feel at home each time I consulted anyone of them. I am grateful to them all.

The initial understanding of the study was taken a step further by the profound inspiration of Professors E. Colson and T.O. Ranger with whom I discussed the dissertation proposal. Their knowledge of the economic life of Central Africa greatly illuminated for me much that was dark and obscure. To them, I extend my thanks. The list of acknowledgement would be incomplete if I did not mention a special debt to Dr. D.M. Mbewe in the School of Agriculture (UNZA). I learnt a lot from his firm grasp of soil characteristics and maize ecology.

In Kasama District, my sincere thanks go to the following: the members of staff of the Ministry of

Agriculture and Co-operatives, the Northern Co-operative Union (NCU), the Village Agricultural Programme (VAP), the Intensive Rural Development Programme (IRDP), the Soil Productivity Research Programme (SPRP), the Misamfu Regional Research Station, the Lima Bank (former AFC) and the many informants too numerous to mention here. I am particularly grateful to Paramount Chief Chitimukulu 36 (Mutale Chitapankwa II), who despite his many duties, availed himself for a personal interview and gave me the valuable information I sought.

I received endless kindness from many people in both Kasama District and Lusaka. My greatest debt of all is to Mr. and Mrs. John S. Matandiko of Kasama and to Mr. Joel M. Ngo of Lusaka, who gave me much needed material sustenance during the time of research and writing of the dissertation. To them I say, thank you very much. I am also grateful to Mrs. E.M. Nyambe who typed this work.

My wife, Joyce Bwalya, was a constant support. I am deeply indebted to her and to my children: Grace, Kashimu, Mwila, Yande, Mulenga and Twiza for their patience as well as moral support. Finally, I must assume full responsibility, however, for errors of any sort which may have crept into the work.

ABBREVIATIONS

AFC	Agricultural Finance Company (Lima Bank from 1st June, 1987).
ARPT	Adaptive Research Planning Team
BSAC	British South Africa Company
CAN	Calcium Ammonium Nitrate
COZ	Credit Organization of Zambia
FNDP	First National Development Plan
IMF	International Monetary Fund
IRDP	Intensive Rural Development Programme
KCMU	Kasama Co-operative Marketing Union
NAZ	National Archives of Zambia
NRG	Northern Rhodesia Government
NAMBOARD	National Agricultural Marketing Board
NPCMU	Northern Province Co-operative Marketing Union
NCU	Northern Co-operative Union
PFS	Peasant Farming Scheme
pH	Soil Acidity
RRC	Rural Reconstruction Centre
SPRP	Soil Productivity Research Programme
SNDP	Second National Development Plan
VPC	Village Productivity Committee
WDC	Ward Development Committee
ZNS	Zambia National Service

TABLE OF CONTENTS

<u>CONTENTS</u>	<u>PAGE</u>
ABSTRACT	v
ACKNOWLEDGEMENT	viii
ABBREVIATIONS	x
TABLE OF CONTENTS	xi
LIST OF ILLUSTRATIONS	xii
<u>CHAPTER</u>	
1. INTRODUCTION	1
2. BACKGROUND: LOCATION, CLIMATE AND SOILS	10
3. THE COLONIAL GOVERNMENT EFFORT TO PROMOTE MAIZE AS A CASH CROP IN THE NORTHERN PROVINCE, 1948-1963.....	26
4. TURNING POINT IN THE AGRARIAN ECONOMY OF NORTHERN PROVINCE, 1964-1978	59
5. CONCLUSION	96
APPENDIX	100
SELECTED BIBLIOGRAPHY	102

LIST OF ILLUSTRATIONS

<u>MAP</u>		<u>PAGE</u>
11	LOCATION OF STUDY AREA: KASAMA DISTRICT	3
2.	KASAMA DISTRICT: RELIEF	11

CHAPTER ONE.

INTRODUCTION

Most agricultural studies on Zambia include commercial maize production and these have concentrated on areas with relatively adequate access to urban markets. These areas where many European settlers grew maize are along the line of rail between Livingstone and the Copperbelt.¹

Lombard and Chilivumbo have dealt with co-operatives in some areas, while J.D. Eardmans has studied government policy on Peasant Farming Schemes.² Scholarly research on agriculture in general, co-operatives, and peasant farming schemes after the attainment of political independence in 1964 have continued to focus on the same areas, the line of rail and the Eastern Province. In contrast, areas such as the Northern Province which were considered backward agriculturally during the colonial period have received relatively limited attention, both before and after independence.

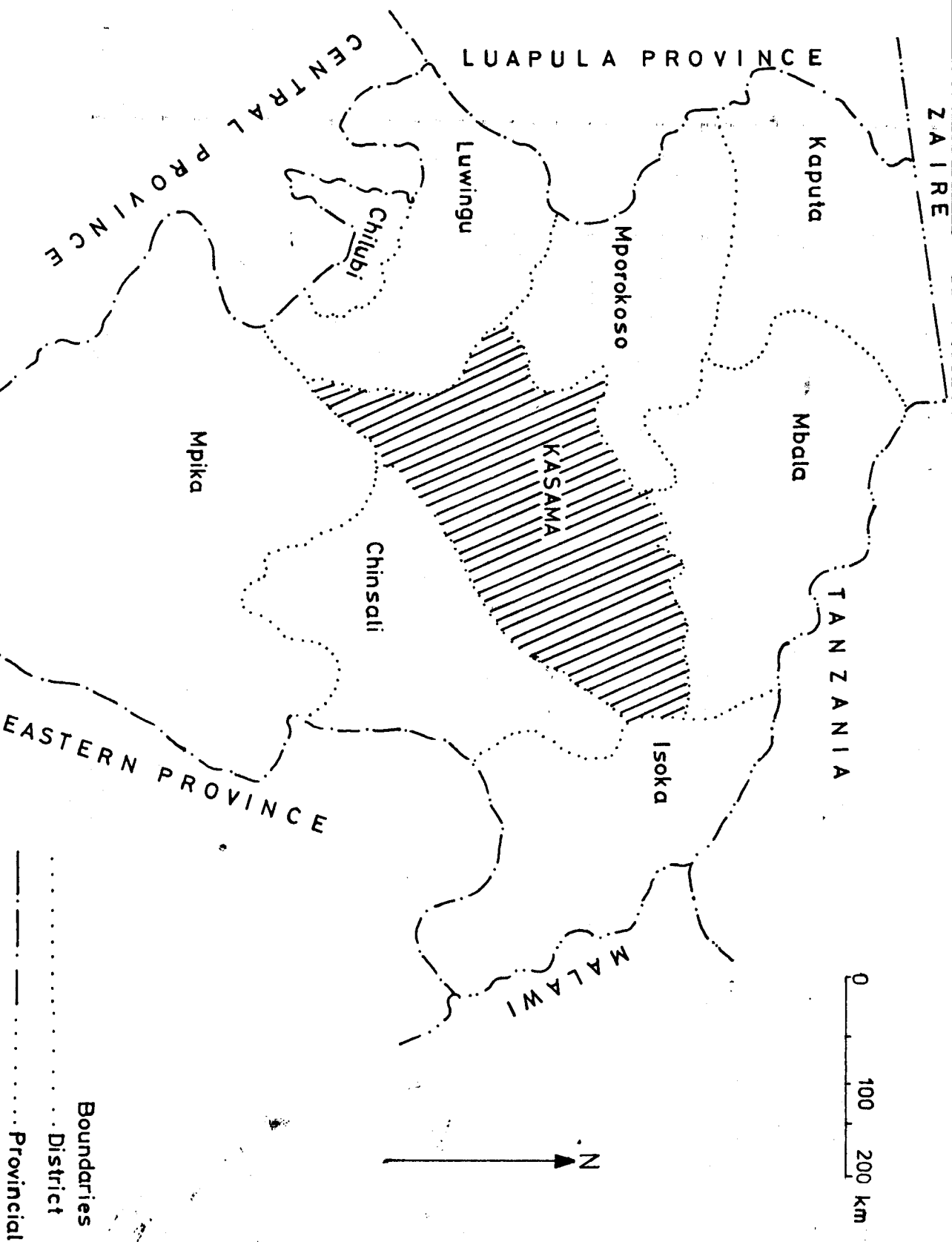
J.F.A. Russell's work is among the few studies on maize production in Northern Province.³ Russell's study covers the period 1965-1968 and deals with costs, returns and future prospects of maize production in the province. The period covered, however, is too short for one to appreciate dramatic increases in maize production which

Northern Province has experienced since independence. In 1981 and 1983 the Soil Productivity Research Programme (SPRP) produced government reports on soil productivity. The overall purpose of this programme, and particularly its focus on Northern Province, is to provide the government with a framework for producing more permanent and maize-related farming systems in high rainfall areas. These areas include Northern, Luapula, Copperbelt and North Western Provinces. C.M. Bwalya's study of agricultural transformation in Mpika District is quite good, but lacks historical perspective on socio-economic change.⁴

It is not merely the long established attitude that Northern Province is an agriculturally backward province that has led to relatively limited official and scholarly studies, that justify the study. But, the increase in the production and marketing of maize in the province since 1964, point to a need to explore factors that have led to this change especially as this increase strongly contradicts the views of Audrey Richards. Writing in the late 1950s, she observed that the Bemba country was agriculturally one of the toughest the colonial government had to deal with.⁵

In this dissertation, we analyze aspects of agricultural change in the Northern Province of Zambia from 1948 to 1978. The method of inquiry used is the case study. Thus, the interaction of various factors in the shaping

LOCATION OF STUDY AREA: KASAMA DISTRICT



of local economies of Northern Province is examined in one context, that of Kasama District. It is hoped that the narrative account of economic and social change will illuminate what is depicted by the theoretical considerations. While minor variations are visible from place to place, the broad pattern of the process in Kasama District holds true for most districts of the Northern Province.

The immediate context of agricultural change in the Northern Province involved interactions among a variety of factors over the years. These factors include the British South Africa Company (until 1923), the British Colonial Office administration (until 1964), the Government of the Republic of Zambia (since 1964), the heterogeneous mass of African inhabitants and ecological change in the province.

There has been misplaced emphasis on the lack of agricultural potential of the Northern Province. For instance, there were persistent colonial reports that Northern Province had no agricultural potential because soils were poor and that people themselves were disinclined to farming.⁶ This study has two major objectives. First, it intends to investigate why the Northern Province in general, and Kasama District in particular, did not pick up in maize production during the colonial period. Secondly, to analyze the factors which contributed to a dramatic increase in production and

commercialization of maize in Kasama District during the 1970s.

There are two theses to be argued in this study. First, is that Northern Province remained unproductive in maize farming during the colonial period not because it had no agricultural potential, nor that the people in the Province were poor agriculturalists, but because of other factors. When the British South Africa Company began operating in North-Eastern Rhodesia, it imposed taxation on Africans in 1903. The introduction of taxation in Kasama District pushed males into migrant wage labour in the Southern African regional economic system. During the 1940s and the 1950s, the change in the agricultural policies of the British Colonial government consequent upon the demand for maize and other cash crops, led to the creation of the Peasant Farming and Settlement Schemes in Kasama District and elsewhere. However, the schemes in Kasama District did not really succeed as centres for maize or cash crop production because of labour constraints, poor pricing and problems of marketing and communication networks.⁷ These problems were aggravated by maize itself not being a staple food for the people of Kasama District.

The second thesis is that the deliberate post-colonial state-policies which culminated in the expansion of agricultural infrastructure, led to the increased production and

marketing of maize in the Northern Province between 1964 and 1978. For example, the pricing policy during the period under discussion aimed at encouraging the peasants to shift from subsistence to cash cropping in maize. Producer prices for maize were higher in deficit areas (Northern, Luapula, Western and North-Western Provinces) than in surplus areas (line of rail and Eastern Provinces).⁸

This work attempts to make two contributions to the understanding of the economic history of Zambia. First, that the economic policies and practices of the NRG were in the interest of the regional and metropolitan economies. The exodus of male labour migrants, for instance, caused a lapse in the agricultural cycle of Kasama District while it promoted interests of international capital in Southern Rhodesia and elsewhere. Northern Province was treated as an important labour reservoir. This indeed is a clear manifestation of underdevelopment.

The second contribution is that the continued exposure of the peasantry to a money economy, led to agricultural transformation in Kasama District, which subsequently led to socio-economic differentiation. This argument is borne out by the fact that in some ways there were appreciable continuities between the policies of both the NRG and the post-colonial state, particularly on maize production. The

introduction of schemes in Kasama District by the NRG, was concerned,⁷ among other things, with ways of 'converting' the local population from subsistence to cash economy.⁹ The Zambian Government, in particular, promoted maize production because, 'maize was essential to Zambian farmers as a first step for entry into commercial farming'.¹⁰ Thus, one of the ways in which socio-economic differentiation was exhibited in Northern Province was through access to the production and marketing of maize. For example, the poor peasants, by virtue of their inability to gain access to credit facilities and other agricultural services, found it difficult to sufficiently expand their maize production. Hence, the substantial increase in production and commercialization of maize experienced by Northern Province between 1964 and 1978, was undertaken for the most part by the well-to-do emergent and commercial farmers in combination with government and parastatal institutions and not the poor peasants who constituted the majority of the Northern Province population.¹¹

The fact that Zambia changed from pounds, shillings and pence (£.s.d.) to Kwacha and ngwee (K n) in January 1968, most figures have been written in Kwacha and ngwee.

CHANGED CURRENCY.

<u>OLD</u>		<u>NEW</u>
One penny (1d)	=	One ngwee (1n)
Six pence (6d)	=	Five ngwee (5n)
Twelve pence (12d)	=	Ten ngwee (10n)
Two shillings and six pence (2/-6d)	=	Twenty-five ngwee (25n)
Ten shillings (10/-)	=	One kwacha (K1)
One pound or 20 shillings (£1)	=	Two kwacha (K2).

NOTES ON CHAPTER ONE

1. K.P. Vickery, 'The Making of a Peasantry: Imperialism and the Tonga Plateau Economy, 1890-1936' (Ph.D. Thesis, Yale University, 1978), pp. 463-523; see also, J.C. Momba, 'The State, Peasant Differentiation and Rural Class Formation in Zambia: A Case Study of Mazabuka and Monze Districts', (Ph.D. Thesis, University of Toronto, 1982), pp. 126-142.
2. A. Chilivumbo, 'Baseline Study: Communal Agrarian Co-operative Societies: An Experiment in Rural Societies', (Lusaka: RDSB-UNZA, 1984), pp. 15-65; see also, J.D. Eardmans, 'An Inventory of Settlement Schemes in Zambia', (Lusaka: Ministry of Rural Development, 1974), pp. 1-20.
3. J.F.A. Russell, Maize Production in the Northern Province: Costs, Returns and Future Prospects, (Lusaka: Government Printer, 1968), pp. 1-10.
4. C.K. Bwalya, 'Rural Development and Agricultural Transformation in Northern Zambia: A Study of the Historical and Contemporary Sources of Agricultural Backwardness in Mpika District', (ph.D.) Thesis, University of East Anglie, 1980), pp. 182-214.
5. A.I. Richards, 'A Changing Pattern of Agriculture in East Africa: The Bemba of Northern Rhodesia', Geographical Journal, 124, 1958, P. 304.
6. For details, see C. Gouldsbury and H. Sheane, The Great Plateau of Northern Rhodesia, (London: Edward Arnold, 1911), p. 303.; NAZ, SEC 2/1297, Annual Report upon Native Affairs for Northern Province, 1935-37.
7. NAZ,NR/17/106, Peasant Farming in Northern Province, 1956-1962; see also, A.I. Richards, 'Changing Pattern of Agriculture in East Africa: The Bemba of Northern Rhodesia', Geographical Journal, 124, 1958, p. 304.

8. D.J. Dodge, Agricultural Policy and Performance in Zambia: History, Prospects and Proposals for Change, (Barkely: University of California, 1977), pp. 99, 102-103.
9. NAZ, SEC2/94, Annual Report upon Native Affairs for the Northern Province, 1950-51.
10. Dodge, Agricultural Policy, 98.; see also R. Klepper, Evolving Structure, (Edinburgh: Centre of African Studies, 1980), pp. 132-133.
11. M. Bratton, The Local Politics of Rural Development: Peasant and Party-State in Zambia, (London: University Press of New England, 1980), p. 46.

CHAPTER TWO

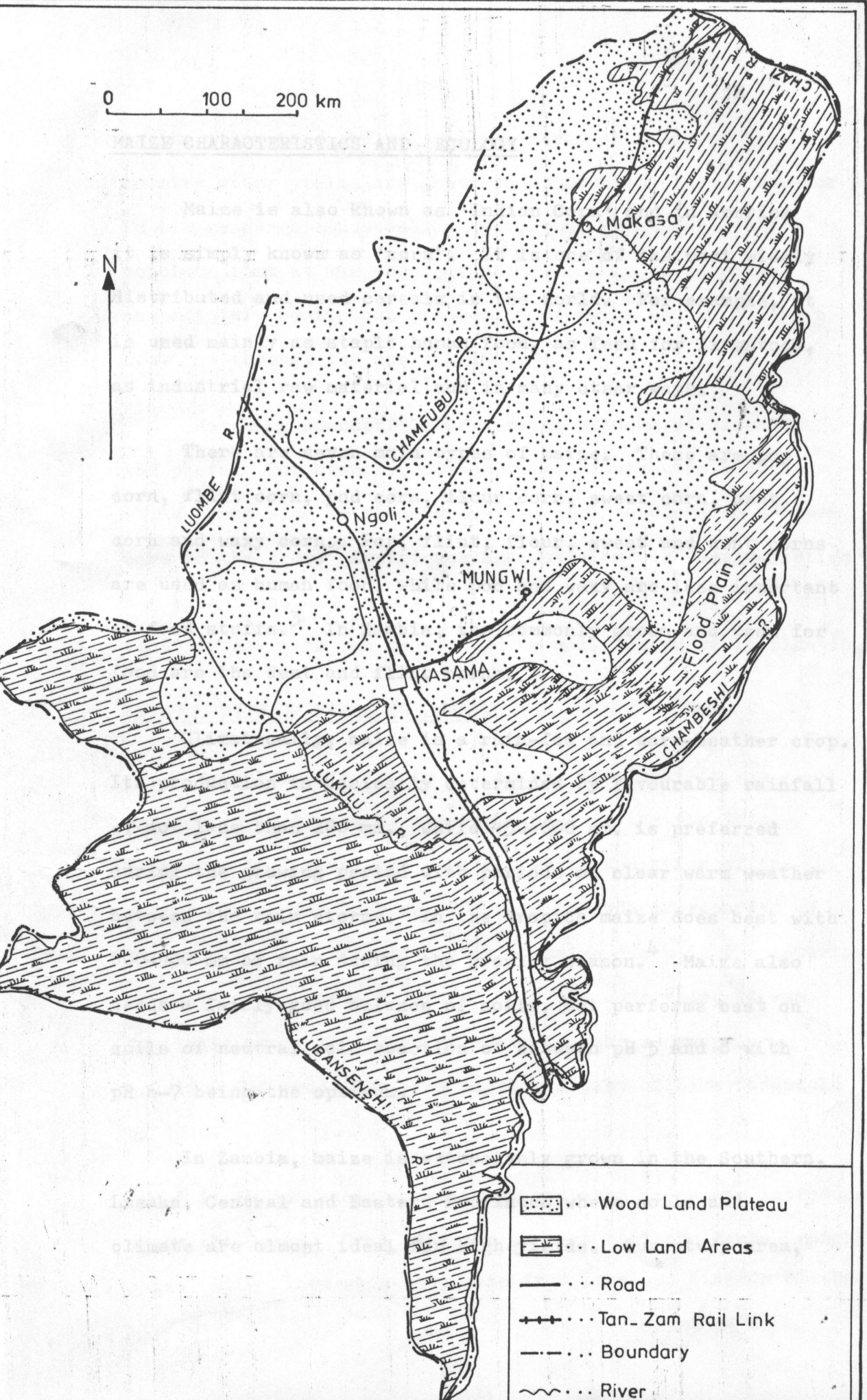
BACKGROUND: LOCATION, CLIMATE AND SOILS.

Kasama is one of the nine districts of the Northern Province. It lies between $30^{\circ} 15'$ and $32^{\circ} 32'$ N, and $9^{\circ} 15'$ and $11^{\circ} 30'$ S. The climate is strongly seasonal with a rainy warm season from November to May. The dry cool season is in June/July with temperatures gradually reaching climax in October/November until the onset of rains. During the wet season, mean monthly temperatures are steady at about 21°C . The wettest month is January with 270 mm. rainfall. The average annual rainfall is 1275 mm.¹

Topographically and ecologically, Kasama District is divided into two by an escarpment which runs east-west. North of the escarpment is miombo woodland and to the south is the Chambeshi Valley supporting chipya woodland. Much of the plateau miombo woodland has been cut over for chitemene cultivation. The soils in the district are generally poor due to deep leaching.

Since the soil is acidic with average acid reaction of between pH 4.2 and 5.5 (pH is soil acidity), its ability to release and retain added nutrients through fertilizers is limited. Liming of the soil is therefore important in order to raise the pH, thus rendering fertilizers more available to crops.² Good soil however, does exist in several parts of the district.

KASAMA DISTRICT: RELIEF



MAIZE CHARACTERISTICS AND ECOLOGY

Maize is also known as 'Indian Corn' and in America it is simply known as 'corn'. It is one of the most widely distributed and used cereals in the world. For example, it is used mainly as staple human food, as feed for livestock, as industrial raw material and in many other ways.

There are seven main types of maize. These are pop corn, flint corn, pod corn, flour corn, sweet corn, dent corn and waxy corn. Pop, flint, flour, sweet and dent corns are used as human food, while pod and waxy are less important as food stuffs.³ In Zambia, the commonly grown and used for food are the dent and flint corns.

Climatically, maize is a rain-fed and warm-weather crop. Its production is basically determined by favourable rainfall of not less than 200 mm., while 450-600 mm. is preferred during the growing period with periods of clear warm weather between the rain storms. In the tropics maize does best with 600-900 mm of rain during the growing season.⁴ Maize also needs a fairly good balance of soils, but performs best on soils of neutral acid reaction of between pH 5 and 8 with pH 6-7 being the optimum.

In Zambia, maize is extensively grown in the Southern, Lusaka, Central and Eastern Provinces where soils and climate are almost ideal for high yields. Our study area,

on the other hand, belongs to the marginal areas of the country where yields are lower and production less. However in his research conducted in 1981, J.G. Vikan came to conclude that it was possible and realistic to increase and maintain continuous production of maize in the Northern Province through the use of lime.⁵

Maize is susceptible to various attacks of diseases and pests. For example, streak virus attacks the leaves while pests such as stem-borers and corn earworms do serious harm to the crop. Resistance against virus in some varieties has been found and in high rainfall areas it has been found that virus attack can be avoided by maintaining early planting.⁶

INTRODUCTION OF MAIZE IN ZAMBIA

Maize has its origin in Central America. It was introduced to Africa by the Portuguese during the 15th century. In Zambia, the earliest written mention of the crop dates as far back as 1798 when Lacerda is recorded as having purchased a small basket of maize 'deep in the interior, in what is now eastern Zambia'. In the same year, it was available among the Lunda of Mwata Kazembe in Luapula Province and among the Bisa north and east of Lake Bangweulu by 1810.⁷

It is not known exactly how and when maize was introduced among the Bemba. Oral evidence suggest that the Bemba brought maize with them when they came from Lubaland Kingdom of the

Congo. According to Mushindo and oral evidence, maize was among the seeds the Bemba carried.

As the refugees fled, some carried seeds in their hair. Often it was necessary to choose a suitable place where soil was good and water convenient and settle temporarily. There they tilled the ground, planted their crops and waited for the harvest. When the crops were harvested they would resume their journey.⁸

Other evidence tends to suggest that the expansion of trade from the East African Coast led to the introduction of American and other exotic crops among the Bemba. According to this evidence, the earliest recorded mention of maize among the Bemba dates as far back as 1831 when it was noted as being available near the Capital of Chikwanda I. When David Livingstone passed through Bembaland in 1867, he is recorded as having been given some maize by the Paramount Chief Chitimukulu Chitapankwa I. Meanwhile, Victor Giraud, a French Naval Officer who made a journey through Bembaland in 1883, is recorded as having noticed some maize at the capital of Makasa. In the same year (1883) Giraud is said to have been impressed by the abundance of maize at the capital of Chitimukulu Chitapankwa.⁹

The evidence presented above is worth close examination in the light of precise dating. Much as one would agree that the Bemba might have come in contact with maize through trade with the East African Coast, the chances of them being

introduced to the crop during this period are rather slim. The greater probability is that the Bemba could have come with maize from Zaire.

The arrival of the Bemba from Zaire is estimated at about the beginning of the 18th Century.¹⁰ This evidence becomes even more convincing bearing in mind Miracle's observation that maize was in the 'Congo sometime after 1493 and spread so rapidly that by 1600 it had become established as a staple six hundred miles or so inland'. He adds that in 1591 'maize was known in the Kingdom of Kongo' - of which the Bemba Kingdom was an offshoot - 'as Mazza Maniputo'.¹¹ Despite Miracle's conclusions, however, according to evidence available to us maize did not spread in Bembaland as rapidly as one could have expected.

THE PRE-COLONIAL ECONOMY OF THE BEMBA

The Bemba are tropical farmers living on the plateau in the Northern Province of Zambia. The vegetation of the area they occupied as they arrived from Zaire was mainly woodland and this together with sandy soils accounted for the agricultural practice of chitemene system which they developed. The chitemene system was based on shifting cultivation in that villages shifted their sites four or five years after preparing the garden patches. The land was prepared for cultivation by clearing the forests. The dry wood and leaves were later burnt. They provided ashes containing the much-needed soil nutrients. The garden patch

was re-used for four or five years, depending on the yields, before it was left fallow for a period ranging between 20-30 years. Under the ecological conditions of the plateau, the fallow period guaranteed regeneration of soil fertility. In this system of agricultural practice as will be seen later, the presence of men in villages was important since men performed the initial arduous task of lopping branches with an axe between May and September.

The traditional staple food of the Bemba was finger millet and it was around its production that the agricultural cycle of the chitemene system revolved. In addition to the chitemene system, the Bemba however, were also cultivators on the subsidiary semi-permanent village gardens (mabala) where a wide range of other crops such as maize, sorghum, peas, beans, sweet-potatoes and yams were grown on mounds. The mounds were made by both men and women using a hoe. Audrey Richards distinguished between two types of mounds: those made from turf and those made from old soils. The first involved opening new grounds and were left to men as heavy work. The second depended on the first and partly on the old chitemene garden soils.¹²

Bemba men, however, did not take pride in the use of the hoe (a Bemba traditional myth had it that a hoe was a woman's tool). The use of an axe in chitemene practice to them was a source of pride. For example, when experiments were shown in 1906 by the colonial government how well finger

millet could be cultivated by merely hoeing the soil, the Bemba were not convinced, attributing the success to the white man's magic. They said:

That is very well for white men, but is not each male child born for the axe and each female child for the hoe? How can we hoe the ground like women? How again can we find wives if we do not cut trees for our father-in-laws?¹³

Indeed, apart from finger millet, all other crops cultivated in the chitemene and village gardens were 'quite subsidiary and sparsely cultivated'.¹⁴

For many years, cassava was not cultivated by the Bemba until the last decade of the 19th century when the crop was introduced among them by the White Fathers following the establishment of Mission Stations in Kasama District.¹⁵ For example, whereas cassava was recorded as the staple at Kazembe's capital by 1798, it was not mentioned among the Bemba until in 1898 when it was first recorded at Chief Mwamba's capital. However, the first Bemba chief to encourage the cultivation of cassava with the backing of the colonial government was Mutale Lwanga (Chikwanda II) when he became the Paramount Chief Chitimukulu in 1913 after presumably adopting its cultivation from his Bisa subjects.¹⁶ Apparently, this was a reaction in part to outbreaks of famine so that the crop became an insurance against famine in times of drought and locusts. On the other hand, it was due to the influence of colonial administration. As will be shown later the

administration insisted that people change from producing millet to producing cassava because millet and chitemene system encouraged a dispersal of villages and hence made tax collection difficult.

Apart from the agricultural production, the Bemba also engaged in both local and long-distance trades. From local trade they received tobacco, mats, baskets, grain and bark cloth.¹⁷ From long-distance trade, the Bemba chiefs through raiding and hunting provided ivory and slaves to the Arabs and Nyamwezi in return for guns, cloth and other European articles which served to entrench their powers as these goods began to circulate among them. As a result of the increased tribal wars people lived together in large stockaded village settlements in order to protect themselves.

COLONIAL POLICY AND ITS IMPACT ON THE BEMBA ECONOMY, 1900-1947

The system of living in mitanda must cease and that all people should again collect themselves into large villages. Also the wasteful methods of cultivation in cutting down trees and thus deforestating the country must come to an end. ¹⁸

The establishment of colonial administration by the British South Africa Company (BSAC) in North-Eastern Rhodesia led to the Bemba economy undergoing a long process of change. Like many other tropical cultivators, the Bemba were incorporated into the money economy of the Southern African regional economic system in which the basis of their socio-economic structure was greatly transformed. This involved a combination of two factors.

First, the BSAC introduced taxation in 1903. Indeed, considering the poverty of the Bemba society taxation meant that since a substantial number of people could not raise tax money within their area, they had no choice but to sell their labour power to the European mines and Plantations in South Africa, Southern Rhodesia, Katanga and East Africa. Between 1906 and the 1930s, the volume of labour migration from Kasama District had adversely affected food production of the Bemba Society.

The second factor involved an effort to shift people from producing finger millet to producing cassava. This began with the establishment of the British administration which ended tribal wars and slave trade. People were free to move into mitanda (temporary dwellings in which people lived when cutting chitemene system). They also began to move into smaller villages as they prepared to re-group themselves around the leadership of a headman of their choice, since they no longer needed the protection of large stockaded village settlements.¹⁹

The dispersal of people made tax collection and administration difficult. Therefore in 1906, at a meeting, the BSAC officials banned chitemene system and ordered all the Bemba chiefs to ensure that their people amalgamated into large village settlements and stopped living in mitanda. Chief Chitimukulu reacted and said:

We want to cut fitemene (plural), we are hungry and

can only get food by this means. If fitemene are made plentiful as before, the country will be prosperous. But if we cannot cut fitemene, we shall rise with our bows and drive away the stranger tribes who have entered our country. But if you urge us to cut fitemene, we shall then cut trees and do work for Bwanas. 20

In reply, the BSAC, official said, 'since of old you have not cultivated large quantities of cassava, now the Barushu (Administrator) says that you shall hoe energetically many beds of cassava near the villages'.²¹ However, in 1909 the decision was reluctantly reversed following widespread protests.²²

The introduction of Native Authorities in 1929 increased pressure on chitemene practice, as each family was now required to 'plant 400 cassava mounds'.²³ By the 1940s, millet was reported 'to be planted only for beer or as an addition to the diet of cassava' in some families.²⁴ As for maize, the reports during this period show little or no reference to its production in Kasama District. To the Bemba the crop during this period was not considered as essential, but only as a snack food which could be eaten fresh after or before the main meal of millet was served or as a mere substitute food during the hunder months. Moreover, according to Richards, the crop was accorded a low status until the 1930s. 'As presents of honour, beer, unthreshed millet, meat, honey or fish may be given ... but it is almost an insult to give a man of rank a basket of maize.'²⁵ As a result, even its storage was limited to only '30 or 40 cobs'

which were kept in a granary to be eaten later as dried dishes. Otherwise, during the 1930s only one maize granary in the Bemba country was noted by Richards and was said to have been built by a former labour migrant who had lived in Southern Rhodesia.²⁶

In the meantime, while people were being directed to grow cassava, the reports show no reference to the colonial government attempt to encourage maize production in Kasama District, let alone the Northern Province. In fact, during the 1930s and 1940s maize was extensively grown in the Southern, Central and Eastern Provinces as a staple and cash crop which in turn enabled African producers in these areas to meet their tax requirements and raise the general standard of living.²⁷ The question is, if the colonial government was interested in promoting the living standards of the people, why did it encourage the production of cassava and not maize in the Northern Province during this period but had to wait until the 1950s when an effort was made to introduce maize as a cash crop? Yet from the nutritional point of view, cassava has the least nutritional value compared to maize and millet. For instance, while both maize and cassava have similar calorific value, maize has significantly larger protein, fat and vitamin content than cassava.²⁸ On the other hand, finger millet, though inferior to maize in protein and fat, is far superior to cassava in these nutrients and superior to maize in mineral salts such as iron, calcium and phosphorous. Above all, the locally brewed

beer (chipumu) is said to provide 'valuable source of vitamin B contained in the germinating grain of millet'.²⁹

In the first instance, cassava was a less labour intensive crop than millet. While millet had high labour peaks and required the presence of male labour in the villages, the necessary operations on cassava could be spread throughout the year. To the people, therefore, the fact that cassava required less labour input and that its production interfered less with millet production while at the same time 'it provided a palatable meal when mixed with millet', accounts for why they found it easy to adopt it as a staple crop in addition to millet.³⁰ Moreover, it meant that its production could be met by households without male labour. To the colonial government, the labour factor in cassava could have been seen as a way of releasing more men into wage employment. After all, maize was more labour intensive than cassava and millet. Since labour was required from Northern Province, it is possible that the colonial government could not encourage maize production because the crop could have interfered with the labour flow to the mines and plantations in the Southern African regional economic system.

Thus, we may conclude that, the delayed interest in the colonial government to promote maize production in the Northern Province was due to the fact that the province was treated as reservoir of cheap labour. In the next chapter, therefore, an assessment will be made as to why Northern Province remained agriculturally backward during the colonial period.

NOTES ON CHAPTER TWO

1. L.A. Van Sleen, Detailed Soil Survey of the Nondo Settlement Schemes, (Lusaka: Government Printer, 1976), p. 4.
2. Interview with Dr. D.M. Mbewe, School of Agriculture (UNZA) 27/8/87.
3. M.P. Miracle, Maize in Tropical Africa, (Madison: University of Wisconsin Press, 1966), pp. 7-9.
4. J.W. Purselglove, Tropical Crops: Monocotyledons, Vols. 1 and 2, (London: Longman Group Ltd., 1972), p. 300.
5. R. Haug, 'Agricultural Crops and Cultivation Methods in the Northern Province of Zambia', (Lobo Oslo: SPRP, Occasional Paper No. 1, 1981), p. 32.
6. Purselglove, Tropical Crops, pp. 310-323.; Miracle, Maize, pp. 11-18.p Personal Communication with Dr. Mbewe, 27/8/87.
7. Miracle, Maize, p. 97.; A.D. Roberts, A History of the Bemba: Political Growth and Change in North-Eastern Zambia Before 1900, (London: Longman Group Ltd., 1973), p. 210.
8. P.B. Mushindo, A Short History of the Bemba, (Lusaka: NECZAM, 1976), pp. XV and 5.; Also Personal Communication with Paramount Chief Chitimukulu 36 (Mutale Chitapankwa II), Kasama, 22/01/88.
9. Roberts, A History of the Bemba, 210.
10. W.V. Brelsford, The Tribes of Northern Rhodesia, (Lusaka: Government Printer, 1956), pp. 20-21.
11. Miracle, Maize, 93-94.

12. A.I. Richards, Land, Labour and* Diet in Northern Rhodesia (London: Oxford University Press, 1939), p. 302.
13. C. Gouldsbury and H. Sheane, The Great Plateau of Northern Rhodesia, (London: Edward Arnold, 1911), p. 302.
14. Gouldsbury and Sheane, The Great Plateau, 300.
15. L.H. Gann, The Birth of A Plural Society: The Development of Northern Rhodesia Under the British South Africa Company, 1894-1914, (London: University of Manchester Press, 1958), p. 36.
16. Roberts, A History of the Bemba, 211.
17. Roberts, A History of the Bemba, 187.
18. NAZ,KDH.1/1/Vol. II, 1909, Kasama District Notebook.
19. NAZ,KDH.1/1/Vol. II, 1909, Kasama District Notebook.
20. NAZ,KDH.1/1/Vol. II, 1909, Kasama District Notebook.
21. NAZ,KDH.1/1/Vol. II, 1909, Kasama District Notebook.
22. NAZ,KDH.1/1/Vol. II, 1909, Kasama District Notebook.
23. Interview with Paramount Chief Chitimukulu, Kasama, 28/01/88. Also J. Hellen, Rural Economic Development in Zambia, 1890-1964, (Munich: London and New York, 1968), p. 85.
24. NAZ,SEC2/788, 1940-1947, Kasama Tour Reports.
25. Richards, Land, Labour and Diet, 60.
26. Richards, Land, Labour and Diet, 47, 83.

27. M.S. Muntemba, 'Thwarted Development: A Case Study of Economic Change in the Kabwe Rural District of Zambia, 1902-70' in R. Palmer and N. Parsons (eds.), The Roots of Rural Poverty in Central and Southern Africa, (London: Heinemann, 1977), p. 353; J.A. Hellen, Rural Economic Development in Zambia, 1890-1964, (Munich: London and New York, 1968), pp. 128-130.; R. Palmer, 'The Zambian Peasantry and Colonialism, 1900-1930', The Evolving Structure of Zambian Society, (Edinburgh: Centre of African Studies, 1980), pp. 30-31.
28. A.Marter, Cassava or Maize: A Comparative Study of the Economics of Production and Market Potential of Cassava and Maize in Zambia, (Lusaka: RDSB, 1978), p. 54.
29. Richards, Land, Labour and Diet, 38.
30. Personal Communication with Paramount Chief Chitimukulu, Kasama, 22/01/88.

CHAPTER THREE

THE COLONIAL GOVERNMENT EFFORT TO PROMOTE MAIZE AS A CASH CROP IN THE NORTHERN PROVINCE, 1948-1963

For many years there were persistent reports that Northern Province had no agricultural potential. For example, writing in 1911 Gouldsbury and Sheane observed that many of the plains in the province, especially in the Bemba country were what was known as 'sour soil and therefore out of the question for raising crops'.¹ Other reports saw the unproductivity of the province in the context of agricultural practices. These reports, therefore, described people in the province as 'poor agriculturalists' or 'incorrigibly lazy'. For instance, in the Government Report upon Native Affairs of 1936, it is stated, 'Natives in this province generally speaking strike one as singularly unenterprising and indeed downright lazy about the growing of foodstuffs'.²

Others saw the unproductivity of the province in relation to the Bemba methods of agriculture. Audrey Richards, writing in the 1930s, said that from the agricultural point of view, the Bemba 'were reckoned as among the more backward of the Northern Rhodesian tribes'.³ The same sentiments were echoed in 1957 by the District Officer for Kasama District who observed: 'The Bemba are not an agricultural people. They grow for subsistence only, and I see little hope of marked improvement in agricultural methods for many years to come'.⁴

Certainly, the above observers overstated the issue. It is true that the agricultural systems of Northern Province were relatively backward, but the agricultural potential of the province had not been effectively investigated. No doubt, the writers were basing their conclusions on the evidence available to them at the time. But, as developments came to show in the late 1950s, the province had appreciable potential even for maize. For example in 1958/59 season, the province marketed 14,000 (90 kg) bags of maize. In 1960, the province had another good crop of maize (10,000 bags) and did not have to import from Tanzania as had been the case in the previous years.⁵

In my view, the causes of low maize production in the Northern Province during the colonial period, have to be sought elsewhere. I venture to suggest that they be found in the problems of 'labour pattern' and in the fact that maize itself was not a staple food crop. This problem was further aggravated by marketing and communication networks which were severely lacking in the Province. According to John U. Ogby by 'labour pattern' is meant, 'the nature of competition between subsistence production and the new cash crops for available labour, especially male labour'.⁶

The purpose of this chapter is to show why Northern Province did not experience substantial expansion in maize

production during the colonial period. I hope to achieve this objective by beginning with a background description of the indigenous agricultural systems in Kasama District. This will be followed by a brief account of labour migration. I shall thereafter look at the colonial government effort to introduce maize in Kasama District as a cash crop, let alone a staple food under the programme of Peasant Farming and Settlement Schemes. This will be followed by an assessment of the colonial government effort to introduce maize in the context of labour pattern and this will be linked up with the problems of marketing and distribution networks in the Northern Province. Finally, the chapter will assess the political atmosphere around the people in the hope of establishing their readiness to adopt cash crop farming.

THE TRADITIONAL FARMING SYSTEMS IN KASAMA DISTRICT

As pointed out in chapter two, the indigenous agricultural system which dominated the Bamba economy was a type of shifting axe and hoe cultivation known as chitemene system, and this was supplemented by semi-permanent village gardens. The system was declared wasteful by the colonial administration.

Thus, backed by Native Authorities' legislation, the war against chitemene practices continued and the swing to

cassava which had started in the 1930s was intensified during the 1940s and the 1950s. This, in effect, 'witnessed a fall in millet production among some families'.⁷

The impression of the Provincial Commissioner is **instructive**:

An increase in the number of settlements surrounded by dug gardens has been a noticeable feature during the years. It has been observed that the continuation of this policy of pressure in favour of hoe cultivation is undoubtedly beginning to show tangible results.⁸

Therefore, added to the food patterns of the Bemba, cassava like, millet, was now extensively cultivated throughout Kasama District. However, the physical environment had much influence on the extent and dominance of a production system employed. On the forested plateau areas, chitemene system was dominant for the production of finger millet with cassava as subsidiary crop. In the low land areas, mound cultivation was dominant for the production of cassava with millet as subsidiary.⁹ Mounds were made by both men and women. Men were responsible for opening up new gardens which involved cutting clods of turf (ukusapika) with a hoe and piling up the clumps of grass into heaps which were then covered with soil (ukushikila). Women made mounds from old soils and these mounds were partly dependent on mounds first made by men and partly on old chitemene garden soil (chifwani).

In chitemene system, the general pattern of activities relating to it were as follows: From May to September men conducted the arduous task of lopping branches. After drying, women piled the branches together and the pile was burnt just before the onset of early rains in October or early November. Finger millet was then broadcast into ashes and interplanted with cassava, maize and many other crops. Planting was done by women, although men could also help and sometimes other methods of calling upon the labour of the kinsmen or members of the village could be employed through beer party (ukutumya). When planting and sowing was over, the field was fenced around January and was left unattended since no weeding was required as the weeds were already destroyed by burning. Instead, the weeding period was utilized in making mounds, 'fencing' and fishing.¹⁰

Women completed the chitemene cycle by harvesting millet between May and June. As for cassava, three years or more could finish before harvesting started. Meanwhile, the garden was put in subsequent years, after the first finger millet, to a cropping sequence which normally included groundnuts, beans, maize and the early maturing millet (mwangwe). This cropping pattern went on up to four or five years depending on yield before the field was finally abandoned. Similar patterns held true of other parts of the Northern Province

except among the Bisa and Lala in Mpika District where cropping ceased after the initial crop of finger millet had been harvested. In this way, the Bemba have practised chitemene system and mound cultivation for a long time.

The main labour unit was the family household comprising a man, his wife or wives and unmarried children. The men were responsible for cutting trees and opening up new grounds for mound cultivation. The women gathered branches together to make millet gardens. They made mounds, did the planting, weeding, harvesting, including a number of other related economic activities. Figure 3.1 shows the division of labour according to sex.

FIGURE 3.1

Distribution of Household Activities by Sex:

<u>Male</u>	<u>Female</u>
<u>Food Production</u>	
Land clearing, tree cutting, planting etc. Garden fencing, mound cultivation, hunting and fishing	Branch piling, planting, harvesting, mound cultivation, fish poisoning - weeding etc.

<u>Male</u>	<u>Other Activities</u>	<u>Female</u>
Building houses, granaries, roads etc. Making furniture, musical instruments etc. Making baskets, fish traps, nets, mats and iron works.		Cooking, Brewing, fetching firewood, water etc. Mudding floor, housing and houses, cleaning up roads and making pottery.

Source: A.1. Richards, Land, Labour and Diet in Northern Rhodesia, (London: OUP, 1939), p. 382.

It is apparent from the figure that a clear sexual division of labour was evident. For example, male labour force was necessary to open new gardens which facilitated the continuation of the production cycle. If no new garden was opened up by men at least every year for 3-4 years, then the balance of production cycle was disrupted and therefore hunger or famine ensued. It is against this background of labour requirements that labour migration took place in Kasama District.

THE LABOUR MIGRATION IN KASAMA DISTRICT.

The introduction of taxation in Northern Province in 1903 was related to the fiscal policy of the colonial government that the territory was to pay for the cost of its administration locally. People contributed to this revenue through taxation and migration. In 1937, the Pim Commission found that in the Northern Province, taxation was the 'main cause of emigration'.

The Commission added that the labour force on the Copperbelt came mainly from the Northern and Western Provinces with other areas providing relatively small amounts. The result was that villages lost many able-bodied men and that agriculture remained 'mainly the work of women'.¹¹

In Kasama District labour migration was perhaps the single most important socio-economic problem stretching from 1900 to 1963. For example, Roberts showed that by 1912, 3,957 of the 7,290 taxable males in the district had been compelled to take up wage employment in order to pay taxes.¹² Richards estimated that male absenteeism had settled at about 48-60 percent by 1933.¹³ The figure later rose; Richards estimated 70 percent for 1957, and Hellen 62 percent for 1961, see Appendix 1. Hellen added that this had the gravest consequences on the local economy. In the Government Report upon Native Affairs of 1953 for Kasama District, this problem is acknowledged:

The figure for absentee male population for Kasama average over 70% and in some areas it is as high as 80%. Such figures are solemnly working against any precipitate development. Officers can exhort, but those listening are mostly the aged and women and children. 15

Thus, upon this male labour drain coupled with demands of the subsistence economy as shown earlier, the Northern Rhodesian Government set about introducing maize in Kasama District as a cash crop. This, the government did through the establishment

of the Peasant Farming and Settlement Schemes.

THE PEASANT FARMING AND SETTLEMENT SCHEMES IN KASAMA DISTRICT

The promotion of maize growing in Northern Province after 1945 was linked to the unhealthy state of the metropolitan economy and the perceived need to strengthen it by encouraging the colonies to produce 'economic', i.e. exportable, crops such as cotton, groundnuts, tobacco and maize. Moreover, maize had become the staple food for the urban workers, hence, agricultural production was to be encouraged among Africans in order to produce enough food to feed this 'new proletariat'.¹⁶ From the expressed objectives, and indeed in the words of a District Commissioner at Kasama in 1950, the introduction of Peasant Farming Schemes (PFS) was concerned with 'converting the natives from subsistence to cash economy'.¹⁷

In Kasama District, the colonial government saw two impediments to the successful implementation of the schemes. First, was the backwardness of the indigenous agricultural system, and second, was the ever increasing male labour absenteeism. It was observed that the able-bodied males who were left in the villages were not the 'most suitable material on which to work for the establishment of improved agriculture'.¹⁸ As for the backwardness of the agricultural system, the government realized that the problem lay not only in the battle against chitemene system, but in dislodging people from cassava and millet to maize production. The government

concern over this was clearly expressed by the District Commissioner for Kasama District who, in 1951, lamented:

One of the most pressing problems that faces Administration and the Agricultural Officers in the future is to endeavour to coerce the Bemba in the production of cash crops other than cassava, which although a great stand by in years of famine, is now cultivated on such a large scale that it is becoming the major staple diet.

The great drive to grow cassava as a famine crop on permanent gardens in recent years has had this unexpected effect. 19

In order to counteract the indigenous farming practices, and, indeed, in line with the expressed objectives of the PFS, the colonial government thought of training male peasant farmers in Kasama District as was the case in the rest of the country.

In 1951, a block of sixteen farms was established at Ngulula in Kasama District. Another block of ten Peasant farms was laid out in 1956 at Makasa. Under these schemes men who were able to read and write were selected and given some training in the use of ox-plough agriculture, and were directed to grow maize. According to oral evidence, men who were 'politically vocal were persuaded to join the schemes and to sign agreements by which they undertook to abandon the chitemene system, and on being loaned cattle they would be required to settle on a piece of land which they were to cultivate permanently'.²⁰ Table 3.1 presents data on Ngulula Peasant Farms Cropping for the period 1954-1955

TABLE 3.1: Ngulula Peasant Farms

Cropping, 1954-1955.

FARM NO.	NAME	MAIZE	MILLET	CASSAVA
1	Yolamu Chimbabantu	2½ Acres	2 Acres	-
2	Yonamu Silwizya	3½ Acres	2½ Acres	-
3	Mwamba Katapa	7 Acres	2 Acres	1½ Acres
4	Bwalya Kasanse	9½ Acres	3 Acres	2 Acres
5	Enasho Kasanse	5 Acres	2½ Acres	1 Acre
6	John Kumwenda	7 Acres	1 Acre	-
7	Sefelino Bwalya	2½ Acres	3½ Acres	-
8	Mutale Chilangwa	5½ Acres	2½ Acres	½ Acre
9	Gosto Kampamba	3½ Acres	2 Acres	-
10	Salati Mukuka	5 Acres	2 Acres	-
11	Kangwa Chipando	3 Acres	½ Acre	-
12	Musonda Lumbili	4 Acres	½ Acre	-
13	Sampa Pepi	3 Acres	1 Acre	-
14	Katundu Kabwibwi	3 Acres	-	-
15	Mwamba Sambaonde	1½ Acres	1 Acre	-
16	John Kupela	2½ Acres	-	-
	TOTAL	68	26	5

Source: NAZ, SEC2/97, 1953-1955, Annual Report, Northern

Province, Provincial and District Organization.

It is evident from the table that a substantial part of the block acreage was under maize. For example, out of a total of 99 acres, 68 acres were under maize, 26 acres under millet and only 5 acres under cassava. This clearly shows some effort to discourage the production of cassava.

In 1957, the Federal Government set up the Mungwi Agricultural Settlement Scheme with a grant of K4 million from the mining companies. The mood and the objective in the Federal Government in putting up such an ambitious and highly capitalized scheme, was clearly expressed in the Mungwi Development Plan of 1961-65. It stated: 'to find and demonstrate a substitute for chitemene agriculture which has ravaged the woodland of the province for so long'.²¹ As was the case for the PFS, under Mungwi Settlement Scheme, men were selected to undergo ox-plough agricultural training after which they were loaned cattle and directed to invest in maize, groundnuts and tobacco, which they were to grow on permanent farming.

To boost maize production the colonial government had, in the meantime, introduced the co-operative movement at Kasama in 1954. The Kasama Co-operative Marketing Union (KCMU) acted as an umbrella marketing and distributing agency for the Northern Province. The KCMU played an important role in offering bonus and loan facilities to peasants who were at the sametime obliged to join the co-operative societies so as to ensure repayment of loans.

By and large, from the above description of the colonial

government effort, it does seem to give the impression that the government was succeeding in its effort to promote maize in Kasama District. Due to non-availability of actual production records during the colonial period, however, the quantity of maize produced in Kasama District cannot be established.

Table 3.2, however, provides some maize, cassava and millet production figures for the period 1953-1957. It is apparent from the table that despite government assistance maize production did not show significant increase as did millet and cassava.

TABLE 3.2

Crops Produced in Kasama District, 1953-1957.

Crop	Unit	1953	1954	1955	1956	1957
Maize	90 kg	306	700	562	600	485
Millet	"	1,268	1,923	1,990	2,734	3,452
Cassava	72 kg	976	1,600	2,100	1,853	2,704

Source: NAZ, SEC2/97, 1953-1956, Provincial and District Organization - Northern Province Annual Reports.
 NAZ, SEC2/112, 1957, Annual Report upon Native Affairs for Kasama District.
 NAZ, NR/17/106, 1956-1962, Peasant Farming in Northern Province.

The point becomes even clearer when we focus our attention on Table 3.3 which provides data on expenditure and recovery at Ngulula Peasant Farms for the period 1951-1955. It is evident from the table that as peasants found it difficult to increase maize output, the rate of loan repayment was equally affected. For instance, whereas a total of K2,796 was invested in the scheme between 1951 and 1955, only K125.41 was recovered by 1955.

As will become clear later, part of the possible explanation to this is that peasants were not prepared to produce a crop which was of little value in the subsistence economy. Above all, communication networks and market incentives were severely lacking in Kasama District as for the rest of the province. In her assessment of the Ngulula Peasant Farms, Richards noted that, 'the average yield of 16 tenant farmers at Ngulula near Kasama was K35.05 a year', adding that this was 'too low to provide much incentive for further effort'.²²

TABLE 3.3Ngulula Peasant Farm Expenditure and Recovery, 1951-1955

Year	Warranted	Approx. Expenditure	Approx. Recoverable	Recovered
1951	K636	K636	-	-
1952	K516	K516	K126	K26
1953/54	K814	K814	K780	K99.41
1954/55	K830	K830	K800	-

Source: NAZ, SEC2/97; 1953-1956, Provincial and District

Organization - Northern Province Annual Reports.

The conclusion to be drawn from tables 3.2 and 3.3 is that despite financial investment into scheme programmes, peasants in Kasama District found it difficult to break away from subsistence to cash cropping. But the question is why did the peasants find it difficult to shift from subsistence to cash cropping? Was it really something to do with lack of agricultural tradition as claimed in 1957 by the District Officer for Kasama District? Certainly the immediate answer to these questions lies elsewhere. Moreover, if this was the case among those on the schemes, what was the attitude of those not yet on the schemes? The sentiments below are instructive.

We are not going to be made children. Today, you stop us from living in mitanda, which we have done by coming together in villages where we are making our ends meet

through 'ukutunya' (beer party). Tomorrow you want us to live in European camps (schemes) to produce for Europeans. In any case, who is going to live on a cob of maize from sun rise to sun set? Above all, do the whites want our women to break arms in pounding maize into mealie meal? We say no. 23

Perhaps these sentiments might be taken as mere political truculence, but they reflect the reality of people's perception of the whole scheme, as revealed by the following. First, there is the implication of the absence of men in villages which was a burden to those who remained in villages. Second, there is the fear of producing a crop which to them did not constitute sustainable food. Then there is the absence of agricultural infrastructure such as grinding mills. Thus in the light of these implications, it is not hard to understand why Northern Province did not experience substantial maize production during the colonial period.

THE LABOUR PATTERN AND SUBSISTENCE PRODUCTION

Maize became the staple food for the Eastern Province long before white occupation of Zambia.²⁴ It became the staple for the Southern and Central Provinces during the early 1920s after replacing sorghum and millet.²⁵ In contrast, maize in the Northern Province remained a subsidiary food for many years. Only in the north-eastern part of Isoka District among the Tumbuka-Nyanja-speaking people of Luangwa Valley was maize a staple food, apparently as a result of contact with the Eastern Province and Malawi.²⁶

The problem faced by the Bemba in Kasama District in adopting maize as a cash crop in spite of the colonial government effort, is, therefore, assessed in the twin problem of labour and in maize itself not being a staple food. In the first place, maize was a more labour intensive crop than cassava and millet. Under the programme of Settlement Schemes, the planners completely ignored the social relations which were important in the process of production. For example, only the nuclear family was allowed to settle on a plot of land, a policy which proved to be a departure from existing social relations based on extended family labour and co-operation. In the face of this lack of labour co-operation, a peasant on the scheme was required to clear and stump an extensive piece of land which was to be ploughed, a process which was not necessary under the traditional chitemene system and mound cultivation. Above all, maize required relatively high management and labour input, and the timing of operations was critical if good yield was to be obtained. It was a crop which required purchased inputs whereas cassava and millet did not.

On the other hand, labour demands of cassava and millet went on throughout the year. Figure 3.2 presents an overview of seasonal activities on these crops. It is clear from the figure that, the critical peak period for millet was from May to December when a peasant family did the harvesting, tree cutting, piling of branches, firing and sowing. These operations of the subsistence economy were essential since they ensured the

continued production of staple food. Meanwhile, during the same period (May-December), the family was required on the maize field to harvest maize, clear and stump the land for maize and then do the sowing. From January to April when the peasant family was not attending to millet, they were required to make cassava mounds, fencing and do other related economic activities, at the same time, they were required on the maize field for weeding.

It is apparent from this assessment that the production of subsistence crops and the production of maize as a cash crop, competed for the same labour, which in turn threatened the level of subsistence. Stressing the importance of labour, Richards has shown that the Bemba experienced seasonal food shortages because they produced 'barely enough' for two meals a day during the normal months, and one meal a day during the 'hunger months' of January and February up to March.²⁷ The question is, why did the Bemba produce only for a bare subsistence? Was it because they were 'incorrigibly lazy' or disinclined to farming? Certainly, the answer is that the Bemba were constrained by shortage of labour, especially the male labour of which a larger proportion was out on labour migration. Richards further noted that each Bemba had 'three or four gardens to deal with annually', see Appendix 2. She added that in face of the continued male absenteeism, a Bemba would not 'produce the optimum results

FIGURE 3.2: Calendar of Seasonal Activities

Months	MEN			WOMEN		
	Millet	Subsidiary	Other Activities	Gardening		Other Activities
JAN.	-	Mound Making	Fishing	-	Mounds	Collecting Mushroom
FEB.	Fencing	"	"	-	"	"
MAR.	"	"	"	Maize Harvesting	"	"
APR.	Any work	"	"	Millet Harvesting	Harvesting beans etc.	Any work
MAY	Tree Cutting	-	"	"	"	-
JUN.	"	-	"	"	"	-
JUL.	"	-	"	" and piling	"	-
AUG.	"	Dry Weather Sowing	Hunting	"	Dry Weather Sowing	Fishing
SEP.	Cutting and piling	"	"	"	"	"
OCT.	Piling and firing	"	"	"	"	"
NOV.	Firing	Mounds	Fishing	Gardening	Mounds	"
DEC.	Sowing	"	"	"	"	Fruit Picking

Source: A.I. Richards, Land, Labour and Diet in Northern Rhodesia, (London: OUP, 1939), p. 389.;
(NB. with modification)

from the soil, but merely the minimum amount of food which would keep his family from destitution".²⁸ The conclusion she drew was that the frequency of the seasonal food shortages was, to a large extent, a result of the absence of male labour earlier in the production cycle.

It follows, therefore, that under such labour constraints as was the case among the people of Kasama District among whom the programme of PFS was introduced, the addition of maize, which was not a staple food, to the production cycles of subsistence economy, greatly overstretched the labour supply. Further more, though the Bemba were able to call upon the labour of kinsmen, or, in some cases, hired labour from the village, the practice did not solve the problem of labour constraint. Richards, while **acknowledging** that the Bemba lacked ambitions in material possession, noted that under the impact of cash economy which was permeating the Bemba society, the reliance on the 'extended family labour' was breaking down.²⁹ In this case, when the production of subsistence food involved kinsmen or hired labour, it was done at a great cost to their labour to the extent that they were left with little labour to experiment in maize production. The result was that, whatever labour that was invested in maize production, was labour removed from the cycles of subsistence production.

On the other hand, though men were indispensable in some areas of subsistence production such as chitemene system

women generally played an important role in the Bemba economy. The practice of rotating cultivation, the use of the hoe, the nature of the soil and the crops grown, all necessitated higher women participation. Hence, a woman could care for the family while the husband was away on labour migration. But in actual fact, it meant that women whose husbands were in wage employment, were in a disadvantaged position to adopt maize as a cash crop. For example, a woman alone could not sufficiently manage a maize field while at the same time trying to meet her family's food requirements.

Against this background, it is clear that the addition of maize to the production cycles of cassava and millet was a great burden to the already strained labour of the Bemba peasant in Kasama District. Since maize was of little value in the subsistence economy, the most probable course taken by most households was simply not to grow it. After all, if they wanted money, they were able to raise it through the sales of their 'staple food' crops.³⁰ It is therefore no wonder that in the whole Northern Province, only in the north-eastern part of Isoka District was maize production significant. For example, in 1952, Isoka District is reported to have produced 1,809 (90 kg) bags of maize and in 1954 the district had another good crop of maize (3,613 bags) which it had even

to export to other districts.³¹ The point becomes even more convincing when we compare Isoka District in maize production with Kasama District, see Table 3.2. Thus, whereas Isoka District in 1954 produced 3,613 bags, only 700 bags were recorded in Kasama District despite government effort to promote maize production there.

In recent studies of cash crops in Tropical Africa, the problem of subsistence economy in the face of cash crop production has been well documented. John Tosh's study has shown that where cash crop routine clashed with the labour cycle of staple crops, unless a really attractive price was offered and indeed, unless the cash crop itself played the 'duo role' of both food and income earner, a peasant will always 'chose his top priority of producing all his subsistence needs'.³² It is equally true to consider that, through all the years of implementing the PFS when the authorities were bemoaning their poor performance and high rate of desertion, both millet and cassava were extensively cultivated in Kasama District as shown in Table 3.2. In the words of an Agricultural Officer at Ngulula Farms, 'the problem is that farmers often have to leave farm work to attend to their normal chitemene fields'.³³ According to oral evidence, only those peasants who received some money from relatives in employment or those who already had money earned during the time of their being in employment,

were able to concentrate on maize production because they used the money to buy food. But more often, such people were ridiculed as 'lazy bones who pretended to live like whites'.³⁴

Needless to say, the effort to promote maize farming on a permanent land in Kasama District was not only a desire of the colonial government but also of enterprising individuals outside the Peasant and Settlement Schemes. When Richards visited the Bemba country in 1957 to assess any changes that might have taken place, she identified two classes of these peasants as being made up of those who had special resources by way of labour and those who had a little capital. The first class consisted of chiefs who had used their traditional powers to mobilize their subjects' labour to invest in maize farming. The second class composed of labour migrants who had returned from the European mining and plantation areas to the South with a certain amount of capital which they used to invest in maize production.³⁵ Some of the labour migrants had wished to uphold their urban taste, for maize acquired during their long stay in industrial areas.

However, the effort of such peasants in breaking the barrier between subsistence and cash cropping in maize was hampered by a number of factors both cultural and economic. For example, most of them on arrival from wage employment denounced maize as a staple food. They said:

It was not logical to continue eating a meal of

maize in a community of our stay-at-home relatives and colleagues whose main food was cassava or millet. Otherwise, one looked out of place. So, it was a matter of "When you are in Rome, do as Romans do". Above all, it was not easy to prepare maize into mealie meal since grinding mills were non-existent, and more than that, growing maize for sale proved unprofitable. 36

Therefore, while acknowledging their desire to experiment in maize production, Richards also observed that, this class of peasants faced serious economic problems. She said,

The success of such men is obviously precarious. They have an advantage over their fellows in that they have capital, but they are obviously under-capitalized in relation to their ambitions. 37

Against this background, it is by all means clear that just as the colonial government effort in boosting maize production remained insignificant, so did the impact of this class of enterprising peasants on the patterns and practices of their own traditional economy. As a result, maize output and its related methods in Kasama District as for the rest of the Northern Province by the close of the colonial period remained undeveloped. Writing in 1958, Richards concluded that:

The country of the Bemba of the north-east Rhodesia is remote, without transport, and agriculturally backward, and might be considered one of the toughest propositions a British administration has to deal with from the economic point of view. 38

MARKETING AND DISTRIBUTION NETWORK

Producing maize for sale requires easy access to markets and communication networks, both of which were severely lacking in the Northern Province. While saying that the Bemba were disinclined to 'cash farming', Hellen at the same time admitted the problem faced by the Bamba in terms of markets. He wrote,

'with only 150 farmers and precarious markets', the province could not change by 'the close of the colonial rule'.³⁹

Added to the problem of marketing was the low price for maize. In itself, this was a deliberate colonial government design intended to pay European producers higher than African producers. For example, as early as 1936 the Maize Control Board was established by the Maize Control Ordinance. The Board worked against the African effort to expand maize production for the market. In the Board's arrangement, price for maize was determined on the basis of cost of production formula which reflected the value of equipment, labour and other capital investment found on the farm. This meant that producer prices differed according to the size of the farm and the amount of investment. Though price paid to Africans apparently remained relatively high in Southern and Central Provinces, the Board, by its policy of paying less to producers in remote areas, discouraged production in those areas. For instance, while in 1951 the Board's price paid to Africans in Southern and Central Provinces was K3.50 per (90 kg) bag, it was K1.30 in Kasama District and other outlying areas.⁴⁰ The effect of this was that profit margin for peasants was very low.

The only option taken as a result, was that Peasants with

ambitions to invest in maize, either gave up production or simply did not want to sell it to the Kasama Co-operative Marketing Union but to the private traders. Acknowledging this Hellen admitted that 'maize may be produced in small surplus but export is unlikely in view of distances involved and the fact that African growers are unwilling to sell at low prices'.⁴¹ The problems of agricultural infrastructure in Kasama District, like the rest of the Northern Province, was neatly summerized by the District Commissioner for Kasama in 1957:

One of the main problems in a district such as this is the efficient communication and marketing of food which the villagers are continually encouraged to produce. No agricultural community whether its agricultural methods be advanced or primitive can make its progress unless it can be assured of a reasonably reliable communication and market for its produce.⁴²

To conclude this chapter therefore an assessment is made of the political atmosphere in the Northern Province in respect of people's readiness to accept agricultural innovations.

AGRICULTURE AND POLITICAL DEVELOPMENTS IN NORTHERN PROVINCE

For many years during the colonial period, African relationship with Europeans grew from bad to worse as Africans became increasingly aware of their exclusion from enjoying socio-economic services that were enjoyed by their European counterparts. For instance, in the field of Agriculture, colonial policies discouraged the emergence of African producers in

rural areas, while in industries, racial discrimination relegated African workers to menial jobs. However, African growing awareness of racial segregation was crystalized in their opposition to the Federation of Rhodesia and Nyasaland which was established in 1953. With the inception of the Federation, it meant that Europeans had more access to a larger pool of Federal resources than Africans, thus consolidating the economic power into the European hands which further intensified the European-African polarization.

Nevertheless, it must be recognized that the Northern Rhodesia Government, in its effort to promote maize growing in Northern Province, was itself blind not only to the seriousness of labour complexity in traditional economy and the absence of agricultural infrastructure, but to the course of events in the Politics of the Province. The imposition of the Federation of Rhodesia and Nyasaland coincided with the introduction of the agricultural schemes and soil conservation measures. Therefore, not only was there more political conflict, mistrust and suspicion on any colonial government programme by the people of Northern Province, but also open defiance of colonial regulations. People refused to comply with the soil conservation measures, let alone the joining of the schemes. At the same time the struggle for political independence in which the Northern Province was actively involved, could not allow a colonial government programme to succeed. Freedom

fighters worked 'day in and day out' to sabotage any such programme as a way of forcing out the colonial government.

'Native Authorities' Agricultural Kapasos were bitter enemies of the freedom fighters'.⁴³ As a result of the government insistence that people should abide by the agricultural regulations, in Kasama District in 1952, 587 offenders were charged with cases of violating the soil conservation measures. In Mbala District, 'a son of chief Nsololo and another man were arrested for inciting people to boycott the anti-erosion regulations' in 1953.⁴⁴

It is thus true, as Baldwin has rightly observed, that for a population that long distrusted the motives of the Europeans, it is no wonder that the few who responded to the programme were treated with contempt and often 'branded as political sell-out and had little influence upon their return'.⁴⁵

In sum, we can aver that the combination of these factors led the Northern Province to remain unproductive in maize output during the colonial period. In this chapter we have shown that contrary to the negative reports about the agricultural potential of Northern Province, the province remained unproductive agriculturally mainly because of the fact that production for cash crops such as maize clashed with subsistence production. This argument was borne out by the fact that, as a result of increased

number of men on labour migration from Northern Province, the household labour force that remained was heavily constrained. The problem was aggravated by the fact that maize was not a staple crop for the people of Northern Province. Above all, marketing and distribution networks on which cash crop production depends, were severely lacking in the province. It thus meant that in spite of colonial government effort to promote maize in Northern Province as a cash crop during the 1950s, the output by the close of colonial rule was negligible. In the next chapter, we attempt to locate the factors that have seen Northern Province experiencing substantial increase in maize production, since the attainment of political independence in 1964.

NOTES ON CHAPTER THREE

1. C. Gouldsbury and H. Sheane, The Great Plateau of Northern Rhodesia, (London: Edward Arnold, 1911), p. 303.
2. NAZ, SEC2/1297, 1935-1937, Annual Report upon Native Affairs, Northern Province.
3. A.I. Richards, Land, Labour and Diet in Northern Rhodesia, (London: Oxford University Press, 1929), p. 19.
4. NAZ, SEC2/798, 1957-1958, Kasama Tour Report.
5. Department of African Agriculture, Annual Reports for the Years 1959-1960, (Lusaka: 1959-60), pp. 2, 21.
6. J.U. Ogbu, 'Economic Transition Among the Poka of Northern Malawi: From Subsistence to Cash Cropping', Journal of African Studies, 6, 2, 1978, p. 152.
7. NAZ, SEC2/94, 1950-1951, Annual Report upon Native Affairs, Northern Province.
8. NAZ, SEC2/94, 1950-1951, Annual Report upon Native Affairs, Northern Province.
9. Interview with Paramount Chief Chitimukulu, Kasama, 28/1/88.
10. Interview with Paramount Chief Chitumukulu, Kasama, 28/1/88. Pigs were doing harm to crops like cassava.
11. W.A. Pim, Report of the Commission Appointed to Enquire into the Financial and Economic Position of Northern Rhodesia, (London: H.M.S.O., 1938), pp. 39-40.
12. A. Roberts, A Political History of the Bemba: Political Growth and Change in North-Eastern Zambia Before 1900, (London: Longman Group Ltd., 1973), p. 343.
13. Richards, Land, Labour and Diet, XII.
14. J. Hellen, Rural Economic Development in Zambia, 1890-1964 (Munich: London and New York, 1968), p. 200.
15. NAZ, SEC2/96, 1952-1953, Annual Report, Northern Province.
16. I. Henderson, 'The Economic Origins of Decolonisation in Zambia, 1940-1945', Rhodesian History, 5, 1974, p. 50.

17. NAZ, SEC2/94, 1950-1951, Annual Report, Northern Province.
18. NAZ, SEC2/94, 1950-1951, Annual Report, Northern Province.
19. NAZ, SEC2/94, 1950-1951, Annual Report, Northern Province.
20. Interview with Mr. Obed Kampamba, former Provincial Agricultural Officer (PAO) for Northern Province, Kasama, 21/1/88. Mr. Kampamba graduated from Lunzuwa Agricultural Training School in 1955 as an Extension Officer. He took part in recruiting tenants to the Peasant Farming Schemes.
21. NAZ, KDH 1/1/Vol. IV, 1959, Kasama District Notebook.
22. A.I. Richards, 'Changing Pattern of Agriculture in East Africa: The Bemba of Northern Rhodesia', Geographical Journal, 124, 1958, p. 311.
23. Interview with Mr. O. Kambamba, Kasama, 21/01/88.
24. C.G. Trapnell, The Soils, Vegetation and Agriculture of North-Eastern Rhodesia: Report of the Ecological Survey; (Lusaka: Government Printer, 1953), pp. 34-35.
25. C.G. Trapnell and J.N. Clothier, The Soils, Vegetation and Agricultural Systems of North-Western Rhodesia, (Lusaka: Government Printer, 1957), pp. 40-46.; M.S. Muntemba, 'Thwarted Development: A Case Study of Economic Change in the Kabwe District of Zambia, 1902-1970', in R. Palmer and N. Parsons (eds.), The Roots of Rural Poverty in Central and Southern Africa, (London: Heinemann, 1977), pp. 348-352.
26. Trapnell, The Soils and Agriculture in North-Eastern Rhodesia, 38.
27. Richards; Land, Labour and Diet, 35-37.
28. Richards, Land, Labour and Diet, 397.
29. Richards, Land, Labour and Diet, 132-134.
30. Richards, Land, Labour and Diet, 217.

31. NAZ, SEC2/97, 1953-55, Annual Report, Northern Province, Provincial and District Organization.
32. J. Tosh, 'The Cash-Crop Revolution in Tropical Africa: An Agricultural Reappraisal', African Affairs, 79, 314, 1980, pp. 84-94.
33. NAZ, KDH. 1/1Vol. IV, 1959, Kasama District Notebook.
34. Interview with Mr. O. Kampamba, Kasama, 21/01/88.
35. Richards, 'A Changing Pattern of Agriculture', Geographical Journal, 311.
36. Interview with Mr. K. Lubeleto, a former labour migrant from Southern Rhodesia (Zimbabwe), Mungwi, 17/02/88.
37. Richards, 'A Changing Pattern of Agriculture', Geographical Journal, 312.
38. Richards, 'A Changing Pattern of Agriculture', Geographical Journal, 304.
39. Hellen, Rural Economic Development, 200, 206.
40. Hellen, Rural Economic Development, 188.; NAZ, SEC2/94, 1950-1951, Annual Report, Northern Province.
41. Hellen, Rural Economic Development, 206.
42. NAZ, NR/17/106, 1956-1962, Peasant Farming in Northern Province.

43. Interview with Mr. Kampamba, Kasama, 21/01/88
and Mr. W. Chanda, former Local Court
Assessor, Chitamba Shanty Compound,
Kasama, 06/07/88.
44. W. Watson, Tribal Cohesion in a Money Economy:
A Study of the Mambwe People of Zambia;
(Manchester: Manchester University Press,
1958), p. 217.
45. R.E. Baldwin, Economic Development and Export
Growth: A Study of Northern Rhodesia,
1920-1960, (Barkeley: University of
California, 1966), p. 203.

CHAPTER FOUR.

TURNING POINT IN THE AGRARIAN ECONOMY OF THE NORTHERN PROVINCE, 1964-1978.

In this chapter, we shall show that contrary to the agricultural unproductivity of Northern Province during the colonial period, the picture has changed since the attainment of political independence. The province has witnessed a phenomenal growth rate in agricultural production especially with regards to maize where the province has moved from being a 'deficit area in the 1960s to a surplus area by the 1980s, exporting its surplus maize to Luapula, Copperbelt and North-Western Provinces'.¹ As a result, Northern Province has become the fourth maize producing area in the country after Central, Southern and Eastern Provinces.

The evidence of the province's increased maize production is provided in Table 4.1. The picture revealed in the table is fascinating especially considering the long standing history of millet and cassava as staple crops for the Northern Province. Moreover, as the table shows, the increase from 23,000 (90 kg) bags in 1964 to 212,364 bags in 1978 and to 648,590 bags in 1982 contradicts some strongly held views about the Bemba attitude to maize. For example Audrey Richards work in the 1930s shows that the crop was identified with low status.

To the contrary, by 1978, the Provincial Agricultural Officer for the Northern Province reported that maize had become the 'major crop grown in the province by all categories of farmers and ranged second to cassava as staple food for the rural population and as staple food for urban areas'.² This chapter attempts to explore the factors that have led to increased production and marketing of maize in the Northern Province. This will tie up finally with an examination of why the production of cassava still holds the first position in the rural parts of the Northern Province.

TABLE 4.1

MAIZE MARKETING BY STATUTORY BOARDS IN SOME PROVINCES, 1964 - 1982

YEAR	UNIT	CENTRAL	SOUTHERN	EASTERN	NORTHERN	LUAPULA	NATIONAL TOTAL
1964	90 kg.	1,176,000	964,000	90,000	23,000	2,000	2,226,000
1966	"	2,330,000	1,704,000	154,000	28,000	14,000	2,894,393
1967	"	2,326,266	1,679,461	89,000	68,609	16,000	4,233,877
1969	"	1,322,220	1,443,600	26,100	113,800	36,800	2,930,930
1970	"	903,200	461,400	15,600	56,690	19,600	1,490,300
1972	"	4,196,700	2,115,000	334,800	68,605	28,800	6,850,600
1974	"	2,510,052	1,171,595	505,937	65,000	15,596	4,435,019
1975	"	3,785,588	1,969,822	612,161	102,634	16,105	6,554,333
1976	"	2,844,008	2,335,657	769,576	113,255	17,644	6,216,455
1977	"	3,948,286	3,073,459	912,122	183,607	25,216	8,333,022
1978	"	2,865,385	2,076,987	942,089	212,364	32,288	7,738,347
1980	"	1,233,917	1,554,074	517,371	159,264	18,407	3,732,879
1981	"	1,518,583	1,554,457	739,743	328,273	19,209	5,107,123
1982	"	2,679,390	3,035,580	1,182,493	648,590	29,056	7,869,802

Source: a) C.L. Dixon, The Development of Agricultural Policy in Zambia, 1964-71

(Aberdeen: University of Aberdeen, 1971), p. 11.

b) V.S.S. Oella, 'The Production and Marketing of Maize in Zambia',

(M.Sc. Diss., University College of Wales, 1983), pp. 11, 14.

c) N.C.U. and Northern Milling Report, (Kasama: February 1983), p. 4.

EARLY EFFORT TO BOOST MAIZE PRODUCTION IN NORTHERN PROVINCE,
1964-1974.

I argue that the first decade of political independence, 1964 to 1974, was one of increased state intervention in agriculture in the Northern Province as was the case in the rest of the country. This state intervention was made possible by relatively high copper prices which led to substantial state revenue. Copper provided 30 percent of gross domestic product and 94 percent of export earnings during the period under discussion.³ With this economic buoyancy, the state set about redressing the social conditions of poverty and underdevelopment. Massive investments were implemented in the extension of road system, provision of marketing, loans, extension services and many other agricultural infrastructures to the rural areas which had been neglected during the colonial period. Though most of it was confined to the line of rail (Southern, Lusaka, Central and Copperbelt Provinces), Northern Province, and Kasama District in particular, did benefit from improved communications and other capital investment.

Meanwhile, beginning from the mining boom of the late 1920s, state agricultural policy aimed first and foremost at the provision of cheap and reliable food supply for the mines and towns. One striking aspect of the agricultural policy in the transition of Zambia from colonial state to

independent state was the continuation of this policy whose implementation was through a succession of the development plans. However, the Zambian Government also aimed at providing cheap and reliable food supply for the nation as a whole. In 1965 when the Agricultural Marketing Committee presented a report on maize it stated that Zambia's objective would be 'national self-sufficiency in maize since imports were undesirable and exports unsound for geographical reasons'.⁴ Therefore, as agricultural infrastructure expanded to most areas of the country, peasants in the outlying provinces like the Northern Province where maize was not a staple food crop were encouraged to grow it as a first step for entry into cash cropping.⁵ The policy objective on the Northern Province as stated in the First National Development Plan, 1966-1970, is instructive.

The major aims are to achieve self-sufficiency in maize, to increase the acreage and yields of Turkish tobacco, to stimulate production of groundnuts in selected areas as a cash crop, and to develop horticulture for local demands. ⁶

Given the implications of this objective on Northern Province, it is apparent that the post-colonial state had no conceived policy on encouraging the production of indigenous crops such as millet and cassava. Thus, as first step toward achieving its objective, the Zambian

Government initiated a programme of Communal Farm Co-operatives throughout the country along side with the Tractor Mechanization Scheme. The co-operatives were launched in 1965 with an announcement by President Kaunda that any ten people could register as a co-operative and become eligible for government loans under the Credit Organization of Zambia (COZ).

These Co-operatives were based on a farm unit and as long as one paid a patronage fee of K2, membership was open to anybody regardless of farming or financial record. To encourage growth of farming co-operatives the government promised a subsidy of K30 for each acre of woodland officially certified as completely cleared for cash crops by the registered co-operative with at least ten members. The government also promised a grant to purchase a tractor for any such group which cleared fifty acres.⁷ The response was overwhelming. Family groups in isolated areas registered themselves as co-operatives and claimed tractors. Generally speaking, large sums of money were spent on co-operative movement throughout the country. For example, between 1964 and 1969, over K14 million was spent.⁸ But despite this huge state inducement given to co-operatives, by the mid-1970s many of the Communal Co-operatives were defunct and most of the members had fled the farms.

The purpose of this section, however, does not lie in the general discussion of the failure of co-operatives in

the Northern Province, but to specify their relevance to maize production. I argue, therefore, that despite their failure, co-operatives together with the tractor mechanization scheme, initiated a turning point in the agrarian sector of the Northern Province. For instance, either by using tractors or any other means, large tracts of land were laid open for farming. But, the main objective of the Zambian Government was to encourage the production of maize as a cash crop. Thus, as groups registered themselves as co-operatives, peasants were encouraged to devote considerable hectareages of land to maize. The trend was further boosted by credits, generous maize seed distribution, heavily subsidized fertilizer and by high producer prices offered.

Fertilizer was sold to both peasants and commercial farmers at heavily subsidized rates until 1976 when the government cut subsidy by 30 percent.⁹ In the Northern Province, for example, the government paid one third of landed cost of fertilizer to every district centres. This meant that for a 50 kg bag of 'X' compound which was costing K5.64, the government paid K1.88 while the peasant paid K3.76. On the other hand, for a 50 kg bag of Calcium Ammonium Nitrate (CAN) which was costing K4.35, the government paid a subsidy of K1.45 while the peasant paid K2.90.¹⁰ Tables 4.2(a) and 4.2(b) present data on fertilizer

subsidies ('X' Compound and CAN) for the 1967/68 season. As the tables show, it means that the government spent a total sum of K170,070 on providing fertilizer for maize in the Northern Province. In addition, a further K38,000 was paid as maize seed subsidy and another K306,000 in agricultural loans. Therefore, the total government support to maize production in the Northern Province was K514,070.

During the 1969/70 season, the total quantity of fertilizer input amounted to 41,325 (50 kg) bags.¹¹ For certain, this was a great incentive to maize producers in the Northern Province. Commenting on this, Michael Bratton observes that out of a total national expenditure of K14 million, the Northern Province alone 'accounted for over K2 million'.¹²

TABLE 4.2(a)

Break Down of Government Subsidy on 'X' mixture, 1967/68

District	Amount	Farmers' Cost per ton	Total Farmers' Cost	Govt. Cost.
Kasama	500 tons	K76.80	K38,400	K19,000
Mbala	250 "	K85.40	K21,350	K10,675
Isoka	250 "	K81.00	K20,250	K10,125
Chinsali	200 "	K75.60	K15,120	K7,560
Mpika	300 "	K66.10	K19,830	K9,915
Luwingu	150 "	K85.00	K12,750	K6,375
Mporokoso	250 "	K86.20	K21,550	K10,775
TOTAL Subsidy on 'X' mixture				K74,625

Source: J.F.A. Russel, Maize Production in the Northern Province (Lusaka: Government Printer, 1968), pp. 5-6.

TABLE 4.2(b)

Break Down of Government Subsidy on Calcium Ammonium
Nitrate (CAN), 1967/68.

District	Amount	Farmers' Cost per	Total Farmers' Cost	Govt. Cost.
Kasama	750 tons	K65.40	K49,000	K24,525
Mbala	375 "	K73.80	K27,675	K13,885
Isoka	375 "	K69.40	K26,025	K13,012
Chinsali	300 "	K63.60	K19,080	K9,540
Mpika	450 "	K54.60	K24,570	K12,285
Luwingu	225 "	K13.40	K16,515	K8,258
Mporokoso	375 "	K74.60	K27,975	K13,987
TOTAL SUBSIDY ON CAN				K95,445

Source J.F.A. Russell, Maize Production in the Northern
Province (Lusaka: Government
Printer, 1968), pp. 5-6.

It is equally clear from the tables that Kasama District received the largest proportion of government subsidy in the Province. Despite the heavy inputs, however, the District maize production shows slower growth rate compared to Mbala and Isoka Districts; see Table 4.3.

This could be attributed to the fact that maize in Kasama District was still fighting against the entrenched patterns of cassava and millet culture. Another explanation, as will become clear later, could have something to do with poor distribution of agricultural services among peasants.

Indeed, at provincial level the production was sufficient enough to maintain even a surplus for export to Luapula Province. D.J. Siddle, for instance, observed that as a result of 'priority support given to maize', the Northern Province in 1967 'produced 68,609 bags, a 20,000 bags surplus above local requirements'.¹³ Thus, the marketed maize in the province, as Table 4.1 shows, rose from 23,000 (90 kg) bags in 1964 to 113,800 bags in 1969 before slumping to 65,000 bags in 1974. The changes in annual trends on Northern Province between 1964 and 1974, like the rest of the country, can be accounted for, on the one hand, in terms of reduction in producer prices and state encouragement to farmers to diversify agriculture, following what was ill-conceived as bumper harvest of 1966 and 1967.¹⁴ To encourage diversification, the government decreased maize prices over the period 1964 to 1969; see Table 4.4. The trend in production, however, boomeranged in 1970 when, under drought conditions, maize production at national level slumped to 1,490,300 (90 kg) bags which in turn, prompted the state to raise producer prices. The

TABLE 4.3

NORTHERN PROVINCE: MAIZE MARKETING BY N.C.U., 1964-1975.

YEAR	UNIT	KASAMA	MBALA	ISOKA	CHINSALI	MPIKA	LWINGU	MPOROKOSO
1964	90 kg.	8,951	4,773	3,665	2,991	3,000	3,190	2,200
1965	"	10,302	6,451	3,753	2,598	5,351	4,000	1,905
1966	"	14,940	9,582	4,982	4,100	8,400	5,900	2,000
1967	"	18,100	12,100	6,800	5,951	10,804	7,075	2,001
1968	"	23,758	15,645	6,824	7,185	11,550	7,488	2,476
1969	"	49,422	20,769	10,158	8,721	8,929	12,464	4,530
1970	"	19,616	14,407	6,861	4,229	5,207	3,847	2,354
1971	"	20,509	10,887	9,679	5,966	6,892	4,744	1,924
1972	"	22,320	11,522	10,941	10,034	6,312	5,288	3,824
1973	"	24,465	10,523	10,954	3,060	6,538	3,734	2,710
1974	"	21,220	19,838	10,808	4,704	3,275	5,529	3,173
1975	"	37,043	24,316	22,000	9,550	16,700	16,020	7,000

Source: a) Northern Co-operative Union Records, 1976.

b) As compiled by Mr. R.K. Meki, N.C.U. Co-operative Development Manager, 27/01/88.

TABLE 4.4

PRODUCER PRICE OF MAIZE BY PROVINCE, 1966-1978 (KWACHA PER 90 KG BAG)

YEAR	Line of rail Provinces	Eastern Chipata	Northern Kasama	Luapula Mansa	N. Western Kabompo	Western Mongu
1965/66	3.32	2.00	4.00	3.10	3.10	3.10
1966/67	3.10	2.00	4.00	3.95	4.40	4.85
1967/68	3.90	2.00	3.75	3.90	4.40	4.85
1968/69	3.20	2.40	3.70	3.90	4.80	5.05
1969/70	3.50	3.00	3.70	3.90	4.80	5.00
1970/71	4.00	4.00	4.00	4.00	4.80	5.00
1971/72	4.30	4.30	4.30	4.30	5.00	5.00
1972/73	4.30	4.30	4.30	4.30	4.30	4.30
1973/74	4.30	4.30	4.30	4.30	4.30	4.30
1974/75	5.00	5.00	5.00	5.00	5.00	5.00
1975/76	6.30	6.30	6.30	6.30	6.30	6.30
1976/77	6.80	6.80	6.80	6.80	6.80	6.80
1977/78	6.80	6.80	6.80	6.80	6.80	6.80

NOTE: Line of rail Provinces refer to Southern, Central, Lusaka and Copperbelt Provinces.

Source a) D.J.Dodge, Agricultural Policy and Performance in Zambia: History, Prospects and Proposals for Change, (Berkeley, University of California, 1977), p. 100.

b) U.S.S. Chella, 'The Production and Marketing of Maize in Zambia', (M.Sc. Diss., University College of Wales, 1983), p. 65.

government was at the same time forced to meet the 1970 shortfall through imports from Zimbabwe.¹⁵

From 1970, on the other hand, the government's aim was characterized by a movement toward eliminating regional price differentials in maize price and fertilizer subsidies, and this aim was achieved in 1975. This move was justified on 'equity grounds' and 'fairness' which meant that a peasant was to get the same price for a bag of maize regardless of the location.¹⁶ However, as it becomes apparent in Tables 4.1 and 4.4, the uniform pricing benefited peasants in Eastern and the line of rail Provinces where maize price and subsidies had been lower than the uniform price. Above, all, the movement toward uniform regional pricing had the effect of leaving the Co-operative Marketing Unions with too small a margin to cover the costs of their marketing services largely because they had to operate within a statutory framework. As Dodge observes, they now depended on government subsidies which were often granted with 'reluctance and usually with considerable delay'.¹⁷ This in turn had an adverse effect on Northern Province maize production between 1970 and 1974 during which period marketing was the sole monopoly of the ill-fated Northern Province Co-operative Marketing Union (NPCMU).

POST-COLONIAL SCHEMES AND MAIZE PRODUCTION, 1975-1978

The failure of the Communal Farm Co-operatives

encouraged the growth of strong feeling in favour of private ownership of land with emphasis on family farms. The relative success of family group co-operatives appeared to have rekindled interest in planned productive settlements as an important method of raising peasant productivity. These schemes developed as part of the national development plans. The concept of settlement schemes, developed during the colonial period under the programme of Peasant Farming Schemes (PFS) which were introduced in the country in 1948. At independence, the post-colonial state, while strongly supported the co-operative movement, reduced support to the PFS on the grounds of their alleged ties with the colonial government.¹⁸

Meanwhile, addressing a meeting on rural development in Lusaka in March, 1970, President Kaunda said, 'Zambia's agricultural future should be directed toward the development of small-to-medium-sized family farms'.¹⁹ Therefore, as a result of the Presidential directive, the idea of Settlement Schemes was revived in the country. In the Northern Province, the period 1970-1978 witnessed the establishment of Settlement Schemes in various areas. The schemes were either state-controlled, parastatal-controlled or private-owned. In Kasama District, state-controlled Settlement Schemes were established at Ngoli in 1970 and at Chamfubu in 1974. A parastatal-owned Settlement Scheme was established at Munkonge in 1975 by the Tobacco Board of Zambia while Kasama Dairy Produce Board and Kateshi Coffee Schemes

established schemes in 1976 and 1978 respectively.²⁰ These were basically mixed farming schemes and produced a variety of cash crops such as tobacco, groundnuts, coffee, beans and maize.

Membership was open to anybody as long as he or she possessed an impressive record of producing for sale and was married. Significantly, some of the scheme members settled at Chamfubu and Ngoli Settlement Schemes came from as far as the Southern and Central Provinces.²¹ In 1975, Rural Reconstruction Centres (RRC) were established in various parts of the country. The aim of establishing these centres was to make them as focal points of food production and as long term projects that were designed to reduce the growing level of unemployment, especially among the Zambian youth who graduated from institutions of learning but could not be absorbed by labour market. In Kasama District a R.R.C. was established at Lukulu, while a Zambia National Service Camp was also established at Chishimba. However, the mechanics and success of food production in these schemes, centres and camps is outside the scope of this study.

In spite of their being Mixed Farming Schemes, these schemes generally registered specifically high maize yields. Take Ngoli Settlement Scheme, for example, where an average of 1,500 (90 kg) bags of maize were produced annually

between 1971 and 1974. The production increased to between 2,400 bags and 3,000 bags from 1975 to 1978. A similar trend held true of other schemes in various parts of the province.²² In addition to the schemes and the family farms which produced maize in the province, higher maize yields in Kasama District, like the rest of the province, were registered by various government and non-government institutions such as School Production Units, Prisons and District Council Farms.²³ Moreover, in response to attractive producer price between 1975 and 1978, maize output in the province rose from 102,634 (90 kg) bags in 1975 to 212,364 bags in 1978, see Table 4.1. At this point therefore, I now take a look at the significance of price incentives in relation to maize production in the Northern Province.

THE CROP PRICING POLICY

I have already said that one of the major agricultural objectives of the Zambian Government enshrined in each of the five-year development plans was food self-sufficiency for the nation. Another and perhaps equally important state objective was an effort to make all Zambian subsistence producers enter into cash crop production. In this respect, crop pricing policies were generally influenced by an effort to achieve these objectives. Consistently, throughout the period from 1964 to 1978, the pricing policy with respect

to maize and other cash crops:

remained that of encouraging Zambian farmers to shift from subsistence to commercial farming, and to ensure provincial and national self-sufficiency as much as possible in those products which can be economically produced at home, and also to take advantage of export opportunities.²⁴

As it becomes clear from Table 4.4, Northern Province received the highest producer price for maize in the country during the 1965/66 season. However, from 1966 to 1970, generally the price for maize was higher in deficit areas (Northern, Luapula, Western and North-Western Provinces) to encourage maize production, and price was lower in surplus areas (Line of rail and Eastern Provinces) to make farmers here diversify away from maize into other cash crops and livestock.²⁵ For example, while in 1968/69 the national price for maize delivered to the line of rail depots was K3.20 per 90 kg bag, it was only K2.40 in Chipata in Eastern Province. The price was K3.70 in Kasama, K3.90 in Mansa, K4.80 in Kabompo and K5.05 in Mongu.²⁶ But as mentioned earlier, from 1970, this regional price differentials were determined by a move toward achieving uniform pricing and this was achieved in 1975 when a producer price of K5.00 was guaranteed everywhere in Zambia.

From 1973, and in addition to an effort to eliminate regional price differentials, new developments in the Zambian economy necessitated further increase in the producer

prices for maize. For instance, the fall in copper prices coupled with the disruption of Zambia's transportation routes to the sea by wars of liberation in Angola and Zimbabwe, created a serious crisis in the Zambian economy which the state chose to grapple with by negotiating an International Monetary Fund (I.M.F.) loan. The terms of the loan included, among other things, that Zambia 'devalue its currency, raise the producer prices of agricultural commodities and eliminate subsidies that had further held down prices of food to urban consumers'.²⁷ The result was an increase in producer prices for maize, from 1974 to 1978.

Meanwhile, one of the most notable features in the period beginning from 1964 was an increase in prices of consumer goods and agricultural inputs whose effect worsened with economic recession of the mid-1970s. Certainly, the effect of price increase in the face of rising costs of consumer goods, could have been inducement enough to initiate agricultural transformation in Northern Province resulting in increased maize production as Tables 4.1 and 4.3 bring out. So, as prices increased, so did the number of maize producers, thereby providing a further increase in maize production. For example, in Kasama District the number of maize producers increased from 416 in 1971 to 4,753 in 1978. At the same time hectareage increased from 1,872 in 1971 to 16,785 in 1978.²⁸

Clearly, by 1978 maize had emerged as one of the major income earners in Kasama District and the Northern Province. On the other hand, it is difficult to establish with precision how maize replaced cassava and millet as a staple food in some families in the Northern Province. But it would appear that population and ecological changes in the province had a bearing.

POPULATION AND ECOLOGICAL CHANGES IN RELATION TO MAIZE PRODUCTION

The Northern Province population declined by - 0.6 percent between 1963 and 1969, from 563,040 to 545,096. Table 4.5 gives overall population figures for each district and compares rural and urban populations. It will become clear from the table that both Mbala and Mporokoso recorded an increase, the later being entirely urban. This could possibly be attributed to the fact that Mbala was agriculturally more productive in rice and beans production, cattle rearing, and fishing on Lake Tanganyika, while Mporokoso also did a lot of fishing on Lake Mweru Wantipa. In his analysis of peasant income, Chipungu brings out this point when he compares the Northern Province population trends with Southern Province. He says, 'In provinces where agricultural production was more viable, the drift to urban areas was significantly less, even if towns were nearby, suggesting that rural incomes could meet most of the peasant demands.'²⁹

TABLE 4.5Population Statistics Comparing 1963 and 1969 Census.

Districts	Rural Areas		Urban Areas		Total Population	
	1963	1969	1963	1969	1963	1969
Chinsali	69,870	55,180	1,070	2,834	70,940	58,014
Isoka	78,710	76,224	1,320	1,476	80,030	77,700
Kasama	104,920	98,893	8,600	8,924	113,520	107,817
Luwingu	80,070	75,514	820	3,650	80,890	79,164
Mbala	85,570	86,553	3,500	5,282	90,900	95,633
Mpika	60,840	57,964	580	1,414	61,420	59,390
Mporokoso	64,590	63,154	750	4,236	63,340	67,378
TOTAL =	544,570	513,482	18,470	31,614	563,040	545,096

SOURCE J.E. Mansfield et al. Land Resources of the Northern and Luapula Provinces, Zambia: A Reconnaissance Assessment Vol. I (1973) pp. 189-187.

However, looking at the urban population for Northern Province, all districts show an increase. One of the main reasons is probably the large increase in the number of government servants and employees who took up residence in urban centres as government departments expanded since 1964. Above all, the independence boom was a major factor as people sought to benefit from favourable economic conditions that

prevailed in urban centres. Moreover, during the period 1963-1969 the major urban centres of Lusaka and Copperbelt, registered population growth rates of 10.4 percent and 7.0 percent respectively.³⁰

After 1969, some reversal of out migration from Northern Province occurred probably as job opportunities on the Tanzam railroad became available in the early 1970s. Meanwhile, the economic recession that affected copper production after 1974 influenced the rate of population growth in major towns to slow down, possibly as employment became increasingly difficult to find. Between 1969 and 1978 Northern Province registered population growth rate of 2.0 percent. Nevertheless, a major characteristic feature of population pattern in the whole country between 1964 and 1978 is a high rate of mobility among the people which resulted in greater inter-provincial migration especially to provincial and district centres as the Zambian Government policies of decentralization took effect after 1969. It is in the same context that we account for increase in the population of Kasama District which rose from 107,817 in 1969 to 128,577 in 1980.³¹

It follows therefore that during the period 1964-1978, although Northern Province experienced considerable emigration, it at the same time registered immigration from all over Zambia with major in-flows coming mostly from Copperbelt, Central, Lusaka, Eastern and Southern Provinces.³² In all

these provinces, maize was widely grown and eaten. Moreover, the climatic changes in recent years that have characterized the Central and Southern Provinces resulting in persistent droughts tended to draw farmers out of these regions to areas of relatively high and more reliable rainfall of which Northern Province is one. On the other hand, urban centres, beginning from the colonial period, have been associated with a strong maize eating culture. Thus, it is possible that the migrants into Northern Province urban and rural centres took with them new cultural and urban tastes for maize which in combination with government policy made them invest more in maize farming, hence setting examples to their Northern Province neighbours who still concentrated on growing cassava and millet as staple food and cash crops. This trend continued as movement of migrants into permanent farming in outlying villages became increasingly common. In this way maize farming and eating began to permeate the rural parts of the Northern Province because these farmers acted as growth poles to the surrounding villages. Maize penetration of the rural areas had an impact on the patterns and practices of shifting cultivation on which the production of millet and cassava depended, as more forested woodland areas were cleared for permanent maize farming. Above all, the practice was better established as more people tended to regard the age-long chitemene system as a wasteful and dangerous practice.

As the tendency toward permanent residence became common, some families grew millet, not on chitemene fields, but

on fundikile which was becoming an increasingly common method of cultivating maize especially among the under-capitalized poor peasants, who had no access to fertilizer. Fundikile is a form of grass manure culture adopted probably from the grassland system of the Aisa Mambwe of Mbala District. In this method of cultivation, grass is hoed into mounds between February and March, and left to rot until late November when the rains set in. The mounds, now containing humic soil, are broken up and spread for maize or millet cropping which often gives high yield. The method is highly fertilizer-saving. Where ten bags of fertilizer are required on 10 hectares of a non-fundikile land, only three or less bags are required on a fundikile land of the same size. At the time of research in 1988, the method was being highly recommended among all categories of farmers because it is economical and at the same time ensures long term soil potential for maize and millet production.³³

In Kasama District, however, as maize farming formed an integral part of new subsistence, some families, especially those in villages lying within 40-50 kilometre radius of Kasama town, had to quit the effort involved in millet and cassava production in favour of maize production. Alternatively, they bought the already processed mealie meal as eating maize meal became associated with the status of urban modernity. According to oral evidence, people began to switch to eating maize meal, not only because it was already processed, but that the adoption of a maize eating culture in a household

became identified with a symbol of high status. 'Maize meal is whiter than our traditional meal of cassava and millet'.³⁴ It is thus clear that while the crop in the 1930s was identified with low status, by 1978, maize had not only assumed the role of both food and income earner, but that, it had also moved from the position of low status to high status. Consequently, millet in some families is reported to be cultivated entirely for the purpose of brewing beer.

Other families combined cassava growing and maize production since the two crops did not pose much problem in terms of labour distribution. Table 4.6 presents data on labour requirements for cassava and maize.

TABLE 4.6

Seasonal Labour Requirements for Cassava and Maize:

(HOURS PER HECTARE)

CROP	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEPT.	TOTAL
MAIZE	67	121	198	158	8	-	-	-	-	-	-	-	552
CASSAVA	5	7	47	81	97	98	43	24	16	12	10	8	448

Source: A. Marter, Maize or Cassava: A Comparative Study of the Economics of production and Market Potential of Cassava and Maize in Zambia, (Lusaka: RDSB-UNZA, 1978), p. 27.

It is clear from the table that the critical peak period for maize is from October to January when due to land clearing, planting and weeding, labour inputs are much higher than the highest monthly labour input for cassava. The peak requirements for cassava are not so pronounced and a more even distribution over the whole crop season is possible. In this way, it is reasonable to assume that cassava could have facilitated further investment in maize production. During the research, I discovered that some families could not do without cassava just as others could not do without both cassava and millet even though they were successful maize producers. To some, cassava and millet were means for paying workers. Others said that cassava provided a reserve food in times of maize failure. 'How certain are we that the government will always provide fertilizer for maize?'³⁵ Some felt that the crop provided a very delicious meal when mixed with either maize or millet.

Therefore, the increased cassava production during the period under discussion could, on the one hand, be attributed to the factors discussed above. On the other hand, the increase could be explained in terms of the distribution of state resources among the peasants. By and large, the sum of the factors discussed above could possibly be sufficient to account for the agricultural change in the Northern Province, resulting in high production of maize and cassava.

THE DISTRIBUTION OF AGRICULTURAL SERVICES AMONG THE PEASANTS,
1964-1978.

In the Northern Province, the farming community constituted poor peasants, emergent farmers and commercial farmers, all with varying production targets, and ultimately differing incomes. Since maize producers were differentiated, their access to state agricultural resources tended to be different also. I have said earlier that the post-colonial state, like the colonial government, aimed at introducing peasants in the Northern Province to maize farming. Hence, for the post-colonial state, the Communal Farm Co-operative movement launched in the 1960s became the first key attempt to orient peasants to maize production. The question is, did the Zambian government succeed where the colonial government failed? Certainly, there is little doubt that poor peasants who constituted the bulk of the Communal Co-operatives made a marked shift from subsistence to cash cropping in maize.

First, while peasants faced problems of access to credits as will soon become clear, their plight was compounded by poor marketing services. For instance, while the state aimed at encouraging peasants to shift from subsistence to cash crop production, it, on the other hand, failed to provide efficient marketing services. To some extent, this can be attributed to the fact that the colonial legacy toward areas which were regarded as having no agricultural potential

was seen to influence the Zambian Government's distribution of marketing services in the country between 1964 and 1978. A case in point is that of the exclusion of the Northern Province from the marketing arrangement and services provided for by the Agricultural Rural Marketing Board (ARMB) from 1965 to 1969, and the National Agricultural Marketing Board (NAMBOARD) between 1969 and 1978 on the grounds that the Province was a 'non-viable area'. A 'non-viable area' was defined as 'one which had agricultural potential but in which the value of the surplus agricultural produce was insufficient to cover its full marketing costs without dully depressing the producer prices'.³⁶

Thus, falling outside this arrangement, Northern Province relied for its marketing services on the Northern Province Co-operative Marketing Union (UPCMU), a marketing agency which, as Dodge has observed, had been the 'biggest constraint on agricultural development in the Northern Province', since it greatly worked against the efforts of the poor peasants.³⁷ For example, late payments and deliveries of agricultural inputs was the order of the day. This point is made clear by the Provincial Agricultural Officer for the Northern Province, who, in 1971 observed:

Payments were paid to farmers as late as February 5th, 1971. This definitely discouraged many farmers from producing maize, because it resulted in many often

being unable to buy seed or fertilizer to continue with farming. And if a farmer had any loan with AFC, he or she appeared to be a bad debtor, and yet money was tied up by NPCMU due to late payment. 38

It was believed by some peasants that those who were on 'good terms' with NPCMU management were often paid in time and, more often than not, these were the already better-off emergent and commercial farmers with impressive market record. 39

A second attempt aimed at the poor peasant was the Decentralization Decision Making and Development Programme. These were the Village Productivity Committee (VPC) and the Ward Development Committee (WDC) structures, which were set up in 1971 on a national-wide basis as the administrative framework for all development programmes. The purpose of these structures was to mobilize peasants in the use of state resources. But, while the idea behind their introduction was to reach the poorest peasants in Kasama District, this was not the case. For example, Bratton shows that the state resources meant for the poor peasantry, were channelled to the politically powerful emergent and well-to-do commercial farmers. A case in point is that of the well-off farmers, businessmen and salaried employees who pressed for positions on the WDC in order to avail themselves to government loans and other agricultural resources. 40

This inaccessibility of the peasants to the agricultural resources was further compounded by the dissolution of the

Credit Organization of Zambia (COZ) in 1969. The COZ was replaced in 1970 by the Agricultural Finance Company (AFC) which immediately adopted a policy of credit worthiness. Moreover, the Second National Development Plan, 1972-1976 (SNDP) stressed that the Company would adopt a policy based on 'credit worthiness'. It stated, 'Loans will only be issued for productive purposes with realistic credit assessment and maximum expectation of loan recovery'.⁴¹ This meant that the applicant had to prove that he or she was able to repay the loan. The policy, observes Chilivumbo, 'sounded a death knell to the Communal Co-operative Farms', whose members were now relegated to a position of 'credit risks'.⁴² In my investigation, I found that some peasants did not know fertilizer and hybrid maize seed (SR 52) until the 1980s. All they knew and used was a local maize variety which often gave low yields. This point is clearly stated by the PAO for Northern Province who in 1971 recorded:

It is estimated that about 90% of the farmers in the province use hybrid maize seed and fertilizer.

Of the subsistence farmers, only about 10% is estimated to be using hybrid seed and fertilizer.⁴³

Thus, faced with the problem of inaccessibility to agricultural resources, peasants in the Northern Province had no option but to fall back on their subsistence production in millet and cassava. The result was that millet production in the province between 1970 and 1978, increased from 3,420 (90 kg) bags

in 1970 to 44,280 bags in 1974 before dropping to 8,250 bags in 1978. However, because of the low market price offered, peasants avoided selling millet to NPCMU in preference for private buyers who tended to stake higher prices. So, while production of millet kept increasing, sales to NPCMU dropped from 365 (90 kg) bags in 1970 to only one bag in 1978.⁴⁴ Meanwhile the period 1969-1978 is riddled with agricultural reports that cassava production and consumption increased tremendously in the province despite the absence of definite government policy on its price and marketing. For example, Bratton puts cassava at 170 percent of the meal consumed in Kasama District by the mid-1970s.⁴⁵

Against this background, it is true to argue that the agricultural innovations in the form of increased maize production and commercialization in Kasama District and the rest of the Northern Province as noted in Tables 4.1 and 4.3, were undertaken for the most part by the emergent and well-to-do commercial farmers and certainly not the poor peasants who constituted the bulk of the rural population. Bratton observes:

increase in maize production in Kasama District in the 1974-75 season were limited to the approximately 1,100 emergent farm families, while the output of 18,000 subsistence families did not improve.⁴⁶

The conclusion that can be drawn from this chapter is

that, while maize production increased substantially in the Northern Province between 1964 and 1978, it at the same time fostered peasant differentiation and class formation.

According to evidence available to us, the increase was achieved at the expense of poor peasants. It is therefore against the same background that we account for why, by 1978, maize was reported by the PAO as the second staple food to cassava in the rural areas of the province. This trend is likely to continue as long as peasants continue to gain no access to agricultural resources.

NOTES ON CHAPTER FOUR

1. Interview with Mr. J.F.M. Chipili, Provincial Marketing Co-operative Officer (P.M.C.O.), Kasama, 22/01/88 and Mr. D.H. Kalebuka, Branch Manager, (NAMBOARD), Kasama, 25/01/88.
2. Northern Province, Annual Report of the Department of Agriculture for the Year 1978, (Kasama: 1978), p. 2.
3. K. Good, 'The Reproduction of Weakness in the State, and Agriculture: The Zambian Experience', African Affairs, 85, 339, 1986, p. 246.
4. D.J. Dodge, Agricultural Policy and Performance in Zambia: History, Prospects and Proposals for Change, (Berkeley: University of California; 1977), p. 94.
5. R. Klepper, 'The State and Peasantry in Zambia', The Evolving Structure, (Edinburgh: Centre of African Studies, 1980), p. 133.
6. Republic of Zambia; NCDP, First National Development Plan, 1966-1970, (Lusaka: Government Printer, July 1966), p. 85.
7. D.J. Siddle, 'Co-operatives' in D.H. Davies (ed.), Zambia in Maps, (London: University of London Press, 1971), p. 64.
8. M. Bratton, The Local Politics of Rural Development: Peasant and Party-State in Zambia (London: University Press of New England, 1980), pp. 259-260.
9. S. Chipungu, 'The State, Technology and Peasant Differentiation in Zambia: A Case Study of the Southern Province, 1930-1987', (Ph.D. Diss., University of Minnesota, 1987), p. 233.

10. G. Larsson, and P. Wainwright, Farm Budgeting Hand-Book For The Northern Province of Zambia, (Kasama: Ministry of Rural Development, 1971), p. 4.
11. Northern Province, Annual Report of the Department of Agriculture For the Year 1970, (Kasama: 1970), pp. 6-7.
12. Bratton, The Local Bolitics, 259-260.
13. Siddle, 'Co-operatives', in D.H. Davies (ed.), Zambia in Maps, 64.
14. Republic of Zambia; NCDP, Second National Development Plan, 1972-1976, (Lusaka: Government Printer, December 1971), p. 15.
15. Dodge, Agricultural Policy, 101.
16. Dodge, Agricultural Policy, 103.
17. Dodge, Agricultural Policy, 89.
18. A.M. Kanduza, 'Allocation System of Land and its Guardianship Under Traditional Tenure in Zambia', Journal of Eastern African Research and Development, 17, 1987, p. 3.
19. K.D. Kaunda, "Medium-Sized Family Farm Will Be the Basis of Future Agricultural Development", as quoted by S. Chipungu, 'The State, Technology and Peasant Differentiation', 286.
20. Interview with Mr. O. Kampamba, former PAO for Northern Province, Kasama, 21/01/88 and Mr. C.L. Mutuna, Crop Husbandary Officer for Northern Province, Kasama, 22/01/88.

21. Interview with Mr. W.K. Musangu, District Agricultural Officer for Kasama West Agricultural District, Kasama, 26/01/88 and Mr. E.M. Kapaya, District Agricultural Officer for Kasama East Agricultural District, Mungwi, 01/02/88.
22. Interview with Mr. O. Kampamba, Kasama, 21/01/88 and Mr. E.M. Kapaya, Mungwi, 01/01/88.
23. Interview with Mr. J.F.M. Chipili (P.M.C.O.), Kasama, 22/01/88.
24. Dodge, Agricultural Policy, 94.
25. Dodge, Agricultural Policy, 99.
26. Dodge, Agricultural Policy, 99.
27. Klepper, 'The State and Peasantry', The Evolving Structure, 142-143.
28. Interview with Mr. A.M. Ngala, Deputy PAO, for Northern Province, Kasama, 27/01/88.
29. Chipungu, 'The State, Technology and Peasant Differentiation', 251.
30. Republic of Zambia; C.S.O., 1980 Population and Housing Census in Zambia; (Lusaka: 1985), p. 61.
31. Republic of Zambia; C.S.O., 1980 Census of Population and Housing: Analytical Report, Vol. II, p. 97.
32. Republic of Zambia; C.S.O., 1980 Population and Housing Census in Zambia, (Lusaka: 1985), pp. 115-127.

33. Interview with Mr. A. Johnnesen, I.R.D.P. - Co-ordinator for Northern Province, Kasama, 25/01/88 and Mr. G.T. Uprichard, Research Extension Liaison Officer; Misamfu Regional Research Station, Misamfu, 29/01/88.
34. Personal Communication with Mrs. M. Kabeya, Nkolemfumu Village, 4/02/88, and Mr. S. Mpundu, Village Development Officer, Mungwi, 17/02/88.
35. Personal Communication with Mr. Kaonjela, Farmer, Senga Hill, 28/01/88.
36. Dodge, Agricultural Policy, 82.
37. Dodge, Agricultural Policy, 269.
38. Northern Province, Annual Report of the Department of Agriculture for the Year 1971, (Kasama: 1971), p. 8.
39. Personal Communication with Mr. D.S. Kolala, a former Scheme Member of Chamfubu Settlement Scheme, Kabula Village, 14/02/88 and Mr. K. Matiyala, Bwembya Village Peasant Farmer, 10/02/88.
40. Bratton, The Local Politics, 87.
41. Republic of Zambia; NCDP, Second National Development Plan, 1972-1976, (Lusaka: Government Printer, December 1971), p. 75.
42. A. Chilivumbo, 'Baseline Study: Communal Agrarian Co-operative Societies: An Experiment in Rural Societies', (Working Paper No. 12. NCDP-UNZA, RDSB, 1984), p. 134.
43. Northern Province, Annual Report of the Department of Agriculture For The Year 1971, (Kasama: 1971, p. 7.

44. Northern Province, Annual Reports of the Department of Agriculture For The Years 1970-1978,
(Kasama: 1970-1978), Various pages.
45. Bratton, The Local Politics, 144.
46. Bratton, The Local Politics, 46.

CHAPTER FIVE

CONCLUSION:

This study has analyzed the agricultural change in the Northern Province of Zambia from 1948 to 1978 focusing on maize production in Kasama District. The second chapter provided a background to the period under discussion. It looked at the policies and practices of the BSAC and the British colonial office between 1900 and 1947 and examined how these policies affected the indigenous agricultural practices in the Northern Province generally, and Kasama District in particular. For instance, the process of taxation with its consequence of labour migration, proved a major factor to economic disintegration among the people of Kasama District.

We showed that when the BSAC began operating in NER, it tried to ban chitemene system in Kasama District in an effort to shift people from producing millet to producing cassava. In the opinion of the company, the chitemene system, in which millet constituted the staple crop, was a source of deforestation. Above all, the system, it was argued, encouraged dispersion of settlement and great residential mobility, which made tax collection and administration cumbersome. We also showed that during this period, maize in the Bemba economy was not considered as essential but only as a snack food which

could be eaten fresh after or before the main meal was served.

The third chapter examined the British Colonial policies and assessed how these led to the creation of the Peasant Farming and Settlement Schemes in Kasama District during the 1950s. We showed that the creation of the schemes in Kasama District was on the one hand, the result of the perceived need for the cash crops, particularly maize, which were needed as food and raw materials for the Southern African regional economic system. On the other hand, it was 'also a de facto way of circumventing chitemene system', which had 'ravaged the woodland of the province for so long', with the aim of settling families on permanent land.¹ We showed that despite the inducements offered, the scheme did not really become cash crop farming centres. This was because of a number of factors which included labour constraints, maize itself not being a staple food, poor pricing, marketing and communication networks. These problems were compounded by the political struggle in which the Northern Province took an active part. Thus, by the end of colonial period in 1964, maize production in Northern Province remained negligible.

The fourth chapter considered maize production in Northern Province in independent Zambia up to 1978. We

showed in this chapter the one striking aspect in the transition of Zambia from colony to independent nation was a remarkable continuity of the colonial agricultural policies in some ways. A case in point is the choice of maize only as a cash and staple crop among the several starch staples of Zambia. This policy, together with the expansion of the agricultural infrastructure led to peasants in Kasama District, like the rest of the Northern Province, being drawn into maize farming which subsequently witnessed a dramatic increase.

However, it must be stressed that within a limited space, this dissertation has attempted to locate why Northern Province did not pick up in maize production during the colonial period. The study has shown that, after all, the NRG was interested in the province only as a source of cheap labour. Hence, the creation of the schemes in Kasama District as elsewhere, was just a facade intended to obscure the reality of the British colonial interests, in projecting European business and settler interests against African involvement and competition. Finally, the study has also shown that Northern Province registered impressive record in the production of maize between 1964 and 1978, but the success was achieved at the expense of the poor peasants who constituted the bulk of the rural population because of their inability to gain access to the loans and other agricultural services.

NOTES ON CHAPTER FIVE

1. H. Moore and M. Vaughan, 'Cutting Down Trees: Women, Nutrition and Agricultural Change in the Northern Province of Zambia, 1920-1986', African Affairs, 86, 345, 1987, pp. 530-531; see also, 'Economic Revolution in the Bemba Country', The Central African Examiner, 3, 16, January 1960, p. 11; The Northern News, Friday, December 4, 1959; NAZ, KDH, 1/1 Kasama District Notebook, Vol. 4 1959.

APPENDIX 1.

<u>PERCENTAGE OF MALE TAX PAYERS</u> <u>FROM NORTHERN PROVINCE CN</u> <u>LABOUR MIGRATION OUTSIDE THE AREA, 1941-62</u>	
YEAR	PERCENTAGE
1941	40
1944	43
1947	43
1950	52
1952	59
1954	59
1957	59
1961	62
1962	62

SOURCE: John A. Hellen, Rural Economic Development
in Zambia, 1890-1964, (Munich:
 London and New York, 1968), p. 97.

APPENDIX 2.GARDENS AND VILLAGE BEDS A BEMBAHAD TO DEAL WITH ANNUALLY.

GARDENS	PERIOD
Garden of Present year to be cut.	4 Weeks during May to September.
Garden of Present year to be fenced.	4 Weeks during February to March.
Garden of last year to be dug up for ground-nuts or other crops.	2 Weeks during August to October
Garden of three years ago to be burnt and prepared for third-year millet.	1 Week during August to October
Garden of four years ago to be dug into mounds for beans or other crops.	2 Weeks during October to January.

VILLAGE BEDS	PERIOD
Digging of new Village beds.	2 Weeks during December to February
Complete rehoeing of old beds.	3 Weeks during December to February
Light hoeing of old beds	1 Week during September to February
Burning and Weeding	1 Week during September to October
TOTAL	20 WEEKS

SOURCE: Audrey I. Richards, Land, Labour and Diet in Northern Rhodesia, (London: OUP, 1939), pp. 396-97.

SELECTED BIBLIOGRAPHY

1. NATIONAL ARCHIVES OF ZAMBIA (NAZ)

1.1 N.R. SERIES

NR17/106, 1956-1962, Peasant Farming - Northern Province.

1.2 K.D.H. SERIES

K.D.H. 1/1, 1902-1962, vols. 1-4, Kasama District Notebooks.

1.3 SECRETARIAL SERIES

SEC2/94, 1950-1951, Annual Reports - Northern Province.

SEC2/96, 1952-1953, Annual Reports - Northern Province.

SEC2/97, 1953-1955, Provincial and District Organisation - Northern Province Annual Reports.

SEC2/111-114, 1956-1960, Annual Reports on Native Affairs - Kasama.

SEC2/784-800, 1931-1959, Kasama Tour Reports.

SEC2/1297, 1935-1937, Northern Province Annual Reports upon Native Affairs.

2. OFFICIAL PUBLICATIONS

2.1 NORTHERN RHODESIA GOVERNMENT

Department of African Affairs, Annual Reports of the Years 1947-1963, Lusaka: Government Printer, 1947-1964.

Department of African Agriculture, Annual Reports for the Years 1957-1963, Lusaka: 1957-1964.

Pim, A.W., Report of the Commission Appointed to Enquire into Financial and Economic Position of Northern Rhodesia, 1938, London: H.M.S.O., 1938.

Trapnell, C.G., The Soils, Vegetation and Agriculture of North-Eastern Rhodesia: Report of the Ecological Survey, Lusaka: Government Printer, 1953.

— and Clothier, J.N., The Soils, Vegetation and Agricultural Systems of North-Western Rhodesia, Lusaka: Government Printer, 1957.

2.2 GOVERNMENT OF THE REPUBLIC OF ZAMBIA.

Eardmans, J.D.B., 'Settlement Schemes in Zambia: A Brief Appraisal Inventory', Lusaka: Ministry of Rural Development, 1972.

Mansfield, J.E., Land Resources of the Northern and Luapula Provinces, Zambia - A Reconnaissance Assessment, Vols. 1-4, London: Ministry of Overseas Development, 1975.

Northern Province, Annual Reports of the Department of Agriculture for the Years 1969-1978, Kasama: 1969-1978.

Russell, J.F.A., Maize Production in the Northern Province: Costs, Returns and Future Prospects, Lusaka: Government Printer, 1968.

Republic of Zambia, Central Statistics Office, 1980 Census of Population and Housing: Analytical Report, Vol. II, Lusaka: 1985.

Republic of Zambia, Central Statistics Office, 1980 Population and Housing Census in Zambia, Lusaka: 1985.

Republic of Zambia, NCDP, First National Development Plan, 1966-1970, Lusaka: Government Printer, July, 1966.

Republic of Zambia, NCDP, Second National Development Plan, 1972-1976, Lusaka: Government Printer, December, 1971.

Republic of Zambia, Central Statistics Office, Monthly Digest of Statistics, 21, December, 1965, Lusaka: Government Printer, 1965.

Van Sleen, L.A., Detailed Soil Survey of the Nondo Settlement Scheme, Lusaka: Government Printer, 1976.

3. NEWS PAPER.

Northern News, Friday, December 4, 1959.

4. SECONDARY SOURCES.

4.1 PUBLISHED ARTICLES

'Economic Revolution in the Bemba Country', The Central African Examiner, Vol. 3, No. 16, January, 1960, pp. 11-17.

Good, K., 'The Reproduction of Weakness in the State and Agriculture: The Zambian Experience', African Affairs, 85, 339, 1986, pp. 239-265.

Kaniki, M.H.Y., 'Wage Labour and the Political Economy of Colonial Violence', African Social Research, 31, June 1981., pp. 1-26.

Kanduza, A.M., 'Allocation System of Land and its Guardianship Under Traditional Tenure in Zambia', Journal of Eastern African Research and Development, 17, 1987, pp. 1-17.

Klepper, R., 'The State and Peasantry in Zambia', The Evolving Structure of Zambian Society, Centre of African Studies, 1980, pp. 120-147.

Moore, H. and Vaughan, M., 'Cutting Down Trees: Women, Nutrition and Agricultural Change in the Northern Province of Zambia, 1920-1986', African Affairs, 86, 345, 1987, pp. 523-540.

Muntemba, M.S., 'Thwarted Development: A Case Study of Economic Change in the Kabwe, Rural District of Zambia, 1902-1970', in R. Palmer and N. Parsons (eds.), The Roots of Rural Poverty in Central and Southern Africa, London: Heinemann, 1977, pp. 345-364.

Ogbu, J.U., 'Economic Transition Among the Poka of Northern Malawi: From Subsistence to Cash Cropping', Journal of African Studies, 6, 2, 1978, pp. 151-172.

Richards, A.I., 'A Changing Pattern of Agriculture in East Africa: The Bemba of Northern Rhodesia', Geographical Journal, 124, 1958, pp. 302-314.

Siddle, D.J., 'Co-operatives' in D.H. Davies (ed.), Zambia in Maps, London: University of London Press, 1971, pp. 64-65.

Tosh, J., 'The Cash-Crop Revolution in Tropical Africa: An Agricultural Reappraisal', African Affairs, 79, 314, June, 1980, pp. 79-94.

4.2 UNPUBLISHED PAPERS AND DISSERTATIONS.

Bwalya, M.C., 'Rural Development and Agricultural Transformation in Northern Zambia: A Study of the Historical and Contemporary Sources of Agricultural Backwardness in Mpika District', Ph.D. Dissertation, University of East Anglia, 1980.

Chella, V.S.S., 'The Production and Marketing of Maize in Zambia', MSc. Thesis, University College of Wales, 1983.

Chilivumbo, A., 'Baseline Study: Communal Agrarian Co-operative Societies: An Experiment in Rural Societies', Working Paper No. 12, NCDP-UNZA, 1984.

Chipungu, S.N., 'The State, Technology and Peasant Differentiation in Zambia: A Case Study of the Southern Province, 1930-1987', Ph.D. Dissertation, University of Minnesota, 1987.

Haug, R., 'Agricultural Crops and Cultivation Methods in the Northern Province of Zambia', Soil Productivity Research Programme; Lobo Oslo: Occasional Paper No. 1, 1981.

Kasapu, T.M., 'Economic Efficiency in Maize Production of the "Outlying" and "Proximate" Small Scale Farmers: A Comparative Study of two Districts of Zambia, Petauke in the Eastern Province and Monze in the Southern Province', MSc. Dissertation, Makerere University, 1974.

Marter, A., 'Cassava or Maize: A Comparative Study of the Economics of Production and Market Potential of Cassava and Maize in Zambia', Lusaka: RDSB-UNZA, 1978.

4.3 BOOKS.

Baldwin, R.W., Economic Development and Export Growth: A Study of Northern Rhodesia, 1920-1964, Berkeley: University of California, 1966.

- Bratton, M., The Local Politics of Rural Development: Peasant and Party-State in Zambia, London: University of New England, 1980.
- Brelsford, W.V., The Tribes of Northern Rhodesia, Lusaka: Government Printer, 1956.
- Dodge, D.J., Agricultural Policy and Performance in Zambia: History, Prospects and Proposals for Change, Berkeley: University of California, 1977.
- Gann, L.H., The Birth of a Plural Society: The Development of Northern Rhodesia Under the British South Africa Company, 1894-1914, London: University of Manchester Press, 1958.
- Gouldsbury, C. and Sheane, H., The Great Plateau of Northern Rhodesia, London: Edward Arnold, 1911.
- Hellen, J.A., Rural Economic Development in Zambia, 1890-1964, Munich: London and New York, 1968.
- Miracle, M.P., Maize in Tropical Africa, Madison: University of Wisconsin Press, 1966.
- Mushindo, P.B., A Short History of the Bemba, Lusaka: NECZAM, 1976.
- Purseglove, J.W., Tropical Crops: Monocotyledons, Vols. 1 and 2, London: Longman Group Ltd., 1972.
- Richards, A.I., Land, Labour and Diet in Northern Rhodesia, London: Oxford University Press, 1939.
- Roberts, A.D., A History of the Bemba: Political Growth and Change in North-Eastern Zambia Before 1900, London: Longman Group Ltd., 1973.
- Watson, W., Tribal Cohesion in a Money Economy: A Study of the Mambwe People of Zambia, Manchester: Manchester University Press, 1958.

5. PRIMARY SOURCES

107

ORAL SOURCES

The interviews were conducted in an informal manner but they were not tape recorded.

NAME	DATE OF INTERVIEW	PLACE OF INTERVIEW	OCCUPATION
1. O. Kampamba	21-01-88	Kasama	Former P.A.O., Now Consultant to the Villege Agricultural Programme.
21. Paramount Chief Chitimukulu	22-01-88	Kasama	Paramount Chief of the Bemba, Member of Central Committee for Northern Province.
3. C. Mutuna	22-01-88	Kasama	Crop Husbandry Officer.
4. J.F.M. Chipili	22-01-88	Kasama	Provincial Marketing and Co-operative Officer.
5. A. Johannesen	25-01-88	Kasama	I.R.D.P.- Co-ordinator.
6. D.H. Kalebuka	25-01-88	Kasama	NAMBOARD-Branch Manager.
7. P.S. Kamwi	26-01-88	Kasama	Branch Manager - Lima Bank.
8. F.S. Ng'ambi	26-01-88	Kasama	Development Officer
9. A. Forssland	26-01-88	Kasama	E.T.P. Co-ordinator
10. W.K. Musangu	26-01-88	Kasama	D.A.O. Kasama West.
11. A.M. Ngala	27-01-88	Kasama	Deputy P.A.O.
12. D. Chonya	27-01-88	Kasama	VAP-Livestock Officer.
13. R.K. Meki	27-01-88	Kasama	Co-operative Development Officer - NCU.
14. F. Kaonjela	28-01-88	Senga Hill	Peasant Farmer.

NAME	DATE OF INTERVIEW	PLACE OF INTERVIEW	OCCUPATION
15. G.T. Uprichard	29-01-88	Misanfu	A.R.P.T. Research
		Regional	Extension and
		Research	Liason Officer.
16. E.M. Kapaya	01-02-88	Mungwi	D.A.O. Kasama East.
17. S.K. Kotati	03-02-88	Ngulula	Peasant Farmer.
18. M. Kabeya	04-02-88	Nkolem-	Peasant Farmer.
		fum	
19. K. Matiyala	10-02-88	Bwembya	Farmer.
20. D.S. Kolala	14-02-88	Kabula	Farmer Scheme Member
			of Chanafubu
			Settlement Scheme.
21. P. Kaumba	17-02-88	Mungwi	Officer Orderly;
			Mungwi Farm
			Institute.
22. S. Mpundu	17-02-88	Mungwi	Peasant Farmer.