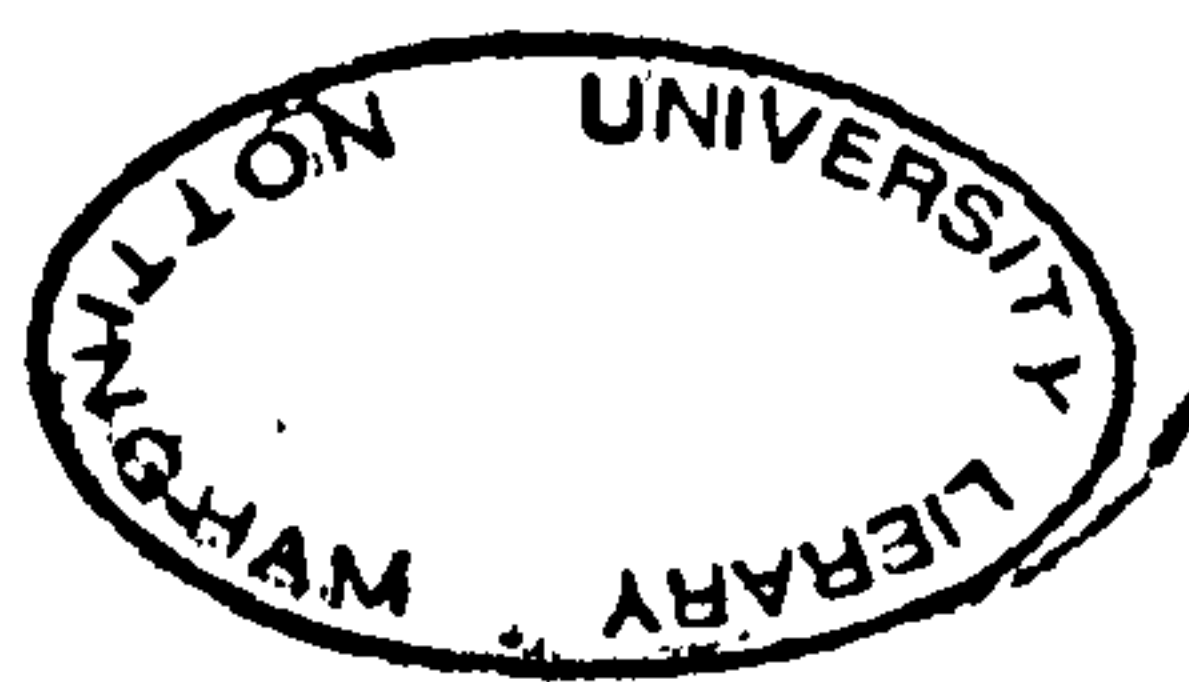


PLANNING FOR THE INFORMAL SECTOR ENTERPRISES IN THE
CENTRAL REGION : IMPLICATIONS FOR GROWTH CENTRES
AND REGIONAL PLANNING IN GHANA



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ABSTRACT

The purpose of this study was to:

Examine the potential for employment growth and output in the informal sector in the Central Region of Ghana ;

and to: outline a strategy for the development of the enterprises in the sector in the region; and to discuss the implications of the strategy for the Regional Planning Organization and the implementation of a growth centre strategy in the region.

The study was limited to the informal sector industrial or artisanal activities, and the petty trading (and services) enterprises in nine selected centres in the region. The main source of data for the study was a field survey carried out by the author in the central region.

A review of the literature of studies of the informal sector and their conclusions and the objectives of this study guided the setting up of research hypotheses for this study. These hypotheses were related to :

The capacity of the enterprises in the sector for both short and long term employment generation;

The relationship between the size range of centres and employment growth in the informal sector enterprises; linkages between the informal sector enterprises and other sectors of the economy;

and Constraints facing the enterprises in the sector.

The potential for employment generation in the enterprises was 'measured' in terms of the size of the initial and present employment in each enterprise; their work cycle and turnover. It also included a discussion of the perceptions of the entrepreneurs of the past performances of their enterprises and their likely future growth patterns.

Employment and output in the enterprises were found to be influenced by a complex combination of factors some of which cannot be quantified in any form. It appeared that constraints to the activities of the enterprises had a substantial influence on the entrepreneurs' decisions with respect to output and size of labour force in their enterprises at the present time and in

the future. Solutions to these problems required proposals for a planning strategy for the informal sector enterprises in the central region. This strategy envisaged a combination of economic policy and physical planning approaches. Proposals were made for implementing these proposals. They have implications for the Central Regional Planning Organization and the growth centre strategy they have adopted as a strategy for regional development.

ACKNOWLEDGEMENTS

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I would like to express my sincere appreciation for the understanding, love, and moral support received from my wife, Salome during our stay in Nottingham. We are grateful for the help and love we have received from fellow Ghanaians in Nottingham, in particular from the Tetteh and De Graft Johnson families. To my fellow students and the staff of the Institute I am grateful for their encouragement. My special thanks to Mrs. Robinson for typing this thesis so efficiently and with very limited time.

I cannot end these acknowledgements without expressing my profound gratitude to my uncle and his wife for bringing me up and making me what I am today. This thesis is dedicated to their good work.

DEDICATIONS

This Thesis is dedicated to J.B. and Kate Eyison

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CHAPTER ONE

INTRODUCTION

CHAPTER ONE

INTRODUCTION

Ghana has had a long experience in national development planning, yet this has failed to transform the economy and improve the well being of the people of the country. The goals and objectives contained in the development plans have not been achieved, particularly for employment generation. This failure is largely blamed on the methods adopted to achieve the goals and objectives of the plans. The planners have placed too much emphasis on the public sector and the formal sector to provide adequate employment. This situation has created a gap between the demand for jobs and the supply of jobs. Unemployment and under-employment will become a more serious problem in the future with continued growth of the labour force, population movements and the accelerated pace of urbanization.

In employment generation, the role that the small-scale labour intensive or 'informal' sector enterprises can play has generally been ignored in national development efforts. In recent years the 'informal' sector has attracted much attention as a sector whose potential for employment opportunities needs to be considered. The International Labour Organization's world employment programme of research is currently focusing attention on the employment aspects of the informal sector enterprises. Although preliminary conclusions about the employment potential of the informal sector have been drawn, in most cases the related policy issues have not been fully discussed. These case studies of the urban informal sector have not been

related to the wider issues of regional planning and development.

Since 1966, regional planning has been adopted in Ghana to bring a spatial component into national development planning. Although some regional planning administrative machinery has been introduced, it has been ineffective. Recently, a growth centre approach has been incorporated into the current five-year plan (1975-1980) as a regional planning technique. This aims at promoting regional development through small-scale urbanization and by concentrating infrastructure and other public sector resources in a few selected centres or points of growth. However, the plan does not specify how the growth centre idea is to be implemented. In particular, the methods to be adopted to ensure that adequate employment is generated in the centres, has been neglected. On one hand, the question is whether the public sector should put resources in infrastructure and other new forms of economic activities with the hope that this will lead to substantial growth in employment. At the other extreme it is arguable that the public sector should seek to promote the growth of the informal sector enterprises which have the potential for growth and employment generation and which already exist.

The recent awareness of the potential of the informal sector in employment generation means that research needs to be conducted into the opportunities and constraints for employment in this sector. Moreover, the need to generate adequate employment in urban areas in general, and growth centres in particular, further reinforces the need for research into the informal sector. This dissertation is directed at these needs.

It examines the potential for employment generation in the informal sector and how economic policies and physical planning strategies might be combined to aid the informal sector enterprises. The Growth Centres idea can be used as a medium through which this objective could be implemented. This study is based on the central region of Ghana, but it is expected that the analyses and proposals from this study could also be used as a model for developing the informal sector enterprises in other regions of developing countries.

This dissertation is divided into three main parts. The first part consists of three chapters which provide background material for defining the research problem and the main focus of this study. Chapter two presents the main regional development problems and discusses the main reasons behind the emergence of these problems. It argues that the national economic development strategies adopted and their failure are the main reasons for most of the regional spatial problems. The lack of regional planning is also partly to blame.

In chapter three attention is focused on regional planning in Ghana, its main strategies to date and the proposed growth centre or growth foci approach in regional development in Ghana. It is seen in the chapter that though the growth foci strategies have almost been battered to death, regional planners still favour it as a regional planning strategy. There is thus little wonder that Ghana has proposed to use it, but then the strategies for implementing the strategy need to be resolved. It is argued that the public sector should look beyond infrastructure and public sector investments in employment generation and consider the informal sector as well. What constitutes the informal

sector is also discussed in this chapter. The idea of the informal sector, its role in national employment and case studies into its characteristics and operating conditions in developing countries and Ghana, are contained in chapter four. This chapter provides both the theoretical framework and the point of departure for this study. The chapter brings out the numerous studies conducted both elsewhere and in Ghana on the informal sector and the various approaches or foci adopted. The main hypotheses examined and the main conclusions of the studies are also summarized in this chapter.

Part two of this study, which consists of seven chapters, is devoted to a case study in the central region and the analysis of the survey results. In chapter five, the framework and the hypotheses for this study are outlined. Also described are the data problems and the survey methods adopted to generate the necessary data. The chapter also provides justification for selection of Central Region for this investigation and the coverage of the study in terms of the types of enterprises covered, and centres chosen.

In chapter six, the characteristics of the enumerated enterprises and those covered during the detailed interviews are analysed. The size and composition of the enterprises are related to some characteristics of the selected centres. The rest of the chapter is devoted to describing the employment characteristics of the enterprises covered, their input structure and sources of inputs. This discussion is carried on in chapter seven, which explores some of the linkages existing between the informal sector enterprises and other sectors of the economy.

Chapter eight describes some of the personal attributes of

the entrepreneurs around whom the whole informal sector economy revolve. These include age, education and training backgrounds, job experience before setting up their present enterprises, and other business interests. The main form of training received by most of the industrial entrepreneurs before they set up their enterprises, is the traditional apprenticeship system. Chapter nine examines very briefly the nature of this system. It draws on the available literature and some information about apprentices collected during the field interviews. Chapters six to nine thus provide in a nutshell the main operating characteristics of the enterprises and their impact on employment growth and output in the informal sector.

In chapter ten, the main characteristics of the entrepreneurs and the enterprises are brought together in a multiple regression model to examine the global impact of all the major variables, and also each variable on employment and output in the informal industrial sector enterprises. This analysis was aimed at providing simple formulae to assist policy makers in the direction of public sector policies and investments in the informal sector. The result show, however, that no such simple formula exists. Hence, the analysis was carried further to examine other potential variables which can be useful in decision making. These considerations include the entrepreneurs' own perceptions of the growth prospects of their enterprises in the last few years, and in the future, and other plans and programmes based on these perceptions for their enterprises.

Constraints facing the entrepreneurs in the informal sector are presented in chapter eleven. These constraints are based on the perceptions of the entrepreneurs themselves, supported by a

review of the literature. The constraints facing the informal sector entrepreneurs in the central region raise the question of what can be done to aid the small-scale informal sector enterprises in the central region. What sort of planning approaches are feasible in this direction and their priorities.

Part three of this study is devoted to the above questions. This part consists of three chapters. In chapter twelve the various methods of aiding informal sector businesses in other developing countries are compared with efforts that have been made in Ghana to aid the informal sector. This discussion points to areas where Ghana falls short of other countries, and what might be done to improve Ghana's performance.

Chapter thirteen is devoted to the planning strategy for the informal sector in the central region. It draws on the experiences of other countries and Ghana in developing the strategies and the priorities. The implications of this for regional planning and growth centres in the region are discussed. A summary of this study bringing out the main findings and areas for future research are indicated in chapter fourteen.

This study is a contribution to the growing number of studies on the informal sector. It is not intended to be just a case study analysing enterprises in a single large city, but concentrates on the growth potential of the informal sector enterprises in a range of centres. Policy and planning implications will also be put forward, but these will also be related to the wider issue of regional development and planning. It thus becomes a contribution to the debate about the value of growth centres for regional planning, as well as an examination of planning for the informal sector.

PART A : DEFINITION OF PROBLEMS AND RESEARCH AREA

CHAPTER TWO

REGIONAL DEVELOPMENT PROBLEMS IN GHANA : CAUSES AND EFFECTS

CHAPTER TWO

REGIONAL DEVELOPMENT PROBLEMS IN GHANA : CAUSES AND EFFECTSIntroduction

Like other developing countries, Ghana is experiencing serious regional development problems. The problems are many and varied but the most important ones are demonstrated in the inter and intra regional disparities particularly in the distribution of services. Secondly, there is the problem of shift in population from rural to urban areas. This shift has created very serious urban problems especially employment problems, and at the same time has affected the rural economy through the loss of the young and able-bodied leaving the old and the weak on farms.

A. Problems of spatial disparities in development(i) Disparities in the distribution of services and economic activities

In terms of spatial socio-economic development, Ghana can in general terms be said to be divided into two broad or major regions : a relatively developed "southern" region and relatively underdeveloped "northern" region, (Szereszewski, 1966, p.89-105; Forde, 1968; Dickson, 1968; Ewusi, 1976, p.75-100)(1) (Fig.2.1). These differentials have been measured using non-monetary or indirect indicators because of the difficulties of using direct indicators or measures such as gross products, disposable income, per capita tax liability, Central Government tax returns, property valuation per capita; retail sales, bank deposits, value added by manufacturing, input-output (Asamoah Darkoh, 1976). Indirect indicators such as the regional origin of gross value added show a distinct concentration of economic activities in

the "Southern" region (Szereszewski, 1966, p.89-105), the disparity is also seen in the distribution of industries and industrial employment and essential services such as health, education, electricity and water supply (Appendix A tables 1-3). These disparities are due to differences in physical and human endowments between the two broad regions; the southern region being rich in forest and mineral resources, but it is also a reflection of the failure of national planning to take space into consideration in its planning strategy.

(ii) Disparities in urban development

The second major problem is rapid urbanization process and its spatial manifestation. All over the world urbanism is becoming a way of life; this process gained momentum in the industrialized countries of Western Europe and America in the late 19th and early 20th centuries (U.N. 1972, p21-53). For the developing countries as a whole, this process began in earnest only recently. As late as 1960, the more developed regions of the world were on the average twice as urbanized as the regions of the developing countries of which Africa was the least urbanized, (Breese, 1972, p21-53). However, between 1950 and 1970, the population of the large centres in Africa increased at a rate of over 7%, while the total population itself increased by about 2.3% per annum (Mabogunje, 1974, p13-26).

This general world trend and that of Africa is true for Ghana as well. The overall growth in volume of urban population has been quite considerable over the past half century or so. The urban population increased from just over 117,000 in 1911 to 1.6 million in 1960, representing an increase of about 13

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The second major problem is rapid urbanization process and its spatial manifestation. All over the world urbanism is becoming a way of life; this process gained momentum in the industrialized countries of western Europe and America in the late 19th and early 20th centuries (U.N. 1972, p.21-53). For the developing countries as a whole, this process began in earnest only recently. As late as 1960, the more developed regions of the world were on the average twice as urbanized as the regions of the developing countries of which Africa was the least urbanized, (Breese, 1972, p21-53). However, between 1950 and 1970, the population of the large centres in Africa increased at a rate of over 7% while the total population itself increased by about 2.3% per annum (Mabogunje, 1974, p13-26).

This general world trend and that of Africa is true for Ghana as well. The overall growth in volume of urban population has been quite considerable over the past half century or so. The urban population increased from just over 117,000 in 1911 to 1.6 million in 1960, representing an increase of about 13

times during this period (Addo, 1972, p243-51). The urban population in 1970 was just over 2.4 million, which makes it an increase of almost 20 times between 1911 and 1971. Urbanization in Ghana is by and large a mid 20th century phenomena (Addo, 1972, p243). The rate of urban population growth has also increased more rapidly in recent years than in the pre-1948 era. On the basis of census figures, the annual rate of growth of urban population for the period 1931-48, 1948-60 and 1960-70, were 3.49, 9.30 and 4.5 per cent respectively, (Addo, 1972) (2). If this trend continues, the urban population is forecast to be about 11.5 million by 1980. The urban population growth rate is also forecast to be about 3.8% per annum between 1970 and 1980, so that by 1980 it has been estimated that about 31% of the total national population will live in urban centres - (Government of Ghana, 1977 Annex I).

Three main factors are responsible for the rapid growth of urban population during the last two and a half decades. Firstly, the general population itself has grown rapidly through natural increase various studies put the crude birth rate between 49 and 52 per thousand (Ewusi, 1977). The difference between fertility and mortality rates has been on the positive side (Ewusi, 1977, p74). Though the fertility rate is generally high for the country, the levels in urban centres as a whole are lower than in rural areas (Ewusi, 1977, p74-75) (7.4 to 17.7p.th.). mortality rates are lower in the urban than rural areas (14.5 to 29.4 p. thous.) (Ewusi, 1977, p75).

Rural - urban migration is the second major factor of urban growth in Ghana. Early migration in Ghana was directed to rural

areas, particularly areas of agricultural and mining development. In recent years, rural to urban migration has gained significance and accounts for almost 18% of the total migratory movements in Ghana (Ewusi, 1975, p18). Rural - urban migration has increased in the last two decades, not because of population pressure in the rural areas, but as a result of modern social and economic development which are concentrated in the towns, particularly the large centres (Addo, 1972, p244). The third factor of urban growth in Ghana is immigration of foreign workers and their families from neighbouring countries into the towns of Ghana. This factor may not be too important now after the introduction of aliens Compliance Order in 1970, which compelled a large number of (illegal) aliens to leave the country.

Perhaps the most disturbing aspect of the urbanization process is not so much the rate of urban growth as the skewed urban growth and the attendant concentration of urban ills in a few large urban centres. The significance of urban environment and the development of well structured spatial system arises from the basic fact that in a national space economy, urban centres have a unique role to play in articulating relationships among different parts of a nation, and as generators and transmitters of development impulses (Berry, 1971, p115; Kraft, 1971, p3; Meyer, 1966, p9; United Nations, 1967, p115-117). These considerations call for a serious and conscious approach to town planning and to the development of a well integrated urban system, not as an end in itself, but as a means for achieving a national spatial integration, development and modernization. This is what makes skewed urban development serious.

Table 2.1 shows the size distribution of urban centres in Ghana in 1960 and 1970 and the changes that have occurred within the system in that decade. A salient feature of the urban system in Ghana is that a larger proportion of the urban centres can be described as very small towns (3). Secondly, the table demonstrates the lack of towns in the intermediate size range, especially large intermediate sized centres.

The size distribution of urban centres alone does not say much about the distribution of urban population. Table 2.2 shows that despite their large numbers, small towns contained about half the total urban population in 1960 but this proportion had declined to only 32% in 1970. Whereas the two very large centres contained 33.4% of the total urban population in 1960, this figure increased to just over 36% in 1970. On the one hand too, the intermediate sized towns gained some appreciable amount of population. This change which occurred within the urban system in a decade is not surprising. It shows that in an integrated urban system changes at the top level of the hierarchy have an immediate repercussion on centres at other levels. It also suggests that the natural growth process and the pattern of internal migration have had positive effects on the growth of the intermediate and very large urban centres. Within the urban system population must have moved not only from the rural areas to the intermediate sized and large towns, but also from small urban centres to intermediate and large centres. But it is in the south where most of the urban centres exist and which must have gained population, (fig. 2.1)

Table 2.1 Size Distribution of urban centres in Ghana - 1960, 1970

Size of Towns (000)	1960		1970		% change in number of towns 1960-1970
	No. of Towns	% of No. of Towns	No. of Towns	% of No. of Towns	
i { 5,000-10,000	61	62%	83	62%	0
{ 10,001-20,000	27	27%	29	21.4%	-5.5%
{ 20,001-30,000	4	4.1%	11	9.3%	+4.4%
ii { 30,001-40,000	1	1.5%	5	3.5%	+2.6%
{ 40,001-50,000	3	3.1%	1	0.5%	-2.6%
{ 50,001-60,000	-	-	2	1.1%	+1.1%
{ 60,001-70,000	-	-	1	0.55%	+0.55%
iii { 70,001-80,000	-	-	-	-	-
{ 80,001-90,000	-	-	1	0.55%	+0.55%
{ 90,001-100,000	-	-	-	-	0
iv 100,000+	2	2.1%	2	1.1%	-0.9%
Total	98	100%	135	100%	

Source : Calculated from 1960 and 1970 population censuses of Ghana.

- (i) very small towns
(ii) small intermediate sized towns
(iii) large intermediate sized towns
(iv) very large or metropolitan centres.

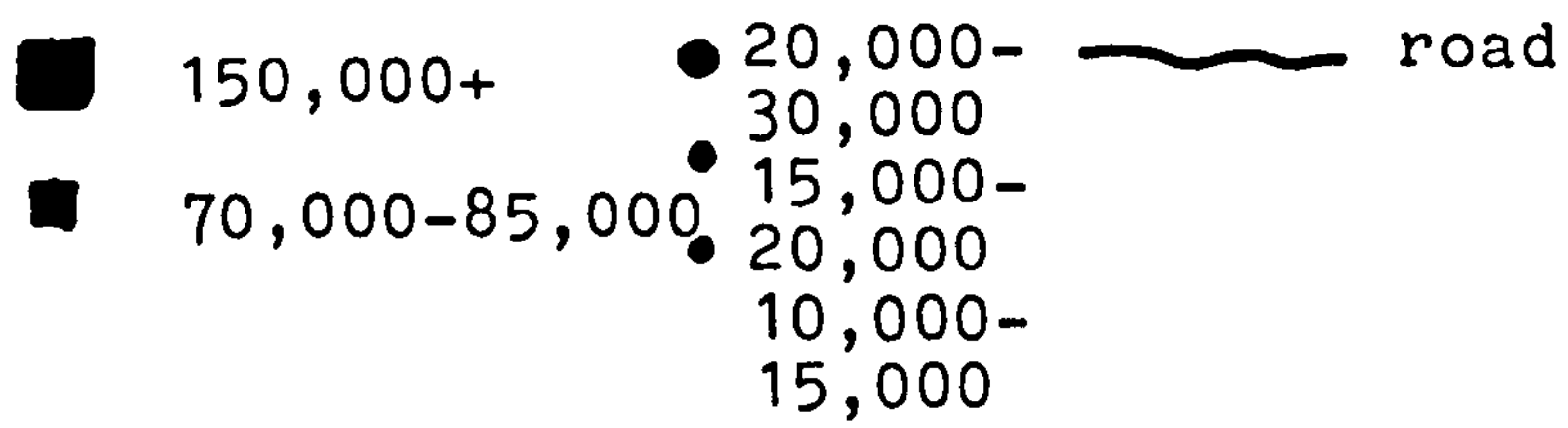
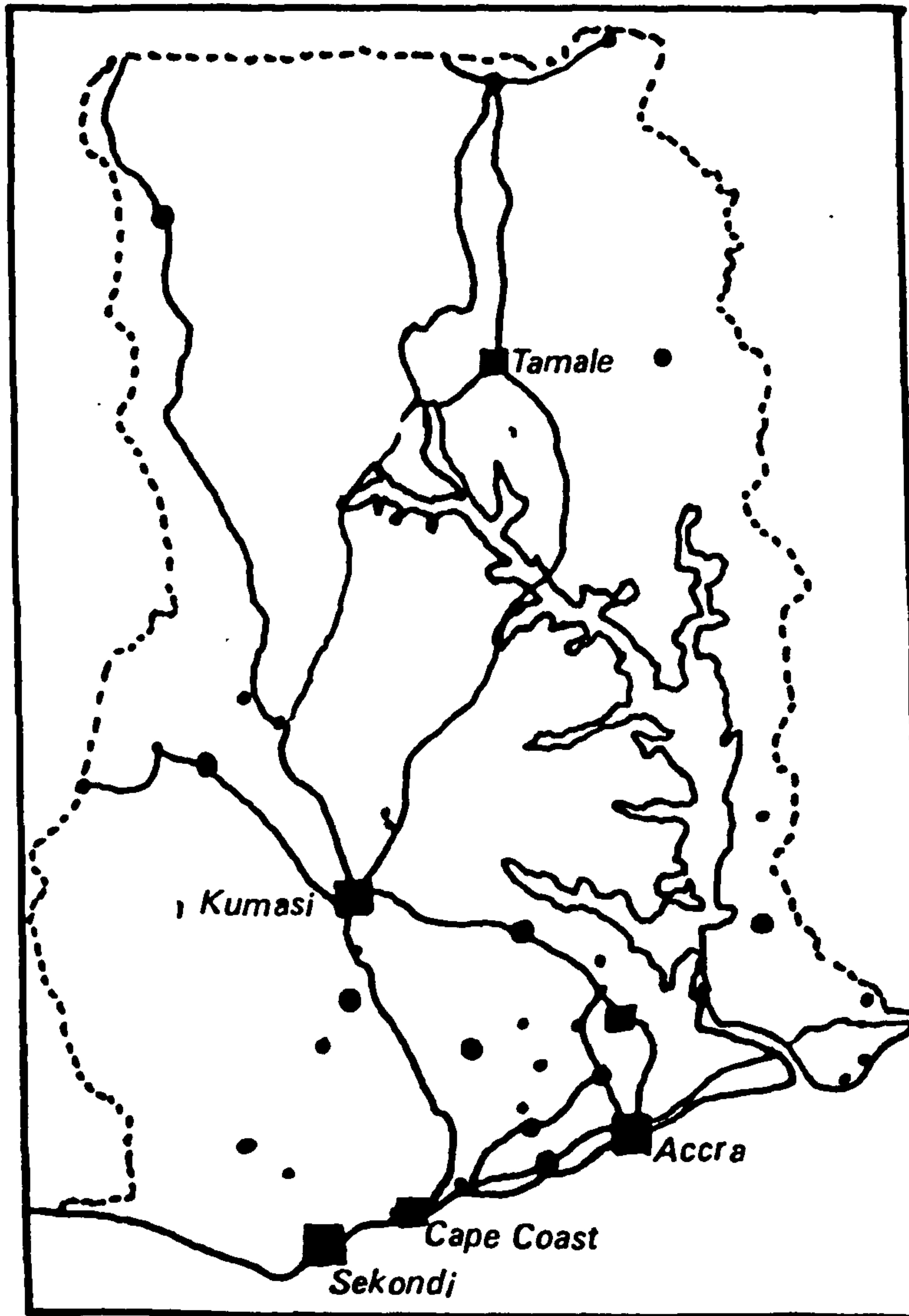
Table 2.2 Distribution of urban population in the hierarchy of urban centres in Ghana, 1960 and 1970

Size of Town	1960		1970		% change of population 1960 - 1970
	Total Populat- ion	% of all urban pop.	Total Pop.	% of all urban pop.	
5,000-10,000	416,678	26.86%	354,024	15.57%	- 11.29%
10,001-20,000	365,691	23.57%	379,012	16.65%	- 6.92%
20,001-30,000	92,947	5.99	245,936	10.82%	+ 4.83%
30,001-40,000	34,856	2.24	168,537	7.41%	+ 5.17%
40,001-50,000	122,600	7.90	46,235	2.03%	- 5.87%
50,001-60,000	-	-	109,814	4.83%	+ 4.83%
60,001-70,000	-	-	60,762	2.67%	+ 2.67%
70,001-80,000	-	-	-	-	-
80,001-90,000	-	-	83,653	3.68%	+ 3.68%
90,000-100,000	-	-	-	-	-
100,000+	518,470	33.42	824,480	36.28	+ 2.86%
Total	1,551,242	99.98	2,272,456	99.99	

Source : Calculated from the 1960 and 1970 population census of Ghana.

Fig 2.1

TOWNS WITH 10,000+ POP.(1970)



Source : 1970 Pop. Census of Ghana Vol.II

(iii) The unemployment problems

Unemployment, however defined, is a spatial problem in Ghana. This is particularly serious in the urban areas, though the problem in rural areas may be described as that of underemployment rather than unemployment. Due to the problems of measurement (4), unemployment is defined to include all those who are openly unemployed and those who are voluntarily unemployed. This is the definition adopted for the 1960 and 1970 population Censuses of Ghana (5). Using this definition, the 1960 and 1970 population censuses estimated the unemployment rate to be 6.2% of the total labour force. The definition adopted for the censuses underplays this as a problem. Also the short reference period of four weeks during which a person who has been out of employment was considered unemployed and the census months of March and April, during which agricultural activities are at their peak period tended to underplay the magnitude of the employment problem.

The magnitude of the unemployment problem can be appreciated if the growth rate of the labour force is examined. The 1975-80 five year plan estimates that the labour force will grow at a rate of about 3% per annum during the plan period, adding annually about 90,000 people to the labour force, so that by the end of 1980 employment would have to be provided for nearly half a million people (Republic of Ghana, 1975, p334). Another estimate puts the increase of the labour force between mid 1978 and the year 2000 as 3.5 million (the total national population is estimated to be 21.4 million by the year 2000) (Population Reference Bureau, 1978), and the urban population is estimated to be 31% of the entire national figure in 1978; one can presume that the share of the urban population and

therefore the urban labour force would increase tremendously. Moreover, one must be reminded that the population of the country is young (the proportion whose age is less than 15 years constitute about 47% of the total population). These demographic dimensions have far reaching implications for the entire national economy and its ability to generate and sustain productive employment, especially in urban areas where, in general, the rate of growth of labour force is fastest. The 1970 Population Census report provides data for both urban and rural areas, which showed that the unemployment rate was 8.6% for urban areas and 4.9% for rural areas (Ewusi 1975). In both urban and rural areas, the rate was higher for males than females (9.5% and 7.2% for males and females respectively in rural areas (Republic of Ghana, 1975, p336).

The age-specific unemployment rates for 1960 and 1970 indicate that the problem is most acute for the youth, particularly those between the ages of 15 and 24. The male youth is the hardest hit by the problem. While the unemployment rate for both sexes increased from 14.4% in 1960 to 17.7% in 1970, the rate for males increased from 15.9% to 22.7%, and the rate for females decreased slightly from 12.9% to 12.3%. The decrease in the unemployment for females as a whole indicates that women were taking up jobs most likely in agriculture. Absorption into the educational system was the main reason behind the increased unemployment rate for males, particularly towards the end of the decade (Killick, 1978, p16). Unemployment obviously has serious socio-economic consequences for the individual and for the national economy. It increases the problem of inadequate purchasing power on the part of the

individual, which directly or indirectly inhibits the growth of the national economy. This inadequate purchasing power affects the type of housing one can afford, his nutritional levels and quality of life as a whole; it has caused serious social problems such as crime and delinquency, much of which are concentrated in urban areas.

B. Emergence of regional development problems

Regional development problems in Ghana can be blamed on a number of factors. The pattern of investment by the Colonial administration, and more important, the path of national development strategy adopted by Ghanaian planners, and their failure to take into account the importance of regional planning in the post-independence era are the major factors.

During the Colonial era, investments, particularly in infrastructure were made in areas which served the Colonial economy and neglected areas with relatively poor economic potential, particularly in northern Ghana (Dickson, 1968, p686-697). This phase of the national spatial development thus initiated the spatial inequality in infrastructural and other services and uneconomic prosperity in general. Since independence there has not been much attempt to correct this trend, and in fact we have seen perpetuation and indeed, intensification of the pattern inherited from the period of Colonial rule. A contributory factor to this has been the sectoral approach to national development planning and even after 1966 when the regional planning machinery was established, it has not been effective and hence regional planning has not had any significant impact on the spatial socio-economic development of the country.

(i) National planning strategy : plan formulation and implementation organization

Like many developing countries, national development planning has been adopted in Ghana for about half a century. Since 1920 Ghana has prepared eight national development plans. Table (23) provides a summary of the various plans in terms of their main objectives, techniques and main area of emphasis. Despite the experience in national development planning, the aims and objectives of the plans have not been fully achieved (Boateng, 1977; Kudiabor, 1971; Omaboe, 1966; Killick, 1978). There are various reasons for this: two forces have been identified :

"The first set of forces may be classified as beyond the control of those charged with implementing the plans. They include inadequate political commitment, political instability, national disaster and severe unanticipated and adverse movements in the terms of trade..... The second set of forces are more within the ambit of planners and include inadequate involvement of agencies expected to implement the plan in the process of plan preparation, inadequate institutions, shortage of skilled manpower and inadequate policy instruments and projects"

(Republic of Ghana, 1977 Part I p86).

Boateng (1977, p81) also considers political leadership, political instability, the nature of the economy, financing and planning machinery and administration to be the main factors which have affected the performance of Ghana's development plans.

However, despite the varied factors responsible for failure of planning, and thus the intensification of the spatial development problems, the sectoral approach to development planning is an important factor. Most of the plans were largely the collection of projects of various ministries put together, vetted and co-ordinated by the central planning agency. Often they resulted in competing claims for the scarce financial resources of the country. Secondly, as has been pointed out,

TABLE 2.3 SUMMARY OF NATIONAL DEVELOPMENT PLANS IN GHANA

Plan	Plan Period	Main Emphasis	Techniques	Extent of Implementation
1. Guggisberg's Plan	1919/20 - 1929/30	Survey of natural resources and mapping. Basic infrastructure development	'Shopping' list technique	implemented up till 1925
2. Ten year Dev. Plan of Dev. and Welfare for Gold Coast	1946 - 1956	No central theme	-	Not implemented
3. First Five-year Plan	1951 - 56	Economic and Productive services; communications, social and common services.	'Shopping list'	largely implemented by 1956.
4. 2nd Five-year Plan	1959 - 64	Infrastructure; agriculture and industrial development.	'Shopping list'	abandoned in 1961
5. Seven-year Plan	1963 - 70	Directly productive activities; infrastructure; full employment.	Integrated or comprehensive approach	abandoned in 1966

/Cont'd..

TABLE 2.3 (Cont'd.)

Plan	Plan Period	Main Emphasis	Techniques	Extent of Implementation
6. Two-year Plan	1968 - 70	Not specific	Comprehensive	-
7. Medium term plan	1972/72 - 1975/76	Rural development	Comprehensive	abandoned in 1972
8. Five-year Dev. Plan	1975/76 - 1979/80	Integrated Development Control inflation Employment	Comprehensive	Still being implemented

the lack of a spatial component in national planning until after 1966 meant that the regional aspects of plan formulation and implementation machinery was not developed, and consequently plans formulated had no regional breakdowns, and various ministries had no guidelines as to where to locate what projects. What is even more surprising is the fact that the problem of spatial inequality was recognised as early as 1960 (The Republic of Ghana, 1963, p xiv, Bannerman, 1971, p132). When regionalization was finally introduced in the form of organization and management for plan formulation and implementation after 1966, it has not made any significant impact. This is because, despite the regional planning machinery, the main executive agencies are still centralized in their decision making. This does not auger well for national development (Pajastka in U.N. 1969, p79-80, Ligale, 1978). The main executing agencies in planning in Ghana are the Central Government's ministries made up of a number of departments which constitute the executive agencies of the central administration (Omaboe, 1966, p458). Since 1966 there has been a move by the Government to make the administrative system more responsive to the problems of development. One of the things initiated by the post-1966 military and successive governments has been the administrative decentralization of the decision making process. In addition, there has been a move towards decentralizing the agencies responsible for formulating and implementing development plans. Institutional decentralization is very necessary in any national planning process. It would ensure that planning is brought to regional and local levels so that local needs and aspirations, local input or participation are achieved during the plan formulation and implementation stages.

Above all, it would ensure that prompt decisions are taken and effected at the appropriate time to avoid bureaucratic difficulties normally associated with decision-making processes. However, in any decentralization process there should be a limit as to how far the central planning agency can delegate its decision-making power to regional and local bodies. This is because the greater the degree of decentralization, the harder it becomes to control and co-ordinate activities. Again, for a decentralized planning to be effective, there is the need to ensure that manpower as well as extensive information systems exist. These are some of the major problems facing the prospects of planning in developing countries (U.N., 1974, vol.I).

Some of the measures introduced in the direction of institutional decentralization include the setting up of programming units in the key ministries of the Government for the sole purpose of preparing sectoral programmes for vital sectors of the economy (7). The principal objectives behind the establishment of these units was to combine the task of planning and implementation of projects identified within the respective sectoral programmes under one body, and to identify viable projects within their respective sectors. This process of decentralization was not carried to the regional level. The Government also attempted to bring co-ordination into the plan formulation and implementation processes by establishing an inter-ministerial planning committee to advise the Government in all matters of basic development policy, and to see to the execution of all government development projects and programmes (U.N., 1967, p1-2). However, no such committees were set up in the regional and local levels. Instead, regional planning committees were set up in 1967, and later on in 1969, district,

local councils and regional development corporations were set up. The regional planning committees remained virtually ineffective. They were not responsible for drawing up regional development plans, which are still done by the various ministries acting independently of each other. The resulting plans are no more than a collection of uncoordinated projects which bear no evidence of regionalization or policies (Bannerman, 1971, p132). Before 1975, the regional planning committees were virtually 'discussion forums', 'information bureaux' and 'project inspectorate' (Bannerman, 1971, p135).

In the current five-year plan (i.e. 1975-80 Plan) the role of regional planning committees in regional planning has been strengthened and they are now expected to serve as the central advisory agency in the regions (8). The committees are still ineffective because the decision to implement projects still has to come from the capital. All that the committees do is to co-ordinate formulation of plans to ensure that they conform to national and regional policies and priorities. After this co-ordination, each ministry sends its proposals agreed upon by the committees to the head office to be incorporated with those of other regions. In this exercise neither the sectoral ministries nor the regional planning committees are given guidelines as to the amount of financial resources that might be made available to implement the projects, and under the present system financial allocations are made principally to the sectoral ministries.

The result of this system is that after the regional programmes of the various ministries have been co-ordinated at the regional level by the committees, they are cut back by the

parent ministries if funds are not secured for them. Inevitably this disturbs any balance which may have been established between these programmes by the Committees. Regional plans may therefore fail before implementation even begins (Buxton and Dunham, 1972, p58). Such a situation affects the implementation of projects and thus the provision of infrastructure and services, as well as employment generation. It is the regions or rural areas which suffer most in this respect. Unless the institutions responsible for formulation and implementation of plans are properly co-ordinated, not much can be achieved in planning (9) and thus the intensification of the planning problems enumerated.

(ii) National planning strategy : instruments of development

The path of development adopted by planners of Ghana is responsible for regional development problems, particularly the employment problem. From the late 1950s until the middle of the 1960s, emphasis was put on industrial development as a means of achieving various objectives : modernization, growth, and solutions to the existing employment problems, exit from the poverty trap and reduction of overdependence on the outside world. This was in line with current thinking among development planners all over the world in the 1950s and 1960s (Killick, 1978). Models developed by such economists as Lewis (1954, 1955), Fei-Rannis (1964), Jorgensen (1961) placed emphasis on industrialization or the industrial sector as the main agent of growth and for labour absorption. However, for this to be successful, there is the need for capital formation, technological progress and innovation in the modern sector and an improvement in agricultural productivity.

This path to national development prescribed by development economists is reflected in the approach to the first comprehensive plan adopted by the Government (i.e. the Seven-year Development Plan of 1963-70). This plan stressed industrialization because of its opportunity for raising labour productivity and hence average level of wealth through mechanization and specialization which would eventually raise productive employment (Seven-year Development Plan p9). The country adopted import-substitution as a strategy by means of capital subsidies, foreign exchange restrictions to maintain over-valued foreign exchange and a pyramidal tariff structure (Steel, 1977 p30). There was also a drive towards modernizing the traditional agriculture as a support for the industrial strategy. Both programmes were capital intensive in nature.

Developing countries which followed the path prescribed by development economists in the 1950s and early 1960s have realized that the industrial sector cannot absorb all the labour surplus generated by the traditional sector^{Baer and} (Herve, 1966, p88-107; Morawetz, 1974) and are facing unprecedented urban unemployment problems, increased rural - urban migration and all the related socio-economic problems. In Ghana, Killick (1978) has pointed out that the employment generated by the industrial sector was very modest, due in part to the capital intensive nature of the industrial programme. The total recorded employment in large scale manufacturing in 1970, for instance, was only 1.6% of the total labour force; on the other hand, large scale industries contributed about 10% of the gross domestic products (Killick, 1978, p178). In fact, it is suggested that the total impact of modern industries on total

manufacturing employment might have been negative if only one can measure the size of the labour force employed in the traditional manufacturing sector displaced by the adoption of large scale capital intensive industrialization (Killick, 1978, p202). Ewusi (1977) on the other hand, argued that employment generated by medium and large scale manufacturing has not been unsatisfactory. Steel (1977, p40-43) has examined the growth of employment in the formal or modern sector between 1957 and 1966. He pointed out that between 1957 and 1961, during which the Government pursued an expansionary policy in firstly, infrastructural development, and secondly, expansion into industrial activities; output and employment grew at an average rate of between 6% and 6.5% per annum. However, between 1961 and 1965, when strains on the economy began to show in the form of higher prices, inflation and the shortage of foreign exchange, the Government still pursued expansion in its investment programmes, this time in more directly productive activities. During this period, although growth of output and wage employment fell from the preceding period; growth in output and employment were maintained above the rate of population growth.

After 1966 the Government pursued restraint in spending and importation aimed at bringing the budget, balance of payment and inflation under control. There was a sharp retrenchment in employment, new public investment in industry was given low priority and some of the existing state enterprises were wholly or partly sold to private concerns. With improvement in the private sector, wage employment grew by about 3.6% between 1966 and 1969 compared with growth in gross domestic product of 3.2%. Between 1969 and 1971 GDP grew by about 7.5%. but there was virtually no growth in recorded employment. Since 1972,

there has been no change in approach to national development (Killick, 1978, Chapters 11 and 12). This raises doubt about the ability of the public or modern sector to absorb the expanding labour force. This is particularly so with the rising tide of urbanization and urban development. What is interesting is that although there have been some attempts to adopt regional planning as a tool in national development planning, little attention has been focused on the employment issues. Various suggestions have been made that the public sector alone should not bear the burden of providing employment, and that the role of the private sector, small-scale enterprises in labour absorption, should be examined. Ewusi has argued that employment in small-scale enterprises should be encouraged, together with that of large scale industries (Ewusi, 1977, p40). Steel (1977, p 50) has made a similar plea for the development of the "intermediate sector" as one area for both short and long term employment generation. Frank (1968, p268) has made a similar suggestion by noting

"Perhaps the most successful way of raising labour intensity of investment is to give every encouragement, or probably more important, avoid every discouragement to the growth of the traditional small-scale sector."

It would be pertinent at this stage to define or attempt to identify this "intermediate", "small-scale" or "informal" sector.

C. Defining or identifying the urban 'informal' sector

The informal sector has been variously called 'the small-scale sector' the 'intermediate sector', the 'unprotected sector', 'labour intensive sector' et cetera. Despite the growing interest among development economists in the small-scale

sector, it has not been easy to define the concept in its precise terms. This is partly because of the wide penumbra of economic activities that come under its heading. In a study of informal income opportunities in Ghana, Hart (1970, 1973), drew a typology of informal sector activities and distinguished activities under the informal sector from those of the formal sector which he suggested are characterized by : permanence of labour and regular basis for fixed income. Such enterprises operate with some measure of bureaucracy and are amenable to enumeration by official surveys. On the other hand, the informal sector enterprises are normally not covered under official surveys. The sector constitutes mainly self-employed people; apprentices and assistants to traders, with or without fixed premises (10). He stressed, however, that an individual should be considered to be in an 'informal employment' only when one is regularly involved in it. Though Hart's typology of informal economic activities seem to capture the various shades of activities and also considered the question of employer-employee relationships, it failed to specify such important variables as: size of establishment (e.g. capital or investment levels of such enterprises and the number and types of employees). This is a variable which is important in distinguishing between small, medium and large-scale enterprises.

The ILO mission to Kenya proposed a more analytical definition of the concept (ILO/UNDP, 1972, op.cit.). According to the report, the sector has the following characteristics :

"Ease of entry, reliance on indigeneous resources; the family ownership of enterprise; small-scale operation; labour intensive and adapted technology; skill acquired mainly outside the formal sector education."

The characteristics of the formal sector are considered the converse of the above. The above characteristics summarise some of the most essential attributes of enterprises generally classified as informal sector enterprises, but the definition does not mention the size of employment among enterprises in this sector. Child (1976, p13-14) has gone further than the IFO report in specifying other attributes of the sector. He described the sectors as being easy to enter;

provides incentives to save and invest small sums which otherwise would disappear in consumption. Also investment of earning is common; skills acquired in the informal manner are passed to others through apprenticeship or on the job training; entrepreneurship and management are less demanding and flexible or irregular work schedules implies profit opportunities neglected, but also permit continued link to the traditional agricultural activities as a sort of insurance policy. Above all, it generates employment at lower per capita cost than the modern sector and creates income per worker greater than or equal to the traditional sector. This sector usually develops spontaneously rather than from alert public policy.

Weeks (1973, 1975) viewed the sector as consisting

"of a wide range of activities in both rural and urban areas characterized by small-scale labour intensive production of goods and services for a market largely made up of the demand side of people with low income."

This definition is not comprehensive though for it does not cover such variables as ownership of enterprises and employment characteristics (size of labour force per enterprise and who are employed in the informal sector). In clarifying who are employed in informal sector enterprises, Friedmann and Sullivan (1974) have suggested that the sector provides an important source of employment for those who cannot gain employment in the formal sector. Mazumdar (1975) looked upon the sector as a stepping stone or a temporary phase in the quest for employment in the formal sector. Sethuraman (1976) has lent support

to Mazumdar and others by describing the sector in terms of the source of employment for the urban poor, since a large majority of the urban labour force (the urban poor) depend on private sources of employment. In view of this, all public sector employment, large industrial and commercial establishments in the private and public sectors, are excluded from the sector for the reason (according to Sethuraman) that only a small fraction of their labour force consists of the urban poor. Thus the informal sector defined as a "residual" includes all the remaining private enterprises in the urbane economy (Sethuraman, 1976, p125-140). Based on this approach, he proposed a definition of the sector to include :

"any economic unit engaged in the production of goods and services - whether it employs only one person or more; whether it uses fixed capital; whether or not it has a fixed location for conducting business"

(Sethuraman, 1976A, p76)

The merit of this definition is that it did not specify categorically what activities are to be considered as "informal" sector activities - perhaps in recognition of the fact that there are too many activities to be enumerated. Indeed, as the I.L.O. study of Abidjan in Ivory Coast found out, most activities carried out in the informal sector are not specific to the sector, only a minority of informal sector activities have no counterparts in the formal sector. Hence, the informal sector can be defined, not by reference to the nature of activities, but by the conditions in which they are carried out (Joshi et al, 1976). Moreover, Sethuraman's definition can be extended to cover the rural non-farm enterprises as well.

The suggestion to recognise the informal sector as a source of employment for the urban poor seems to have been accepted by

Henning (1974). He suggested that an attempt to delineate the informal sector (which he called the 'popular sector') is to select a broad set of activities which can be described empirically using data drawn from a fairly wide set of situations. He did not consider the sector as a group of people who form a more or less continuous independent community :

"it seems appropriate to characterize this community as a unit which is closely associated with both traditional and modern sectors, but which is in important ways an independent entity.... clearly such communities hereafter called 'the popular sector' are both dependent on and in a sense independent from both modern and traditional sectors...."

(Henning, 1974, p4-6)

The various attempts at classifying the sector when combined together contain all the variables needed to adequately describe the sector. One can be provided by adopting some form of cross classification. For example, the sector can be defined by employment status (employer, self-employed, employee, apprentice, family worker etc.); by type of activities; by size of firm (fixed capital and/or size of employment). As will be seen later, the small-scale sector is^a very important aspect of the industrial sector, and indeed in total employment in Ghana. This is particularly so in the urban areas and with the new directions in regional development in particular, the proposed growth centre strategy, the role of small-scale enterprises and their needs or planning strategy need to be studied. This forms the core of this study. The next chapter thus looks at the main regional development strategies, and discusses the proposed growth centre concept.

NOTES

1. The "Northern" region includes : the northern and upper administrative regions (which together make up about 40% of the total area of Ghana) plus the northern part of the volta region and Northern and Eastern parts of the Brong Ahafo region (2/3 of the surface area of Ghana). The "Southern" region covers the Eastern, Western, Central, Ashanti, Greater Accra and the remaining parts of the Brong Ahafo and volta regions.
2. For the 1960-70 figure for urban growth rate. Ewusi has pointed out that official estimates are upwardly biased because the figures were arrived at by comparing the population of 98 towns in 1960 with the population of 135 towns in 1970. After correction for the upward bias, Ewusi arrived at an average figure of 3.7% and a maximum of 3.9% as the rate of growth of urban population between 1960 and 1970.
3. According to size of centres, the urban centres can be categorized into four types of centres: very small centres - those between 5,000 and 20,000 people in 1970; small intermediate sized centres (20,000 to 50,000); large intermediate sized centres (50,000 to 100,000) and very large centres - above 100,000.
4. Turham (1970) p15 following, discusses different approaches to measure the size of unemployment problem. These include the surplus labour approach and the incomes approach. The surplus labour approach involves comparison between the number of people available and the amount of work which needs to be done to produce a given amount of output. Where the available labour exceeds amount of work available the difference defines the labour surplus. The incomes approach defines the unemployed as those whose income is below some reference level.
5. The 1960 and 1970 population censuses defined the unemployed person as "one who did not work at any time during the reference month and had no fixed job and who was looking actively for work by visiting unemployment agencies and writing applications. The 1970 census in addition included the voluntarily unemployed.
6. Launching the Seven-year Development Plan in 1963, the President of Ghana observed "The development of Ghana has hitherto not been sufficiently balanced between different parts of the country. It is the deliberate policy of this plan to correct this imbalance." The two-year stabilization plan also recognised this problem; it notes "... (Ghana) should seek to achieve a more equitable distribution of income between regions...."

7. These sectors include : agriculture, industries, mining and power, transport, housing, education, forestry and health.
8. Within the framework of broad policy directive issued by the Central Planning Agency the functions of the Regional Planning Committee are :
To develop the natural resources of each region by identifying the principal areas of growth and bottlenecks hindering the expansion of existing agricultural and industrial activities of the regions and by identifying the main opportunities for new agricultural and industrial development; to develop the human resources of the regions by identifying and solving the specific manpower needs of the region in relation to present economic activities operating in the region as well as for future requirements; to co-ordinate the development programmes of the different Government agencies in the regions in order to make them harmonious and consistent with each other and also with those of private enterprise; to review and report on progress of development projects in the regions, and to encourage the growth of new centres of economic activity in the regions. (Boateng, 1977, p82).
9. For the importance and different forms of co-ordination necessary for formulation and implementation of plans see : Chi Yuen Wu (in U.N., 1974).
10. Hart (1973) divided the informal income opportunities into two : legitimate activities which include primary and secondary activities such as the self-employed artisans; tertiary enterprises such as transport services, petty trading and other services; the illegal activities include illegal transfer payments.

CHAPTER THREE

REGIONAL PLANNING AND STRATEGIES IN GHANA

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A. Introduction

There are various ideas expressed as to what constitutes regional planning or what regional planning ought to be. However, in almost all ideas expressed, one thing stands out clearly, and that is that regional planning is an essential tool in national development. It is essential in bringing spatial components into the broad national sectoral plans. As a technique, regional planning is applied to planning problems whose spatial dimension is greater than an urban area - it could be subnational or subcontinental. In this respect, Kulikinski (1975, p11) notes :

"Regional planning should be first of all a method of imaginative and rational thinking about the regional dimension in the development of a given society"

Perhaps it is the purpose or objectives of regional planning which is more interesting to note. Misra (1972, p8) viewed regional planning as "a process which seeks to create a spatial balance in socio-economic development".

Sunderam and Rao (1971, p109-124) emphasised the process aspect by defining regional planning as basically involving the preparation of an integrated plan for land use and settlement in regions specified. They went on to define the details of the process and concluded by pointing out the complex role regional planning is expected to play in national development planning.

Fisher (1971, p63-69) has also emphasised the process aspect by assigning to regional planning the role of

"the identification and determination of alternative spatial arrangements for the broad purpose of development" (1)

Perloff (1968, p153), Hufschmidt (1969, pxx), Alden and Morgan (1974, p1) have expressed similar views. Thus regional planning implies a two-fold function : the first is the vertical function which serves as a link between the macro-planning (national economic development planning) and micro-planning (planning at the local level); the second is the planning for the utilization of human and material resources within a specified area. This is the horizontal function (Anipq, 1976). These two functions meet at the level of the region (2). In addition, regional planning needs to be approached from the comprehensive viewpoint - though comprehensive regional planning is still a theoretical concept that needs testing by case studies before it can be accepted universally as a goal in planning (Fisher, 1971, p63). Comprehensiveness in regional planning also suggests an integrated or co-ordinative approach to regional development - in the type of investments and in human activities. Integration could be inter and intra regional. In addition, regional planning requires the existence of a machinery for formulating and implementing plans; a basis for defining regions and adequate information system on which to plan and hence a need for spatial information system.

B. Regional planning before 1966

It has been seen that up until February 1966, spatial components in national planning was not seriously considered because there was no institutional or organizational framework within which regional planning, as a tool in national development planning, could operate. However, unconsciously, regional

planning methods were employed in one form or another. The most important single project carried out - the Volta river hydroelectric project - had far-reaching implications for regional development planning. This major infrastructural development, exploitation of mineral resources, the creation of a new deep artificial port at Tema, resettlement schemes, call for very comprehensive or integrated approach to the development of the Volta basin.

In drawing up the seven-year development plan, the spatial aspects were elaborated in the national physical plan (Town and Country Planning Division, Ministry of Lands, 1965), but this plan did not explicitly take account of the growth potential of each region and the part each could play in the overall development of Ghana. It only recommended twenty-two existing and proposed urban centres as centres for suitable physical and economic planning in Ghana. These were selected on the basis of the degree of their centrality in the provision of services (Grove and Huszar, 1964). However, the implementation of the proposals contained in the plan was abandoned with a change of government in February, 1966.

Since February 1966, regional policy in Ghana has focused attention on two major issues : finding ways and means of improving the administrative planning machinery itself so as to ensure that the needs of each region are being met and their development potentials realized, and secondly, initiating and directing certain policies and programmes for redressing regional disparities in levels of welfare in general and rural urban migration in particular (Darkoh, 1976, p153-167). The first approach involves the setting up of programming units in

the ministries and regional planning committees in the regional headquarters to co-ordinate plan formulation at the regional level. Its functions and weaknesses have been referred to in the last section (see Bannerman, 1971, Darkoh 1976, Boateng, 1977). It is the second approach to which we now turn attention.

C. Regional planning strategies in post-1966 Ghana

A significant aspect of post-1966 regional planning in Ghana has been efforts to develop the rural areas. However, there is no comprehensive framework within which to co-ordinate these efforts. Agencies involved in rural development in Ghana (both governmental and private organizations and churches) tend to duplicate the efforts of each other (Atsu, 1970). All over developing countries in general, numerous rural development programmes and projects have been launched with the view to raising productivity in agriculture, increasing the purchasing power and standard of living of rural residents as a whole, and thus to achieve a balanced rural-urban development (I.B.R.D. 1975A, 1975B). Ghana's attempt at rural development forms part of this general trend. This has arisen out of failures of national planning to transform the rural areas where about 70% of all Ghanaians live.

Ghana's approach to rural development dates as far back as the Colonial era when the idea to establish the government department of Social Welfare and Community Development was first mooted in 1943 (Brown, 1977, p5, Ewusi, 1977, p148). The main strategy at this early period was community development, the main concern of which was to help the local people cultivate the sense of civil responsibilities and to stimulate them to

undertake self-help projects, normally with technical assistance from the department of Social Welfare and Community Development.

Since 1966, a number of other approaches to rural development have been adopted by the various Governments. These include attempts to provide social amenities to rural communities, concentrated agricultural production approach, project implementation approach, and recently, small scale urbanization through growth foci approach as a means of aiding rural areas (Brown 1977).

(i) The Social Amenity approach is aimed at providing rural communities with basic social amenities, largely through self-help implemented under the auspices of Town and Village Development Committees and local authorities or councils, whose resources are generally limited so they can undertake one project at a time. Social amenities are provided to rural communities with the view to reducing rural exodus and to bridge the gap between urban and rural areas in the distribution of social amenities. Amenities provided include: pipe-borne water, health posts, electricity, feeder road networks and rural housing. Since the late 1960s, the Government has allocated substantial amounts to the provision of these activities. For instance, in the 1970-71 budget statement, the Government's intentions were stated thus :

"To the extent that rural development is to be stimulated with budgetary funds or with credit, the budget seeks to make available the maximum volume of resources."

(Buxton and Dunham, 1972, p54-60).

More specifically, the following measures were contemplated as means of improving facilities in rural areas: a roof loan

scheme to improve the quality of housing in rural areas; the provision of health posts, good drinking water and electricity. The task of regional planning was to make available these basic amenities to the rural communities. However, this approach is costly and dangerous to overstress it as a sole strategy for the development of rural Ghana (Kudiabor, 1970). An implicit assumption of this approach suggests that there are adequate employment opportunities in the rural area, and all that is needed to stabilize the rural population is to provide basic social amenities. It is essential that any policy towards improving life in rural areas should include policies and programmes to tackle the basic issue of rural poverty by means of increasing productivity through agricultural improvements; marketing, storage and transportation facilities. Such an approach should also encompass the non-farm sector as well. Once the problem of rural poverty is solved, it is likely the rural folks would be able to provide most of the amenities themselves. The history of Ghana shows that with rising rural income, some communities have been able to provide amenities for themselves (Amonoo, 1977). This, however, does not mean that this approach should be abandoned. Rather, it should be viewed as part of a comprehensive strategy to rural development so that it can be used as a vehicle, through the self-help concept, for public participation in rural development - in deciding what rural communities need and what they can do to achieve their objectives.

(ii) The second strategy aims at improving rural income through increased agricultural production and productivity.

The ingredients to agricultural expansion includes agricultural extension services, better feeder road networks, Co-operative movements providing services such as marketing, storage and

processing facilities to the rural population, and ease and reasonable credit to farmers. The government has clearly stated its objectives in rural development :

"In the area of rural development efforts will be made to increase rural incomes - improve living standards through the provision of more amenities including low cost housing, portable water supplies and health services; improve environmental facilities; establish an adequate rural infrastructure for the sale of farm inputs and the marketing of agricultural produce; improve rural school facilities related to the needs of the agricultural population and to introduce rural craft training schemes; develop adequate extension services, the availability of fertilizers, seeds and pesticides, develop simple irrigation facilities, encourage communal labour and co-operative movement to support and implement rural development programmes."

(Government of Ghana, 1972)

It is rather surprising that no mention was made about the employment problem in rural areas, and efforts that the public sector had to make to solve this problem. Perhaps it was thought that developing the agricultural sector will automatically solve the rural employment problem. This cannot occur without an examination of the non-farm sector's role in employment generation. In any case, efforts to improve rural income generation through the development of the agricultural sector has not been very successful because of a variety of problems facing the organization of the agricultural sector.

(iii) Project planning and implementation approach. The third approach involves project planning - particularly project implementation at the regional levels. This approach was first tried in 1968 through the establishment in each region of Regional Planning Committees (RPC's) which were to serve inter-alia as the "medium" through which the implementation of development projects could be effectively monitored in each region. The Regional Planning Committees have generally failed

as links in a matter of economic development between the regional and the central planning agency in Accra. The main reason for this is that the RPC's' lack sufficient authority and a respectable budget to deal with local development issues transcending sectoral decisions.

Despite the many projects and programmes that have been launched in the rural areas, there have been no articulate policies, programmes and plans for rural development in Ghana. Lack of a comprehensive rural development means that rural projects have not had the impact they are expected to have on rural socio-economic development. This approach, like the above two, have been tried without considerations for employment generation and growth in the rural areas, and its implications for the rural economy.

In recent years, regional planners in Ghana have suggested the use of a growth foci approach in rural development. This is aimed at achieving rural development through small-scale urbanization. Indeed, the use of growth foci or growth poles and growth centres in regional planning has become very popular among regional planners, particularly in the developing countries. The next section briefly reviews the concept of growth pole and growth centres, its major weaknesses and strength and Ghana's adoption of a growth foci approach in regional planning.

D. Growth Poles and Growth Centre concepts : A brief review of main tenets and criticisms as tools in regional planning.

(i) Origins of concept

The concept of development poles and development centres have in recent years been discussed, and in some countries,

used as tools in regional development planning in both the industrialized and developing countries,

Perroux (1950, 1955) a French economist is generally considered to have initiated thinking along growth centre lines in his theory of growth (development) poles (Poles de Croissance) which he defined in relation to abstract economic space - space as field of forces consisting of centres or poles or foci

"from which centrifugal forces emanate and to which centripetal forces are attracted. Each centre being a centre of attraction and repulsion has its proper field which is set in the field of other centres".

(1950, p27)

He did not relate his theory to any geonomic (or geographic) space which he dismissed as "banal". He considered three types of abstract space - space defined by a plan, space defined as field of forces and space as a homogeneous aggregate.) Growth poles are conceived as field of forces consisting of centres (poles or foci) "from which centrifugal forces emanate and to which centripetal forces are attracted". These forces are mainly economic and their generators are basically firms and industries. Thus Perroux was primarily concerned with the process of growth as reflected in the appearance and development of new activities; growth among firms and industries and their interactions rather than the spatial pattern of economic activity or the geographic implication of economic growth, intra and inter-industrial shifts (Hermansen, 1972a, p21).

Perroux based his idea on schumpeterian ideas of the role of entrepreneurial innovation and large scale firms. He believed that innovation is a major factor explaining the growth process which takes the form of succession of dynamic sectors or poles through time (Hansen, 1968, p105) (4).

He argued that the growth process or
 "development does not occur everywhere all at once. It appears in points or development poles with variable intensities. It spreads along diverse channels and has varying terminal effects for the whole of the economy" (Perroux, 1955, p94)

Perroux's growth pole theory thus has no spatial connotations.

His growth pole corresponds to a leading sector of an economy. X

The effects of sectoral growth are viewed in terms of input - output matrix with growth impulses being transmitted across the rows and down the columns. The dominance of the pole is expressed through forward and backward linkages to the manufacturing sector of a spatial economy, but linkages between firms are considered without regard to geographic location.

(ii) Spatial dimensions of growth pole theory

Following Perroux's work, there have been attempts to orient the scope of the theory to incorporate spatial elements. This line of inquiry or theoretical development has been initiated independently by Myrdal (1957), Hirschman (1958) and articulated by Boudeville (1966) and Friedmann (1966, 1972). Myrdal and Hirschman have attempted to

"synthesise a theory of geographical incidence of growth with a hypothesis of the mechanism of the geographical transmission of development impulses"
 (Hermansen 1972a, p40)

Their arguments were based on their theories of economic development as an unbalanced process propagated through chains of disequilibria (Hermansen, 1972a, p41). They attempted to identify the basic reasons why development is apt to be localized in space and to expose the nature and mechanism through which development impulses are propagated from a limited set of urbanized regions to the rest of the country (Darkoh, 1977.)

However, like Perroux, they failed to address their theories to a proper geographic context and "they have little

to say about the geographical manifestations of development impulse propagated from the centres" (Hermansen, 1972a, p44). It was Boudeville (1966) who applied the growth pole concept and theory in a specific geographical and regional context. However, Boudeville was unable to entirely get rid of the non-spatial connotations of Perroux's theories. It appears he did try to build a bridge between the concepts of functional and spatial poles without deviating much from Perroux's formulation which relies heavily on the industrial sector as the generator of growth (Darkoh, 1975, p15).

Friedmann has developed a more comprehensive descriptive and normative model of the growth centre concepts in his core - periphery model where an "authority dependency relationship exists between the core and periphery (Friedmann, 1966, 1972).

The application of space into Perroux's growth pole concept gave rise to a growth centre idea. This arises particularly from the work of Boudeville who viewed growth poles as towns possessing a complex of propulsive industries (Boudeville, 1966, p112). Thus the modification of the growth pole concepts has shifted the attention from functional pole to the idea that central points or growth centres should be induced in an urban area, and that spatial concentration of development is more productive than thinly spread economic activity. This idea is consistent with Rowdin's suggestion of a policy of concentrated decentralization (Rowdin, 1961, pp221-231); Friedmann's deliberate and accelerated urbanization (1968, 1962), Alonso (1968) and Louis Faber (1964) have expressed similar views. In addition to the above are studies of the relationships between the growth pole and growth centre concept and the

central place theory (Hermansen, 1972, Parr, 1973) and the relationships of these with the notion of innovation and diffusion of growth impulses through the urban hierarchy (Berry, 1972, Pederson, 1970). Berry, for instance, argued that:

"the role of growth centres in regional development is a particular case of the general process of innovation diffusion" (Berry, 1972).

(iii) Criticisms of Pole and Centre Concepts

Both the growth pole and growth centre concepts have been criticised on several grounds. Firstly, there is confusion over the use of the terminologies that Hansen (1967) has asked for "semantic rewording of the concepts". Moseley, (1973, 1974), Darwent (1969) have attempted to draw distinctions between the growth pole, growth centres and related terminologies. But far more important criticisms of the concepts are based on the confusion as to what constitutes a growth centre, what size range of centres should be developed as centres; should the emphasis be on 'natural' growth centres or induced growth centres?. Latin American reviewers in particular have criticized the concepts on ideological, theoretical, political and practical grounds (Conroy, 1973), (Richardson and Richardson, 1975).

A key feature of the growth centre concept is the notion of the spatial impact of such centres. Growth centre is a strategy of concentrated decentralization (Rodwin, 1961) aimed at achieving the distribution of investment and the spreading of economic prosperity without losing the advantages of urbanization economies. The justification of a growth centre policy hinges around the argument that "concentration engenders certain economies of agglomeration" and that "spatial concentration is an efficient means of indirectly promoting higher

levels of development over a much wider area." (Moseley, 1973, p53). But researchers have shown that this spatial impact of growth centres is very limited in geographical extent (Gaile, 1974), Moseley (1973), Nicols (1969), Hansen (1975), Waller (1972), Johnson (1970), Dickson (1972)(5). Lack of spatial impact of growth centres thus cast doubt on its suitability as a tool in regional development.

Related to this is the difficulty of choosing growth centres. The growth centre concept at its present stage of development does not give a clear-cut conception of what constitutes a growth centre and the explanation of why it is that such a centre possesses particular qualities conducive to structural change in economy, society and space (Appalraju and Safier, 1974). It does not provide specific criteria for identifying the location of relevant urban centres (Hansen, 1972, p103) or empirical criteria for verifying and evaluating different forms of growth centre development. In view of this researchers have attempted to use various methods or have advocated the use of such approaches as the central place theory using the existing hierarchy of urban centres as means of selecting hierarchy of growth foci, so as to reduce future investment needs. This is equivalent to Hermansen (1972, p59-61) and European Free Trade Associations (EFTA) (1968) "reinforcing" or "passive" approach to growth centre policy. This approach has been used by Kenyan planners in selecting growth centres for rural development (Republic Kenya, 1974, 1979), Grove and Huszar, 1964) in planning of regional settlement pattern in Ghana; other methods include the use of factor or component analysis (Moseley, 1971); flow analysis

for example by: Toloso and Reiner (1970), spatial impact analysis (Moseley, 1972, Waller, 1972, Brown, 1972), and criteria method (Nicols, 1969, Morrill, 1972, Maki, 1966, EFTA, 1968).

Recently, Kimani and Taylor (1973) in their work in Kenya have suggested the importance of small scale enterprises in growth centre selection processes. They stressed that one of the important indicators in any growth centre selection process is the relative growth of small (informal sector) enterprises over time. This should include both the physical number of businesses, the increase in degree of specialization over time, the improvement in business performance and increase in variety of goods offered. This is the novelty in growth centre concept which should be seriously considered by all developing countries.

In addition to the location of centres, there is no agreement as to what size range of centres should be chosen as growth centres. Some have advocated for small centres (Nicols, 1969; Taylor, 1974); others have proposed that it would be suitable, in view of the importance of urbanization economies and economies of large scale in the provision of infrastructure, services and the creation of markets, the choice of large centres is probably better (EFTA, 1968). Others have pressed for medium sized centres (Hansen, 1972). However, the question of urban size is a relative one and it depends very much on the level of urban development and the size range of centres in each country. Moreover, the question of size should relate more to the provision of goods and services and the creation of employment in the centres selected.

These criticisms apply to the use of the concept in both the developed and developing countries. But in the developing countries, particularly those in Latin America which have tried to use the concepts and later on rejected them as unsuitable for their regional development objectives.

On ideological grounds the criticism is related to similarities drawn between Perroux's theory and the theory of external dependence. It has been asserted in Latin America that an adoption of a growth centre concept necessarily means inviting multi-national corporation and foreign investments, thus strengthening the dependence on external economies. This criticism has arisen largely out of the use of industry as the basis for a growth centre policy. The theoretical objection against industrial development per se may not be as strong as the scarcity of entrepreneurship, together with the absence of an industrial structure that permits decentralized industrial development. Scarcity of entrepreneurs capable of organizing and financing projects of the scale required for propulsive industries can be seen as a limitation if a country using growth centre strategy should rely on propulsive industry as the basis of its strategy.

Secondly, the pattern of industrial development, i.e. import-substitution, which is a characteristic feature of the industrial development of many developing countries including Ghana, cannot permit the development of a well-integrated industrial structure. The limitation of industrial structure and entrepreneurial supply implies that a growth centre strategy is likely to fail unless it is accompanied by other policies relating to industrial organization and human resource investment (Richardson and Richardson, 1975, p160-170).

In addition, the identification of "propulsive industry" can present problems. Propulsive industry necessarily has to be big and capital intensive type in the production goods sector (Phillipe, 1970, p16). But this approach is not necessarily the best way to achieve urban and regional growth (Phillipe, 1970, p16). Misra(1972, p141-168) has attacked the over-emphasis put on industrial development as a basis for growth centre strategy, though he agreed that industrial development is a major contributor to economic growth. Misra suggested that in the socio-economic context of less developed countries, growth centres should be allocated varied functions rather than as industrial centres. This suggestion reflects the conditions existing in developing countries. In developing countries there are many obvious growth centres whose economic base may not be dominated by any "leading or propulsive" industry, but a wide range of functionally unconnected small scale activities which have developed together without any growth industry stimulating the process. It is the role of these small scale activities which has not been given attention in growth centre thinking in developing countries. Santos (1975, 1976) in his two circuit urban economy model notes that the growth pole theory takes into account only the "upper circuit" which consists of activities of modern sector and has little relevance to the "lower circuit" or traditional sector consisting of non-capital intensive industries, services and trading. This study focuses on this area, because it is relevant to employment generation which is a crucial problem in the urbanization and regional development process in Ghana - a process in which a growth centre strategy is expected to play a role.

In addition to these theoretical and practical shortcomings of the growth centre concept as it stands now, comes the political argument. Critics maintain that since a growth centre approach would involve "concentration" of investments, it would intensify, deepen, or even perpetuate the already polarized spatial structure, and that a choice of certain areas or centres over others in the selection process has serious political implications.

These criticisms, though they have exposed the weaknesses of the growth pole and growth centre concepts, do not mean the strategy is wrong in itself. What is wrong is that too much is perhaps expected out of the strategy too soon. What is needed is to broaden the approach away from industrial pole to include political, social, economic issues; a more flexible attitude towards selecting prospective growth centres, the location and size range of centres. The concept can also be used within the context of total national spatial development strategy which would require a policy for distributing infrastructure and investment. It is on these issues that the growth centre, despite its apparent weaknesses as a body of concepts, has a great deal of appeal to regional planners, and they continue to adopt it as a regional development methodology.

The major advantage of the growth centre concept is the opportunity it offers for integrating industrial policy, physical planning and inter and intra-regional economic planning. By concentrating investments in a few centres rather than spreading them over many centres, scale economies or efficiency in the provision of services to the areas served

by the growth centres, would be made. In addition, using a growth centre approach provides a guide or framework for the provision of distribution of public sector infrastructural facilities. It is also believed that the growth centre approach can be used to promote the development of a national urban system, capable of diffusing development impulses and innovation from the core to the periphery (Richardson and Richardson, 1975, p164). However, it is up to any country intending to adopt a growth centre strategy in regional planning to have a clear conception of the type of growth centres and the functions they are to perform. In addition, the means of identifying and selecting centres, and also develop policies to implement the strategy; and these must be relevant to its particular circumstances. It is in the light of this that Ghana's adoption of a growth centre strategy must be examined.

E. Ghana's move towards a Growth Centre Policy in Regional Planning.

Ghana's attempt at using a growth centre strategy began in the early 1970's when the regional resource planning unit of the Ministry of Economic Planning advocated for the use of a growth foci approach in regional development planning. The leading proponent was Clemence Kudiabor (1970, 1971, 1972). In a paper to the United Nations Research Institute for Social Development (UNRISD) in 1971, he proposed a four-tier hierarchy of growth foci for Ghana, and used Northern Ghana to illustrate the type or size of centres intended to be included in each category of centres in the hierarchy of growth foci. The proposed four-tier hierarchy incorporated growth poles at national level, growth centres at the regional level, growth

points at district levels, and development service centres at the local and village levels. Kudiabor sees in the growth foci approach an important spatial organization framework for the implementation of Ghana's agricultural development programmes in particular, and that of rural development in general. He advocated for a deliberate creation in the rural areas of

"functionally viable small towns, where the farmer can go to secure credit from banking institutions, repair his farm machines and equipment, procure the inputs for his farm and sell or store his produce from his farm through his district co-operative marketing, storage and processing centres..... The deliberate creation in rural areas of small but functionally viable centres..... is also an inducement to young school-leavers to settle in those towns and work in the processing and service industries created in them."

(Kudiabor, 1970, p7)

Thus growth centres, according to the regional resource planning unit, are to perform two important functions: as service centres for Ghana's agricultural development programme and secondly, as important rural industrial centres to provide job opportunities to the rural youth and thus help stem rural - urban migration; these ideas have been embraced by the Government. In the outline of the economic policy in 1972 (Government of Ghana, 1972), the Government of Ghana viewed the need for a growth foci approach as a vehicle for rural development.

"To achieve these objectives (rural development objectives) and as a vehicle for implementing the government's agricultural programmes, the National Redemption Council (ruling body at that time) will initiate the development of a selected number of growth centres across the country. A four-tier growth foci are accordingly planned for the country."

The hierarchy outlined were the same as that suggested by Kudiabor in 1970 and 1971. The growth centre idea resurfaced

during the preparation of the current Five-year Development Plan (i.e. 1975-80). In the guidelines for the Five-Year Development Plan, the Government recognised the urgent need for regional planning in general and the growth foci policy as a principal regional development approach.

"Ghana's planning experience has shown that regional planning has not received the due attention that it deserves in the methodology of national development planning. Sector planning approach has been emphasised while regional planning has been played down as if they are two opposing approaches. The result, therefore, is enough to confirm the observation the world over, that regional and rural needs do not receive the thorough attention they deserve through a planning methodology..... Government is dissatisfied with this state of affair and is determined during the plan period to employ regional planning methods to correct it."

(Republic of Ghana, 1975, p45)

The principal objectives of this regional planning policy are inter alia :

"To create a number of development centres or towns across the country to serve the agricultural activities in rural areas and to serve as new centres of industrial development and thus to help raise rural income."

(Republic of Ghana, 1975, p46)

The above references indicate the commitment of the planners and the Government to the growth centre concept. But it is one thing declaring intentions about something, and another thing seeing to it that it is successfully implemented. The crux of the problem is how to implement a growth centre policy so that its intended functions and full impact are felt throughout a regional economy. The 1975-80 Plan has about a year more to run, but up until now the Government, and indeed, the planners, have no elaborate strategy to implement the concept. In addition, it has no institutional structure to implement the details of the project, if any, envisaged for the selected centres. Perhaps the authorities have

assumed that the strategy would be implemented within the framework of the existing organization for planning and implementation of plans. In addition, the policy instruments to develop the economic base of the centres have not been outlined, except references made of the needs to develop the infrastructural facilities and services of the selected centres.

The planners and the Government have failed to realize that no amount of public investments in the form of infrastructure and services would ensure the growth of a centre and its ability to perform the agricultural and other essential services to rural areas, without a conscious attempt to provide and improve opportunities for employment (both in the public and private sectors). Although infrastructure and services can play a part in attracting other formal sector investments, particularly industries and government institutions, that alone cannot provide adequate employment opportunities for all. Thus, the role of the private small-scale enterprises in employment generation with respect to growth centre policy needs to be examined. This sector has been neglected due perhaps to the difficulty in planning for it. The purpose of this dissertation therefore, is to examine the characteristics and potential generation in the small-scale (informal sector) enterprises, and how to plan for it so that it plays a significant role in employment generation in growth centres. The concept growth centre can be used to apply to various scale of centres - urban or rural centres. In this study, it is used to refer to urban centres (i.e. all centres with a population of 5,000 people or over) rather than rural or village centres. This is because it is assumed it is in the urban centres that the informal sector enterprises have the better

opportunities for income generation and employment.

The next section takes up the employment issue again, and argues further for the need for incorporating the small scale informal sector enterprises in any programme for urban economic development through a policy of concentrated decentralization (i.e. growth centres).

F. Growth Centre concept and employment generation

It has already been pointed out that the growth pole - growth centre concepts in their present state of development leave much to be desired, because they do not give any guidelines as to how to implement the ideas contained in them. This is particularly so with respect to employment generation. The "pole" (or centre) is expected to develop a network of forward and backward linkages with new and existing industries, leading to direct and indirect creation of wage employment (Mayer, 1977, p79-95, Lugi, 1972, p45-61). It is doubtful whether the application of the theory through the setting up of large scale industries alone can provide adequate employment within the "poles environment". Secondly, it is not easy for large scale capital intensive industries to be set up everywhere. Their locational requirements are such that not all designated growth centres can be industrial centres. This is because limited markets can reduce the number of plants and centres which are feasible. In most developing countries, particularly in Ghana, as will be shown later, most urban centres which can be growth centres for rural development, are service rather than industrial centres, because most of the large scale industries are concentrated in the main urban centres and port areas. This is particularly

the case where a country like Ghana, pursues an import-substitution industrialization. In such a situation it is quite difficult to achieve a policy of dispersing industries away from the main centres to desired regional and rural centres, even with specific development controls and some form of fiscal incentives and financial measures (U.N., 1968, p.468-424). Only a few developing countries, particularly India and Pakistan have been able to achieve some success in this direction (U.N., 1968, p474). However, one cannot rely on controls and incentives to achieve substantial success in industrial dispersion in developing countries because such policies have not been backed by complementary policies and programmes (Friedmann, 1973, p246-247)(6). These complementary policies include provision of infrastructure and related services, and to remove constraints facing the location of large and medium sized industries in largely undeveloped regions and centres.

In Ghana, modern medium and large scale industries are concentrated in the main metropolitan areas and port cities, where industrial estates and related industrial services have been provided. In the late 1950s and early 1960s, the Central Government attempted to decentralize industrial location away from the three main industrial centres of Accra-Tema, Kumasi and Sekondi - Takoradi by proposing to build up to 20 other rural centres, each of which would have industries. These centres were either district or local administrative centres or places where some raw material was available. The main idea behind this decision was to set up in these towns such footloose industries as could survive economically outside the large urban or industrial centres (Ewusi, 1976, p14-15).

However, these ideas were not implemented because the Second Five-year Development Plan (1959-64) under which the Government's industrialization programme was to be carried out, was abandoned in 1961 in favour of the Seven-year Development Plan (1963-70). Since then Ghanaian planners have not adopted a policy of controlling the location of industries outside the main centres even though the Government has accepted the need for industrial dispersion into other urban and rural centres, and it has been proposed to achieve this through the provision of infrastructure and administrative facilities in addition to fiscal concessions (Republic of Ghana, 1977, p191).

The point being emphasised here is that in a growth centre policy, particularly in developing countries, one cannot rely on large scale industry as the sole basis of growth and employment generation, because not all prospective growth centres are industrial centres. X Secondly, it is difficult to develop modern sector industries in centres away from the main industrial areas or to achieve substantial success in industrial decentralization or both. X Thirdly, the long term impact of large-scale capital intensive industries in employment generation is not encouraging (Morawetz, 1974). X The creation of new employment opportunities by large-scale industrialization has been unable to keep pace with the growth in labour force, although in Ghana this general picture for the developing countries does not seem all that gloomy (Ewusi, 1977, p1) (7). This lends support to the contention that a growth centre policy without conscious attempt to encourage the growth and development of all types of avenues for employment generation, would exacerbate the already grave urban employment problems. This is because improving the services and infra-

structural facilities of the designated centres is likely to attract more migrants than perhaps may have been the case without such a policy. It is in the light of this that the informal sectors' role and potential for urban employment generation has to be examined. While this is important for urban employment generation as a whole, it is particularly important for a growth centre strategy, because it is to the growth centres that future migration trends may be directed. In looking at employment issues, it is not being suggested that other issues in growth centre are unimportant, but the problem of urban unemployment is too serious to be ignored. This brings us to the question of infrastructural investments and urban growth, and by implication, growth centre strategy.

Infrastructure is seen by planners in Ghana as the main instrument for implementing the growth foci policy. This is not surprising because it is the instrument that has been used in other countries - particularly in Kenya (Republic of Kenya, 1969, 1971), in Venezuela (Müller, 1974, p42).

The term infrastructure is difficult to define precisely. Different ideas have been expressed about the content of infrastructure (Youngson, 1967, p63-65; Hirschman, 1958, p83; Higgins, 1959, p304; Wingo, 1969, p115-146). However defined, infrastructure consists of socio-economic, technical and physical facilities which support primary, secondary and tertiary activities at any scale (local, regional and national). Investments in infrastructure have an important role to play in urban development because the development of various elements of infrastructure provide urban areas with a "uniquely productive environment", which not only create favourable conditions

for private investments in industry, but also for other secondary and tertiary activities as well (Wingo, 1969, p131-32). On a regional and national scale, infrastructure can be used to guide the development of a system of urban centres by directing urban growth to areas where needed and where necessary. Investments in infrastructure can also enhance a region's comparative advantage in the exploitation of the region's natural resources and in its industrial development (Johnson, 1970, p96; Mountjoy, 1967; Steele, 1971, Rosenstein-Rodan, 1961).

On a local scale, to attempt to adequately provide all designated growth centres with infrastructural facilities, can be a big task, and in fact a burden on the scarce national resource. This might affect the balance that necessarily has to be struck between providing urban infrastructure and that of rural area on the one hand, and between the provision of infrastructural services and directly productive activities. Investment in infrastructure alone without complementary investments in productive activities aimed at generating employment, could add to the employment problems in the designated growth centres (8). Productive activities do not mean investments in large scale capital intensive industries, but also small scale enterprises, particularly where there is scope for employment generation in such enterprises. However, since not much is known about the small scale informal sector enterprises, it becomes imperative to research into the sector and to examine whether enterprises in that sector have potential for employment generation. This thus provides justification for examining employment issues, particularly employment in the small scale (informal) sector in small scale urbanization in Ghana

through growth centre strategy.

Part two of this study is devoted to describing the study area and the methods for survey, analysis of survey data, conclusions of which would be discussed with recommendations in part three.

NOTES

1. Fisher (1971) visualized at least four major contributions that regional planning, if adopted would play in national development.

- (i) Regional planning would focus on integrated projects and programmes to a greater extent than sectoral planning does.
- (ii) It would stress the co-ordinating relations among projects and programmes in particular localities and therefore fix attention on linkages, multipliers and efficiency in investment planning.
- (iii) It would lead to the discovery of new resource combinations and thus expand the total range of resources available for development.
- (iv) It would uncover a range of entirely novel issues which have relevance to the nation's policies regarding the use of land or resource mobilization for development.

Fisher went on to suggest that a regional development framework would facilitate national investment as well as provide a vehicle to stimulate private investment. This suggestion was made with regards to India, but it may well hold for other developing countries as well.

2. According to Anipa (1976, p5-6) "The vertical function of regional planning is the co-ordination of sectoral plans at the national level, with the plans for individual units of production so as to bring some harmony and consistency between national and local objectives - the horizontal functions of regional planning covers intersectoral co-ordination, the identification of projects and programmes to suit specific conditions of a region and the translation of the overall development plans into concrete feasible projects.
3. The resettlement programme was approached with the objective of developing a spatial structure amenable to the modernization of agriculture, which was expected to have been the economic base of the settlements (Muller, 1974, p51-52). This would require a system of central places to provide marketing and related services, material inputs, labour and facilities for technical assistance. For each

planning area, a hierarchy of centres composed of a central town (10,000 people) to function as centre for industry, trade, services in each area; a service centre village (5,000 - 8,000 people); local centres of trade; education, indigenous industry and satellite villages. Organization for agricultural sector fell far behind the whole resettlement scheme, so that in the end, people had to migrate to the river banks for fishing or out of resettlement areas altogether.

4. Other concepts which play an important role in Perroux's concepts are the concept of 'dominance', 'industrial linkages' and propulsive industry. For an explanation of these concepts see Hansen (1967, p709-727).
5. Contributors to concepts of spread and backwash impact of growth centres are : Hoselitz (1955), Myrdal (1957), Hirschman (1958), Friedmann (1966).
6. Friedmann (1973) gave four reasons for this :
 - (i) "It is politically difficult to restrict the geographical incidence of financial inducements to only a few areas. Yet a multiplication of areas eligible for favoured treatment will cause an excessive spread of industrial location, dissipating the potential effectiveness of the incentives.
 - (ii) Unless financial subsidies make up a substantial portion of total variable cost in production dependent on location, they may not lead the industry to locate in areas that, in other respects, are lacking in decisive economic advantage. The subsidy must be at least sufficient to compensate the producer for higher costs of transport of raw materials and/or finished products, as well as for other costs he may incur by locating outside the existing core region. Yet the provision of adequate level of subsidy may place an excessive burden on the public treasury and decelerate the overall process of national economic growth.
 - (iii) Financial incentives may encourage industry that are ineffective from the standpoint of private cost accounting and thus reduce the overall competitive position of national industry in foreign markets. Additional export subsidies may be required. This, however, would further raise the costs of regional development to the nation. Withdrawal of financial incentives after the initial starting point may lead to a shift of industries out of the region and back to core areas of the country. Should this happen, and the mere threat to do so would be sufficient, a policy of permanent subsidization might be required, resulting in structural distortion of resource allocation pattern that would be difficult to reverse."
7. Ewusi (1977, p1) notes that according mto a study by Griffin and Enos (1972, p65) it is "only El Salvador and Ghana who have managed substantially to increase the proportion of their labour force engaged in industry. In most other countries, the proportion of total labour force employed in large scale manufacturing is probably falling."

8. Employment generated by investments in infrastructure is generally of a temporary nature. Rosenstein-Rodan (1961, p205-211) has pointed out that "investment in infrastructure will only last as long as the construction activities last, and this will fall when they are over". Ewusi (1976, p8) has also pointed out that construction of major infrastructure in Ghana generated much employment during the time of their construction but could not add to employment opportunities on a permanent basis.

CHAPTER FOUR

THE INFORMAL SECTOR : REVIEW OF CASE STUDIES IN DEVELOPING COUNTRIES AND GHANA

CHAPTER FOUR

THE INFORMAL SECTOR : REVIEW OF CASE STUDIES IN DEVELOPING COUNTRIES AND GHANA

A. Introduction

Employment as an issue in national development is gradually dawning on development planners in developing countries. However, one cannot expect the public sector to provide all the non-farm employment needed now and in the future. In recent years attention has been drawn to the existence of a third or intermediate sector between what are labelled "traditional" and "modern" sectors. The importance of small-scale fabricating, services, construction, transport, trading enterprises in income generation and employment has been noted in rural Africa (Leedholm, 1973), but their importance can be magnified in urban areas in developing countries as a whole. The various International Labour Organizations employment mission to developing countries, particularly the one to Kenya in 1972 (I.L.O./U.N.D.P. 1972), specifically mentioned this sector as providing productive remunerative employment to about 25% of the labour force in urban Kenya. Unfortunately, a lot is still to be known about the informal sector.

This research is seen as part of the wider researches being carried out to find out the operative conditions and employment aspects of the informal sector. However, unlike other studies, this present work is also linked to the strategy of small-scale urbanization or growth centre policy in Ghana. This chapter reviews the case studies that have been done in developing countries in general, the characteristics of the

operators in the sector and their enterprises, particularly with respect to income and employment generation and potential for growth. The chapter also reviews in some detail the informal sector and related studies in Ghana. The purpose of this review is to provide the point of departure for this study, and also to provide the basis for a conceptual framework and research methodology for a case study in Ghana.

B. Characteristics of the Informal Sector : International evidence from the less developed countries (L.D.C.)

This section discusses some of the major features of the (informal sector employment,) drawing upon a number of case studies in the developing countries. Throughout the literature attention is always drawn to the recent growth in the size of the sector. Very unfortunately, however, most of the case studies are not based on small towns or regional centres serving rural areas. The discussion will be organized under four major headings : the size of the sector in national total employment; earnings generated by enterprises in the sector; important personal characteristics of operators in the sector and the growth potential of enterprises in the sector.

(i) Size of the informal sector

Any attempt to define the informal sector precisely or even for an operational purpose is always bound to be controversial. This is because it is likely to include some activities which may be considered to belong to the "formal sector" and excludes others, which may be considered as belonging to the informal sector. For any particular city or case study area, the difficulty of identifying the sector and estimating its size arises from lack of data. Even where

census data are available, the sector is not treated as a special sector. Granting that this is possible, the question is how to treat it - should it be considered to include all shades of small-scale distribution and production? should it include transient businesses?. Schaefer (1976, p66-79), in a study of Sao Paulo in Brazil, used three methods. First, he identified the sector with the traditional sector in the dual economy model. In this model some sectors were designated as traditional (for example, small-scale construction, commerce and personal and paid domestic services). This method is open to criticism because some informal activities are also evident in the more modern sectors of the economy - for example, temporary workers in the formal sector who do not enjoy social security benefits. The second method was based on earnings according to which all enterprises earning below the minimum wage of the formal sector were considered as participating in informal sector activities. The third method was based on the size of establishments. By this method, the sector was defined to include all self-employed persons (except those in the liberal professions), and all enterprises having no more than nine employees. /

None of these approaches adequately measured the size of the sector; each method used gave a different result. By using the sector method, it was found that 43.3% of the total urban labour force belonged to the informal sector, while the minimum wage (36.4%) and size of establishment criterion showed that 24.6% of all the greater Sao Paulo labour force employed in 1970 belonged to the informal sector.

Although the sector and minimum wage criteria provided

estimates of the size of the informal sector employment, both have limitations which make more realistic estimates of the size of the sector impossible. As Schaefer himself put it:

"The sectoral approach was too comprehensive in relation to activities such as construction, commerce where informal sector was an important element but hardly a comprehensive characteristic. The minimum wage approach on the other hand, was considered too narrow because it excluded informal sector workers who earned more than the minimum wage".

(Schaefer, 1976, p77)

The best result was achieved through the combination of minimum wage and size criteria. His method seems comprehensive enough but in the absence of census reports backed by extensive field surveys it would be difficult to apply it.

Merrick (1976, p334-354) used work arrangement as the basis for calculating the size of the sector in Belo Horizonte in Brazil. He defined the informal sector enterprises to include those which did not contribute to social security institutes (except those in liberal professions and employees in the public sector) and domestic workers. He also used the minimum wage criterion. Sethuraman (1976B, p125-140) used a similar approach in Jakarta. He defined the sector to include all unregistered commercial enterprises and all non-commercial enterprises that have no formal structure in terms of organization and operation. He did not consider wage as a major criterion (perhaps due to lack of data).

Thus there is no unique or standard method for measuring the size of the informal sector in any particular city or / economy. The method adopted is dictated by the availability of data and the particular circumstances of the case study area. /

However, as more case studies are done, methods for estimating the dimensions of the sector would be refined. In what follows we present the results of some of the case studies.

Mazamdar (1975) has presented a review of the salient features of the sector drawing on case studies in Peru by Webb (1975). Then there are the case studies in Belo Horizonte by Merrick; Jakarta by Sethuraman; the technical assistance coordinator of the I.L.O. Regional Employment programme for Latin America and the Caribbean (PRELAC);

(Souza and Tokman, 1976) Abidjan by Joshi et al, Sao Paulo by Schaefer, Calcutta by Lubell (1974) and Dasgupta (1973) and Latin America as a whole by Souza and Tokman (1976). Table I gives examples of case studies in Latin America and Asia. In Calcutta, the sector absorbs about 40% of the city's labour force. In Abidjan, there were 12,000 people employed in the sector in 1963 and 15,000 in 1970 (Lubell, 1974, p53-60). The I.L.O. employment mission to Kenya in 1972 provides another case study of the importance of the sector. The mission had no adequate population census or survey data to determine the extent of gainful employment in the informal sector, but on the basis of several assumptions came to the conclusion that

"20% of the income earning opportunities were provided by the informal sector" (ILO/UNDP, 1972, p54)

"In all PRELAC case studies, it was observed that the informal sector provided employment for a high proportion of workers in almost all branches of economic activity, the sole exception being financial services.... the informal sector share was over 50% in nearly all branches in Asuncion and over 40% in more than half of them in San Salvador..."

(Souza and Tokman, 1976, p360).

(ii) Earnings or income generation

A discussion of the size of employment in the sector without an examination of the earning potential of activities in the sector is inadequate. The sector has been described as one which provides employment for the urban poor, as a

TABLE 4.1 **SIZE OF INFORMAL SECTOR IN SELECTED CITIES IN THE**
DEVELOPING COUNTRIES

Area	Date	Criterion for Employment size	Total Employed	% in Informal Sector
Bombay	1961	Employment reported Directorate of Employment and training	1,687,000	55%
Jakarta	1971	Registered establishments	Just over 1 million	Just over 50%
Belo Horizonte (Brazil)	1972	Social Security payments	?	69%
Lima (Peru)	1970	Size of establishment	619,000	53%
8 Cities (Peru)	1970	Size of establishment	N.A.	62%

Source : Mazumdar, D. The urban Informal Sector : World Bank staff working paper
No.211. July, 1975, p.10.

stepping stone for entering the formal sector employment and a sector where demand for labour does not depend on its own capacity for capital accumulation, but on the labour surplus in formal sector employment and on the possibility of producing and selling anything that will generate an income (Souza and Tokman, 1976, p355). Because of this, it has been suggested that earnings in this sector are lower than earnings in the formal sector employment.

Mazumdar (1975) has developed a two-sector model of the urban labour market in the less developed countries where migrants from rural areas respond to the expected earnings in both sectors, and can reach the formal sector market while participating in the informal sector activities. Labour supply determined by such a migration function, together with the relative rates of growth of income in the two urban sectors, lead to the possibility that average earnings in the 'informal sector' declines over time relative not only to the 'formal' sector wage but also to the alternative income in the rural sector. One major reason for differentials in earnings between the two sectors is that employment in the formal sector is in some sense "protected", whereas that of the informal sector is "unprotected". This kind of protection may arise from the action of trade unions, or the government, establishing a minimum wage level or both.

Harberger (1971, p559-579) considered earnings or wages in the urban informal sector as the only one determined by market mechanism. He stressed "structural" factors in explaining income differentials between the two sectors, and hypothesised that wages in the "unprotected" sector in urban areas are substantially higher than wages for comparable workers in the

rural areas. Mazumdar (1975, p1) on the other hand suggested that the play of the market forces, rather than institutional factors, could lead to the development of a "protected" sector within the urban labour market. This is due to a "varied group of factors which establish a direct relationship between the efficiency of a worker and the wage level."

The case studies that have already been cited, indicate that the sector has a much larger percentage of lower income earners (Mazumdar, 1975, p21). Merrick's work in Brazil showed that when age, sex and education are held constant, "income earnings are only 55% of those in the formal sector for males and 47% for females." He pointed out, however, that earning differences in Belo Horizonte are determined by both human and capital endowment, as well as by structural factors (Merrick, 1976, p351). Souza and Tokman's article show that the PRELAC surveys confirm results obtained elsewhere.

"In Asuncion and San Salvador, the share of the informal sector in the total urban income was about 33% and 25% respectively."(1)

The position of the self-employed in the urban economy is not clear. Webb's data on urban Peru (2) indicate that although a large proportion of them earned incomes lower than workers in the formal sector, 37% of the self employed earned as much or more than a modal earning of workers in the formal sector. A similar conclusion was reached by Sabot from the survey of the labour markets in seven urban areas in Tanzania in 1971 (Sabot, no date, quoted by Mazumdar, Ibid. p27). Again, according to Mazumdar, income data obtained from a large scale household survey in Malaysia showed that a large proportion of the self employed earned above that of the average earning group (Mazumdar, p32).

The case studies cited suggest a diversity of levels of earnings among the self employed and informal sector workers. They also suggest that a proportion of the self employed earn a bit more than formal sector workers. However, the studies cited only compare earnings between the urban formal and informal sectors. It would have been useful if earnings in the urban informal sector were compared with the rural farm and non-farm sectors. This would have thrown more light on the validity of Mazumdar's model and Harberger's hypothesis that wages in the urban "unprotected" sector is substantially higher than that of the rural sectors. Joshi et al(3) attempted to demonstrate this in their case study of Abidjan (Ivory Coast). The study concluded that the average income level in the informal sector was quite close to the level of the minimum statutory wage.

(iii) Other characteristics of Informal Sector employment

The few studies in this sector have revealed the heterogeneity of activities in the sector. Most of the activities do not require specialized skills; others, however, require an acquisition of some skill before one can engage in such activities (this is particularly true of all forms of artisan occupations). Some, like the trading sector (petty trading, hawking, etc.) require little complementary equipment, and entry conditions are not stringent - it is easier to enter and get out whenever the opportunity arises. There is also a lack of long contractual (relationship) agreement, and this means that there is relatively high labour turnover. It has been asserted that this is one of the major factors favouring entry into the sector. Because of this view, the sector is regarded as a buffer zone between employment and unemployment (Mazumdar, 1975,

Todaro, 1979, Harris and Todaro, 1970). This is because it has been alleged that a substantial part of the workers found in this sector are "secondary workers" (i.e. those who are not the main income earners in households); a disproportionately larger number of women as well as those outside the prime working age group (under 25 years and about 50 years) would be found in the informal sector employment. Similarly, migrants are said to dominate operators in the sector (Mazumdar, 1975, p5). Some of these allegations are supported by findings from case studies.

Merrick's Belo Horizonte study revealed that the sector functions as

"a buffer area for groups like young and old whose participation in labour depends upon whether they are willing to accept an informal (sector) job rather than go unemployed. The sector's employment is more significant in providing earning opportunities for members of the low income families than other members...."

(Merrick, 1976)

However, the ease of entry hypothesis, especially for migrants was not supported by Merrick's study. Bienefeld's study of urban Tanzania provides a different view and can generally be said to disprove the ease of entry hypothesis. His findings do not support the view that the sector is open, that it plays a significant role in absorbing new entrants to the urban economy, or that it is used as a temporary refuge or stepping stone to formal sector employment (Bienefeld, 1974). Individual activities studied showed that there was a substantial, if not dominant, core of permanent activities which may have been open to new entrants, and in most cases migrants preferred to return home than to subsist for any length of time in such activities.

"It was the non-rural migrants for whom such alternatives were not readily available who were mostly found in the ranks of the lowly paid non wage earners."

Moreover, it was found that the sector is generally inaccessible to the young and the inexperienced and that those who had established themselves in it appeared more committed to it.

(iv) Personal characteristics (age, sex, education, migrant status).

Information on the characteristics of participants on the sector is important in assessing the potential for growth of enterprises in the sector - such characteristics can be ascertained from surveys. Bienefeld's study in urban Tanzania revealed that 23% of the respondents were above the age of 50 and only 17% were below the age of 25 (Bienefeld, 1974, p33). Thus in urban Tanzania, the sector appears to provide people of retirement age and some secondary income earners with a "steady" source of income. In the Belo Horizonte case study, a large proportion of workers were outside the prime working age of 25-50. Moreover, there was an over-representation of women. Webb's Peru study gave similar results to Merrick's. In all PRELAC case studies, it was observed that the sector contained a high concentration of younger and older workers and a high rate of female employment in the informal than in the formal sector.

The education profile of informal sector employees is of particular importance because it relates directly to a number of hypotheses relating to the so-called "school leaver" problem (Bienefeld, 1974, p13). In Tanzania, 59% of all wage earners (i.e. formal sector workers) had had more than four years of education. No more than 29% of non wage earners had had this amount of education. The PRELAC study showed that in all case

study areas, the informal sector contained a high proportion of the least educated or functionally illiterate (with up to 3 years of schooling) (78% in Asuncion and 73% in San Salvador).

In the literature of urbanization, rural-urban migration and urban unemployment in developing countries, it is the non wage (or informal sector) which is expected to absorb those who cannot find employment in the formal sector, and who cannot wait so long to get employed in it. Under this circumstance, one would expect to find a high proportion of migrants in the informal sector. Bienefeld (1974, p13) showed that in urban Tanzania, this is a contrary view - that migrants were under-represented. Generally, this finding suggests that becoming established in the sector is rather difficult for those having few roots, or little or no experience at all in the urban community and economy. Sabot's work in Tanzania gave results similar to Bienefelds, (Mazumdar, 1975, p20). The Belo Horizonte, Peru and to some extent Sao Paulo case studies showed results consistent with Bienefeld's findings. In Belo Horizonte, 64.2% of all males and 60.3% of all females in the sector were natives, while in Sao Paulo the corresponding figures were 65.6% and 63.8% respectively (Schaefer, 1976, p75). However, the PRELAC case studies provided results which seem to support the hypothesis of ease of entry for migrants. In all its case studies the informal sector was found to be made up of people who had migrated to the cities at various times.

(v) Growth potential

We have so far reviewed some of the salient characteristics of the "informal" employment sector drawing largely on case studies. These characteristics indicate 'one shot' picture of the sector. However, for the purposes of economic develop-

ment, the problems faced by the sector and the growth-potential of the activities in the sector need to be ascertained. Because too little is known about the sector and the types of government policies which need to be pursued to encourage the growth and development of this sector, the informal sector as a whole has been subject to little dynamic and analytical treatment.

Informal sector participants face constant problems. Most activities such as street hawking are under constant harassment from government officials; traders and small-scale artisan establishments normally have difficulties in obtaining licences and raw materials at official prices and have to rely on the black market (Watanabe, 1974). In Kenya, for example, the government's policy towards the informal sector has, in the view of the 1972 I.L.O. Employment Mission (team)

"contained too few elements of positive support and promotion and too many elements in action, restrictions and harassment" (I.L.O. UNDP, 1972, p226)

This attitude on the part of central and municipal governments are based on three premises :

"That persons in the urban informal sector are largely temporary inhabitants or occasional migrants, many of whom could be induced to return to the rural areas; that persons in the informal sector are unemployed or sporadically employed, contributing little to urban income while constituting a significant health, fire and political hazard, and that attempts to improve living conditions in the sector would only induce additional migration and might thus be self defeating." (I.L.O./UNDP, 1972, p226)

These problems have also been referred to elsewhere. Sethuraman indicated in his Jakarta study that the government's policy towards the informal sector activities is a mixture of positive and negative responses. In the case of petty traders and small hawker units, the government's policy is one of ecological concern. "Street hawkers have experienced policies

designed to completely remove them from certain areas." This negative attitude is also meted out to the transport activities. There is a gradual process of ^{infer}phasing out this sector. On the other hand, a relatively more positive government policy seems to prevail as far as larger retail units are concerned. The master plan of Jakarta makes provision for the construction of market facilities to relocate vending units and rehabilitate old ones. (Sethuraman, 1976B, p131).

Weeks (1975, p1-13) has examined in some details some of the major difficulties hindering the growth of the informal sector. He based his discussion on the assertion that

"in developing countries, the State plays a significant role in determining access to resources and private profitability, and that the State planning process must be seen as a process of relating and restricting opportunities."

This assertion has been used to draw distinctions between opportunities for growth in the formal and informal sectors:

"The formal sector is encouraged, nurtured, subsidised (directly and indirectly) and fostered by the State. It enjoys tariff and quota restrictions; competition in its market is frequently restricted administratively; it has privileged access to foreign exchange and aided by low interest rates in the formal banking system. As a consequence the formal sector is large scale, uses imported capital techniques and earns high profits. Further, it produces a standard international product with only minor modification to the local environment."

(Remy and Weeks, 1973, p295) ✓

On the other hand, the informal sector is largely ignored by governments. This sector is characterized by the absence of State intervention, either to restrict competition or to provide privileged access to resources. As a consequence, this sector is basically competitive with enterprises operating on a very small scale. Capital accumulation is limited by the ability of the individual operator to plough back profits into

the enterprise. Most of the time, operators in this sector have to resort to borrowing from informal sources - friends, relatives, money lenders - at high interest rates, and have limited access to regulated foreign exchange market. The sector uses simple technology because the operators lack the capital and foreign exchange to purchase industrial technology from abroad, and because they are unable to associate themselves with the multinational corporations through which foreign technology is transferred. Thus the sector remains competitive with low rates of surplus, low output per head and low capital per head (Remy and Weeks, 1973, p79).

Bienefeld (1974) has also referred to the predicament of the informal sector enterprises in the face of competition from the capital-intensive formal sector enterprises. From his study of the subsectors of the informal enterprises in urban Tanzania, he found that the potential for the development of craft and small-scale manufacturing is limited because such enterprises depend on large scale ones for much of their inputs. Also once the market on which the informal sector enterprises sustain themselves grow beyond a certain critical size, formal sector firms enter and capture it and eventually displace small-scale producers, because they have the advantages of advertising, packaging and surface furnishing and the ability of modern sector products to undersell their competitors. He added that informal sector enterprises exist only because they are able to exploit or capture markets which have not been reached by modern sector production process. This may be due to the nature of demand being met by small enterprises - personal services, retail trading, small-scale subcontracting in housing, in which extensive capital production is for the moment unlikely. Thus the problem

and poverty of small-scale producers is likely to persist so long as the competition from more advanced technology, capital intensive production, with its system of organization, goes on. As will be discussed later, this problem could easily be solved through planning techniques./ Once a government has accepted the role of small-scale industries, it can commit itself to promoting growth of enterprises in the sector and boosting its growth potential as is done in India (later discussions will take this point up).

The question of the dynamic growth of the informal sector enterprises has further been explored by Weeks (1975). He distinguished between two types of growth processes - 'involuntary' and 'evolutionary' development. The former concept describes the process of internal adaptation of the sector which is necessary to absorb a continually increasing labour 'spill over' without any increase or very slowly raising output per head. The symptoms of this process is a fall in the average income of operators in the sector. The 'evolutionary' process is one of internal adaptation accompanied by rapid growth of output, technical change, capital accumulation and increase in per capital income. This process is typical of advanced, industrialised economies where the development of large-scale industries lead to the development of small-scale ones (as we shall see later), complementary to them. This is largely achieved through subcontracting. This type of industry has not yet become established in developing countries, but with the pace of industrialization, this would gradually develop. (4) The evolutionary process has been explored by Weeks through an input-output framework (5). According to him, the model gives an insight into policies which can stimulate an evolutionary

growth of the informal sector. A shift within the final demand towards the informal sector would increase the rate of growth of employment in the sector. An example of such a shift includes government purchasing of goods and services from the informal sector. For example, the use of local resources in rural infrastructural development (road, irrigation schemes, etc.); more local inputs can be used in such projects instead of foreign inputs. This has the added advantage of conserving foreign exchange. Again, there is a wide range of government goods and services amenable to a shift from capital intensive, to labour intensive supplies (construction, furniture, clothing, printing and maintenance). Small-scale producers would be more difficult to monitor than large-scale firms or expatriate suppliers in the short run, but in the long run this should not be a major problem.

Weeks, again notes that the expansion in informal sector employment is complementary with the development of small-scale agriculture. Capital and product movements can, and do, exist between the two sectors. Weeks and Remys' study in northern Nigeria revealed a high degree of linkages between the small-scale non farm and the agricultural sectors. (The linkages were in forward, backward and final demand linkages) (Remy and Weeks, 1973, p293-306). Despite these linkages, their study shows that growth of the informal sector comes from within the sector in the form of transfer of products, resources and skill. Week's model implies that rising formal sector wages have a long run negative impact and encourage an 'involutionary' growth of the sector. In the short run, however, the impact of formal sector wage increases would probably be to increase employment by shifting production from capital intensive to labour intensive processes. Similar observations have been made elsewhere.

In one of the technical papers reproduced in the Kenyan report (ILO/UNDP, 1972, p503-508), the interrelationships and linkages between the formal and informal sectors are examined. It is argued that there are important linkages of input-output nature between the informal and the agriculture sectors. It is claimed that an increase in the final demand for informal sector products would have over spill effects on other sectors because of the intermediate demand of the sector for goods and services coming from the other sectors (6). What is being suggested is that the size of input-output coefficients between formal and informal sectors should be increased. Secondly, the composition of future increases in output should be shifted towards sectors using more of the inputs originating in the informal sector. The feasibility of this approach has been examined by Weeks. Thus in the Kenyan report (and to some extent in other reports), a positive attitude on the part of the government towards the promotion of the informal sector is advocated (I.L.O/UNDP, 1972, p22, Welin, 1974, p205-212)(7). Muench, (1977) has also examined the growth potential of the informal sector economy. He pointed out that the quality of employment, levels of income and the savings the informal sector generate and its contribution to growth is far less clear. Secondly, the basic scope of the informal sector lies in the production of services rather than goods, and added that the sectors potential for employment growth is in cities rather than in urban areas. He went on to develop a model of informal employment generation in the urban economy in which four dynamic elements of employment generation were examined. These are, average incomes in the informal sector, distribution of incomes in the formal sector, the size of the formal sector and propensity to consume on value added in the

informal sector

The model :

$$Y_I = \bar{C}_H Y_H + \bar{C}_M Y_M + C_L Y_L + C_I Y_I$$

where Y_I is gross aggregate income of the urban informal sector; Y_H , Y_M and Y_L are aggregate household income in the high, middle and low income ranges respectively of the formal sector in the urban economy; and C_H , C_M , C_L and C_I are average propensity to consume on informal sector goods and services by high, middle and low income formal sector households and informal sector households respectively.

This model was reformulated to measure only the net aggregate income in the informal sector.

Though Muanch viewed this as a simple model, he thought the model can lead to several important conclusions about the capacity of the informal sector to generate employment and potential rate of public intervention. This was done through hypothetical examples.

Allen (1977) does not perceive any tremendous growth potential for the informal sector. According to him

"the growth potential of the informal sector is dependent on factors external to itself, since internal opportunities for capital accumulation are almost entirely lacking."

(Allen, 1976, p2)

He stressed that opportunities for capital accumulation within the informal sector do not generally exist on sufficient scale to justify the belief that the sector has strong potential for growth. Allen argued that this fact lends weight to his contention that enterprises in the sector need not be supported. He

He expressed this vividly :

"To speak of the informal sector and to hope for productive growth is to hope for a crop of carnation in the desert. It would serve the hungry of the earth far better than to suggest they eat cake than to encourage the view that the informal sector is any solution to the problem of deprivation, inequality and underdevelopment"

(Allen, 1976, p7)

The weakness in Allen's argument is that he seemed to have lumped all informal sector enterprises together in examining their growth potential. There is no denying the fact that some informal sector activities do not and may not have the potential for growth. Such activities may include hawking and petty trading, but there are other activities, particularly the small-scale industrial sector, which could have potential for growth so long as planning strategy is devised to solve their basic developmental problems.

The above review has examined some of the most important case studies into the informal sector. These studies have followed similar lines of investigation, and the major areas examined are in general : employment size, employment characteristics, problems and prospects for growth, general and specific policy issues relating to the growth of the sector. The main method of data collection has been through surveys by means of personal interviews with questionnaires(8). In general, it can be said that the sector is complex and this makes it difficult to develop hypotheses which would hold in all cases. Each case study area is unique; however, there are certain characteristics which are common to all informal sector enterprises. There is, therefore, the need for more case studies to shed more light on some of the hidden dimensions of the sector, especially on the

questions of definition and growth potential of the sector. At the moment it seems the informal sector concept is nothing more than a descriptive term whose analytical significance has yet to be established. When the world employment programme's missions complete their reports, there could be adequate numbers of case studies which may make it possible to determine the size and nature of linkages existing among informal sector enterprises, between them and the agricultural and formal sectors. This would be of immense help to analysts in suggesting policies to promote the growth and development of the sector. At the moment there is lack of literature on these linkages, and this calls for research into that direction. Again, most of the case studies have been confined to major urban areas, and it is about time researchers considered the medium sized and small regional and district centres also. Studies in rural non farm activities reveal the tremendous importance of the 'intermediate' sector. Liedholm (1973) has an excellent review of the empirical evidence of the role of non farm economic activities in rural employment in Africa. More research is needed in that direction too.

C. Informal Sector (small-scale enterprises): Studies in Ghana

The review of studies in Ghana is divided into two; studies on small-scale 'fabricating' sector, and studies in the commerce or trading sector. Hart's study is generally regarded as the pioneering work of informal sector related studies in Ghana (Hart, 1970, 1973). He studied informal income opportunities in the formal sector on one hand, and lack of skills and training of the new entrants on the other. Later studies by the I.L.O. employment missions popularized the use of the

term 'informal sector'.

(i) Studies on informal sector (small-scale) manufacturing industries

Peil's work on the 'apprenticeship system in Accra' is one of the earliest researches conducted into aspects of small-scale industries in Ghana (Peil, 1970). The study was designed to

"provide information on the background motivation and learning experience of apprentices in a large African city, and to explore the difference between trades with a relatively long history of practice within the traditional society and those which are largely limited to the more developed, urban sector of the population."

(Peil, 1970, p149)

The study was based on a sample of 120 master craftsmen and 233 apprentices and the trades studied were: goldsmithing, carpentry, tailoring, fitting, printing and radio repairing.(9) The study expected that differences exist among the trades in their apprenticeship systems. Apprenticeships among the 'traditional' trades (goldsmiths and carpenters) would be marked by payment in kind, apprentices living with the master, learning by copying the master, rather than by formal teaching, and the choice of trade is made for the apprentices by parents. In addition, apprentices were expected to be mostly illiterate and from rural areas. At the other extreme, 'modern' apprenticeships (exemplified by printing and radio repairing) would be more formal - payment in cash, specific skills taught in a set order, and choice of trade by the apprentices themselves. Apprentices would be literate, of urban background and live separately from the master. (Peil, 1970, p139).

Generally, the differences between trades were as expected. Training in goldsmithing and carpentry differs in many respects from training in printing and radio repairing. Fitting and tailoring are in the middle of the continuum on most variables.

(Peil, 1970, p140). Goldsmithing, carpentry, and to a lesser extent, tailoring, attract apprentices mostly from rural areas, and in many cases parents or relatives made their career decisions for them. The apprenticeship contract involves payment in kind as well as payment in money. Apprentices frequently live with their masters. Printing and radio repairing are at the other extreme. Most of the apprentices were from the urban areas. Decisions to enter the trades were based on personal interest and initiative, or the influence of friends, although parental assistance was necessary if fees were to be paid. The fees were high and in cash; apprentices provided their own accommodation and their relationship with their masters was more contractual.

A recent study by Steel (1977) provides more insights into the operations of the informal sector in Ghana. Steel assessed the actual and potential contribution of the (small-scale) 'intermediate' sector to urban employment generation. The study also examined the relationships between the 'intermediate' sector and the size of urban centres. A number of hypotheses were examined. These were :

First, the more rapid expansion of small-scale enterprises in the intermediate sector would significantly improve the rate of labour absorption at little or no cost in terms of output growth;

second, the small-scale sector can provide an effective short-term (as well as long term) means of alleviating

the employment problem without sacrificing growth of output;

Also, relationships between the intermediate sector and city size were examined by means of the following set of hypotheses: (Steel, 1977, p54-56);

That there is some threshold beyond which increasing city

size provides relatively few additional benefits for small-scale enterprises and therefore has negligible impact on their share of the labour force;

secondly, within the intermediate sector wage employment is likely to be an increasing share of non-agricultural employment as the city size and hence the cash economy increases;

thirdly, the importance of self employment and family labour relative to wage workers within the intermediate sector would diminish as city size increases;

fourthly, the intermediate sector as a whole may diminish relative to labour force as city size increases;

and finally, the sectoral composition of small-scale businesses and employment are related to size of the cash economy and hence city size.

The study also focused on larger urban areas, although Steel admitted that developing small-scale enterprises at the village level is an important component in a strategy emphasising increased employment, decreased urban and rural migration and balanced regional growth. The study thus examined the composition of the intermediate sector employment in relatively small, medium and large cities to assess the comparative ability of small cities to support productive employment outside the large scale industrial sector.

Data for testing the above set of hypotheses were obtained from both public sources (mainly the 1960 and 1970 population census reports, industrial and labour statistics) and largely or mainly through sample questionnaire surveys in three cities in southern Ghana. (10) The survey covered four main subsectors: manufacturing and repairs; food, drink and lodging (including food preparation and sales, hotels, rest houses and night clubs);

personal services and sales. (11)

Though Steele considered his work exploratory, he made conclusions which have far-reaching implications for the development of small-scale industries. The main conclusions of the study were:

the intermediate sector investment can employ more than four times as many workers as corresponding large-scale investments, with no cost in terms of output and a potential increase of more than 50%. He added that the inability of small-scale firms to use their capacity fully is a major limitation on their ability to use labour and capital productively, though this may stem from high competition due to easy entry, as much as to the overwhelming advantages of large-scale firms in obtaining raw materials and capital. He noted that the comparative advantages of the intermediate sector is especially strong in furniture, printing and cement block industries. (Steele, 1977, p170);

secondly, the intermediate sector potentially can play a dynamic role in economic growth and transformation, as well as in absorbing surplus labour;

moreover, the share of the total population engaged in the small-scale activities increases strongly with city size (12). On the other hand, city size has relatively little impact on the overall size of the intermediate sector beyond a certain threshold which is in the neighbourhood of 25,000 population (or 10,000 non-agricultural workers). Steele thought the evidence is not conclusive on this finding, and suggested further research to verify this relationship more correctly and precisely.

Again, the hypothesis that wage employment is associated with

city size is also confirmed (13);

wage employment increases relative to non wage and self employment as city size increases. Small-scale employment in the small city consists overwhelmingly of self employed owners and their immediate family. Non wage workers constitute the largest share in the medium city, while wage workers have the largest share in the large city(14); The structure of the intermediate sector changes with increasing city size even the relative size of the sector as a whole does not change. The self employed constitutes a much higher proportion of small-scale workers in Aburi (the small city) than in the two large ones (Nsawam and Accra). On the other hand, whereas the share of well established, self employed declines steadily as city size increases, the proportion of 'casual' self employed rises again in the large city. This is a reflection of the severe unemployment problem in the large city.

Also there is a clear shift in the type of workers hired by employers in cities of different sizes. Business owners in small towns rely most heavily on family members; apprentices predominate in the medium sized towns and wage workers in the largest cities.

The share of full time wage workers is closely related to city size. Wage workers are the major small-scale employment category in the largest city - 31%; moderately important in medium sized city - 12%, and relatively unimportant in the small city - 3%). This relationship holds even more strongly when small-scale wage workers are taken as a share of total non agricultural employment.

It was also found that: structural changes in the small-scale sector appears to take place as the city grows from under 10,000 population to over 25,000. Steele suggested that this conclusion needs further testing away from the capital city.

Though Steele considered the work exploratory, the study is very interesting and has some implications for small-scale urban employment generation and a growth centre policy. As he suggested, the hypotheses need further testing with a larger sample size of towns of different sizes with varying economic activities. Through this, the relationships between the structure of the intermediate sector and urban size would become clearer. It would also suggest which range of urban sizes planners should consider seriously with respect to small-scale employment opportunities. Steele seemed to have put a lot of emphasis on wage employment in the intermediate sector. It is the opinion of the writer that wage employment is not necessarily more productive than say self employment per se. What is needed in the name of employment generation is all types of employment generated by the small-scale sector.

Aryee (1976, 1977) examined two aspects of the informal manufacturing sector in Kumasi - a large city which is close to 180 miles north west of Accra. In two studies, he examined some of the salient characteristics of small-scale industries. The first study examined in detail the interrelationships existing between the formal and informal sector manufacturing in Kumasi (Aryee, 1977) (15). The study was based upon a sample survey of small-scale manufacturing units (16). Data

for analysis was obtained from a recorded interview of 298 enterprises. After discussing the characteristics of the enterprises studied, Aryee employed a regression model to measure the extent of direct and indirect linkages existing between the formal and informal manufacturing enterprises in Kumasi. Significant findings from the study were :

that a direct relationship between the formal and informal sector is tenuous. However, the relationship between the formal sector manufacturing industries seem tenuous as well. The reasons are that;

informal sector enterprises have small capacity and therefore cannot be relied upon to deliver reasonably large quantities of goods and services when they are required;

secondly, informal sector enterprises cannot buy raw materials in large enough quantities to warrant direct contact with the sources of raw material. These features tend to have adverse effects on linkages with the modern sector. It has also led to a situation in which the existing linkages with modern sector enterprises are handled by middlemen, so that part of the potential surplus of the informal sector producers is siphoned into trading activities. Since the factors which influence linkage relationship with the modern sector are quality of the products and the capacity of the informal sector enterprises, the above factors act as a serious hinderance towards achieving the desired linkages.

On employment and income, Aryee's study shows that:

the rate of labour absorption in the informal sector is very high.

Secondly, labour productivity is much higher than the minimum

wage per day in the modern sector of the economy.

According to Aryee, these and other findings suggest that a re-organization of the informal sector enterprises would be necessary as a precondition for improving productivity and employment opportunities in the informal sector.

In another study, Aryee examined the effects of formal education and training on the intensity of employment, based on the survey for the study in Kumasi (Aryee, 1976) (17). Two hypotheses were examined :

That education and training do have positive effects on the intensity of employment, or on the degree of employment in the informal sector (18);

and that, exposure to the modern sector which formal education and training provide could, therefore, constitute an advantage for the recipient of such education and training. The findings of the study indicate that intensity of employment tends to be higher among those with formal sector education than among those who have not been exposed to the formal sector educational system.

Secondly, additional schooling after the middle level does not seem to have positive effects. There appears to be diminishing returns to education after the middle school level has been reached.

Thirdly, with regards to training, both family and formal training in institutions appear to be superior to apprenticeships in the informal sector and to apprenticeships in the wage sector. Entrepreneurs who obtained their training in the family enjoyed the highest advantage followed by those who obtained theoretical and practical training in specific activities in formal training institutes.

These findings present some policy implications as Aryee has suggested :

It appears that for successful performance in the informal sector, middle school education plus institutional training in a particular activity could give the highest benefit to the individual.

Secondly, education and training need to be combined with other factors of production in the production process, and finally,

Government should extend the training programmes offered by public sector institutions to reach more entrepreneurs.

Hakam (1976) has studied another dimension of the informal sector, by examining the skill acquisition in the informal sector and skill transfer from the modern to the informal sector. Unlike Aryee, Hakam's study was based only on the automobile repair units. Again, the study was only exploratory and was not based on any set of hypotheses as others had done. The study was based on a sample survey of 213 enterprises selected from some of the major urban centres in the country (i.e. Accra, Kumasi, Tarkwa, Koforidua and Tamale). In addition, a few formal sector enterprises were interviewed.

The findings of the study indicate that a significant flow of skills exists between the informal automobile trade and the entire modern sector enterprises and institutions. The modern sector firms interviewed reported that over 50 per cent of their trained men left their jobs within five years after completion of their training, mainly to enter the informal sector. Similarly a reverse flow exists for about 75 per cent of the technically skilled labour force in the modern sector has had some training in the informal sector at one time or another.

Hakam also examined the linkages existing between the formal sector training institutions and the informal sector. He pointed out the importance of public sector institutions such as the Accra Training Centre, the National Vocational Training Institute, the Management Development and Productivity Institute all in Accra, and the Technical Consultancy Centre in Kumasi, to the development of the informal sector.

Hakam's study points to the need to examine further the whole issue of linkages existing between the informal sector and other sectors of national economy. Secondly, the role of public sector institutions on the development of informal sector enterprises away from the centres in which such institutions are located need to be examined with the aim of drawing attention to the needs of the enterprises and what the public sector has been able to, or can, offer.

The above studies, particularly those of Aryee and Hakam, plus a number of visits to informal sector enterprises in selected centres in Ghana (e.g. Accra, Kumasi, Tamale, Bolgatanga) form the basis of a report by the International Labour Office (I.L.O.) and officials from the Job and Skill Programme in Africa (J.A.S.P.A). The enterprises visited were engaged in a wide range of activities including the manufacture of shoes, mattresses, wooden boxes and wooden furniture, metal utensils and fabricated metal products, repair services to consumer durables, and processing of hides and skins. The aim of the visits was to ascertain the environmental conditions and constraints under which enterprises belonging to the sector operate in order to suggest appropriate measures to improve employment and productivity in the informal sector. The mission studied the operational

characteristics of informal sector enterprises (they looked at only master craftsmen). Three positive features of the informal manufacturing enterprises noted were :

That, virtually all the informal sector enterprises play a vital role as agents turning unusable scrap materials into products of value. Secondly, it was discovered that frequently, the cost of locally manufactured materials is only a fraction of the comparable imported products, and yet the production of such products is constrained partly by lack of scrap materials and partly by imperfections in skills and technology.

Thirdly, besides the import-substitution potential in the informal sector, there are export possibilities as well.

Thus the survey showed that the informal sector contributes to a higher output and employment in a significant way, and has generated new income opportunities for those who need most. It also has considerable potential for expansion as well as for saving foreign exchange. In addition, the informal sector plays an important role in human resource development. The survey also indicated that some amount of linkages (both forward and backward) exist between the formal and informal sectors; however, linkages within the informal sector are much stronger. (ILO/JASPA, 1977, p113).

The study also proposed strategies towards the solution of the operating and environmental constraints facing the informal sectors. The study emphasised, however, that any strategy to develop the informal sector should first concentrate on informal sector activities in the rural areas and promote the skill intensive informal sector activities rapidly. This is a very important suggestion which should be taken up. It requires,

however, that a lot more case study based on small and rural centres need to be carried out.

Another study which has highlighted the problems faced by the small-scale sector, especially the fabricating activities, is that done jointly by the Ghana Business Bureau and the Management Development and Productivity Institute on behalf of the Government (M.D.P.I.) (19). The aim was to research into the problems of only the metal industry in the small-scale sector. It was a feasibility study "for setting up modern workshops with a full complement of equipment to be operated as a viable project by metal tradesmen". (I.L.O/JASPA, 1977, Para. 4.7). The report was based on a number of visits to informal sector enterprises in a few major urban centres. The study confirmed practically all the problems of the informal sector which other studies have shown. It also revealed that entrepreneurs in the metal industry find it difficult to organise themselves, and attempts to organise them through co-operatives or other means have been viewed with suspicion and with some resistance (20).

Another study is being carried out by John Bryant in Tarkwa (Personal communication, 1977/78) a mining town in the western region of Ghana. Like Steel's work, Bryant examined both artisanal activities, petty trading (and services) enterprises, which he collectively labelled "petty commodity production". (21). Bryant considered this form of production developing during the 'transition' period between the dominance of distinct modes of production. Its perpetuation thus depends on the extent of the growth of the capitalist mode of production. He devoted a section of his paper to the problems faced by petty commodity producing units, namely, low level of capital

accumulation, lack of business partnership, supply difficulties, market difficulties and uncertainty. He noted that most entrepreneurs try to solve these problems by branching out or expanding into other areas of economic activities such as trading and farming, thus hampering the rate of capital accumulation and perpetuating the underdevelopment of the petty commodity production sector. This study thus points to the need to examine the extent and reasons for business diversification among entrepreneurs in the informal sector.

D. Commerce (petty trading/services) sector

Two major researches have been done into commercial activities in the formal sector, but the methods of approach are relevant to informal sector studies in general. The earliest of such studies was by Peter Garlick (1962, 1971). The study was principally concerned with the biggest African shopkeepers in the two largest towns in Ghana : Accra and Kumasi. The purpose of the study:

"was to formulate some general picture of private economic enterprise by Africans in Ghana with a view to indicating what factors may prevent an enterprise from expanding."

(Garlick, 1962, p111)

Based on a sample survey and questionnaire interviews data were collected and analysed for entrepreneurs' background, physical data on enterprises, finances, socio-economic constraints to business expansion.

The major findings of Garlick's study were (Garlick, 1962, p226-230):

People entered the trading sector not primarily to develop a business of size - though this might also be possible - but to provide for immediate and future family needs, particularly by the acquisition of real

property (houses, farms, cars) to meet the requirements of old age.

Again, business enterprises depended on individual entrepreneurs, so that in general the difficulty of finding reliable subordinates limited the development of a firm to the size which an entrepreneur could control himself. Business tended, therefore, to be regarded as ephemeral, expected to last only for a man's working life.

In general, it seems that family responsibilities tend to reduce the power of a business man to undertake effective business enterprise, and in many cases appear to distort its direction of growth by making it necessary for a man to hide or absorb in a less useful way his cash balance.

A recent and related study to Garlick's is by Paul Kennedy, (1974, 1976). His first study, however, focused on indigenous businessmen working in the modern sector of the economy, particularly in manufacturing, commerce and construction. His research was

"primarily concerned with the entrepreneur as an agent of social change in terms of the pattern of social relationships that the business men are creating to satisfy their needs as businessmen".

He examined three areas of entrepreneurship: supply of entrepreneurs and the relationships between changing market opportunities in different fields of business endeavour, and the corresponding response made by businessmen as new fields open up. Secondly, he examined aspects of entrepreneurial role which present more difficulties than others, and those that require skills that are in short supply, and aspects of business activities which are more important from the point of view of the growth

of firms and economic development. Finally, the constraints and opportunities of businessmen, the forces that shape up entrepreneurial response (Kennedy, 1977, p50-55). This study was based on a detailed study of 184 businesses in Accra, between 1968-1970 through personal interviews (21). Kennedy's work however did not cover the small-scale enterprises. His main interest was to make comparisons between businessmen who were operating in different fields of endeavour in the formal sector, but the methodology used in that study is very relevant to our own study. In another paper, Kennedy (1976) examined constraints to the development of the informal sector that result from prevailing arrangements in the social structure and culture of Ghana. Among the institutional and cultural constraints are: the demand of kinship and community which may effectively weaken the capacity of entrepreneurs to accumulate capital; the inability in some cases of the entrepreneurs to arrange their economic activity in a rational manner, and to give priority in the use of their time and energy to economic rather than social activities.

The second major constraint is the market demand open to the entrepreneurs and to secure or obtain employees who are willing to work on a regular basis with them. The urge for independence makes this a difficult problem. Then there is the problem of the supply of entrepreneurs. This, Kennedy viewed, depends on the cultural constraints which in effect determine the kind of skills entrepreneurs need to achieve success. It also depends on the particular field of business enterprise which is selected, the amount of competition which accordingly has to be faced, capital resources and good timing of entry into the informal sector.

E. Informal sector studies : overview of main features and findings

The point has already been made that the various case studies conducted in the developing countries in general have followed a similar trend. The main emphasis has been in determining the size or role of the informal sector in total national employment and describing characteristics of employment and operators in the sector. Also, some considerations have been given to the income generation capacity of enterprises in the sector: linkages with other sectors of the economy, and above all, the potential for growth in the sector. In this respect, some researchers have cast doubt on the growth potential of enterprises in the sector, but this view may not be conclusive unless the various types of enterprises or activities in the sector as a whole have been examined. Another feature of the case studies in developing countries is the over-emphasis on the informal sector in the capital and main urban centres in the various countries where the case studies have been carried out.

Unlike studies elsewhere, the case studies in Ghana have been focused on all aspects of the informal sector economy. The emphasis, however, has been on enterprises in the industrial or manufacturing activities. The studies have examined the vehicles through which skills are acquired in the informal sector and transfer of skill between the formal and informal sectors; the relationship between attributes of the informal sector enterprises and urban size; linkages (other than skill transfer) with the formal sector; the role of education in employment growth and output of enterprises in the informal sector has also been studied. Also the problems or constraints facing the activities of the informal sector entrepreneurs and

the role of some public sector institutions, particularly with respect to training, have also been examined. These studies have implications for growth potential in the informal sector, and the need for a planning strategy to exploit or develop this potential. Like other studies elsewhere, not much research has been carried out in the small and medium sized (mainly regional and district) centres have been carried out. Indeed, the I.L.O/J.A.S.P.A. report specifically mentioned the need to develop the informal sector in rural areas of Ghana. Obviously the most appropriate way to do this is to start from the main rural centres. The review of the case studies has also shown that no single case study has attempted to research into all aspects of the informal sector economy. This is simply an impossible task. It is therefore necessary for this research to isolate main areas of emphasis. The next chapter discusses the scope of this research and the research hypotheses and methodology.

NOTES

1. See De Souza and Tokman op cit. p367. See also table I on page 358 and table 4 on page 362. The tables show that in Asuncion and San Salvador, average income rises with level of education and at each level, it is always higher in the formal sector. These results correlate positively with Merrick's findings in Belo Horizonte.
2. See table 7 on page 22 of Mazumdar : The urban Informal Sector, op. cit. p22.
3. Joshi et al, op cit. p58. For the agricultural sector, the average gross value added (at the time of the study) was Fr C.F.A. 70,000 a year. The annual minimum wage for unskilled labourers and lowest category workers (Fr C.F.A. 151,512); lowest temporary administrative employee (Fr C.F.A. 168,000).

4. Weeks (1975) has discussed why subcontracting has not developed in less developed countries and ways to achieve this. These include: encouraging workers in large concerns to set up supplying enterprises using the skills they have obtained in formal sector jobs. Secondly, multi-national enterprises may come to adapt their production process to local inputs especially where cost of production is reduced. Government policies to compel international firms to use local supplies include changing the tariff and quota regulations on intermediate goods. Initial agreement with foreign firms should specify programmes of fostering indigenous suppliers.
5. Weeks (1975) used a four-sector model of the urban economy suggested by Renolds (1969).
6. The linkages are expressed purely in qualitative terms. It would be highly desirable and perhaps revealing to attempt to quantify these linkages. See Thorbecke (I.L.R. vol.107).
7. The strategy which is recommended would embrace the following measures among others; cease demolition of informal sector housing; review trade and commercial licencing with a view to eliminating unnecessary licences; intensify technical research and development work on products suitable for fabrication in the informal sector; attempt to increase government purchase of products and services obtainable from informal sector enterprises; induce large firms to train sub-contractors in the informal sector. See ILO/UNDP (1972, p22) and Werlin (1974, p205-212).
Werlin recommends that in as much as many Kenyans lack the necessary skills, education, contacts, capital and experience to compete with the well-established foreign firms, they must remain within the informal sector. However, with the proper governmental encouragement, links could be established between the formal and informal sectors facilitating transfer of income and skills.
9. For details of methods, see Sethuraman (1976, p69-81). Data for this study were collected in 1968. It was difficult to locate all master artisans to form the basis of a sampling frame. Each interviewer interviewed 20 masters of specified crafts in more than one part of the city of Accra. Questions were asked on the age, experience, educational and migratory background of masters and apprentices, reason for choosing a trade and with particular master, arrangements made at the beginning and conclusion of apprenticeship, length of training and reasons for leaving without completing training; attitude towards living with the master craftsman, hours of work, opportunities for earning money. Where a master had more than two apprentices, the youngest and oldest apprentices were interviewed.
10. The towns chosen were Accra (Pop. - 1970, 625,375); Nsawam (Pop. - 1970, 25,518) and Aburi (Pop. - 1970, 7,656). These centres are designated large, medium and small respectively for convenience without necessarily implying that the relative sizes have any implied meaning.
Steel defined the intermediate sector to mean all enterprises employing 30 or less persons, and the survey covered such enterprises with fixed places of work. For details of survey methods see Steel (1977, p65-68).

11. For the extent of coverage of informal or intermediate sector activities see Steel (1977, p67-68).
12. The ratio between the medium and small centres shares corresponds to the ratio of their population. About 3:1; the ratio of small-scale share in large cities to that in medium sized cities, however, is quite low (1:4:1) relative to differences in their populations (27:1). This suggests that an increasing size of centre is especially important for the growth of small-scale sector in centres of less than 25,000 people. See Steel (1977, p73).
13. Steel, 1977, p74, table 3.8. In all the three centres, the percentage of wage employment rises from 0.2% in Aburi to 2.1% in Nsawam to 5.5% in Accra. The medium sized centre is able to support many more non wage employees than the small city : 6.6% or 1.9% of non-agricultural employment.
14. Steel, 1977, p76, see table 3.9 on p77.
15. In Aryee's study, the formal or modern sector was defined to comprise all the factory system of manufacturing in Ghana as well as modern sector construction, commercial and large scale wholesale and retail trading firms, central and local government authorities.
16. Small-scale manufacturing units covered were in: motor repairs and maintenance; metal-working; blacksmithing; carpet/doormat making; footwear and related manufacturing; carpentry; tailoring and seamstressing; wood-carving; cane weaving. These are the activities found to be the most important in terms of employment during the first stage of the survey.
17. See Aryee (1976): He defined the informal sector as a spectrum of various levels of manufacturing and repair activities ranging from single person activities to small-scale factory type engaging ten or more people.
18. Aryee used output and income to measure the degree or intensities of employment among entrepreneurs in the informal sector. Thus given other factors of production, entrepreneurs who have a higher level of productivity would be judged to have a higher degree or intensity of employment than those with lower productivity level. See Aryee (1976, p5-6). This approach does not seem comprehensive enough without taking into consideration the number of employees and the type of employees - whether full-time, part-time, wage or non-wage etc.
19. Ghana Business Bureau (and M.D.P.I.) (1974). This report is based on a field trip made to some of the regional administrative centres between July and August, 1974 with a view to eliciting information from metal-workers.
20. Bryant defined "petty commodity production" as a form of production characterized by small independent units exchanging their products in a free market, whatever the internal relation of production of these units. It is

conditioned on : the producing units themselves owning or renting the means of production (See Bryant Ibid, p2).

21. Other sources of information for the study include, newspapers, government publications, the opinions and impressions of leading members of organizations which interact with Ghanaian businessmen, particularly, bankers, government officials and, members of advisory and technical agencies. However, according to Kennedy, much of the information derived from these sources was unsystematic and vague, and its main function was to supplement the core of materials from the questionnaire survey.

PART B :

THE CASE STUDY OF THE INFORMAL SECTOR

IN GHANA

CHAPTER FIVE

**SCOPE OF STUDY, RESEARCH HYPOTHESES,
CASE STUDY AREA AND SURVEY METHODS**

CHAPTER FIVE

SCOPE OF STUDY, RESEARCH HYPOTHESES, CASE STUDY AREA AND SURVEY METHODS

A. Scope of Study

(i) Introduction

The brief reviews of the main studies in the informal sector presented in chapter four have shown that there are many aspects of the informal sector which have been studied and also where further research work may be needed to confirm or disprove the main findings of such studies. Many of the studies have been in the craft (manufacturing) and related industrial activities, whereas the trade and commerce, personal services, transportation services and construction activities, have not received much attention in the literature. In addition, most of these case studies have been based on one or a few large urban centres in the countries where such studies have been carried out. This is perhaps not surprising in view of the fact that it is in the large cities or urban centres where the problems of unemployment hit hardest and where it is very necessary to ascertain the existing and potential role of the informal sector in urban employment generation. Again, it is in the large urban centres where variety of informal sector activities are carried out. In most cases, the medium sized and small urban centres have not been surveyed, although, Steel's work in Ghana is an exception. It is worth looking at the prospects for growth in output and employment in the informal sector enterprises in such centres, particularly those which are the main district and local centres of importance, since they can play a significant role in any strategy for small-scale urbanization through a growth centre approach. *discovered at local level.*

(ii) Enterprises included in the study

With respect to the type of activities included in this study, it had to be taken into consideration that there are many types of activities and enterprises operating in the informal sector and that each type of activity has its own unique characteristics and operating conditions, though there are a number of characteristics common to all informal sector enterprises. Some enterprises are engaged in petty production of goods and services which create "wealth" and hence may be regarded as "productive" enterprises. Others are just engaged in the exchange of goods and services - these include hawking and petty trading - permitting savings and experience to be built up forming the nucleus of future activity. Four general types of activities characterize the informal sector. These are : craft (manufacturing or petty commodity production enterprises; commerce (or petty trading); personal and industrial services and transport and construction enterprises.

This study examined the craft or manufacturing enterprises and petty traders (and services) enterprises. The emphasis, however, was on the craft activities. The study concentrated on these two types of activities to the exclusion of other important informal sector enterprises in the construction industry and transportation services for practical reasons. In the case of the construction activities, it is not easy to locate skilled workers, apart from carpenters, some of whom may spend some time on construction sites, but much of their time is spent in their workshops. The only way to locate other skilled workers such as steel benders, masons and painters in the construction industry, is to conduct a house to house survey, since they do not have workshops and largely operate from their

respective homes. The transport sector was also excluded; it was virtually impossible to cover the numerous vehicles in the study area. The main reason for including petty trading and services activities in this study is the overwhelming number of people engaged in such activities, and thus the author felt unable to leave this segment out of the study. Secondly, like other sectors, apart from the craft enterprises, it has been neglected in informal sector studies, and thus it is necessary to examine aspects of their operating characteristics.

The main reason for concentrating this study on the craft or petty commodity production enterprises is the significant role such enterprises play, not only in output, but particularly in employment in the manufacturing sector of Ghana (Steel, 1977, Birmingham et al, 1966, vol.2 chap.12, p275). The industrial censuses carried out in the late 1950s and 1960s indicated that enterprises employing thirty or less people constituted 82.7 per cent of all industrial establishments; 33.7 per cent of total industrial employment and 15.5 per cent of industrial wage employment (Central Bureau of Statistics, 1963, 1965). The 1962-63 survey showed that manufacturing units employing less than ten people per enterprise accounted for 98 per cent of all industrial enterprises and 74 per cent of the total number of persons engaged in manufacturing. However, they accounted for only 20 per cent of wage employment. In Ghana, manufacturing is still quantitatively small in nature. In the 1962-63 surveys, for instance, on the average, the number of persons engaged was about 2.7 per enterprise. Many of the enterprises were one-man concerns or small family concerns employing little or no outside labour (see Birmingham et al, 1966, p276 table 2.6). It is quite likely no major changes

have occurred since the 1960s, though no other major industrial census has been carried out since those of the 1960s. It is not likely the industrial structure has changed dramatically in favour of medium and large scale enterprises. This suggests that one cannot ignore the importance of small-scale industries, largely traditional and family concerns in both urban and rural employment generation. It is this reason coupled with the role of manufacturing in the general process of development, and the part small-scale manufacturing can play in urban employment, which motivated the choice of emphasis on the sector. One major problem though had to be cleared, and that was the problem of defining small-scale industries for the purpose of this study.

(iii) Small-scale industries : A definition for this study

There is no single definition for small-scale industries. The main reason for this is that it is extremely difficult to obtain a sharp distinction between what constituted small and large-scale enterprises (Aubrey, 1951, Laloire, 1961, p246-268).

Small-scale industry is simply a broad term covering small industrial firms ranging from household and cottage industries on the one hand, to medium and large-scale industries on the other (I.L.O. 1965, p5; Staley, 1958, p3-6). There are generally two approaches to the definition of small-scale industries, one of which is to use some quantitative measures such as employment size, employment with power, horse power or capital equipment at some convenient valuation. Various governments and countries have set precisely measurable statistics to define small-scale industries. This seems to be very convenient, especially when it comes to the question of resource allocation, industrial promotion and administration. This

approach has influenced the definitions adopted in countries such as India, Nigeria and Japan. (I.L.O. 1961, p5; Aluko, Oguntoye and Afonja, 1972; Development Commission - Small-scale Industries, New Delhi, 1967, p3-4; Nanjundan et al, 1962, p3).

The second method is the functional definition whereby small-scale industries are distinguished from medium and large-scale ones by means of certain characteristics: little specialization in management, close personal contact of top management or entrepreneurs with production workers, lack of access to capital, no special bargaining strength in buying and selling and often a close integration with local community (Staley and Morse, 1965, p15-16). Neither of the two approaches, however, has been accepted universally. They have been formulated to meet statistical, administrative, managerial and analytical purposes. Each country has, therefore, tried to define the lower and upper limits of small-scale industrial characteristics in the light of its level of industrial development. This is reflected in the varied definition adopted in Ghana, but (see table 5.1 below) these definitions refer primarily to the modern small-scale industries which have access to the banking institutions for loans. While no single measure is entirely satisfactory, the size of labour force is probably the most widely available, the most convenient and, on the whole, the least objectionable measure of the size of an enterprise.

In this study, the size of employees of an enterprise is used to define small-scale industries. Thus small-scale industry is defined to include all manufacturing and related services enterprises which employ less than 30 employees. It includes all factory and non-factory, cottage industries, and those with fixed places of work. They may or may not use power

Table 5.1 Definitions of Small-Scale Industry in Ghana

Definition	Source	Purpose
1. A Company having an original Investment in Plant and machinery not in excess of N ₵ 100,000 and annual turnover not in excess of N ₵ 300,000.	Bank of Ghana (since 1969)	To restrict the benefit of credit guarantee scheme to small borrowers.
2. Companies employing nine persons or less.	Central Bureau of Statistics (C.B.S.)	The C.B.S. reports data on Companies having 10+ employees to help assure year-year comparability. Companies with less than 10 employees often do not respond to questionnaires.
3. Companies requiring a loan of no more than ₵250,000 (If the borrower's equity were 30% eg. a loan of ₵250,000 could result in fixed assets of ₵357,000 including land and building).	Ghana Enterprises Development Scheme (GEDS)	To restrict the size of loans under the small Business Credit scheme (act 334 of 1970 & NRCD 330 of 1975).
4. A manufacturing or Service Company whose fixed assets (exclusive of land and buildings) do not exceed ₵300,000 before or after a loan.	Oct. 13, 1976 meeting at Bank of Ghana with 8 banks engaged in lending to Industry.	To consider operations of a Consortium of commercial banks and a definition for a program of loan to small-scale Industry.
5. The Ministry's definition places an upper limit on a) fixed assets, b) of persons engaged c) turnover.	Ministry of Industry at request of Ministry of Economic Planning.	To assist world bank consultants team in arriving at definition of small-scale Industries for program administration.

Source : Government of Ghana : Small-scale Industry Development in Ghana. (report by Checchi and Co., Washington D.C. April 1977.

and are owned largely by private individuals.

B. Conceptual Framework and Research Hypotheses

The reviews of the studies on the informal sector have shown that there are many aspects of the informal sector that can be studied. This study aims at examining some of the major factors that influence output and employment generation in informal sector enterprises. The study assumes that the ability of a business unit to engage in "profitable" economic activity and create employment, depends on a number of factors among which are :

The entrepreneurs who manage the enterprise. It is expected that their background characteristics have both direct and indirect impact on the performance of their businesses (1). It is also expected that their perceptions of the prospects of their business units in the past and for the future influence their decision to continue operating their enterprises and hence to generate output and employment in the informal sector.

Secondly, the centres in which the entrepreneurs operate their enterprises have direct and indirect effect on the level of output of their enterprises. This is brought about by the supply linkages and demand for the products and services of the business enterprises. These are also related to the size of labour force in the business units.

Thirdly, the operating characteristics of the enterprises are also important considerations with respect to output and employment in the informal sector. These operating characteristics include : sources of inputs; output or marketing characteristics; turnover; physical and

environmental conditions and the availability and use of public sector facilities.

Lastly, the main problems arising largely out of the operating and other characteristics governing the performance of the business units are expected to have direct impact on an entrepreneur's ability to operate his enterprise "successfully" and hence to generate employment in the informal sector.

Out of this general framework within which the output and employment issues interact, the objectives of this study are thus :

To examine the extent to which centres of different size hold prospects for the development of the informal sector (2). This study examines the size and types of employment generated by the enterprises in the centres. Also the locational factors of the enterprises are examined. In addition, the relationships between the entrepreneurs and aspects of output and employment are examined. An important aspect of this study is an examination of the linkages that exist among the informal sector enterprises themselves, and with the agricultural (or rural) and large-scale or modern sector. The linkages are discussed in terms of the "flow" of capital, products and skills. Finally, the main problems encountered by the enterprises are examined and are related to the wider issues of the existence or otherwise of opportunities or facilities and the use thereof from the modern or public sector. These areas of inquiry have implications for policy issues (both economic and physical planning proposals) that can be directed to the enterprises in the sector with the aim of promoting their growth and develop-

ment. They also have implications for employment growth and growth centre strategy.

Arising out of these objectives and also from reviews of the studies in the informal sector economy, the central themes or hypotheses which this study is intended to investigate are:

Informal sector enterprises have the potential for both short and long term employment generation. In addition, there is direct relationship between the size of centres and potential for employment generation in the informal sector enterprises. This relationship is also expressed in the "intensity" of constraints facing the economic activities of the enterprises. Hence it is hypothesised — that the "intensity" of problems encountered by informal sector operators should be inversely related to the size of the centres.

Also, the capacity or potential for output and employment growth in the informal sector is conditioned by both endogenous operating characteristics and exogenous factors. With respect to linkages, it is hypothesised — that weak intersectoral linkages exist among the informal sector enterprises and between them and the other sectors of the economy.

C. Rationale for and choice of Study Region

For practical purposes it became necessary to limit the study to one administrative region as a case study region, and to a number of selected centres. In Ghana, the administrative regions are the regional planning regions or units. Up until now the country has not been divided in any other way for the

purpose of regional planning. The administrative regions form the basis for data collection and for the allocation of public sector resources. It also has the advantage of being easy to create and for incorporating the national administrative structure for the formulation and implementation of plans. In Ghana, there are nine administrative regions and each region consists of smaller units called districts. In addition to these, the choice of one region is based on the idea that the strategy for the implementation of a growth centre policy is expected to be devised by the regional resource planning units in the regions (3). So it was thought that by examining one region, the employment implications of such a strategy could be highlighted.

The central region was chosen as a case study region (Fig. 5.1), because it is one of the regions with a number of urban centres ranging from what in national terms may be described as medium sized centres, to small urban centres located in close proximity to each other. This is very important in a study of this nature which requires that informal sector enterprises in a number of centres must be surveyed. In addition, most of the urban centres in the central region are either growing slowly or not growing at all (see Table 5.2) and one wonders whether this is related to employment problems. Therefore, if a growth centre strategy has to be applied in the region, the employment issue has to be seriously considered. Above all, in many ways the region is representative of other regions in Ghana, as will be seen in the section below.

(i) Population and economic activities of the Central Region

(i)a. Location: The Central Region is located in the south

Table 5.2 Distribution by type of Industries : Central Region and Ghana, 1960,1970.

Sector	1960			1970		
	Ghana		Central Region	Ghana		Central Region
	No. Employed (Persons)	% of total	No. employed	% of total	No. employed	% of total
1. Agriculture	1,581,331	61.8	191,993	62.2	1,790,713	57.2
2. Mining and Quarrying	48,221	1.9	1,453	0.5	30,987	1.0
3. Manufactur- ing	233,947	9.1	26,363	8.5	376,377	12.0
4. Construction	88,653	3.5	15,134	4.9	73,579	2.3
5. Electricity, gas, water etc.	14,189	0.6	1,851	6.0	12,243	0.4
6. Commerce	371,131	14.5	51,413	16.7	435,967	13.9
7. Transport & Communications	67,823	2.6	6,763	2.2	84,327	2.7
8. Services	154,088	6.0	13,784	4.5	328,849	10.5
TOTAL	2,559,383	100%	308,754	100%	3,133,042	100%
					351,962	100%

central forest and coastal thicket and mangrove belt of Ghana. It comprises an area of 3656 sq. miles (i.e. 4% of the surface area of Ghana (see figure 5.1).

(i)b. Population : The population of the region was 751,392 in 1960 (i.e. 11.2% of the total population of Ghana). Though this had increased to 890,135 in 1970, it constituted only 10.4% of the national population. The regions population density of 205 persons per sq. mile is much higher than the average for the nation as a whole (73 persons per sq. mile). However, its annual population growth rate between 1960 and 1970 was 1.7% per annum and this is lower than the average for the nation (i.e. 2.4% per annum)(4).

The central region can be divided into two areas of high population and areas of low population density (fig. 5.2). The areas of high population concentration are along the coast and eastern portion of the region - areas east of the Cape Coast - Kumasi trunk road. These areas include the agricultural sub-districts of Elmina, Cape Coast, Mankesim, Apam, Winneba, Ajumako and Breman (Addo, 1974, p118-120). Population density in these areas is about 300 persons per sq. mile. Areas to the west of the Cape Coast - Kumasi trunk road and the northern portion of the region are least populated generally, with less than 100 persons per sq. mile. The least populated areas include the agricultural subdistricts of Fanti-Nyankumasi, Asin Manso, Asin Fosu, Akonfori and Dunkwa agricultural subdistricts. According to Addo (Addo, 1974, ibid, p118-120), this pattern of population distribution is closely related to the intensity of agricultural and commercial activities in the region. It is also related to the pattern or distribution of urban development. The most heavily populated areas are also the most urbanized. The coastal and south eastern portion of the region contain all

Fig. 5.1

GHANA : Administrative Regions

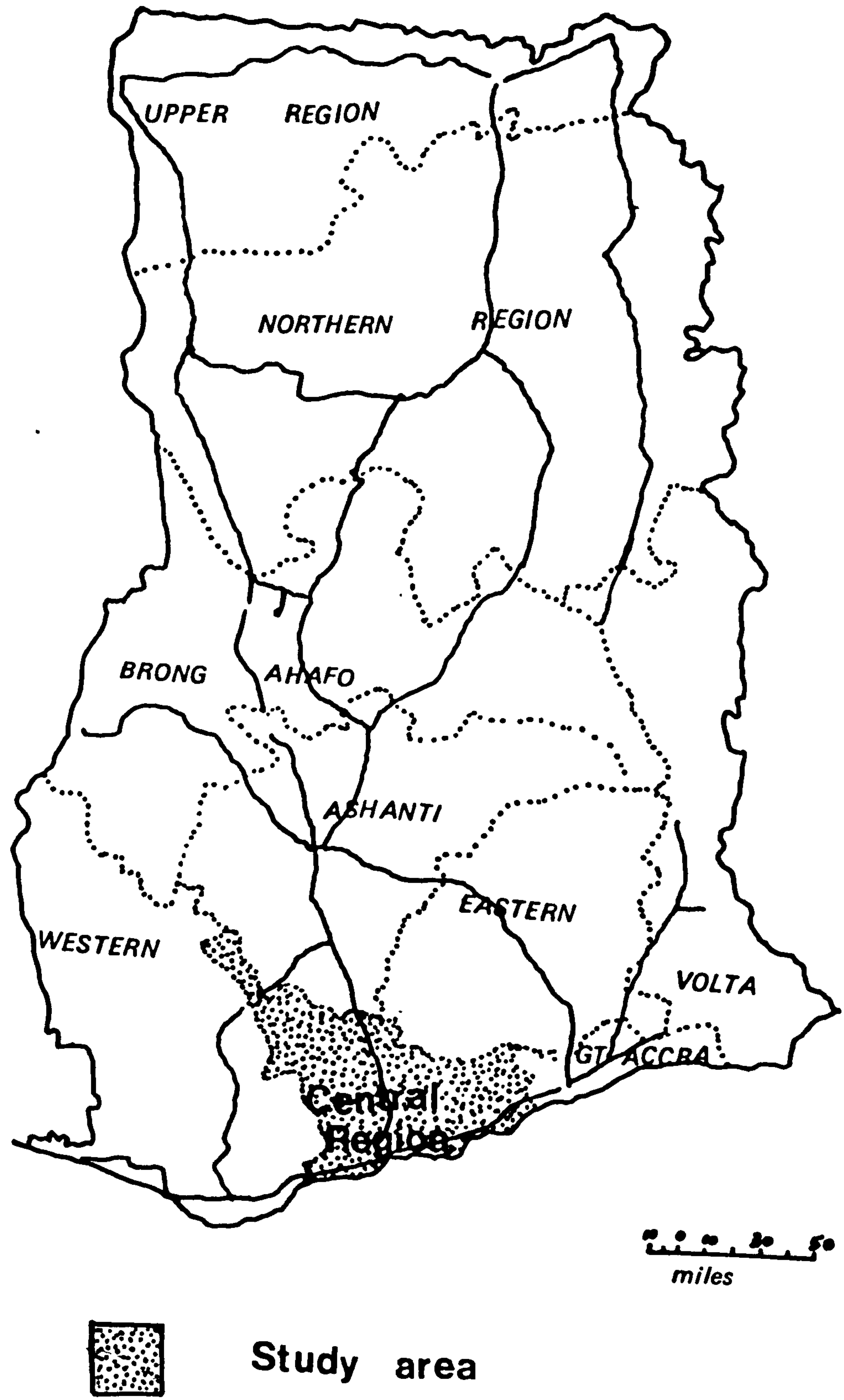
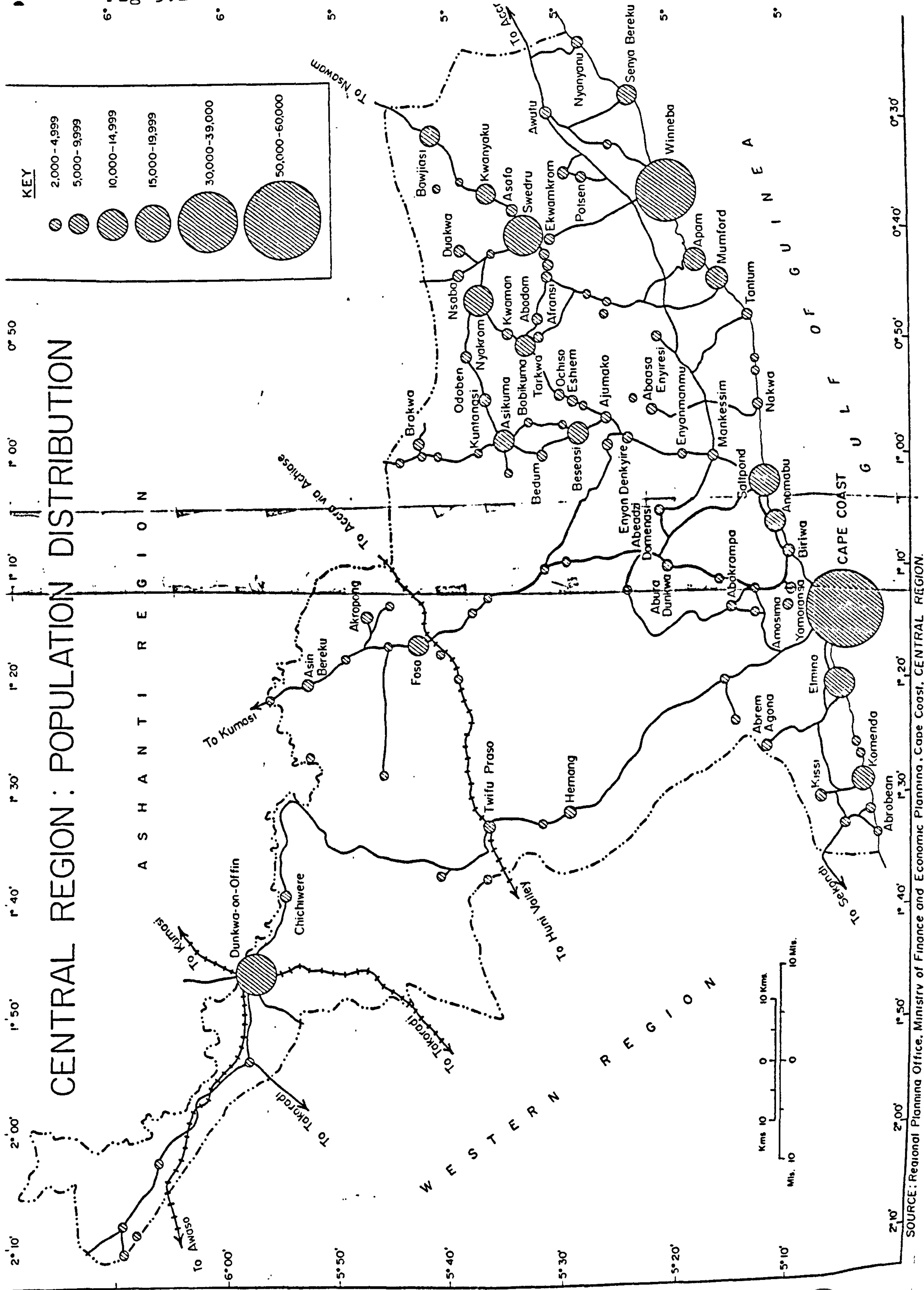


Fig 5.2



but two of the regions towns. In addition it contains a significant number of large villages (i.e. settlements between 3500 and 5000 (see figure 5.2). Most of the regions basic infrastructure (e.g. roads, electricity supply, are located in the heavily populated areas (Figs. 5.3 and 5.4). Consequently, with the exception of Dunkwa and Fosu, the area contains virtually all the service centres in the region (Fig.5.5). This, together with its resources for industrial development, has influenced the location of the existing and proposed industrial establishments in the region.

(i)c. Urban development : Like the rest of the nation, the central region is characterized by small-scale urban development. 27.7% of its population lived in towns in 1970 compared with the national figure of 28.6%. The annual growth rate of urban population of the region between the two censal years of 1960 and 1970, was 1.5% per annum, compared with a rather high growth rate of 4.8% for the nation as a whole (5). This indicates that the towns in the region did not grow as fast as the average for nation (6). Changes occurred in the size of population of some of the towns between 1960 and 1970 (7) (see table 5.2). The projected regional annual urban growth rate for 1970-80 shows that the central region is expected to experience at least annual growth rate of 2.2% compared with a national projected rate of 3.8% (Govt. of Ghana, 1977)(8). The low projected rate of urbanization in the region probably reflects the flow of people towards Accra-Tema in the East and Sekondi-Taheradi in the West. However, within the region, as in other regions, some urban centres are expected to grow faster than others. In the central region the three main urban centres of Cape Coast, Winneba and Swedru are likely to have the largest popul-

CENTRAL REGION - ROADS (EXISTING AND UNDER CONSTRUCTION)

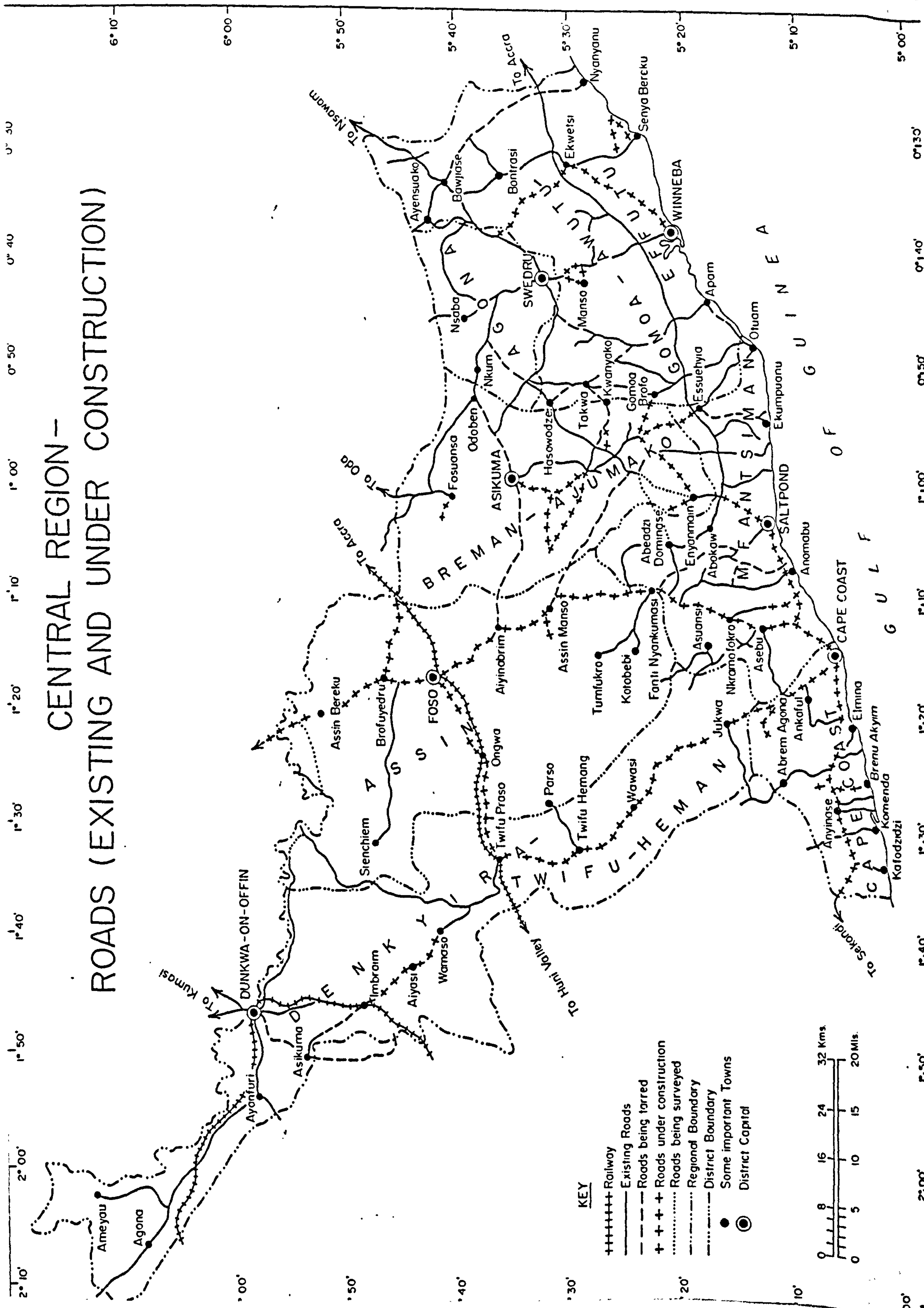
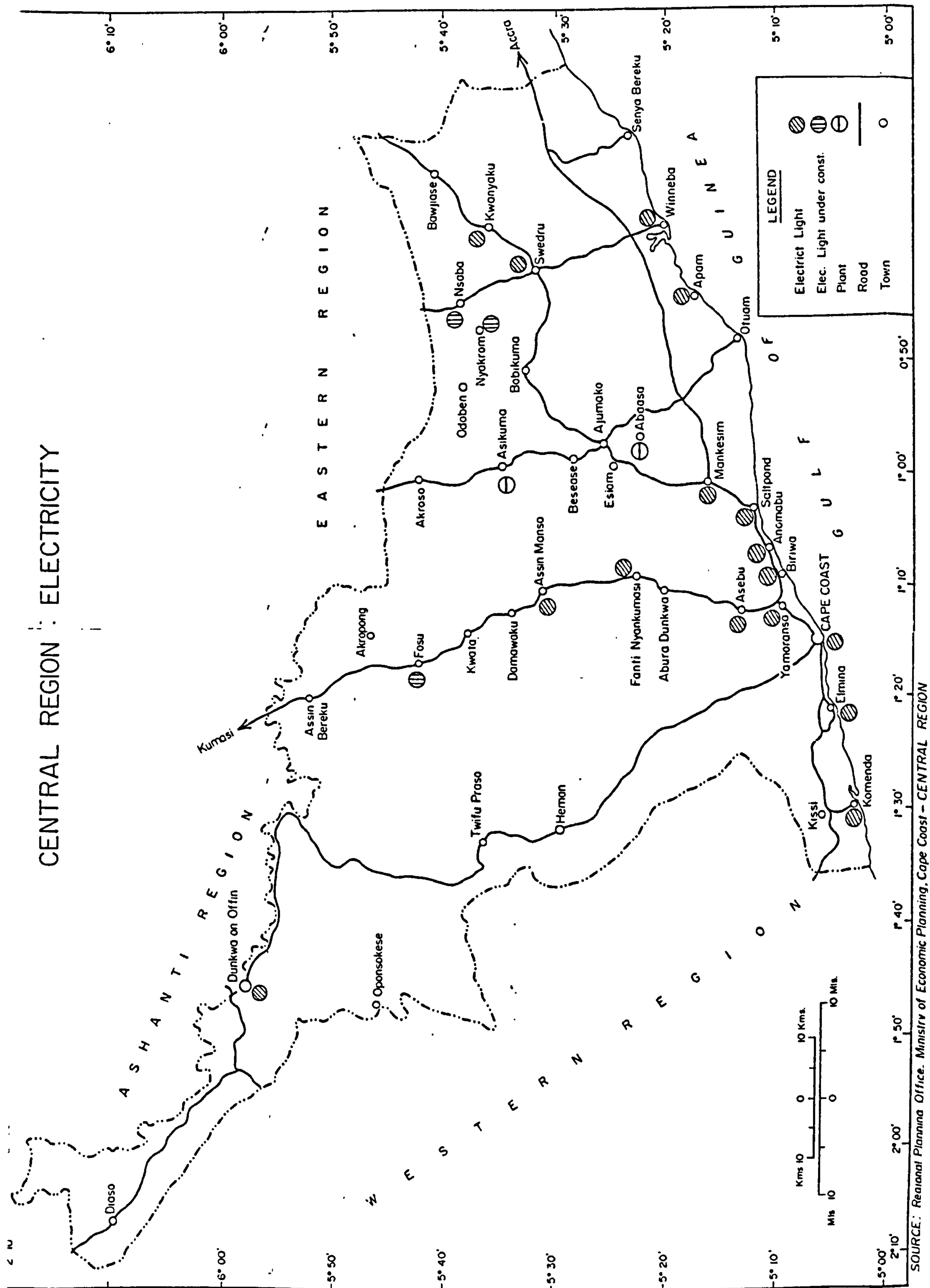


Fig 5.4



KEY

KEY

HEALTH: 1 Specialist Hospital
2 General Hospital
3 Polyclinic
4 Health Centre
5 Health Post

EDUCATION*

- 1 University
- 2 Specialist
- 3 Training College
- 4 Secondary School
- 5 Technical School
- 6 Commercial School

BANKING:

4 Standard Bank of Ghana	No of Persons
POLICE: 1 Police Station	-----50,000

Year	High Court	Circuit Court	District Court
1980	15,000	10,000	5,000
1985	20,000	15,000	10,000
1990	25,000	20,000	15,000

LOCAL ADMINISTRATION:

POSTAL SERVICE:

**ABURA DUNKWA: Health-Specialist Hospital
Health Post**

ELMINA: Health - Polyclinic
Education - Technical School,
Commercial Sch.

**NYAKROM : Education - Training College
Judicial - District Court
Police - Police Station
Local Admin - Local Council
Postal Service - Post Office
Water Supply - Treated**

**NSABA: Education - Tranning College
Police - Police Post
Local Admin - Local Council
Postal Service - Post Office
Water Supply - Treated**

KOMENDA: Health - Health Post

**KOMENDA - Health - Health Post
Education - Training College
Police - Police Post
Postal Service - Post Office
Water Supply - Treated**

AWJIASI - Health - Health Post
Police - Police Post
Postal Service - Postal Agency
Water Supply - Treated

**DIASO - Health - Health Centre
Police - Police Station
Postal Service - Post Office
Water Supply - Not Treated**

**DUNKWA - Health - General Hospital
Education - Training College, Sec. School
Police - Police Station
Judicial - District Court
Local Admin - Local Council
Postal Service - Post Office
Water Supply - Treated .
Electricity**

Shopping Facility - U. A. C., G. B. Olivent

**CHICHIWIRE: Health- Health Post
Police - Police Post
Postal Service- Postal Agency
Water Supply - Not Treated**

PRASO: Police - Police Post
Shopping Facility - G.N.T.C.

WFO PRASO: Health - Health Post
Postal Service - Post Office

Police - Police Post
 Judicial - District Court
 Local Admin - Local Council
 Water Supply - Not treated
 Shopping Facility - U A C.G

**OSO. Health - General Hospital
Education - Training College**

Banking - Commercial Bank
Police - Police Station
Judicial - District Court
Postal Service - Post Office

SIKUMA : Health - General Hospital
Education - Sec. School
Banking - Commercial Bank
Police - Police Station
Judicial - District Court
Local Admin - Local Council
Postal Service - Post Office
Water Supply - Treated

SENYA BERAKU:
Health - Health Po

Police - Police Post
Postal Service - Post Office
TARKWA: Police - Police Post
Postal Service - Postal Agency
Water Supply - Not Treated

TANTUM (OTUAM)

Health - Health Post
Police - Police Post
Postal Service - Postal Agency
Water Supply - Treated

**SWEDRU: Health - Health Centre
Education - Secondary School,
Technical School**

Banking - Agricultural Development Bank
Commercial Bank
Police - Police Station
Judicial - District Court
Social Admin - Urban Council
Postal Service - Post Office
Water Supply - Treated
Electricity
Housing Facility - U A C G B Olivant

3

2024

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0.40.

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ation by 1980 (appendix C). The pattern of urban development in the region is typical of the rest of the nation. As noted earlier, urban growth is shewed towards the left, i.e. there are too many small urban centres compared with a small number of medium sized and large centres. In 1970, there were only three urban centres with a population above 20,000 people each; five centres with between 10,000 and 20,000 and the rest were between 5,000 and 10,000.

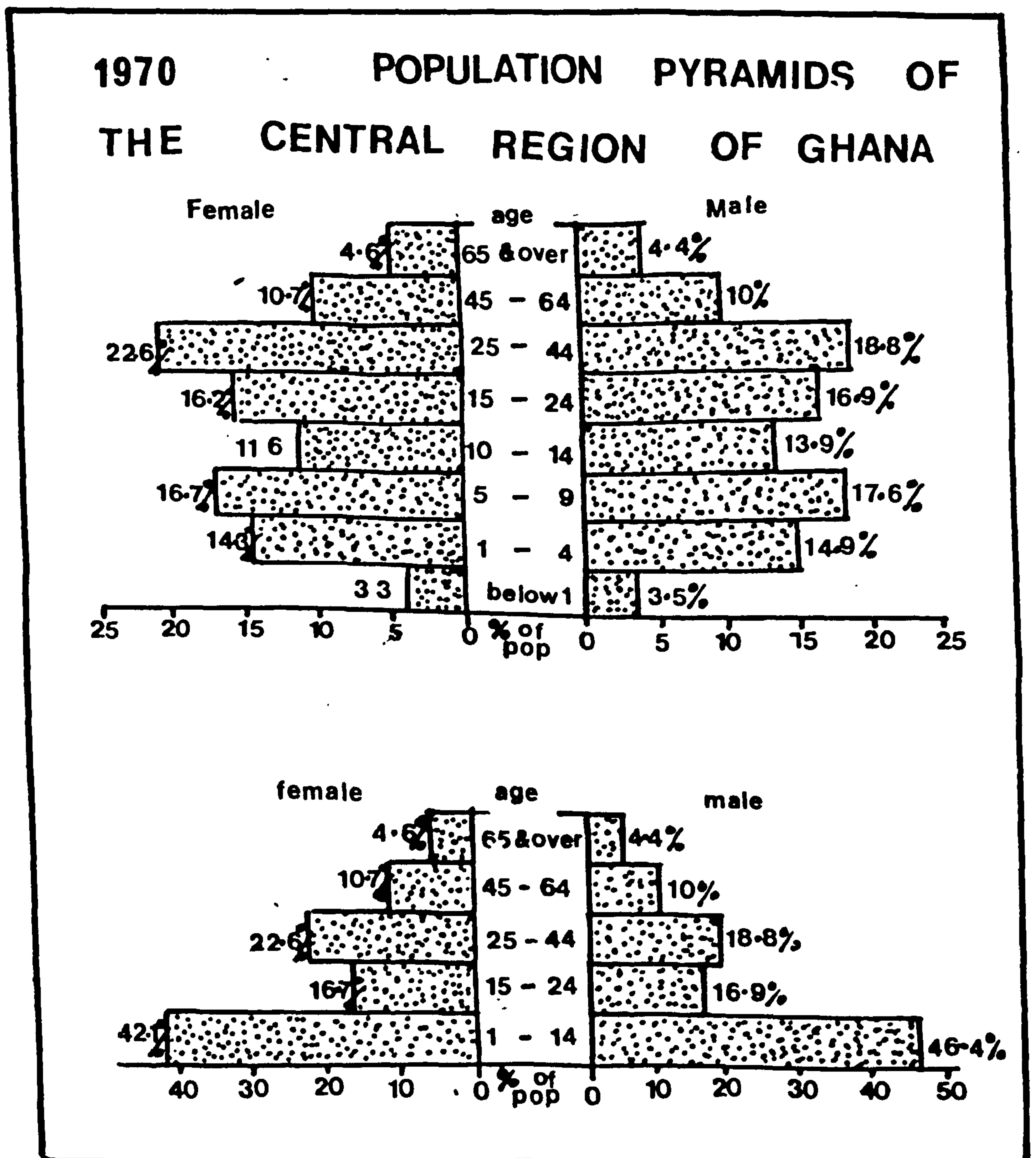
The regions demographic structure is typical of the rest of the nation (Fig. 5.6). The population of the region can be described as young with almost 50% of the entire population aged less than 15 years old, which means the dependency ratio is quite high. It also has serious implications for employment. Most of the young are pupils and students, and by the end of this decade and probably the next, most of them would be thrown on to the job market. It is thus pertinent to examine the regions production structure and the employment situation.

(ii) Production Structure of the Central Region

The central region is, on the whole, one of the least developed regions in southern Ghana. Prior to the 1960s the regions "backward" position within southern Ghana was concealed by its administrative incorporation into the western region, which was better endowed with resources. The economic base of the region appears to be poor; its inhabitants are engaged primarily in farming and fishing, which employed not less than 64.3% of the regions labour force in 1970 (table 5.2).

(ii)a. Agricultural production : The greater part of the region is in the moist semi-deciduous forest belt. The southern part is cloathed in coastal scrub and grassland (Dickson

Fig. 5.6

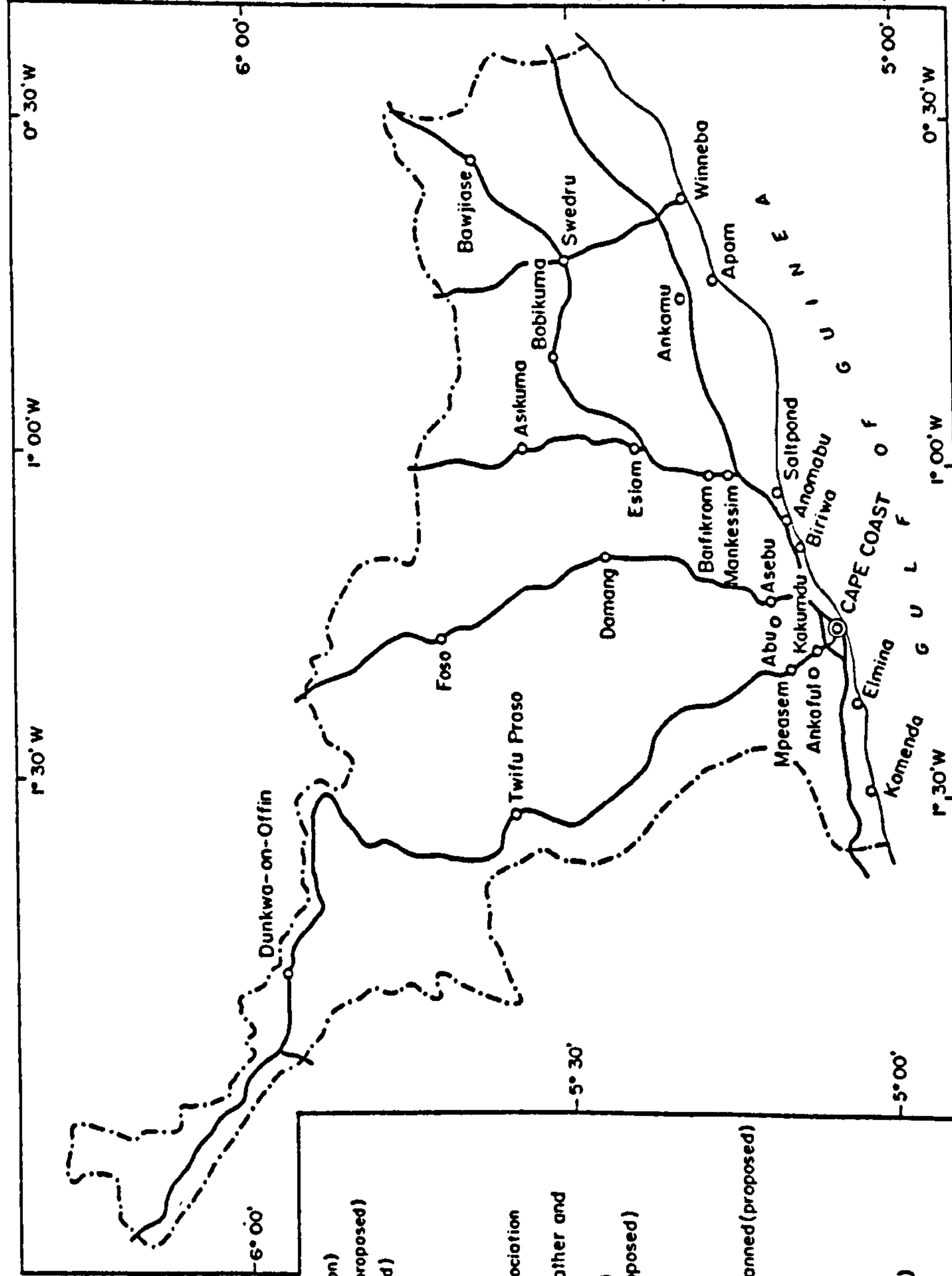


and Benneh, 1970, p36-40). The regions principal cash crops are maize, cocoa, coffee, banana, oil palm and rubber. The cocoa industry in the region has suffered a decline and this has adversely affected the growth of the urban centres which used to be service centres for the cocoa growing areas, particularly in the Agona - Nyakrom - Nkum area. Despite this decline, the region has potential areas for the development of the cocoa industry. The major areas for this development are Fosu, Twifo Praso and Dunkwa - on - Offin districts have fertile lands where swollen shoot infections are very low.

(ii)b. Industrial development : The region has no modern port, neither is it an important manufacturing region. The region does not have any base for large scale heavy industry, and the base for future industrial growth seems to lie in agro-based industries. This is because the region is not rich in exploitable mineral resources. The only known mining activities going on in the region are alluvial gold mining through dredging of the Offin River near Dunkwa and the mining of kaolin deposits near Saltpond. However, recent discovery of oil (Bonsu fields) off the coast at Saltpond holds the greatest prospects for mineral exploitation in the region (9). Manufacturing in the central region is typical of the general Ghanaian manufacturing in that it comprises a multiplicity of technologically simple concerns and a small number of medium and large-scale enterprises owned by foreign interests, the State and joint State and private interests (Fig. 5.7). In the early 1970s there were only 5 industries employing 100 or more people - three of which employ over 300 people. These are the Komenda Sugar factory, Bremen Gold dredging Company at Dunkwa on Offin and L Rose lime factory at Asebu. All these industries are based on the

CENTRAL REGION: INDUSTRIES AT A GLANCE

Fig 5.7



CAPE COAST

- 1. Bar and Flake Soap: Ameen Sangari Soap Factory (in production)
- X 2. Laundry services: Oguoo Laundries and Cleaners (in production)
- 3. Fishing and pleasure boats: Yartel Boat Building Industry (in production)
- 4. Brake lining BND: Brake Lining Factory (in production)
- 5. Methodist Book Depot Ltd (in production)
- 6. General printing services: Grabys Press (in production)
- 7. Sparking Plugs: Automotive Engineering Services (proposed)
- 8. Knitted fabrics: Afro Knitters Ghana Ltd. (proposed)
- 9. Aluminium window: Flamingo Metal Ltd (proposed)
- 10. General printing: Mfantseman Press (in production)
- 11. General printing: Catholic Press (in production)
- 12. Rubber stamps: K. Dam Industry (in production)
- 13. Pharmaceutical products: General Pharmaceutical Association Ltd. (proposed)
- 14. Suit and Brief Cases, Ladies' hand bags: Coast Leather and Plastic Industries (in production)
- 15. Lumber Eduana Sawmills Ltd. (in production)
- 16. Fire extinguishers: Regis Extinguishers Fibre (proposed)

ELMINA

- 1. Edible salt: Panbros Ltd (in production)
- 2. Coconut Oil Mill (proposed)
- 3. Messrs. Elmina Canneries: Sardines and other canned (proposed)
- 4. Edible salt: Edina Salt Products (in production)

ANKAFUL

- ▼ 1. Burnt bricks (CS R.I.) (in production)
- ▼ 2. Bricks and Tiles
- 3. Pan Saw Mill (in production)
- 4. Dressed fowl: Pomadzi Enterprise (in production)

ASEBU

- 1. Lime peel in production
- 2. Lime Juice (in production)

MANKESSIM

- 1. Sugar and Alcohol: Alanfam Products (in production)

MPEASEM

- ▼ 1. Chippings: Quarry Project (R D C.) (under construction)

KAKUMDU

- 1. Concentrated, alcohol, soft drinks: Cape Distilleries (proposed)
- 1. Pulp and paper: Ghana Pulp and Paper Industries (proposed)

DUNKWA-ON-OFFIN

- 2. Smoked sheet rubber: Offin River Estate (in production)

FOSO

- ▼ 1. Bamboo products: Bamboo Industry (to be reactivated)
- 2. Garli: Universal Cassava Products (in production)
- 3. Kiln: Dried lumber: Sudayan Company Ltd. (proposed)
- 4. Sawn timber, plywood veneer and wood tiles: Africam Timber Industries (proposed)
- 5. Wood processing mill: Messrs Canlite Complex Ltd (proposed)
- 6. Lumber: Garbrah Bros Enterprise (proposed)
- ▼ 7. Forest products: Assin Forest Products (proposed)

ABU

- 1. Lime juice, oil concen.: Abura Okotoon Industries (under construction)

ASIKUMA

- 1. Sand - paper bags, furniture polish, and destree blue: Reliance Sandpaper Industries (proposed)
- BAWJIASE
- 1. Soap: Royal Complex Manufacturers Ltd. (proposed)

BOBIKUMA

- ▼ 1. Baskets, tables and chairs

SWEDRU

- 1. Bread: Assance Bakery Ltd. (in production)

ESIAM

- X 1. Cooking oil: Waff Trading Co (in production)

ANKAMU

- 1. Stone chippings: Assin Stone Quarry Ltd. (proposed)

WINNEBA

- 1. Obonoma Press Ltd. (in production)
- 2. Panelled doors, glazed doors, flush doors and windows: Miniwood Products Ltd (proposed)
- 3. Cassette tapes: Afrodisk Industry Co. Ltd (proposed)

APAM

- 1. Edible salt: Apam Salt Industries (in production)

BAFIKROM

- 1. Water cooler, flower pots: Bridge Pottery (in production)

SALTPOND

- 1. Door mats and ropes: Coil Fibre Factory (in production)

- X 2. Sanitary and Earthenwares: Ceramic Products (in production)

- 3. Coconut oil: Beb Products (proposed)

ANOMABU

- 1. Lime juice, oil and concentr. Cape Coast Citrus Factory (in production)

BIRIWA

- X 1. Furniture etc.: Biriwa Projects (in production)

KEY

- ▼ Government

- X Government/Private

- Private

- Roads

- Regional Boundary

Kms 10 0 10 20 30 40 Kms

Miles 10 0 10 20 30 Miles

local resources of the region. The main problems affecting industrial development in the region are related to supply of adequate raw materials to run production to full capacity (eg. the Komenda Sugar factory) or to expand production capacity, as in the case of the lime factory at Asebu. In addition, some of the small scale industries, particularly the wood and furniture industry, are constrained by the lack of adequate markets. The output from these establishments exceeds demand.

Despite these constraints, industrial production in the region could be expanded through increased agricultural production. The existing agro-based industries can be expanded through increased cultivation and potential areas for cash crop production could be developed. Such crops include : oil palm which is widely grown in the forest belt around Twifu Praso, citrus fruits, pineapples, and also forest products including firewood, charcoal, roots and herbs. Some of the main industrial potential of the forest include sawmilling, veneer and plywood (Fosu), charcoal burning factory at Asin Manso.

(iii) The Employment structure of the Central Region

Like the concepts of unemployment and under-employment, the concept of employment is difficult to define. Sen (1975, p45-49) has distinguished three aspects of employment: production aspect, income and recognition aspects. Mouly(1972, 1977) has suggested the use of the concept "work" instead of employment. In view of the difficulty in defining the concept employment, this study adopts no particular definition, but uses the broad concept employment to include both the wage and non-wage types of economic activities. Secondly, for employment to be meaningful to the individual and society as a whole,

it must be productive employment (10). This section examines the employment structure of the region and compares it with that of the nation as a whole. The purpose is to demonstrate the extent to which the region is representative or differs from the rest of the nation.

(iii)a. The size of labour force. The size of labour force in every country or part of it is determined by the minimum age at which a person is regarded as economically active. That age differs from country to country. The population census of 1960 considered every person of the age of fifteen years and above as economically active, and thus in the total labour force. Total labour force includes the employed as well as the unemployed. The age limit was fixed at a minimum of 15 years, probably because below this age most people are either students or dependents and when people below that age are working, they would only be assisting in the production of goods and services and are not considered to be responsible for decisions, which normally affect the work procedure (Addo, 1967, p31). The exclusion of persons between the ages of 10 and 14 (in the 1960 census) of those who were working either on their own, or for others, may have distorted the picture of the size or magnitude of economic activity of the national population as a whole (Addo, 1967, Ibid, p3).

(iii)b. Distribution of population aged 15 years and above by type of economic activity : Ghana and Central Region compared (see table 5.3).

There are two striking changes between 1960 and 1970. The proportion of student population in the total labour force doubled for both Ghana and the Central Region, while the proportion of homemakers declined between 1960 and 1970. The tremendous increase in the size of students in the labour force

in the whole country was largely due to the expansion programme in education began in the early 1960s. The decline in the number of homemakers has been caused by the decline in the fertility rate and increases in female participation in employment. These in turn have been affected by increased education for women, increased urbanization and more permissive attitude towards the role of women in society, all of which are indications of modernization (Ewusi, 1975, p4).

(iii)c. Structure of employment. The term "structure" of employment can be used to mean one or a number of all of the following distributional aspects of employment.

- (a) Distribution by sector.
- (b) Distribution by industries
- (c) Distribution by type of occupation; by type of employer and distribution in spatial context (i.e. regional variation or intraregional).

These categories of the classification schema are not mutually exclusive. The structure of employment would be described to be the distribution by industries (i.e. sector), by type of employment or occupation and employer. The structure of urban employment would also be looked at. The data sources for this discussion are the 1960 and 1970 population census reports which though a bit out of date, are the only sources of data available. In addition, the reports contain detailed occupational distribution.

(iii)d. Distribution of employment by industry : Table 5.2 summarises the importance of various sectors of the regional economy in employment generation. This is compared with the national averages in 1960 and 1970. It was noted that there

Table 5.3 Distribution of Population aged 15 years and over, by types of Economic Activity
in Ghana and Central Region, 1960, 1970

Activity	Ghana				Central Region			
	1960		1970		1960		1970	
	No. engaged	%	No. engaged	%	No. engaged	%	No. engaged	%
Employed	2,559,838	68.6	3,133,047	69	280,122	72	351,962	75.5
Unemployed	167,732	4.5	267,705	4.5	18,131	4.5	18,676	4
Homemakers	688,103	18.4	625,430	13.8	38,067	9.9	29,248	6.3
Students	147,881	4.0	392,006	8.6	28,610	7.5	45,196	9.7
Vocational training	10,779	0.3	4,650	0.1	602	0.2	250	
Disabled	148,323	4.3	166,250	3.7	16,237	4.2	17,753	4.5
Income recipients	3,205	0.1	8,108	0.2			1,097	
Others	4,903	0.1	4,800	0.1	1,963	0.5	1,932	
Total	3,730,309	100	4,543,348	100	383,732	100	466,214	100

Source : Calculated from 1960 and 1970 Census reports of Ghana.

was a decline in employment in the construction and utilities in the country as a whole, but the drop was "sharper" in the central region than in the rest of the country. In the case of the construction industry, the drop may be due to the deflationary policies of the central government after 1966, and it is also a reflection of the depressed economic activity, particularly between 1966 and 1969. The introduction of the Volta grid system after the construction of the dam at Akosombo is perhaps the main reason for the decline in employment in the utilities industries. Some electricity service men who worked on several generators spread throughout the region, may have been eliminated. The service industry and the manufacturing sectors gained some employment in the 10 year period in both the central region and the nation as a whole. Using data from the labour and industrial statistics, Steele(Steele,1977, p48ff) has shown that between 1957 and 1971, in the country as a whole, it is the services and manufacturing sectors which experienced the fastest growth in productivity and employment in the wage sector, with the public sector role far outweighing that of the private sector (11). Steele expressed optimism that if the manufacturing sector, which stood out as the most consistently fast growing sector under both public and private ownership with the greatest potential for absorbing labour rapidly and productively, continues its past growth trends, it is probable that it could play a significant role in terms of growth and high productivity. He noted, however, that the success of enlarged manufacturing sector stimulating development in Ghana, depends on the support of agriculture and the small-scale sectors and on its ability to sustain high growth rate (Steele 1977, p49ff).

However, despite its seemingly appreciable growth trends in output and employment, the (formal) manufacturing sector has remained too small to absorb total additions to the urban labour force, and with its poor linkages with the rest of the total national economy, its continued growth does not seem to offer the lasting solution to the employment problem of the country as a whole.

(iii)e. Distribution of employment by type of employment :

Table 5.4 is an aggregation of occupational distribution contained in the 1970 population census report.

Table 5.4. Persons employed by occupation (major groups)
in Central Region and total Country 1970

Type of Occupation	All Regions		Central Region	
	No. employed	% of total	No. employed	% of total
All occupations	3,133,047	100	351,962	100
Professional, Technical and related workers	119,680	3.8	11,809	3.4
Administrative and managerial workers	11,323	0.4	799	0.1
Clerical workers	86,361	2.8	5,603	1.6
Sales workers	413,510	13.2	48,878	13.9
Agriculture and related workers	1,798,256	57.4	227,444	64.6
Service workers	90,164	2.9	5,824	1.7
Production and related workers	613,753	19.6	51,605	14.7
Transport, equipment operations and Labourers				

Most of those categorized under sales workers, service workers, production and related workers, and the transport and related activities are likely to be in self employment, and thus operating within the informal sector. These activities form the bulk of non-farm activities.

(iii)f. Distribution of employment by employer : In the country as a whole, employment in the private sector (12) far outweighs employment in the public sector and the related institutions (13). These accounted for only 12% of total employers in 1970, but in terms of regular wage employment, the public sector provided 57% of wage employment (Ewusi, 1975, p64). In the Central Region, the private sector employed 92% of all the employed in 1970. The 1960 census report does not contain a breakdown of the types of employment which can be compared with the situation in 1970. However, according to available data, in the whole country, the public sector provided only about 38% of regular wage employment in 1960 (Ewusi, 1975, p67).

(iii)g. Types of activities and employers in the urban areas: The commonest feature of nearly all urban centres in Ghana, as far as economic activities are concerned, is the importance of commerce as a source of employment for at least a third of the total number of the actively engaged people (Hinderink and Sterkenberg, 1975, Dickson, 1971). In as many as 13 out of the 32 towns with a population of over 10,000 people, commerce is reported to employ as much as a third of the labour force (Dickson, 1971) (14).

Another distinct group comprising about a third of all urban centres, particularly those in the size group of 10,000 to 15,000 (in 1970) is characterized by the preponderance of

primary production activities (15). In such centres, activities like fishing and agriculture provide a living for over half of the active population.

A third group consists of mining towns such as Obuasi, Preska, Bibiani and Alwatia, where over 40% of the people are employed in the mines. Commerce and mining together employ 75% of the economically active population in such centres.

The 1970 census report provides data on the types of economic activities, as well as employers, in the urban economy of Ghana and that of the central region. With respect to the rest of the nation, the most important activity taken together is the production and related activities (34%), whereas in the central region it is the third most important urban economic activity after agriculture, sales and related activities.

Table 5.5. Type of activities in urban areas - Ghana and Central Region (1970)

Activity	<u>Ghana</u>		<u>Central Region</u>	
	No. employed	% of employed	No. employed	% of employed
1. Professional Technical and related services	65,062	7.2	5,702	6.1
2. Administrative and managerial	8,397	0.9	340	0.3
3. Clerical and related workers	66,927	7.4	3,611	3.9
4. Service workers	66,126	7.3	3,813	4.1
5. Production and related workers	308,572	34.1	22,276	24.0
6. Sales workers	224,452	24.8	29,184	29.3
7. Agriculture and related workers	164,252	18.2%	29,923	32.2

Source : Calculated from 1970 Census unpublished table 16.

It is also interesting to note that the private sector was the major employer in urban areas of Ghana and the central region in 1970. Most of the activities in the private sector may well belong to the informal sector. Note should also be taken of the importance of the self employed in the urban economy in the country as a whole, and more importantly, in the region. All forms of self employment constituted about 51% and 65% of all types of employment in Ghana as a whole and central region respectively.

The importance of the private sector is brought to sharp focus when one considers its relative importance in all types of urban economic activities. Table 5.6 below shows that apart from technical and professional services, clerical service and other service activities, the private sector dominates all other activities in the private sector. If this trend should continue in future, the share of private sector employment, of which the informal sector is an important segment, may be on the increase. This not only calls for the need to incorporate sector investment and employment in national development planning, but to actually design a planning strategy for it. This is particularly important for the process of urbanization and regional development through a growth centre approach. It is necessary, therefore, to know more about the operating characteristics of these enterprises. This necessitates a case study.

Table 5.6 Type of employers in urban Ghana and urban Central Region in 1970

Type of Employer	<u>Ghana</u>		<u>Central Region</u>	
	No. of Employees	% of Employment	No. of Employees	% of Employment
1. Employees in Central and local Government services, public schools except universities.	152,202	16.8	11,099	11.9
2. Employees in Public boards, joint Public and Private Enterprises	81,101	9	4,333	4.7
3. Employees in Co-operative enterprises	2,070	0.23	226	0.24
4. Employees in private enterprises (including apprentices)	172,881	19.3	11,465	12.4
* 5. Self employed without other employees	426,697	47.2	56,603	61
* 6. Self employed and employees	35,999	3.9	3,572	3.8
7. Unpaid family workers	30,601	3.4	5,285	5.7
8. Caretakers in agriculture and fishing	2,241	0.25	226	0.23
9. All employment	903,792	100	92,849	100

Source : Calculated from 1970 Census Report (unpublished Table 16)

* mainly Informal Sector entrepreneurs.

C. Choice of Centres in the Central Region

Within the central region, it became necessary to limit the study to a number of urban centres which together represent all the size range of urban centres in the region (see Table 5.7). These centres were chosen from these administrative districts: Cape Coast, Winneba, Swdru, Saltpond, Fosu and Asikuma. These districts are the most populous districts in the region. In 1970, almost all, except Dunkwa, urban centres in the region were in these districts. In addition, the districts also contain a large number of small rural centres (i.e. centres with populations between 2000 and 5000). There are, however, variations among the districts in level of urbanization and economic activities. They vary from urban districts of Cape Coast to rural districts (e.g. Asikuma and Fosu). In choosing centres from the districts, four factors were taken into consideration: First, their places in the region's settlement hierarchy. As much as possible, emphasis was put on centres which are the main regional, sub-regional and district service centres. Second, their population growth rate between 1960-1970. It was assumed that centres which experienced positive growth rates in the intercensal period are quite likely to continue with that trend in future, and thus have better growth prospects than those which registered no growth or negative growth rates. Third, their accessibility or location on regional transportation network; and finally, to achieve spatial balance in centres in the districts studied.

Centres which experienced no growth or negative growth rates between 1960 and 1970 were not selected. Table 5.7 below shows that Nyakrom, Besease and Mumford experienced negative

Table 5.7 Central Region Towns, Pop. size (1960, 1970),
Per cent Growth Rates and Per cent Employment
in Agriculture in 1970

TOWN	1970 Pop.	1960 Pop.	% Growth Rate	% Employed in Agricult- ure
1. Cape Coast	51,653	41,230	3.6	3.3
2. Winneba	30,778	25,376	2.0	23.7
3. Swedru	21,522	18,293	1.6	14.9
4. Saltpond	11,849	9,869	1.9	15.9
5. Elmina	11,401	8,534	2.9	23.0
6. Nyakrom	11,253	13,467	-	58.9
7. Moree	10,086	7,634	2.2	35.9
8. Senya Breku	9,921	7,984	2.2	35.9
9. Apam	8,903	8,728	0.2	4.6
10. Mumford	8,566	8,666	-	40.6
11. Besease	7,451	7,542	-	61.9
12. Fosu	7,249	5,284	3.2	42.0
13. Asikuma	6,948	5,356	2.6	49.9
14. Kwanyarko	6,648	6,694	-	56.5
15. Bawjiase	6,183	5,723	0.8	58.1
16. Komenda	5,966	4,261	3.5	24.0
17. Brakwa	5,499	2,198	9.6	77.2
18. Abodom	5,195	5,685	0.2	74.6
19. Odoben	5,101	4,723	0.8	62.2
20. Bobikuma	5,097	4,726	0.7	73.7
* 21. Dunkwa	15,437	12,689	2.0	13.1
22. Manhesim	4,412	2,604	68.	

* Dunkwa is the centre of Dunkwa district, it was not covered in the survey.

Source : Kodwo Ewusi "Towns of Ghana and their development" (appendix 1) I.S.S.E.R. (University of Ghana) research paper - No date

population growth rates and were eliminated (15). Other towns which were "villages" in 1960 became towns in 1970, but they still remain big villages in view of the preponderance of the rural sector in their urban economies. Such towns include Odoben (0.8% growth rate and 62.2% of employment in agriculture); Bobikuma (0.7% growth rate and 73.3% in agriculture).

The question of accessibility is important in terms of intra-regional and inter-regional interaction. Even though some towns experienced positive growth rates between 1960 and 1970, they are located away from the main trunk roads of the region. Such towns include Brakwa, Kwanyarko, Bawjiase, Senya Breku and Mumford.

To ensure spatial balance in terms of centres studied, some of the populous coastal settlements were not selected. The coastal towns were grouped into two according to population size: The first group consists of towns with populations above 8,000. Apart from Cape Coast and Winneba which are the two largest centres in the region, such centres include: Saltpond, Elmina, Moree, Senya Breku, Apam and Mumford. Of these, Elmina and Saltpond were chosen. Saltpond is a district service centre and it is located on the (main) coastal trunk road linking the region to the Greater Accra on the East and the western region on the West. Elmina is also a rural centre located on the same trunk road about 6 miles west of Cape Coast.

The second group (population 5000-8000) consists of Komenda and Anomabu. Komenda was chosen even though it is located a few miles off the coastal trunk road. It has one of the main manufacturing enterprises in the region. The Komenda Sugar factory - in the region - employing at least 500 people. Anomabu too has a citrus processing industry employing about

100 people, but though it is located on the coastal trunk road, its population growth rate of 0.9 is below that of Komenda (3.5%).

Only one centre with a population in 1970 below 5,000 was included in the survey. This is Manhesim (4,412). It is very accessible, located at the junction of the coastal trunk road with another important road linking the eastern with the western parts of the region; it is an important rural centre, a famous traditional market and a high growth rate (68%) between 1960-1970. With the above considerations, the centres chosen were: (see table 5.7)

	<u>Centre</u>	<u>Population in 1970</u>
1. Large centre (750,000) GT 50,000	Cape Coast	51,653 (inner city)
2. Medium sized centres (20,000-50,000)	Winneba Swedru	30,778 21,522
5. Small and very small centres (5,000-20,000)	Saltpond Elmina Fosu Asikuma Komenda	11,849 11,401 small centres 7,249 6,948 very small 5,966 centres
1. Centre, L 5,000	Manhesim	4,412

(See Appendix D for a summary of their main characteristics.)

Above all some of the centres chosen (i.e. Cape Coast, Winneba, Swedru, Fosu and Asikuma) have been selected by the Central Regional Planning Unit as prospective or tentative growth centres in the region. It would be recalled from the review of the growth centre strategy, that there are no guidelines as to what constitutes a growth centre. In Ghana, the process of selecting growth centres has not been defined. According to an interview the author had with Kudiabor, it is up to the Regional Planning unit to select their own growth centres based on their own criteria. The easiest way out of this problem for the Regional

planning unit is to select the main administrative and service centres. Since in essence urban centres in Ghana are primarily administrative and service centres, it is obvious that the main centres in a regional context would be designated growth centres. However, other centres not selected have been included in the selected centres to ascertain whether differences exist among enterprises operating in designated growth centres and non-designated growth centres. A brief review of the main functions of the three main centres in the region is in Appendix E (16).

D. Survey Methods

(i) Data Problems

Research into the operations of small enterprises often presents problems because of lack of published data on the characteristics and economic parameters of small enterprises. Researchers frequently have to generate their own data through sample surveys (17).

The objectives of this study require the generation and analysis of a comprehensive data set and the problem was how to obtain adequate and reliable data. In Ghana, published data on the small (informal sector) enterprises are woefully lacking. The data collection machinery for the industrial sector of Ghana generally does not cover small enterprises, particularly the very small ones. Small entrepreneurs generally feel reluctant to release information about the operations of their enterprises probably because of fear of taxation. Secondly, a significant number of small enterprises are not registered as they do not have fixed working places, and so it is difficult to reach them. As has been seen, two major industrial surveys have been conducted in the country since the late 1950s (i.e. 1959 and 1962 census

surveys of industrial enterprises (18). The 1959 survey did not cover enterprises employing less than 5 people. However, the 1962 survey was comprehensive enough and covered most of the enterprises. The industrial directory prepared after the survey by the Central Bureau of Statistics is considered to be at least 12 years out of date. For instance, an attempt was made in Cape Coast to trace some of the enterprises in the directory without much success. The enterprises had either gone out of business, or had moved out of the town or changed location within the town itself. In addition, there is the likelihood that since the directory was prepared twelve years ago, there have been changes in the size and composition of enterprises (indeed, as will be seen later, our census revealed that in the centres studied, over 60% of the enterprises have been set up since 1966).

In searching for possible sample frames, the 1960, and particularly the 1970, population census report on the economic characteristics of the enumeration areas, were used with the aim of determining the size of the informal sector from the structure of employment in the national and regional basis, depending on the definition of informal sector adopted (19). This can be done for the enumeration areas, but unfortunately, not for individual urban centres. This is because, though this data can be obtained from the 1960 census report, which is also considered out of date, it cannot be extracted from the 1970 report since the relevant data are not yet published. If this were available, one could calculate the size of the informal sector, but then the problem would have been how to determine the number of enterprises with and without fixed places of work.

Another source of information on employment is the Labour Statistics published annually by the Central Bureau of Statistics, but unfortunately, it does not cover most small-scale enterprises, particularly those operating in the informal sector. Moreover, the latest of these annual reports is the 1972 issue.

(ii) Preliminary census

A socio-economic study of Cape Coast by two Dutch geographers in 1971 (Hinderink and Sterkenburg, 1975), the results of which have recently been published, provide a useful basis for this study. Their study examined in detail the employment structure of Cape Coast and also the characteristics of the small-scale sector. An ad hoc survey had been conducted to generate the necessary data. Unfortunately, however, there are no other comparable surveys in the selected centres, so it became necessary to conduct a preliminary census of industrial, trading and services enterprises in the selected centres as a means of creating a sample frame for a detailed sample survey. This approach was considered the best under the circumstances.

This survey, however, differed from that of Hinderink and Sterkenburg, in that it was restricted only to enterprises with fixed places of work (20), because of the ease with which the enterprises could be located to make revisits to the entrepreneurs possible and easy. Moreover, fixed working places suggest some element of permanency in the operation of such enterprises. It is to these enterprises that any government's policy, particularly taxation, financial and technical aid, et cetera, are most likely to apply, much more than those which are not registered and/or without fixed working places. The most important consideration was that such enterprises are more likely

to employ labour (both skilled and unskilled) and engage apprentices who are likely to become master craftsmen and entrepreneurs in future, than those without fixed working places. On the other hand, one cannot discount the fact that some of the enterprises without fixed working places are making good business (profits) but perhaps the fear of government taxation, or perhaps the difficulties in obtaining work premises, have prevented them from being seen to be in business. If it was possible to cover such enterprises, it would have offered an opportunity to examine the physical and economic problems facing them.

(ii)a. Preparation for preliminary census

The census survey was the phase one of our entire study in the centres chosen. Interviewers had to be recruited and briefed on the nature and purpose of the surveys (21). Attempts were also made to obtain base maps from the regional town planning office at Cape Coast, and the newly set up district offices at Saltpond and Winneba. None of the other district administrative centres had physical planning offices. Town layout maps were obtained for Cape Coast, Saltpond, Winneba, Fosu, Elmina and Swedru. However, the Swedru layout map was out of date (prepared in 1949). The Fosu and Elmina maps were obtained at the end of the surveys and could not be used. There were no maps for Asikuma, Komenda and Mankesim. The maps were used in preparing land use (location pattern) maps of small enterprises (Figures in appendix 4). One may note from these figures that certain household industries such as food preparation and bakeries are generally missing, as most of these could not be seen from the street level.

During the census survey, master craftsmen, business owners and caretakers (labelled entrepreneurs) with fixed working premises, were approached with a questionnaire consisting of 13 questions. The aim was to find out the size and types of small-scale industries. The main questions asked were, the type of enterprise, size of employment, turnover and main problems. (see Appendix E). Addresses of owners and entrepreneurs were recorded to enable interviewers to return to them during the detailed survey. The census was carried out in all of the 9 centres except in Fosu and Asikuma, where it was planned to interview all small-scale industries during the detailed survey. This was decided upon to achieve a balance in responses on enterprises located in the centres along the coast and those in the interior. Table 5.8 shows the type of activities and the size of employment in all the 9 centres.

A similar procedure was adopted for the preliminary census of petty trading and service units except that here, interviewers just recorded the enterprise and size of employment for each enterprise (22). The results of that survey is presented in table 5.9.

(ii)b. Response rates in census survey:

The response to the questions can be described as satisfactory. All entrepreneurs approached responded to the questions asked: the question which received the greatest response and prompted much discussion was the problems faced by entrepreneurs. The present economic situation - inflation - has apparently had serious impact on small enterprises. Entrepreneurs find it difficult to obtain supplies, especially spare parts and generally have to obtain them at black market price, thus cutting their profit margin and threatening the survival of their

Table 5.8 Preliminary Census of Small-Scale Industries with Fixed Working Places
(October, 1977)

Activity Types		Towns							
Activity	Cape Coast	Winneba	Swedru	Saltpond	Elmina	Fosu	Asikuma	Komenda	Mankesim
1. Bakery	71(196)	10(18)	16(25)	18(38)	5(12)	-	2(7)	7(17)	6(8)
2. Carpentry	17(34)	12(22)	20(62)	10(31)	11(28)	8(26)	8(36)	3(4)	3(6)
3. Blockmaking	15(53)	-	-	-	1(8)	-	-	-	*1(4)
4. Dressmaking	29(52)	18(159)**	15(54)	13(78)	5(13)	8(35)	4(19)	3(22)	3(8)
5. Tailoring	59(156)	24(69)	40(112)	17(41)	25(46)	6(22)	6(27)	5(10)	4(9)
6. Shoemaking & repairs	16(20)	26(51)	20(50)	1(2)	6(9)	3(10)	3(8)	2(3)	1(1)
7. Watch repairs	6(6)	6(6)	8(8)	2(2)	2(2)	3(3)	2(2)	-	1(1)
8. Auto repairs	39(79)	12(77)	15(35)	-	3(6)	-	3(14)	1(1)	2(15)
9. Electrical & electronic repairs	8(37)	7(33)	8(29)	1(2)	5(9)	-	3(11)	-	4(14)
10. Smithing	7(13)	7(14)	7(10)	4(7)	5(7)	6(16)	1(3)	-	1(1)
11. Food preparation	28(50)	3(18)	15(35)	7(9)	6(12)	-	1(3)	2(2)	3(8)
12. Milling	10(17)	6(9)	5(8)	4(8)	3(5)	-	1(2)	4(6)	2(5)
13. Photography	8(28)	2(5)	7(18)	3(3)	2(2)	-	1(3)	1(3)	1(1)
14. Hairstyling & other services	6(8)	2(2)	2(4)	3(6)	2(3)	-	2(4)	1(1)	1(1)
15. Printing	1(3)	-	-	2(8)	-	-	2(4)	-	-
16. Weaving	-	-	-	-	-	3(10)	4(24)	-	-
17. Machine repairs	3(6)	2(2)	2(3)	-	-	-	-	-	-
18. Pottery	-	-	-	-	-	2(6)	2(4)	-	-
19. Carving	-	-	1(1)	-	-	-	-	-	-
20. Rubber treatment	2(2)	-	2(2)	-	-	-	1(3)	-	1(1)
21. Metal work	10(26)	8(15)	6(9)	3(6)	3(8)	-	5(24)	-	3(7)
22. Miscellaneous	8(12)	1(2)	-	-	-	1(10)	1(6)	-	-
* Total	343(1114)	146(512)	188(465)	87(241)	86(170)	40(138)	49(200)	29(70)	37(88)

* Size of employment in brackets.

** A dressmaking school owned by a private dressmaker was covered in the preliminary census. This has inflated the figure for Dressmaking employees in Winneba.

Table 5.9. Preliminary Survey of Retail and Service Enterprises Employing

less than 30 people - 1977

Town	Type and Size of Enterprises (b)											
	General	Special- ized Shops	Dept. (a)		Grocery*		Pubs & Nightclubs		Others			
			No. of Units	Size of Empt.	No. of Units	Size of Empt.	No. of Units	Size of Empt.	No. of Units	Size of Empt.		
1. Cape Coast	160	180	90	145	32	205	175	301	72	195	60	125
2. Winneba	40	81	53	112	10	40	87	78	25	107	54	75
3. Swedru	145	310	48	112	18	85	115	213	59	194	65	132
4. Saltpond	16	27	5	9	10	52	6	11	15	27	14	20
5. Elmina	18	28	14	17	12	43	24	27	34	57	7	9
**												
6. Fosu	4	6	7	9	3	15	9	17	21	25	12	14
**												
7. Asikuma	15	20	9	7	1	5	5	13	8	10	6	10
8. Komenda	8	13	3	6	1	4	5	8	3	8	8	12
9. Manhesim	12	16	18	24	-	-	4	6	3	8	8	5

Notes : (a) These are largely wholesale, specialized and general stores which are branches of Accra based stores such as Ghana National Trading Corporation (GNTC); United African Company (U.A.C); United Trading Company (UTC); Compaigne Francaise de l'Afrique Ouest (CFAO); Societe Commerciale ouest Africaine (SCOA), and G.B. Ollivant. All of these shops are un by Ghanaians on behalf of the Companies or as Companies' employees on commission basis.

* The term Grocery has been used here to mean units which operate in kiosks or stalls which retail general items of consumption.

** The counting was done in Fosu and Asikuma before phase 2.

(b) The Survey excluded the markets which are very important elements in the Commercial activities of Ghanaian towns. However, much of the commercial operators in these are hawkers, even though there are a few stalls in which retail textile products and other semi-durable items.

businesses. Generally, response was poor on the question of turnover (profit). A lot of small businesses do not keep records of sales, expenditure and turnover - not even in their very rudimentary forms, so it was difficult to give exact figures from memory, except perhaps the figures for the days of the interview which is nothing to go by. Others felt too bothered to be asked such a question for fear of exposing themselves to taxation.

On the average, interviewers spent between 15-20 minutes with each respondent (this included introduction and interruptions). The survey was a useful indication of the possible response rate in the detailed survey, and it also helped in restructuring the question for pilot survey.

In the case of petty trading and service enterprises, interviewers did not encounter any difficulty except shops which were closed and had to be visited at least twice before they were abandoned, but such shops were very few in the larger centres and their exclusion was not considered serious to the results of the surveys. In the small centres enquiries made showed that the owners of the shops that were closed had either travelled or gone to their villages to farm. Again, less than five per cent of the business units were thus not covered in the preliminary census.

(iii) Detailed survey

(iii)a. Pilot survey prior to detailed survey:

In the spirit of social science research methodology, the detailed survey was preceded by a pilot survey. A pilot survey is an essential aspect of any social science survey. It can be a useful way of testing respondents reaction to the research

questionnaire as a whole and to specific questions. This helps researchers to restructure the pattern of the questionnaire and the wording of individual questions. It is also a useful exercise for interviewers to go through this exercise as an important part of their training. In some researches, pilot surveys are used as a preliminary test for the hypotheses to be tested, though in our survey this was not one of the aims of the pilot survey.

Questionnaires for pilot surveys can take several forms. In this survey the choice of the form the questionnaire should take was between the coded, partially or open ended (uncoded) questions. Normally, fully or partially precoded questionnaires require the researcher to do extensive pilot surveys to confirm or disprove answers already suggested, and help the researcher to make changes. This approach can be useful where there are no time and financial constraints affecting the surveys. In this survey, uncoded questionnaire set were used for various surveys. It was not intended to do a very extensive pilot survey. It aimed at getting interviewers used to writing while interviewing at the same time that answers were given.

A pilot study was organized in Sekondi-Takoradi, a city of just over 90,000 people, 50 miles west of Cape Coast. A questionnaire containing 123 questions was used in the survey. The questions covered : entrepreneur data; physical data of business units; employment characteristics of business; input and marketing characteristics; problems faced by business; their future plans and prospects.

In order to achieve a fair representation of respondents from all types of small-scale industries, interviewers were asked to interview one entrepreneur from each enterprise in small-scale industries. (The pilot survey did not cover the

petty trading (and service) sector. To help interviewers proceed successfully with the interviews and to gain confidence from respondents, introductory notes were given to each interviewer. This helped dispel fear among respondents who thought we were acting on behalf of a Government Ministry. The survey took 3 days and 100 respondents were interviewed.

(iii)b. Response rate of the pilot survey

Each interview took a little over an hour to complete where there were no interruptions from customers since interviewers had to record all answers given by respondents. Where there were interruptions, interviews took over an hour; some were abandoned half way through the schedule due to repeated interruptions, and interviewers were requested to return the following day to complete the interview, or to meet respondents in their private houses in the evening for that purpose. Some of the houses could not be traced, and where the schedules could not be completed in the shops the following day, the interviews were abandoned and the questionnaire treated as 'incomplete'. A few artisans refused to be interviewed either because they didn't want to be bothered since they didn't want people to know the operations of their businesses, or they were too busy attending to customers or otherwise to have time for an interview.

In general, respondents complained about the length of the questionnaire, this was especially so when there were frequent interruptions by customers. Response level was satisfactory for the questions about problems, entrepreneurs' background and physical characteristics of the enterprises. It was not very satisfactory on future business plans and prospects as

most entrepreneurs were not sure of the fate of their business in conditions of economic hardships. Most of them refused to answer the questions on expenditure pattern and business turnover, and a few who did were not sure whether they had given the right answers because they kept no records and had to recall from memory.

The pilot survey was very valuable. It indicated the need for a more manageable, short questionnaire. It also suggested the need to simplify the wording of the questions. Above all, the attitude of some of the respondents to the interviewers meant, it would be safer to use people who may be familiar with the towns and even the business operators.

The answers given to each question were compiled and compared with a precoded questionnaire prepared before the pilot survey (but not used). This helped in drawing up the precoded questionnaire for the detailed survey. The final questionnaire drawn up for the main surveys did not differ very much from the pilot survey questionnaire, except questions on expenditure pattern in which response was generally poor in the pilot survey. The final questionnaire contained 91 questions (partially precoded). This approach was adopted to save the interviewers from writing all the answers down as tried in the pilot, and to quicken the pace of interviews. It was also aimed at avoiding some of the dangers of uncoded questions which produce a wide range of answers and which usually present problems in compressing qualitative answers into coded categories later during the data processing stage. Bearing in mind also the fact that my interviewers were inexperienced, it was thought safer to adopt a precoded questionnaire which offered the advantage of combining two operations into one - recoding and coding of answers

given to questions (Moser and Kalton, 1975, p342-343). However, it was borne in mind the inherent problems embodied in a precoding questionnaire. Once an interviewer has ringed a code, there is the difficulty of defecting error of recoding or judgement. Again, answers may be forced into categories to which they may not belong. This was a danger interviewers were asked to be mindful of. To overcome this there was a code for "other answers" to each question (Appendix G).

(iii)c. Selection of enterprises for detailed survey

The results of the census survey in phase one was used as the sampling frame for the main survey. It is important to re-emphasise the coverage of informal sector enterprises from which a sample was taken. It was limited to enterprises with fixed working places. With the sampling frames for small-scale industries, petty trading and services, the task was to select a suitable sampling method which would ensure a fair representation of all enterprises in the population of small enterprises. The second task was to choose a sample size which would make the results statistically significant, thus at least 30% of all enterprises had to be interviewed. However, in view of the difficulty in predicting the response rate for the questionnaire in general, and to the individual questions in particular, it was decided to select a sample size of at least 50% of all enterprises in each town and 100% in Fosu and Asikuma.

A glance at the results of the census survey of the industrial enterprises shows that (i.e. table 5.8) in general, tailoring, dressmaking, carpentry, baking and auto repairs are the most important industries in almost all the centres covered both in size of enterprises and size of employment. A sampling

method which would bring out the importance of these activities influenced the choice of disproportionate stratified random sampling method for selecting enterprises for the detailed survey.

(iii)d. Questions asked and total response rates

Appendix G shows that 91 questions were asked of each respondent in the detailed survey. The questions asked were divided into six broad groups. The first set of questions explored the background of the entrepreneurs - their age groups, educational and training backgrounds and working experience prior to establishing their enterprises. By comparing the age groups of the entrepreneurs with the broad periods in which the enterprises were set up, one can deduce what age groups of entrepreneurs are being attracted into the sector. This has implications for the survival, growth and death of types of enterprises in the sector as well. Education and training are very important attributes of entrepreneurship which can influence the level of success or otherwise the entrepreneurs can achieve in operating their enterprises.

The second set of questions were directed at seeking information about the size and types of employment generated by the enterprises covered in the detailed interviews, and particularly about the apprenticeship system, the main vehicle of training and skill acquisition in the informal sector.

The third set of questions were aimed at seeking general information about linkages and operating characteristics of the enterprises: under this, questions were asked about work-sharing, the extent to which co-operative spirit had developed among informal sector enterprises; subcontracting or linkage

with the modern sector; types and ownership of machines and tools used; the extent to which the enterprises share tools and machinery among themselves and their willingness to share government provided tools and equipment if provided. Information about the previous location, reasons for site selection and facilities on sites were sought.

This set of questions was followed by questions on sources of raw material; capital and other inputs; the main trading areas and type of customers and output. The above set of questions sought variety of information which govern the operation of informal sector enterprises. They are directly and indirectly related to employment generation and growth in output in the enterprises.

Detailed questions were asked about specific problems with the aim of ascertaining the "intensity" of constraints facing enterprises in the informal sector as a whole and those being operated in different sizes of urban centres.

Also information was sought about entrepreneurs' perception of the past and future growth prospects of their enterprises, and specific plans that they may have for their enterprises. Entrepreneurs were asked whether they would like to continue operating their enterprises or close them down, and their reasons for such decisions. They were also asked about their relocation plans, expansion plans, physical improvement plans for their workshop, tools and machinery and above all, for plans for employment generation. Finally a question was asked about the sort of help the entrepreneurs would wish to receive from the government.

Table 5.10 shows the response rate. It must be pointed out that a few questionnaires were rejected during the data

Table 5.10 Detailed interviews of Informal sector Small-Scale Industries in
Central Region

Type of Activities		Sampling Units and Sample as percentage of Frame in all towns covered ^a																	
Activity	Towns,	1		2		3		4		5		*6		*7		8		9	
	Cape Coast	Winneba	Swedru	Saltpond	Elmina	Fosu	Asikuma	Komenda	Mankesim										
	Tot. No.	Resp. Rate %	T.N.	R.R.	T.N.	R.R.	T.N.	R.R.	T.N.	R.R.	T.N.	R.R.	T.N.	R.R.	T.N.	R.R.	T.N.	R.R.	
Bakery	71	34 (47.3)	10	6 (60)	16	9 (56.3)	18	9 (50)	5	-	-	-	2	2	7	4 (59)	6	4 (66.7)	
Block Making	15	10 (66.7)	-	-	-	-	-	-	1	1 (100)	-	-	-	-	-	-	1	1 (100)	
Carpentry	17	12 (70.6)	12	8 (66.7)	20	15 (75)	10	3 (30)	11	6 (54.5)	8	8	8	8	3	2 (66.7)	2	-	
Dressmaking	29	9 (30.3)	18	12 (66.7)	15	11 (73.3)	13	8 (61.5)	5	3 (60)	8	8	4	4	3	2 (66.7)	3	2 (66.7)	
Tailoring	59	28 (47.5)	24	17 (70.4)	40	30 (75)	17	11 (64.7)	25	17 (76)	6	6	6	6	5	4 (80)	4	3 (75)	
Metalwork	10	7 (70)	8	5 (62.5)	6	4 (66.7)	3	2 (66.7)	3	2 (66.7)	-	-	5	5	-	-	3	1 (50)	
Shoemaking & Repairing	16	6 (37.5)	26	19 (73)	29	19 (65.6)	1	-	6	3 (50)	3	3	3	3	2	1 (50)	1	-	
Watch Repairing	6	2 (33.3)	6	2 (33)	8	5 (62.5)	2	1 (50)	2	-	3	3	2	2	-	-	1	-	
Auto repairs (all types)	39	33 (80.5)	12	7 (58.3)	15	11 (73.3)	-	-	3	2 (66.7)	6	6	3	3	1	-	2	1 (50)	
Electrical & electronic repairs	8	6 (75)	7	4 (57)	8	6 (75)	1	-	5	3 (60)	-	-	3	3	-	-	4	3 (75)	
Smithing	7	1 (10.5)	7	3 (43)	7	4 (57.1)	4	1 (25)	3	2 (66.7)	-	-	1	1	-	-	1	-	
Food Prep.	28	17 (60.7)	3	1 (33)	15	7 (46.7)	5	3 (60)	6	2 (33.3)	-	-	1	1	2	-	3	-	
Milling	10	4 (40)	6	3 (50)	5	1 (20)	4	2 (50)	3	1 (33.3)	-	-	1	1	4	2 (50)	2	-	
Photography	8	3 (37.5)	2	-	7	4 (57.1)	3	2 (66.7)	2	-	-	-	2	2	-	-	1	-	
Printing	1	-	-	-	-	-	2	1 (50)	-	-	-	-	-	-	-	-	-	-	
Pottery	-	-	-	-	-	-	-	-	-	-	2	2	2	2	-	-	2	1 (50)	
Rubber treating	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	
Weaving	-	-	-	-	-	-	-	-	-	-	-	-	4	4	-	-	-	-	
Hair Styling	6	2 (33.3)	2	-	2	1	3	1 (33.3)	2	-	-	-	-	-	-	-	-	-	
Miscellaneous	8	2 (25)	-	-	-	-	-	-	-	-	3	3	-	-	-	-	2	-	
Total	344	176 (51.1)	146	83 (57)	188	137 (72.8)	84	44 (52.4)	82	44 (53.7)	40	40 (100)	49	49 (100)	27	15 (55.6)	37	16 (43.2)	

Notes * 100% coverage was attempted for Fosu and Asikuma.

In brackets (%) are response rate as a percentage of population size for each activity.

processing stage due to inconsistencies in responses, or because the interviews were abandoned half way through because respondents refused to continue or had no time to continue. Moreover, over-caution as regards possible non responses and the need to select a larger sample size, resulted in what may be described as "over-representation" and "under-representation" of certain enterprises in the various centres in the detailed interviews.

The same procedure adopted for the detailed survey of small-scale industries was used for the survey of the petty trading (and services) units, except that Department Stores were excluded from the sample (23).

The response to the questions may be described as satisfactory. However, it was much better in the "larger" centres than in the "small" ones. On the average each entrepreneur interviewed in the small-scale industry took about half to three quarters of an hour (including introduction and interruption) but some interviews took at least an hour each when there were frequent interruptions. In general, interviewing entrepreneurs in the trading (and services) enterprises took about half an hour. This is because though fewer number of questions were asked compared with detailed survey of the industrial enterprises, the questionnaires used were not precoded (Appendix H). Moreover, the questions were not pilot tested. Despite these differences, the response to the questions was satisfactory as well. Table 5.12 presents the response rates achieved in each of the centres studied. It showed that almost 44 per cent of all trading (and services) enterprises were interviewed.

Table 5.11

Summary of Table 5.10

Centre	No. of Interviews	Per cent of all enterprises
Cape Coast	176	51.3
Winneba	83	57
Swedru	127	72.8
Saltpond	44	52.4
Elmina	44	53.7
Fosu	40	100
Asikuma	49	100
Komenda	14	55.6
Mankesim	16	43.2
Total	595	60%

Table 5.12 Detailed interviews of Petty Trading and Service Units

Town	All Types of Activities		
	Total enumerated enterprises	No. of Interviews	Response Rate
1. Capecoast	556	170	30.6%
2. Winneba	209	113	54.1%
3. Swedru	432	155	35.8%
4. Saltpond	81	61	75.3%
5. Elmina	92	72	78.3%
6. Fosu	53	38	70%
7. Asikuma	43	31	72%
8. Komenda	27	9	30%
9. Mankesim	40	22	55%
Total	1533	671	43.8%

Throughout the interviews, letters of introduction carried by the interviewers helped a great deal, especially in cases where entrepreneurs doubted the intentions of the interviewers. In certain cases, the researcher had to approach difficult entrepreneurs who, after some further explanations of the purpose of the interviews, agreed to co-operate. In a few cases, interviewers were threatened with being beaten up.

(iii)e. Revisits

Due to the length of the questionnaires it was decided to conduct a second detailed interview to collect a few important facts. A 50 per cent sample of all enterprises covered in the detailed interviews were revisited. Again, using a proportionate stratified sampling technique, entrepreneurs were selected at random for this exercise. These interviews sought information (see Appendix I) about other forms of business activities in which the entrepreneurs were engaged, and the reasons for business diversification; indirect sources of capital inputs and future mobility and direction to which this pattern would be directed. It was intended to use this information as a supplement to the information obtained through the detailed interviews. However, these interviews were quite successful as the detailed interviews, though some entrepreneurs who were approached became more suspicious as they were visited for the third time. A few of them were reluctant to co-operate or to give any information at all. The response rate was satisfactory for all centres. In the case of the two smallest centres (Komenda

and Mankesim), all the industrial entrepreneurs interviewed in the detailed interview were interviewed again.

(iii)f. Coverage of larger enterprises

These interviews were aimed at seeking employment data from the large-scale manufacturing enterprises operating in the centres studied. There are quite a few medium and large-scale enterprises in the region as a whole, and most of them are located in the centres studied. Proprietors and personnel officers were approached with prepared questions about the present size of their labour force, problems encountered by the businesses and prospects for their expansion and the possible impact of future plans on employment generation in the enterprises. Except for a few large enterprises, which did not give positive answers, almost all other units responded to our inquiry. The aim of this survey was to examine the prospects for large-scale employment in such enterprises and to compare them with that of small-scale enterprises. Appendix J shows the number of enterprises, size of employment and distribution of all the interviews.

The first part of chapter six is devoted to analysing the preliminary census. The second part of that chapter and later ones are devoted to the analysis of the detailed interviews.

NOTES

1. Business performance is defined to include the level of turnover and size of total employees.
2. This follows up from Steel's work in Ghana, see Steel (1977).
3. Interview with Clemence Kudiabar, Oct. 1977.
4. The highest recorded growth rate was in the Greater Accra area (5.6%) and the lowest (1.4%) was recorded for Eastern and Upper Regions. See 1970, Pop. Census Vol.1.
5. In 1960, 221,396 people, i.e. 29.5% of the people in the region lived in towns of 8000 or more people. Though the absolute size had increased to 258,636 by 1970, the proportion of urban dwellers had decreased by 0.4% to 27.7% in 1970.
6. The average growth rate for urban areas in Ghana between 1960 and 1970 was 4.8%. Ewusi considers this growth rate as upwardly biased. He made adjustments to the figures and came out with a probable growth rate of between 3.7% and 3.9% per annum. Taking Ewusi's calculation and the Central Bureau of Statistics estimates, the urban growth rate is between 3.7% and 4.8% per annum.
7. Some towns declined in absolute terms. These towns are Nyakrom, Mumford and Besease. Otum which was a town according to the 1960 Census, lost that status in 1970; on the other hand, four localities Komenda, Brakwa, Odoben and Bobikuma which were villages in 1960 became towns in 1970 as a result of population increase.
8. The Northern and Upper regions are expected to experience the fastest growth rates. These traditionally rural regions are starting from a low urban base.
9. There is no doubt about the existence of other minerals in the region. This has come from geological surveys. These include beryl and feldspar found in association with other minerals, especially mica, garnet in Hornblende, mica schist. It is also claimed that manganese, menozonite, platinum, talc, tin, copper, titanium and arsenic, are other minerals known to exist in the region, but their exact quantities are not known (Addo, 1974, p122-123 - quoted from Dept. of Rural Planning, 1965).
10. This idea is borrowed from Green (Green, R.H. 1975) who suggests that productive employment is not equitable to wage and salary employment only, but also the self employed in both the urban and rural sectors as well.
11. The source of data does not cover the private small-scale sector so that this observation can be said to refer only to the formal sector leaving a large informal sector unaccounted for.

12. This is defined to include employment in private enterprises, the self employed and their employees, unpaid family workers, caretakers in agriculture and fishing.
13. Defined to include employment in central, local government services, public corporation, schools and colleges.
14. These centres were in order : Accra, Kumasi, Cape Coast, Koforidua, Winneba, Swedru, Nsawam, Keta, Tarkwa, Dunkwa, Bawku, Anloga, Sukum (Hinderink and Sterkenburg, 1975).
15. These centres include Asamankese, Sunyani, Yendi, wa, Nyakrom. Berekum, Wenchi, New Tafo and Agogo.
16. In relation to other centres in the nation as a whole: (ie hierarchical order : Cape Coast is the 6th largest; Winneba is 12th, Swedru, 19th; Saltpond, 42nd; Elmina, 44th; Fosu, 78th, Asikuma 85th; Komenda, 107th. There were 135 urban centres in Ghana in 1970. (Source : Ewusi, 1975 Appendix I, p26-28).
17. See for instance the work of M. Peil (1970); M.C. Shetty (1963), Steel (1977), Aryee (1977), Hakam (1977), and in Sierra Leone, by Liedholme and Chuta (1976).
18. (i) Central Bureau of Statistics : Directory of Industrial Enterprises and Establishments, Accra, 1963.
(ii) Central Bureau of Statistics : Area Sample Survey of Small Manufacturing establishments, Accra, 1965.
19. (i) 1960 Census Report Vol.4 (Characteristics of Enumeration Areas) Accra, 1962.
(ii) 1970 Census Report Vol.2.(Characteristics of Enumeration Areas) Accra, 1972.
20. Fixed Places of work could be open air, under trees, temporary and permanent (structures) workshops, in rooms, stores, corridors, etc. most of which can be seen from the streets. However, certain activities are mainly household activities, such as food preparation, bakery and pottery and are difficult to be seen from the streetscape. The existence of business signboards helped a great deal in locating a few of such enterprises. Also the use of interviewers from the centres studied in the census survey helped a great deal. The use of business signboards in locating enterprises not seen from the street level was used by Steel in his study of Accra, Nsawam and Aburi. See Steel, W.P. Small-scale production and employment in developing countries : Evidence from Ghana. Praeger, 1977.
21. Six interviewers and a research assistant were recruited. None of them had had any experience in social science surveys. Attempts to seek help from the research units in the university of Cape Coast failed, and since school was in session during the period of the surveys, it wasn't possible to recruit undergraduates who would perhaps have done a better job for a higher fee though.

22. Below is an example of the format devised for the survey of petty trading and service units :

Survey of Retail Trading and Service Enterprises				
Town				
Type of enterprise	No. of		No. of people	Total of Units
				Total Employment
1. General	1111	1111 11	4,3,2,5,1,7, 10,2,1,3,4,5,	
2. Special- ized shops	1111	1	1,5,7,2,3,	
3. Depart- mental Store	1111	111	16,32,20,12, 15,7,25,	
4. Provision (Grocery)	1111		2,0,5,4,3,	
5. Drinking Bars/Pubs/ Restaurants	1111		4,6,2,3,4,5,	
6. All other	1111		2,1,3,6,7,	
Total				

23. The Departmental stores were not covered because the stores are branches of the main trading Companies in the country. Their organisation and employment structure suggest they belong to the formal sector, even though they may employ less than 30 people. Entrepreneurs managing these units are likely to face problems different from those experienced by the self employed small-scale operator.

CHAPTER SIX

OPERATING CHARACTERISTICS OF INFORMAL SECTOR ENTERPRISES IN THE CENTRAL REGION

CHAPTER SIX

OPERATING CHARACTERISTICS OF INFORMAL SECTOR ENTERPRISES IN THE CENTRAL REGION

The first part of this chapter describes the profile of the enterprises enumerated during the preliminary census and those covered during the detailed interviews will be discussed in the second part of this chapter and subsequent ones.

A. The enumerated enterprises in the Preliminary Census

The preliminary census presents a picture of the total number of enterprises and their composition in the selected centres. It is also possible to use the result of the survey to estimate the size of the enterprises studied in other urban centres in the central region. In addition, some relationships can be drawn between the size of the enumerated enterprises and some characteristics of the selected centres. The characteristics of the centres that will be used are the total population of the centres, size of total labour force, total employment and total non-agricultural employment based on 1970 census data (1).

(1) Total size of the enumerated enterprises

The total size of the enumerated enterprises is measured in terms of the total number of enumerated enterprises and the total size of employment in such enterprises. In the case of the industrial enterprises, table 6.1 shows the total number of enterprises and total employment in each of the selected centres. (for details see table 6.1 in Appendix A).

Certainly, the definition adopted for this study has influenced the results of the preliminary census survey. The case of Cape Coast has clearly shown that by excluding those "mobile"

Table 6.1 Total number of enterprises and size of employment in the industrial enterprises in the Selected Centres

Centres	Number of Enterprises	Size of Employment
1. Cape Coast	343	806
2. Winneba	146	512
3. Swedru	188	465
4. Saltpond	88	241
5. Elmina	86	170
6. Fosu	40	138
7. Asikuma	49	200
8. Komenda	29	70
9. Mankesim	37	88
Total	1003	2698

Table 6.2 Relationship between size of enumerated informal industrial enterprises and size of selected Centres - 1970

Selected Centres	Measure of size of Selected Centres			
	% of total Population	% share of labour force	% share of total employment	% share of total non-agricultural employment
1. Cape Coast	1.6	2.8	5.0	5.4
2. Winneba	1.7	3.2	5.0	6.6
3. Swedru	2.2	4.1	5.6	6.6
4. Saltpond	2.0	3.9	6.0	7.2
5. Elmina	1.5	2.6	3.9	5.1
6. Fosu	1.9	3.4	4.9	8.5
7. Asikuma	4.2	7.9	8.0	15.9
8. Komenda	1.2	2.0	2.8	3.6
9. Mankesim	2.0	4.0	5.1	7.4
Total	1.9	3.6	5.9	10.7

Source : Authors Survey 1977/78 and 1970 Population Census
Report of Ghana

enterprises from the survey, a lower figure for the total number of enterprises and total size of employment generated in them could be obtained. In a survey of small-scale enterprises in Cape Coast by Hinderink and Sterkenburg (1975), in 1971, 847 small-scale industrial enterprises were enumerated. Together these generated 1551 employees. In our preliminary census 343 of such enterprises employing 806 employees were counted. It is difficult to determine, however, whether the differences observed in the results of this census and that of Hinderink and Sterkenburg are due to the "mobile" enterprises and all others without fixed places of work alone. Part of the differences in the results may be attributed to the natural death of some of the enterprises enumerated in 1971, assuming that full coverage was achieved in both censuses. Thus assuming that opportunities for small-scale enterprises are broadly the same throughout the urban centres in the region, the total number of informal sector industrial enterprises in the urban centres in the region may be in the neighbourhood of 1800 and 2100 enterprises (2).

As may be expected, there are variations among the nine centres. Cape Coast being the largest centre contains the largest number of informal industrial enterprises and employees. Table 6.2 shows the relationship between the size of selected centres and the enumerated enterprises (see Appendix D for a summary of characteristics of the selected centres). In table 6.3 the total number of selected centres has been categorised into a large centre, medium-sized and small centres (3), to demonstrate the relationships observed in table 6.2. Table 6.3 also shows the same relationships in the trading (and services) enterprises as well.

Table 6.3

Distribution of informal sector industrial, petty trading and services enterprises in the large, medium and small-sized Selected Centres.

(a) Industrial enterprises		(b) Petty trading and services enterprises						
Size of Centre	Size of enumerated enterprises	Size of enumerated enterprises						
		No. of enterprises enumerated	% of the number of all enterprises enumerated	Total size of Emplt. ment	% of total employ-ment	No. of Enterprises enumerated	% of all enterprises enumerated	Total Size of Employment
1. Large Centre (ie 50,000+ in 1970)		343	34.3	809	29.9	588	36.8	1251
2. Medium sized Centres (ie 20,000-50,000)		334	33.4	980	36.3	666	41.7	1539
3. Small Centres (ie 20,000)		326	32.2	909	33.7	343	21.5	568
Total		1003		2698	100%	1597	100%	3358
								100%

Source : Author's Survey : Central Region 1977/78.

Table 6.3 suggests that the total size of employment in each of the three broad categories of centres may not be entirely related to the size of population of the centres but to a total spectrum of opportunities for small-scale enterprises in each category of centre. It can be noted from appendix E, the role of Cape Coast as the regional, administrative and commercial centre, in addition to its role as an important national educational centre. These important urban functions may have combined to create greater opportunities for small-scale operators in the centre than in the other category of centres. Among the medium sized centres, though Winneba's population in 1970 was about one and a half times that of Swedru, (see appendix D), yet a larger number of people are engaged in the enumerated enterprises than in Winneba, despite Winneba's role as an important educational centre. Fewer enterprises were enumerated in the small centres and they employ far less people than the rest. In the small centres, and probably in the medium sized ones, it is likely that local economic opportunities for informal sector enterprises derive largely from agricultural activities and money in the local economy rather than from educational, administrative and commercial activities.

It is also interesting to examine the relationships between total employment in the enumerated enterprises and characteristics of the selected centres. Considering all centres together, there are about 1.9 informal sector enterprises to every 100 people. Employment in such enterprises accounts for 3.4% of the total labour force of all the centres; 5% of the total employment and 4% of total non-agricultural employment in 1970 (table 6.4)(4). However, as table 6.4 indicates, there seems to be no significant pattern between the size of employment in the enumerated

Table 6.4 Share of Informal sector employment to total population, labour force, total employment and non-agricultural employment in Selected Centres

Selected Centre	% share of total enterprises		% share of total labour force		% of total employment		% of total non-agricultural employment	
	small-scale industries (A)	Petty trading & services (B)	small-scale industries	Petty trading & serv.	Industries	Petty trading & serv.	(A)	(B)
1. Cape Coast	1.6	2.4	2.8	4.3	5.0	7.7	5.4	8.4
2. Winneba	1.7	1.6	3.2	3.1	5.0	4.8	6.6	6.4
3. Swedru	2.2	4.9	4.1	9.3	5.6	12.6	6.6	14.8
4. Saltpond	2.0	1.1	3.9	2.0	6.0	3.2	7.2	3.8
5. Elmina	1.5	1.6	2.6	2.8	3.7	4.0	5.1	5.4
6. Fosu	1.9	1.2	3.4	2.2	4.0	4.9	8.5	5.4
7. Asikuma	2.8	0.9	5.7	1.8	8.0	4.3	16.0	14.4
8. Komenda	1.2	1.4	2.0	1.5	2.8	2.0	3.6	2.7
9. Mankesim	2.0	1.8	4.0	2.7	5.1	3.4	7.4	5.0
10. Average for all Centres	1.9	1.9	3.5	3.4	5.1	5.0	7.4	7.4

Source : Author's Survey 1977/78 and 1970 Population Census Report of Ghana.

enterprises and the size of centres. However, when one compares the contribution of informal sector employment with the 1970 total employment and non-agricultural employment in the three categories of centres, it seems employment in the enumerated enterprises increased its contribution with respect to all the four variables of selected centres up to the medium sized centres beyond which it decreases (in the large centre (table 6.5)). This observation seems to conform to Steel's finding that city size has relatively little impact on the overall size of the intermediate (informal) sector beyond a certain threshold, which Steel suggested to be in the neighbourhood of 25,000 people (or 10,000 non-agricultural workers) (Steel, 1977, p73). However, unless the total size of all informal enterprises is properly estimated by including those without fixed places of work, and compared with up-to-date data on all the four variables of the centres, this observation may be inconclusive. Moreover, this observation does not in any way suggest that opportunities for employment generation in the informal sector enterprises are strictly speaking related to the size of centres alone.

A closer examination of table 6.5 shows differences in the contributions of the industrial and trading (and services) enterprises. While the proportion of the industrial enterprises decreases from small to large centres with respect to the four variables of the centres, that of petty trading and services enterprises first increases to the medium sized centres, and then declines in the large centre. This observation also suggests that the observation made earlier may not hold for all informal sector activities. It also indicates

Table 6.5 Relationship between employment in enumerated Informal Sector enterprises and the size of large, medium and small centres (1970 figures)

Centres	Measure of Size						
	% share of total	% share of total	% share of total	% share of total	% share of total	% share of total	
	Population	Labour force	Industrial petty trading and services	Industrial petty trading and services	Employment	non-agricultural employment	
	Industrial petty trading and services	Industrial petty trading and services	Industrial petty trading and services	Industrial petty trading and services	Industrial petty trading and services	Industrial petty trading and services	
Large Centres	1.6 (2.0)	2.4 (3.6)	2.8 (3.6)	4.3 (3.6)	5.0 (6.4)	5.4 (6.9)	8.4
Medium Centres	1.95 (2.6)	3.25	3.65 (4.7)	5.65	5.3 (7.0)	6.6 (8.6)	10.6
Small Centres	1.9 (1.7)	1.48	4.2 (3.5)	2.7	5.97 (5.1)	9.23 (8.3)	7.35

Average for both industrial, trading and services sectors in brackets.

Source : Summary of Table 7.4.

that the industrial enterprises contribute more to non-farm activities in the small centre rather than in the medium and large centres. This pattern may thus lend weight to the consideration that urban size alone may not be the most important factor in the generation and possibly growth of employment in informal sector enterprises.

(ii) Composition of the enumerated enterprises

(ii)a. The industrial enterprises :

The composition of enterprises in the industrial sector varies from centre to centre. On the whole, however, tailoring is the single most important activity accounting for 18.5% and 18.1% of the number of enumerated enterprises and the total size of employment in them respectively. Together with dressmaking (by women) and cloth weaving, the "cloathing" related activities account for 28.8% and 36.5% of the total number of industrial enterprises and employment respectively in the nine centres selected for the study. A similar finding has been made by Liedholm and Chuta in Sierra Leone where tailoring alone accounted for 33% and 31% of number of enterprises and employment respectively (Liedholm and Chuta, 1976, p64).

The food preparation enterprises (ie bakeries and other food preparations) constitute the second most important group of activities responsible or accounting for 23.5% and 20% of total number of enterprises and total employment generated by such enterprises respectively. (Bakeries alone account for 13.5% and 12.6% respectively). Others are, wood-working (ie carpentry and joinery and wood carving) 9.2% of total employment; modern repairs (and trade)(ie electrical and electronic, auto repairs of all types) 12.1% of total employment. These

four groups of activities account for the bulk of small-scale industries enumerated in the census survey.

One would expect to see a greater variety of industrial activities in the larger rather than the small sized centre. However, this did not seem to be the case in the census. In addition to the most important activities that can be found in almost all the centres, cloth and basket weaving, pottery and wood carving, which are mainly rural activities, are located in the small centres (particularly Asikuma and Fosu)(5). On the other hand, the medium sized and large centres are noted for the predominance of modern small-scale fabricating and repair activities, especially in block manufacturing, auto repairs, electrical and electronic repairs, tailoring and dress-making (see table 6.1 in appendix A).

(ii).b. Petty trading and services enterprises(6):

Commerce as a whole covers all activities generated by the process of labour specialization which affects the flow of commodities from the original producer to the final consumer (Hinderink and Sterkenburg op cit. p83). In Ghana, the distributive trade sector is dominated by specialized wholesale firms operating separate wholesale and retail establishments, or firms operating one or more enterprises in which both wholesale and retail activities take place. There are also the retail units which undertake the incidental wholesale transactions, and finally, petty trading enterprises. All of these types of retail outlets, except the last one, are controlled by foreign-owned and Ghanaian firms based in the capital, Accra, and with branches in all regions. In our study area there are a number of such shops, most of which are referred to as departmental stores, which are mainly branches of the parent firms in Accra.

These stores normally combine retailing and wholesaling activities together. In addition there are supermarkets and specialized retail outlets. All these can be regarded as belonging to the formal sector in view of their ownership, control and organization, and were thus included in our census survey but excluded from the sample survey. At the bottom end of retail activities are the petty traders, who properly belong to the informal sector. In the census survey, general merchants retailing general items of consumption and semi-durable items account for 52.7% and 41.6% of all the petty retail units enumerated and total employment in them. Service units such as drinking bars (Pubs), Nightclubs and Restaurants constitute 29.3% and 31.3% of total units and employment respectively.

(iii) Number and Total Employment in large-scale Industrial Enterprises

As noted in chapter 5, the Central region is not a major industrial region in Ghana. Most of the existing industries are agro-based industries utilizing local agricultural and other raw materials. Most of the region's industries, however, are concentrated in the selected centres. Most of the main enterprises were approached, and the results of the interviews presented in appendix J show that the enterprises covered employ at least 966 employees. Though this figure is by far less than the employment generated in the informal sector enterprises, it is significant to note that the formal sector industries make a modest contribution to the non-farm employment in the region. Most of the enterprises (50%) and employment (79%) are concentrated in Cape Coast alone.

B. Characteristics of the Enterprises covered in the Detailed Interviews.

The analysis in this section of the chapter and the subsequent ones are based on the detailed interviews conducted to ascertain the salient and operating characteristics of informal sector enterprises. It is important to note that two separate interviews, followed by revisits, were done for enterprises in the industrial sector and enterprises in the trading (and services) sector. A distinction is made between these two where ever possible and necessary because of different operating characteristics. For instance, the entry requirement or procedure into each of the sectors is different. Entrepreneurs in the industrial enterprises generally have acquired skills in their respective industries or trades before setting up their enterprises or in partnership with other artisans, whereas traders generally need not go through similar training before they can open their shops.

(i) Date of establishment of enterprises

Table 6.6 shows the proportion of industrial enterprises and the period during which they were set up. From fig. 6.1, one notices the sharp increase in the number of enterprises set up just after 1965. A large proportion of the sampled enterprises (ie 66% of industrial enterprises and 67.2% of trading and services units) were set up between 1966 and 1975. However, while there was a slight increase in the number of small-scale industrial units established between 1966-1970 and 1971-1975 periods, and a sharp decline between 1975-1978, one notices a gradual decline in the proportion of petty trading and services enterprises set up between 1966-1975 period and then a sharp decline after 1975.

TABLE 6.6 TYPE OF ENTERPRISE AND PERIOD OF ESTABLISHMENT IN 9 CENTRES OF CENTRAL REGION : INDUSTRIAL SECTOR.

Period of establi- ment	TYPE OF ENTERPRISE																			
	Bakery	Block	Carp.	Dress.	Tail- Metal	Shoe	Watch	Auto	Elec.	Smith- repair	Food	Mill- prep.	Photo	Hair- styl- ing	Print- ing	Weav- ing	Pottery	Rubber	Misc.	Total
* Before 1960	16 (23.5)	1 (8.3)	11 (17.7)	2 (3.4)	5 (4.1)	6 (23.1)	1 (1.9)	5 (7.9)	1 (4.0)	5 (41.7)	2 (6.5)	1 (7.7)	-	-	-	-	2 (50)	-	-	58 (9.7)
1961-65	17 (25)	0	15 (24.2)	3 (5.1)	8 (6.5)	7 (26.9)	8 (15.4)	14 (22.2)	2 (8.0)	5 (41.7)	5 (16.1)	1 (7.7)	1 (10)	1 (16.7)	-	3 (42.9)	1 (25)	-	-	92 (15.5)
1966-70	26 (38.2)	1 (8.3)	17 (27.4)	8 (13.6)	33 (26.8)	9 (34.6)	26 (50)	25 (39.7)	10 (40)	1 (8.3)	8 (25.8)	5 (38.5)	2 (20)	-	1 (100)	1 (14.3)	1 (25)	2 (100)	2 (50)	187 (31.4)
1971-75	9 (13.2)	9 (75)	15 (24.2)	32 (54.2)	64 (52)	4 (15.4)	14 (26.9)	3 (20)	14 (22.2)	-	13 (41.9)	5 (38.5)	6 (60)	4 (66.7)	-	3 (42.9)	-	-	1 (25)	206 (34.6)
1976-78	-	1 (8.3)	4 (6.5)	14 (23.7)	13 (10.6)	-	3 (5.8)	2 (13.3)	5 (7.9)	1 (8.0)	3 (9.7)	1 (7.7)	1 (10)	1 (16.7)	-	-	-	-	1 (20)	52 (8.7)
** Column Total	68 (11.11)	12 (2.0)	62 (10.4)	59 (9.9)	123 (20.7)	26 (4.4)	52 (8.5)	15 (2.5)	63 (10.6)	12 (2.0)	31 (5.2)	13 (2.2)	10 (1.7)	6 (1.0)	1 (0.2)	7 (1.2)	4 (0.7)	2 (0.3)	4 (0.7)	595 (100)

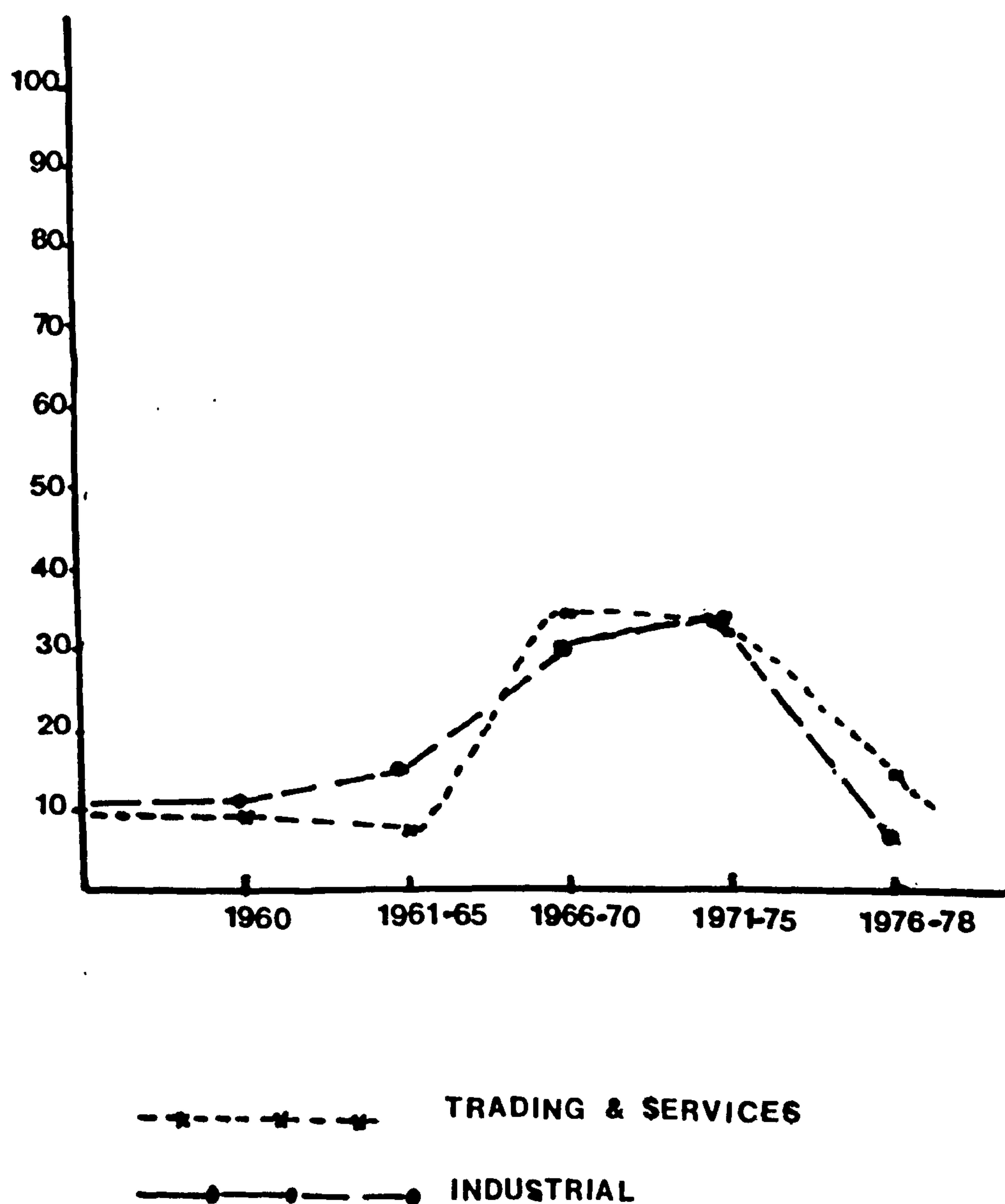
Source : Authors Survey of 9 Centres in Central Region : 1977/78.

* Proportions in brackets

** Proportions of total sample in brackets

Fig 6.1

**Proportion of informal sector enterprise in
the Central Region and the periods of
their establishments all Centres**



It is difficult to explain this age distribution pattern of the sampled enterprises in the region, and indeed in the whole country, except by recourse to the economic and political conditions that prevailed in the country before and after 1966. Perhaps the socialist policies which the government under the late Dr. Nkrumah was trying to pursue may account for part of the reason why only a few enterprises were established before 1966. It has been said that the government was not keen on encouraging the development of small-scale private enterprise for the fear that a wealthy class of Ghanaian businessmen might pose a threat to its socialist ideas (Killick, 1978, p37) (7). While the government did not "ban" people from setting up small-scale enterprises, their existence, however, was to be contingent upon their willingness to operate within the socialist framework which the government wished to create.

"The initiative of Ghanaian businessmen would not be cramped but we intend to take steps to see that it was channelled towards desirable social ends and was not expanded on the exploitation of the community. We would discourage anything which threatened our socialist objectives"

(Nkrumah, 1968 p86-87. Quoted by Killick, 1978 p60, footnote 29).

However, after the February 1966 Coup by the armed forces, the socialist ideas were either reversed or abandoned and there was a return to private enterprise. Several measures were introduced to assist Ghanaian businessmen, including legislation to reserve certain sectors of the economic activities for Ghanaians (Killick, op cit. p55). Though the socialist policies of Nkrumah's era and the business promotion legislations of Post 1966 may not have directly affected the very small-scale (informal sector) operators, the atmosphere

created by changes in policies may have influenced the decision of the small entrepreneurs to either abandon their enterprises as the case may be in the ante-1966 era or to set up enterprises in the post-1966 era.

It also seems likely that through the "natural" process of "death" and "survival", most of the pre-1966 businesses may not now exist or have moved out of the selected centres, or have been bought over by new entrepreneurs. Certainly, the economic difficulties (inflation, shortages etc.) which the country has passed through in the last decade or so has a part to play in either the "death" of some of the existing enterprises, or discouraged prospective small-scale entrepreneurs or operators from setting up any enterprises altogether.

A large proportion of all enterprises sampled in the industrial sector were set up after 1966, except the traditional craft activities such as smithing, pottery and weaving. Secondly, a significant proportion of the more "modern" craft activities were set up after 1970. These include : Block-manufacturing (83%); Dressmaking (80%); Tailoring (63%); Electrical repairs (48%); Milling (46%) and the service industries such as Photography (70%) and Hair-styling (83%). If this growth trend should continue in future, it is quite likely that many more "modern" trades and services enterprises would be established, while there could be a corresponding decline in importance of the traditional crafts.

(ii) Employment characteristics of the enterprises

Employment generation in the informal sector is the

theme of this study. In studying employment characteristics of the enterprises covered in the detailed interviews, therefore we are interested in noting the average size of employment per enterprise, and changes, if any, that have taken place in the average size of employment since the enterprises were set up and, secondly, the proportion of each type of employee. This will not only give an indication of the type of labour force dominating the sector, but also its possible impact on future employment generation in the sector. Thirdly, the "intensity" of employment in the enterprises, and lastly, their turnover will be discussed. In all cases, comparison will be made between the enterprises and the centres in which they operate would be made, highlighting upon any differences that may exist.

(ii)a. Size of initial employment per enterprise:

In general most of the enterprises started with less than ten employees. The mean initial size of employee per enterprise in the industrial sector is about four persons, while in the trading (and services) enterprises the corresponding figure is two persons per enterprise. Table 6.7 gives details of the variation in the mean size of initial employment among the industrial enterprises in all the 9 centres, and among the three categories of centres (table 6.8). A variance analysis test shows that the variation in size of employment per enterprise observed among the three categories of centres is not significant (table 6.9).

Like enterprises in the industrial sector, there is no significant difference in the mean size of initial employment

Table 6.7 MEAN SIZE OF INITIAL EMPLOYMENT : ALL CENTRES : INDUSTRIAL SECTOR

	CENTRES									
	Cape Coast	Winneba	Swedru	Saltpond	Elmina	Fosu	Asikuma	Komenda	Mankesim	All Centres
Mean	4.2	3.47	3.76	3.45	5.43	1.30	3.39	2.29	11.19	3.998
S.E.	0.357	0.537	0.33	0.49	0.585	0.089	0.476	0.194	2.67	0.187
S.D.	4.735	4.946	3.724	3.22	3.878	0.564	3.334	0.726	10.647	4.567
S.S.	176	85	127	44	44	40	49	14	16	595

Source : Authors survey 1977/78

Table 6.8 Mean size of initial employment in large, medium-sized and small Centres : Industrial enterprises.

	Large	Medium	Small	All Centres
\bar{X} (mean)	4.22	3.64	4.17	3.998
S.E.	0.357	0.292	0.329	0.187
S.D.	4.357	4.248	4.735	4.567
S.S.	176	212	207	595

Source : Authors survey 1977/78.

Table 6.9 Analysis of variance : mean initial size of employment per enterprise between large, medium-sized and small Centres : Industrial Sector

Source	D.F.	T.S.S.	M.S.S.	F ratio	F. Prob.
Between Groups	2	42.1465	21.0733	1.01	0.366
Within Groups	592	12348.8518	20.8595		
Total	594	12390.9983			

F. Ratio not significant at 95% level of significance.

Table 6.10 Mean size of initial employment : large, medium-sized and small Centres - Retailing and Services enterprises

	Large Centre	Medium-sized Centres	small-sized Centres	All Centres
\bar{X} (mean)	1.112	0.892	2.154	1.639
S.E.	0.220	0.120	0.154	0.130
S.D.	2.863	1.960	3.354	3.359
S.S.	170	268	233	671

per trading and services enterprise among the three range of centres (table 6.10). But the mean figures conceal important variations among the centres. A breakdown of the magnitude of mean initial employment shows that 92% of all industrial entrepreneurs began with less than 10 persons per enterprise; 72.4% of them began with less than 5 employees; only 1.8% of the industrial enterprises were begun as one-man operations. On the other hand, 87.6% of their counterparts in the trading and services enterprises started with less than 5 employees, but the most significant difference is that over half (ie. 54.2%) of all enterprises in the trading and services activities were started as one person operations.

There were, however, differences among the main industrial enterprises but it is the block manufacturing (8.1 persons per enterprise). auto and electrical repairing units (5.9) which generally started with more than 5 employees per enterprise. Other industrial enterprises generally started with less than 5 employees.

(ii)b. Size of present Employment per enterprise:

One would assume that with years, enterprises which began as one-person operations, and those which employed one or two other persons, would employ more persons in various capacities - as helpers, apprentices, skilled workers, wage and non-wage employees. At the time of the survey, the mean size of employee per an industrial enterprise was 5 compared with only 2 in the trading and services sector. However, in general it seems that the mean size of employee per industrial enterprise is related to the size range of centres (table 6.11), while this sort of relationship is not noticed in services enterprises (table 6.12). Table 6.13 presents variations observed among

Table 6.11 MEAN SIZE OF PRESENT EMPLOYEES PER ESTABLISHMENT : INDUSTRIAL SECTOR : ALL CENTRES

STATISTICS	CENTRES							
	Cape Coast	Winneba	Swedru	Saltpond	Elmina	Fosu	Asikuma	Komenda Mankesim All Centres
\bar{X}	5.91	5.00	5.64	3.93	4.86	3.45	6.12	3.07 5.81 5.28
S.E.	0.38	0.54	0.64	0.52	0.47	0.32	0.57	0.54 0.85 0.21
S.D.	4.99	4.95	7.22	3.45	3.15	2.01	3.98	2.02 3.41 5.11
S.S.	176	85	127	44	44	40	49	14 16 595

Source : Authors Survey 1977/78

Table 6.12 MEAN SIZE OF PRESENT EMPLOYEES PER ENTERPRISE : TRADING (AND SERVICES) SECTOR : ALL CENTRES.

STATISTICS	CENTRES							
	Cape Coast	Winneba	Swedru	Saltpond	Elmina	Fosu	Asikuma	Komenda Mankesim All Centres
\bar{X}	2.01	1.64	2.29	2.66	2.64	1.32	2.13	0.11 0 2.08
S.E.	0.30	0.25	0.21	0.12	0.39	0.27	0.23	0.33 0 0.11
S.D.	3.95	2.63	2.56	0.91	3.34	1.65	1.26	0.11 0 2.93
S.S.	170	113	155	61	72	38	31	9 22 671

Source : Authors survey 1977/78

the mean size of present employees in all the enterprises covered in the detailed interviews.

A variance analysis test shows that the observed difference in the mean size of present employment among the centres is not significant (table 6.14).

Like the mean initial size of employment per enterprise, it is only in auto, electrical and electronic repair services, and cement block manufacturing enterprises in which the mean sizes of present employment per enterprise are above the average for all enterprises in the industrial sector. Also, in all centres, 90% of all industrial enterprises employ between 1 and 2 people); 8% employ between 5 and 10 people, while less than 1% employ above 10 people each, and no employees respectively.

In the trading sector, as many as 35% of the enterprises are one-person operated enterprises, whilst about 56% employ between 1 and 4 people (40% employ 1 or 2 people whilst 15.8% employ 3 or 4 people); 7% employ between 5 and 10 employees and only 2% employ more than 10 employees (all of which were recorded among the services enterprises such as Nightclubs and Drinking Bars and Restaurants.)

(iii) Types of Employees

Type of employees includes the size of permanent or full-time and part-time employees per establishment, the proportion of apprentices (8) skilled workers and family members in the employment structure of the industrial enterprises. Table 6.15 and 6.16 present the percentage distribution of the types of employees in the industrial and trading enterprises.

Table 6.13 Mean size of present employees per enterprise in large, medium and small-sized Centres : Industrial and Trading Sectors

Statistics	<u>Industrial Sector</u>				<u>Trading Sector</u>			
	Large Cent.	Medium Cent.	Small Cent.	All Centres	Large Cent	Medium Cent	Small Cent	All Centres
\bar{X}	5.91	5.38	4.64	5.28	2.09	2.02	2.16	2.02
S.E.	0.38	0.44	0.23	0.21	0.30	0.16	0.15	0.11
S.D.	4.99	6.40	3.36	5.11	3.95	2.61	2.35	2.93
S.S.	176	212	207	595	170	268	233	671

Source : Authors Survey 1977/78

Table 6.14 Analysis of variance test : Differences in the Present mean size of employment between large, medium and small Centres : Industrial Enterprises

Source	D.F.	Sum of squares	Mean Squares	F.Ratio	F.Prob.
Between Groups	2	155.9845	77.9922	3.011	0.048
Within Groups	592	15336.1432	25.9056		
Total	594	15492.1277			

* F ratio not significant at 95% level of significance.

Group	Count	Mean	S.D.	S.E.	MIN	MAX
Large Centre	176	5.9091	4.9929	0.3764	1	40
Medium Centres	212	5.3821	6.4013	0.4396	0	
Small Centres	207	4.6425	3.3614			
Total	595	5.2807	5.1070	0.2094	0	60

Source : Authors Survey 1977/78

Most of the enterprises have at least one or two full-time employees (the mean for all centres being about three full-time employees per each industrial enterprise, while in the trading and services enterprises, the mean is about two employees per enterprise. Part-time employment is not a significant form of employment in either the industrial sector (mean is one person per enterprise) or the trading and services enterprises (where the mean is only 0.3 persons per enterprise). Family employees too do not form a significant segment of the total labour force in the sampled enterprises. Most of the family employees are children and other relations of entrepreneurs who help their parents and relatives run their workshops and stores on a part-time basis, particularly during school vacations.

By far the most significant form of employment in the industrial sector is the apprenticeship system which will be described later. 66% of all industrial enterprises use apprenticeship labour. The system is prevalent among enterprises such as carpentry, tailoring, dressmaking, metal works, auto and electrical repairs. Only 35% of the enterprises employ wage labour most of whom may have completed their apprenticeship training (9).

It is also interesting to examine the differences between the mean size of various types of employees among the three categories of centres (tables 6.17 and 6.18). In general, the mean size of permanent employees per enterprise in the industrial sector is greater in the large than in the medium-sized and small centres. A variance analysis test shows that the observed differences in the mean size of permanent employees

Table 6.15 A: Distribution of types of Employees : All Centres combined : Industrial Sector

Type of Employee	Number of Employees				
	None	1-2	3-4	5-10	10+ Total
Part-time	69.4(413)	16.8(100)	8.4(50)	4.1(24)	1.4(8) 100(595)
Full-time	19.5(116)	38.8(231)	23.2(138)	13.7(82)	4.8(24) 100(595)
Skilled	65.5(390)	26.3(157)	4.6(27)	2.5(14)	1.2(7) 100(595)
Apprentices/ unskilled	27.9(116)	30.8(183)	22 (131)	14.6(87)	4.7(28) 100(595)
Family	55.1(328)	35 (208)	7.1(42)	2.6(16)	0.2(1) 100(595)

Source : Authors Survey
Actual frequencies in brackets.

Table 6.16 B: Distribution of types of Employment (All Centres combined): Trading (and Services) Sector

Type of Employee	Number of Employee				
	None	1-2	3-4	5-10	10+ Total
Full-time or Permanent	38.9(261)	40.6(272)	13.6(91)	4.9(34)	1.7(13) 100(671)
Part-time	82.7(555)	15.2(102)	1.3 (9)	0.8 (5)	- 100(671)
Family	63.2(424)	30 (201)	6.1(41)	0.6 (5)	- 100(671)

Source : Authors Survey
Actual frequencies in brackets

Table 6.17 Mean size of different types of Employees per Enterprise : 3 range of Centres : Industrial

Type of Employees	Centres			
	Large	Medium	Small	All Centres
Full-time	4.44	2.37	2.63	3.07
Part-time	0.23	1.73	0.93	1.00
Apprentices	2.78	3.45	2.83	3.04
Skilled	1.10	0.79	0.72	0.86
Family	1.26	1.10	0.67	1.00

Table 6.18 Mean size of types of Employees per Enterprise : 3 range of Centres : Trading & Services

Type of Employees	Centres			
	Large	Medium	Small	All Centres
Permanent	1.75	1.88	1.83	1.83
Part-time	0.41	0.21	0.39	0.33
Family	0.77	0.69	0.67	0.71

per industrial enterprise among the three centres is significant at 95% level of significance (table 6.19). However, the observed difference in the mean size of family employees and skilled workers per enterprise among the three categories of centres is not significant. On the other hand, the mean size of part-time employees and apprentices is larger in the medium-sized centres while the large centre recorded the lowest mean figure.

In the case of the trading and services enterprises, no differences were observed among the three categories of centres with respect to the mean size of permanent, part-time and family employees per enterprise.

(iv) "Intensity" of Employment

It is difficult to calculate precisely the extent to which operators in the informal sector enterprises are employed in their activities owing to the informal nature of their organization. There are no specific conditions of work or no regimentation with respect to the number of days and hours one needs to work in a specified period. For one to obtain average figures of the number of hours and days worked in a period, would require long periods of observation and recording. This is what Liedholm and Chuta (1976) did in their study of small-scale industries in Sierra Leone. They calculated the number of hours worked by each employee in the sampled enterprises twice weekly for a whole year. In a study of informal manufacturing in Kumasi, Aryee (1976B) used output as a measure of the "intensity" of employment in the sampled enterprises. He assumed that :

Table 6.19 Analysis of variance test: differences in the mean size of Permanent Employees per Enterprise in large, medium-sized and small Centres : Industrial

Source	D.F.	S.S.	M.SS.	F. ratio	F.Prob.
Between Groups	2	475. 3956	237. 6978	16.486	0.000
Within Groups	592	8535. 3506	14. 4178		
Total	594	9010. 7462			

Categories of Centres	Count ie.S.S.	Mean	S.D.	S.D.	Min.	Max.
Large	176	4.4432	4.1400	0.3121	0	0
Medium	212	2.3726	4.4698	0.3070	0	30
Small	207	2.6280	2.5317	0.1760	0	20
Total	595	3.0739	3.8948	0.1597	0	30

F ratio significant at 95% level of confidence.

"given other factors of production entrepreneurs who have higher levels of productivity would be judged to have higher degree or intensity of employment than those with lower productivity level"

(Aryee op cit p5)

One cannot, however, rely very much on figures of output and income for the simple reason that such figures cannot be very reliable since most informal sector entrepreneurs do not keep records of expenditure and income, and in most cases only recall such figures from memory. In addition, such data need to be collected over a long period to enable one to discern the pattern and variations within them from period to period. Thus a cross-sectional study can only tell part of the story. Moreover, the adoption of such an approach depends very much on financial resources and the amount of time at the researcher's disposal.

In view of this, intensity of employment was calculated by means of the number of days worked in a week, number of months during which enterprises operate in a year and the months they do not operate at all or operate slower than usual, and finally, the number of months during which the enterprises obtain more patronage and thus work longer hours than usual.

(iv)a. Number of days worked :

The mean number of days worked by each enterprise in the industrial sector is about 6 days in a week. 82% of all such enterprises operate at least a 6-day-week schedule (10). About 12% of the enterprises are opened for only 5 days in a week and only 5% open their workshops for a day to four days in a week. The predominance of the 6-day-week schedule was recorded in all selected centres except Asikuma where 76% of all the enterprises operate a 5-day-week schedule. Again, the 6-day-week regime is

typical of all sampled enterprises except in the bakeries in which the number of days worked depends very much on the availability of raw material inputs and how fast the bread is sold.

(iv)b. Number of months of business operation :

In all centres, all the industrial enterprises sampled operate fully for about 9 months of the year (table 6.20) and close or remain virtually inactive for 3 months of the year. In the small centres, where some of the entrepreneurs or operators are part-time farmers and traders, the "slow period" could be used profitably on their farms or in the retail shops. During the months in which the enterprises operate there are peak periods for various types of activities. For instance, in the case of tailoring, dressmaking and industrial services such as photography, and also hairstyling, such enterprises usually experience increased patronage just before and during special occasions, such as local festivals, Christmas, weddings and funerals.

For all the 9 centres, the mean number of comparatively busy months of operation is about 5 months, but this differs from centre to centre. In general about 29% of all the industrial enterprises sampled are busy for 1 to 3 months; about 33% between 4 and 6 months; and 32% between 7 and 9 months. About 3%, however, operate normally for 9 months without either being too busy or operate "slowly". Table 6.20 shows the distribution of enterprises and the number of months during which they are busy, and it shows that a larger proportion of bakeries (84.2%), block manufacturing (91.6%). auto repairs (75.8%) electrical repairs (72%), food preparation (93.6%) are busy

for between 4 and 9 months, while most of the other enterprises, for example, tailoring (83.2%), dressmaking (76.2%), smithing (83.3%) are busy for only 1 to 6 months.

No discernible pattern between "slow months" and type of enterprises was observed in the interviews. Most craftsmen thought "slow months" were irregular. In some months work could be slowed down for a few days or weeks depending upon the availability of materials, demand situation and the occasion or period of the year. In general, however, most entrepreneurs reckoned they operate below normal working schedule for between 1 and 3 months in a year.

(v) Turnover

A discussion of employment in the informal sector without the earnings of the enterprises does not present a complete picture of the informal sector economy. If anything at all, turnover (11) is an indication of the level of output in each enterprise. However, to obtain reliable data on turnover, as has been pointed out already, requires long periods of observation and enquiry, and with the unorganized sector, this may still be difficult to achieve because once entrepreneurs became aware that the researcher was delving too much into that area, they became apprehensive. In view of the general problem of obtaining reliable data, entrepreneurs were asked what they considered to be their average weekly turnover.

Tables 6.21 and 6.22 present mean turnover of enterprises in each of the 9 centres for all the enterprises covered during the detailed interviews. In general, the mean weekly turnover for enterprises in the trading (and services) sector (¢303) is

Table 6.21 MEAN WEEKLY TURNOVER : ALL ENTERPRISES IN EACH OF THE 9 CENTRES : INDUSTRIAL SECTOR

Stats.	Cape Coast	Winneba	Swedru	Saltpond	Elmina	All Centres				Range of Centres			
						Fosu	Asikuma	Komenda	Mankesim	All Centres	Col.I large	Col.II medium	Col. III small
Mean	236.7	162.06	229.06	62.43	340.89	62.8	44.47	143.29	95.5	185.8	236.69	202.57	125.42
S.E.	36.99	20.11	41.31	7.68	196.27	13.23	12.66	29.75	17.89	20.61	36.99	26.08	42.38
S.D.	490.76	185.36	465.56	50.97	1301.89	83.67	88.58	111.33	71.57	563.24	490.76	379.69	609.77
S.S.	176	85	127	44	44	40	49	14	16	595	176	212	207

Source : Authors Survey 1977/78

Table 6.22 MEAN WEEKLY TURNOVER : ALL ENTERPRISES IN EACH OF THE 9 CENTRES : TRADING (AND SERVICES) SECTOR

	All Centres										Range of Centres			
	Cape Coast	Winneba	Swedru	Saltpond	Elmina	Fosu	Asikuma	Komenda	Mankesim	All Centres	large	medium	small	
Mean	635.78	105.97	374.03	152.07	87.09	202.84	34.45	26.73	33.46	303.03	635.78	261.0	108.58	
S.E.	47.09	14.03	31.83	14.72	13.87	39.13	17.66	7.85	11.14	16.9	47.09	20.96	9.73	
S.D.	614.06	149.18	396.92	114.95	117.65	241.19	98.40	23.64	52.26	437.77	614.06	343.21	148.57	
S.S.	170	113	155	61	72	38	31	9	22	671	170	268	233	

Source : Authors Survey 1977/78

almost double that of the industrial sector (¢186). These figures, however, compare favourably with the national minimum wage of about ¢150 a month. The figures also suggest that opportunities for income generation may be comparatively better in the commerce sector than in the industrial sector.

Also, the mean weekly turnover for all enterprises varies among the centres (12), but in aggregate terms, for all the enterprises covered, there is a close relationship between the mean weekly turnover and the size categories of centres (see tables 6.23 and 6.24). An analysis of variance test shows that the observed differences in the mean weekly turnover among the large, medium-sized and small centres are statistically significant.

C. Sources of Inputs for production in Informal Sector Enterprises

In the last section, the human resource input for production in the informal sector was discussed under employment. This section describes the main sources of other major inputs, namely, raw materials and capital. This discussion is the first step in the analysis of linkages that exist within the informal sector economy and between it and the other sectors of the economy.

(i) Raw material inputs

Informal sector enterprises obtain raw materials, spare parts and general supplies from a variety of sources. In the case of the industrial enterprises, the predominant sources are the local retailers, local departmental stores and middlemen or sales agents. However, a larger proportion of entrepreneurs in the small centres obtain much of their material inputs from departmental stores in and out of their centres of

Table 6.23 Analysis of variance test : Differences in mean size of weekly turnover between large, medium-sized and small centres : Industrial Sector

Analysis of variance					
Source	D.F.	Sum of squares	Mean Squares	F Ratio	F Prob.
Between Groups	8	4304793.8	525599.2	2.106	0.633
Within Groups	586	146225180.1	249531.2		
Total	594	150429973.9			

F^* at 95 level of significance is 1.95.

$F < F^*$ at 95% level of significance

F is thus significant.

Table 6.24 Analysis of variance test : Differences in mean weekly turnover of large, medium-sized and small Centres : Petty trading & services

Analysis of variance					
Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups/ Centres	2	28105446.4453	14052723.2227	93.595	0
Within Groups/ Centres	668	100296052.1230	150143.7906		
Total	670	128401498.5683			

F ratio significant at 99% level of confidence.

operation. However, in all centres middlemen provide the bulk of the material inputs. On the other hand, a greater proportion of operators in the trading and services enterprises obtain much of their supplies from departmental and wholesale shops (37%). Unlike the industrial enterprises, the role of middlemen is greatly reduced: only about 13% of them obtain much of their supplies directly from trading agents or middlemen.

In general, the proportion of enterprises in the trading and services sector which receive their supplies from formal sector sources is related to the size of centres: 70%, 44% and 28% of all such enterprises in the large, medium-sized and small centres obtain much of their supplies from the formal sector sources. This is not surprising because only a few branches of the departmental stores, mostly run by local agents, can be found in the small centres.

(1)a. Differences among Centres:

A second aspect of material input sources is the centres from which enterprises obtain their material inputs. 42% of all the industrial entrepreneurs in all centres obtain much of the supplies from their respective centres of operation. In addition, however, 30% of all industrial entrepreneurs obtain much of their inputs from the 3 main national urban centres, especially from the Accra-Tema metropolitan area. Entrepreneurs in the large and medium-sized centres rely less on other centres for supplies than those operating in the small centres. In proportionate terms, 8%, 18% and 50% of entrepreneurs in the large, medium-sized and small centres respectively, rely on other centres (apart

from their own centres of operation) in the region for much of their material inputs. Moreover, a comparatively smaller proportion of enterprises in the medium-sized and the large centres obtain much of their supplies from the main national centres (the proportions being 11%, 5% and 19% for large, medium-sized and small centres respectively).

The implications of this pattern of material input sources are that most industrial entrepreneurs have to rely on middlemen for much of their inputs. Middlemen invariably charge very exorbitant prices and moreover this supply channel cannot be reliable and fluctuations in supplies can adversely affect the operation or production and thus employment in the industrial sector. In addition to the above problem, entrepreneurs in the small centres have to incur extra expenses since they obtain much of their raw materials and spare parts from outside their own centres of operation. This can even worsen prospects for 'continuous' production, and can affect the levels of turnover or profit and indirectly influence the decision of the entrepreneurs to employ more hands to help them, in the productive process.

In the trading and services sector a far smaller proportion (i.e. 24%) of entrepreneurs than in the industrial sector, rely on supplies from sources within their respective centres of operation. About 40% of all supplies are obtained from sources in the three main urban centres of the country (13). However, like the industrial enterprises, the proportion of entrepreneurs in the trading (and services) sector who depend on supplies from their respective centres of activity vary directly with the size categories of centres - being 42%, 29%

and 6% for large, medium-sized and small centres respectively. Thus one may infer from this that there are "better" opportunities or greater resources at the disposal of entrepreneurs in the large and medium-sized centres than in small centres.

(ii) Capital Inputs

To start any business requires capital resources. In the absence of one's own capital resources, capital can be obtained from both formal sector sources such as government, bank loans or from informal sector sources, for instance, from parents, relations and friends and money-lenders. In the industrial sector enterprises, most entrepreneurs obtained financial resources from informal sector sources - only 3.5% of all industrial entrepreneurs started their enterprises with loans from banks and other public sector sources. In the informal sector one notes the role of parents in financing businesses (43%) and also the entrepreneurs own internally generated resources (32%) which could have been obtained while working in the agricultural sector, other informal sector activities or wage employment in the formal sector.

In the trading (and services) sector, however, entrepreneurs' own generated capital forms the bulk of initial capital (36.4%) though the role of other informal sources is very substantial. Parents, relatives, spouses and other informal sources account for 56.5% of all sources of initial capital. Formal sector sources (ie. bank loans and overdrafts) account for only 6.9%.

On the surface, the role of capital resources from the formal sector may not be substantial but the indirect impact

is substantial. Put together, indirect sources of formal sector capital accounts for 30.2% and 38.7% in the industrial and trading enterprises respectively for all the initial capital invested in the informal sector businesses, while the agricultural sector accounts for 24% and 11.5% in the industrial and trading sectors respectively.

Once businesses have been established, entrepreneurs tend to rely more on their own internally generated capital rather than on parents and close relatives and other relations. This is seen in the larger proportion of entrepreneurs in both the industrial (65%) and trading (62%) sectors, who utilise their own savings to run their businesses. A characteristic of the industrial enterprises is the role of traditional money-lending in the running of business enterprises. Even though most industrial entrepreneurs depend on their own internally generated capital to run their businesses, a greater proportion of the very young entrepreneurs (i.e. 15-20 years) depend more on loans from money-lenders (33.3%) and bank loans and overdrafts (22.2%) - than on their own savings. This is quite understandable, in view of the fact that one needs to build up a considerable amount of savings in order to feel independent of other possible sources of capital, and that may be possible only after a long period of operating their enterprises.

Like the initial capital, direct formal sector sources of capital for operating the enterprises do not form a significant component of all sources of capital. Only 4% of all industrial entrepreneurs use the banking system compared with 8% of their counterparts in the trading and services sector. However, the role of the formal sector is quite substantial in the "indirect"

source of capital for unning businesses in the informal sector. About 28% and 32% of entrepreneurs in the industrial sector, trading and services sector respectively, obtained capital from sources who were directly employed in formal sector institutions and agencies. Indirect sources from the agricultural sector, though not as substantial as that from the formal sector, is quite appreciable. About 23% and 14% of entrepreneurs in the two sectors obtain capital from people who were, or are still, farmers, fishermen or hunters. 30% of the industrial entrepreneurs obtained finances from people employed in the petty trading and services activities (9).

A third aspect of capital input is the possible sources of capital in case expansion of production in a business is envisaged. About two-thirds of all entrepreneurs in all enterprises consider their own savings or internally generated capital as the main source of capital to expand their businesses relative to other informal sources. One distinguishing feature about the response to the enquiry of possible sources of capital for expansion is the increased role formal sector sources could play : 11% and 15% of entrepreneurs in the industrial or trading and services sectors wish to apply for a bank loan. This perhaps indicates that small businessmen are aware of the difficulties involved in obtaining a loan from formal sector sources, which insist on the credit worthiness of potential customers. Once businessmen are operating normally and perhaps making profits, entrepreneurs may feel confident to approach banks for loans. The problem thus may be how to get one's business enterprise to a level of operation where one can easily obtain loans to expand his enterprise.

(iii) Types of tools and sources of power

Another source of inputs in the productive process of the informal sector enterprises is the type of tools used. The type of tools used by the industrial enterprises confirms the labour intensive nature of the enterprises. 47% of all the industrial enterprises use simple hand tools such as hammers, chisels, screwdrivers. Only 24% of them use in addition to simple hand tools, portable machines, whilst only 5% of them use stationary machines as well. 16% of them use all forms of equipment and machinery (14).

Most of the entrepreneurs own their tools and machinery (88%) while for about 6% and 7% of the enterprises, equipment and machinery are owned by business partners and co-operatives respectively. Machine hire is very rare; this means that any prospective informal sector entrepreneur must endeavour to acquire his own tools and machinery before setting up his enterprise or must save enough to acquire them while working, or both.

In terms of the energy input, manpower is the most important source of energy for operating the businesses, apart from the normal use of electricity - for lighting. 56% of all the industrial enterprises rely solely on manpower. This is particularly so with tin smiths, Carpenters and some auto repair units. 39% use a combination of manpower and electricity. Only 1.8% use only electricity - particularly the electrical and electronic repair enterprises. 3% of the enterprises such as blacksmiths and all forms of food preparation rely on local firewood.

D. Summary

The analysis presented in this chapter indicates that the size of the enumerated enterprises may be related to the opportunities for operating informal sector enterprises rather than to the size of the centre. In terms of composition of enterprises, tailoring and dressmaking constitute the most important activities both in terms of the number of enterprises and the size of employment generated in them. Most of the enterprises covered in the detailed survey are new, most of which belong to the "modern" craft activities.

The size of initial and present employment in all the enterprises studied shows the characteristic smallness of informal sector enterprises. However, a significant difference exists between the three broad groups of centres in terms of the mean size of present employment in the industrial enterprises. In particular, there is a significant difference in the mean size of permanent employees per enterprise in the industrial sector. The mean is larger in the large than in other centres. These observations, if carried into the future, will have implications for the growth and type of employment to be generated by industrial enterprises located in various centres. However, it should be remembered that much of the labour force in the industrial enterprises is apprenticeship labour.

Other major inputs, namely raw material and capital used in the productive process, are obtained from varied sources. In the case of raw material inputs, dependence on sources with centres of operation varies somewhat with the size of centres.

In all cases, the entrepreneurs operating in the small centres are at greater disadvantage than those operating in the large and medium-sized centres. They incur extra transportation costs to convey supplies from various sources in centres outside their own. Informal sources of capital dominate the capital inputs though indirect sources from the formal sector are quite substantial. When entrepreneurs contemplate expansion in their business operations, they perceive the formal sector as an important source of capital. This could be significant for it could mean that formal sector financial resources can gradually be injected into the informal sector economy and this may auger well for production and employment in the informal sector.

The issue of linkages existing between the informal sector and other sectors of the economy has implications for the survival and growth of the informal sector economy. The next chapter examines aspects of these linkages.

NOTES

1. The 1970 Population Census report of Ghana is the most recent data source available for this study. Estimates exist population growth of urban areas as a whole and for certain urban centres in the country (see Appendix C) but the estimates are not disaggregated enough to cover all the centres in our samples. Thus even if the total size of centres population could be estimated at the survey year i.e. 1977/78, it would have been difficult to estimate their total employment and total non-agricultural employment.
2. This figure was obtained by multiplying 326 being the total number of informal industrial enterprises in small centres by 2.5 (there are 13 other small centres in the region). This plus 1003 gives us 1953 enterprises. An arbitrary lower limit is set at 1800 and an upper limit at 2100 enterprises.
3. The division is based on the size range of regional urban Centres rather than with respect to, for instance, total national urban populations. Cape Coast, being the largest urban centre in the region with a population of over 50,000 people in 1970, automatically became a large centre. The medium-sized centres are Winneba and Swedru, each with populations of over 20,000 in 1970. The rest, ie. the 6 other selected centres are categorised as small centres with populations of less than 20,000 each.
4. Note that due to the definition adopted for the survey, the size of informal sector enterprises may have been underestimated. The case of Cape Coast seems to support this. In early 1970 a survey of socio-economic characteristics of Cape Coast was conducted by two Dutch geographers. The survey of Manufacturing and Craft activities produced the following results :

Industry	No. of Enterprises	No. of Employees
(i) Food manufacturing	143	303
(ii) Manufacture of made up textile goods and footwear	536	858
(iii) Manufacture of furniture and fixtures	52	104
(iv) Manufacture of machinery, electrical apparatus and transport equipment	83	233
(v) Miscellaneous	33	53

For details see :

Hinderink, J. and Sterkenburg, J. "Anatomy of an African town : A socio-economic study of Cape Coast"
op cit p165)

5. The Central region as a whole is not noted for any particular craft activity unlike parts of the Ashanti region for instance where cloth weaving is predominant.
6. Retailing in market stalls was excluded from the census survey. Fishing, trade in foodstuffs and hawking along streets and in areas of traffic attraction were also excluded.
7. The late President Nkrumah is said to have made an explicit statement on this in a national assembly debate in 1964 during which he said "we would be hampering our advance to socialism if we were to encourage the growth of Ghanaian private capitalism in our midst." (Killick, 1978, p37).
8. Apprenticeship is not a feature of the employment structure of the trading and services enterprises.
9. Prevalent among Bakers, Block manufacturers, Dressmaking, Food preparation, Shoe and Watch repairers.
10. The 82% (or 487) industrial enterprises which operate 6-day week schedule is made up of 65.6% which operate on 6 days in a week and 17.4% which operate 7-day week schedule.
11. "Turnover" is used here to mean total receipts from sale of goods and services. The term "profit" could have been used but with restricted meaning to total receipts over total expenditure, but as has been pointed out, informal sector entrepreneurs do not keep records of accounts and may rarely distinguish between personal and business accounts.
12. The mean weekly turnover for Asikuma is fairly low due to poor response.
13. A breakdown of this 40% shows that 31% of the entrepreneurs in the trading (and services) sector obtain much of their supplies from Accra-Tema metropolitan areas.
14. The proportion of labour and capital use in the informal sector enterprises was not ascertained in this study. A study of aspects of this has been done in another part of Ghana by Steele (1977).

CHAPTER SEVEN

LINKAGES BETWEEN THE INFORMAL SECTOR ENTERPRISES AND OTHER SECTORS OF THE ECONOMY

CHAPTER SEVEN

LINKAGES BETWEEN THE INFORMAL SECTOR ENTERPRISES AND OTHER
SECTORS OF THE ECONOMY

In the last chapter, the sources of the main inputs in the activities of the informal sector are obtained from a variety of sources. It was mentioned that the discussion forms the basis for a detailed look at the linkages that exist between the informal sector and other sectors of the economy. Linkage is used here to refer to the relationships that exist between informal sector enterprises and between them and the public or modern sector on one hand, and the agricultural sector on the other.

The literature on informal sector studies lacks linkage analysis or studies. The most significant studies, as has been noted already, are those by Remy and Weeks in Northern Nigeria; (Remy and Weeks, 1973) a technical paper in the I.L.O.'s Kenyan report (I.L.O/U.N.D.P, 1972), and Aryee's work in Kumasi (Aryee, 1977). Because of scarcity of studies relating to linkages, methods for measuring linkages have not been developed. Remy and Weeks used input-output techniques which implies strict data requirements. Aryee isolated five factors as the main linkage forging factors between informal sector manufacturing and the formal sectors. These are fixed capital, employment of skilled labour, capacity, scale of operation and size of enterprise (Aryee, 1977, p72) (1). Aryee measured both backward and forward linkages through direct purchases (2) and found weak linkages between informal sector manufacturing and formal sector enterprises (3).

This chapter is based on the hypothesis that :

There is weak intersectoral linkages between the informal sector enterprises in the central region and other sectors of the economy.

This hypothesis is drawn from the reviews of case studies in the informal sector economy presented in chapter in chapter four. For practical purposes, this chapter is limited to an examination of linkages in three 'directions' or perspectives; capital transfer, product transfer and skill or technology diffusion between the formal and informal sectors. It does not pretend to present any development in the analytical techniques of measuring level or extent of linkages which would perhaps require a special study. The study of linkages not only demonstrates the extent of relationship between the subsectors of the national economy, but it also demonstrates the sources of vital inputs for informal sector activities and this has far-reaching implications for growth in production and employment in the informal sector. This chapter is based on the detailed interviews and the revisits. Part of the responses obtained from the interviews have been analysed in chapter six.

A. Linkages between the Formal and Informal Sectors

(i) Capital Transfer from one sector of the economy to another can be ascertained through the proportion of entrepreneurs who directly used formal sector financial sources in setting up and for running their enterprise. This has already been seen not to be significant (see chapter six). In addition, entrepreneurs were asked whether they have ever received, or tried to obtain any government or bank loans : only 8% and

13.4% of the entrepreneurs in the industrial and trading sectors have done so. In the industrial enterprises it is block manufacturers (58% of them) who have used capital from formal sector financial institutions. Most of the entrepreneurs in block manufacturing are already registered building contractors with the Central Region Administration, and as such, have access to resources including supplies of raw materials from the regional organization. Apart from the block manufacturers, there are a few other informal sector industrialists and repairers who have ever received loans (4). In addition to the direct access to the formal sector, it will be seen that some entrepreneurs in all sampled enterprises were employed in formal sector institutions before entering the informal sector and must have saved some money with which they started their present enterprises.

(ii) Skill transfer : Hakam's study indicates that flows of skilled labour between the formal and informal sectors exist in both directions. A similar pattern will be observed in the detailed interviews sample with respect to the job mobility pattern of entrepreneurs (chapter 8) and industrial apprentices (chapter 9). In addition, direct linkages between informal sector industrial entrepreneurs and formal sector training institutions show that only about 4% and 2% of all industrial entrepreneurs have ever received any form of technical advice and technical training respectively from the formal sector (5). Of the 30 industrial entrepreneurs who have ever received any advice or training, 10 (33%) of them are from the large centre alone. Thus formal sector institutions offering technical training and advice have not

had a significant impact on informal sector industries in the central region, but we shall return to this later.

(iii) Product transfer : Product transfer refers to the sources of raw material inputs and sales outlets for informal sector enterprises. Direct purchases from formal sector institutions account for only about 22% of all purchases in the industrial sector (6). The very nature of small-scale enterprises explains the low level of linkages. They are unable to buy directly from the large-scale commercial firms, partly because most often they are unable to buy in bulk and thus cannot keep stock against periods of shortages. It is also due to the fact that in general, small enterprises operate at low capacity. It is because of these two main factors that much of the trade that should have existed between informal and formal sector industries is being controlled by agents and middlemen.

Another dimension of product transfer is the sale of informal sector products to formal sector institutions (7). On the whole, the market area of informal sector industries is very local indeed. 89% of all goods and services produced by the enterprises are sold in the selected centres. A very insignificant proportion is sold to customers outside the centres. However, about 76% of all goods and services from the sector are sold to the general public, while direct sales to formal sector institutions account for only 2.3% of the main customers of all the industrial enterprises. Much of this sale is made to educational institutions - schools and colleges - in the centres. A greater proportion of all industrial enterprises (87%) do not sell anything to the

formal sector at all. However, this proportion is largest in the medium-sized centres and lowest in the large centre (table 7.1). Sales to schools and colleges constitute the largest proportion of all transactions with the formal sector. Bakers and carpenters are the most important enterprises in these sales. Transactions with modern medium and large-scale enterprises located in the region are mainly in the form of repair services by auto, electrical and electronic repair units, particularly those located in the large centre.

The low level of transactions with the formal sector may be ascribed to two factors : First, most informal sector enterprises, particularly the petty fabricators, produce goods for final consumption, mostly for the "ordinary" customers or general public, and do not produce intermediate goods which can be used as inputs by modern industry. In addition, and related to the above, even if informal sector enterprises produce intermediate goods, technological differences with the modern or formal sector may make informal sector products unsuitable for use in modern sector industry for their products may not satisfy the specifications and quality requirements of enterprises in the modern sector.

B. Informal Sector - Agricultural sector linkages

Linkages between informal sector enterprises and the rural or agricultural sector are mainly in the form of transfers of products from one sector to another, and also some cash flow exists, particularly from the agricultural to the informal sector. In a study of Northern Nigeria by Remy and Weeks (Remy and Weeks, 1973), significant forward and backward linkages

Table 7.1 Sale of Goods and Services by Informal Sector
Industrial enterprises to Formal sector
organisations

Sales to formal sector organis- ations	Proportion in Centres			
	Large	Medium	Small	All Centres
1. Schools and Colleges	10.8 (19)	4.2 (9)	2.9 (6)	5.5
2. Large industry	3.4 (4)	0.5 (1)	4.3 (9)	2.7
3. Other large firms	2.3 (4)	0.5 (1)	1.9 (4)	1.5
4. Govt. organisation	4.5 (8)	0.9 (2)	2.4 (5)	0.8
5. Others	2.3 (4)	-	0.5 (1)	86.9
6. None	76.7 (135)	93.9 (199)	87.9 (182)	595
7. Total S.S.	176	212	207	

* Actual frequencies in brackets.

Source : Authors Survey 1977/78.

between the agricultural and rural non-farm sectors were found to exist. Liedholm (1973) has also reviewed studies in the rural non-farm sector in Africa and has pointed out the importance in employment generated by the non-farm sector and its linkages with the rural economy as a whole. Though our study focuses on urban centres, almost all the small centres selected can be described as rural service centres whose links with the rural sector cannot be overestimated.

(i) Product flows : Direct purchases from farmers constitute less than 2% (ie 1.8%) of all the industrial enterprises which obtain much of their material inputs from the agricultural sector (8). On the other hand, a very insignificant proportion of all industrial enterprises (i.e. 0.2%) make direct sales to farmers (9).

(ii) Capital flow : Previous employment in the agricultural related activities by entrepreneurs means that part of the capital for starting and operating businesses must have originated from the agricultural sector. About 21% and 7% of all entrepreneurs in the industrial sector and trading (and services) sectors, respectively, were previously farmers or did part-time farming (see chapter 8). In addition, the extent of the indirect impact of the rural sector in financing small businesses has been noted (in chapter six). Apart from this, the agricultural sector constitutes the main source of secondary occupation or business diversification for all sampled entrepreneurs (see chapter 8). Part of the proceeds from farming activities are used to run or operate and possibly to expand businesses in the informal sector.

C. Linkages within the Informal Sector

Apart from the transfer of capital from one informal sector activity to another through changes in occupation or business diversification within the informal sector as a whole, there are no other significant relationships between individual enterprises. In the case of the industrial enterprises, for instance, subcontracting or work sharing is not significantly developed : only about 19% of all the sampled enterprises receive or give work to other artisans when necessary. Each entrepreneur tries to "capture" as much work for himself as possible. In addition, and perhaps very typical of the organization of informal sector enterprises, only about 14% of all industrial entrepreneurs share tools and equipment with fellow artisans. As will be seen later, a significant proportion of all artisans do not want to share government supplied equipment if provided. These characteristics indicate that competition rather than co-operation exists among the informal sector entrepreneurs.

Thus, viewing the whole issue of linkages as an extension of inputs, one would observe weak intrasectoral linkages within the informal sector. The strongest area of linkage is in capital transfer. Intersectoral linkages with the formal sector is also weakly developed, but this is largely due to the operating characteristics of the informal sector enterprises (i.e. small-scale operation, work to order and non-standardised products for purely local markets). However, a significant indirect impact of the formal sector is observed in the form of capital and skill transfers to the informal sector. Thus for the entrepreneurs in the informal sector

to avail themselves of a wide range of opportunities and resources the channels of linkages between them and other sectors of the economy have to be exploited. This has very significant implications for the survival and growth of enterprises in the informal sector economy.

A major factor necessary for the exploitation of these linkage channels to the informal sector economy as a whole is entrepreneurship in the sector. Chapter eight describes the main characteristics of the entrepreneurs covered during the detailed interviews and revisits.

NOTES

1. Aryee found employment of skilled labour force to be positively and significantly related to sales to the formal sector; secondly, on the average those enterprises which sell something to the formal sector institutions employ more people per enterprise than those who sell nothing. The proportion of sale made to the modern sector is also found to be related to quality (measured in terms of the number of skilled employees).
2. Backward linkages were measured as direct purchases of raw materials used by informal sector enterprises, while forward linkages were the "amount" of direct sales by informal sector manufacturing to formal sector enterprises.
3. Only 9.4% of all informal intermediate inputs are purchased directly from the formal sector (defined to include not only manufacturing but also commercial and other trading enterprises as well as State institutions and authorities). In terms of backward linkages, he found that carpet weaving and fitting enterprises have the highest backward linkages with formal sector enterprises, followed by footwear, metal working, smithing, tailoring, wood carving and cane weaving.

4. The industrial entrepreneurs include : 16% of the carpenter; 9% of the baker, 15% of operator in milling and 28% in weaving. The entrepreneurs in the repairing units are mainly in the electrical and electronic repairs (16%).
5. The 21 entrepreneurs who have ever received technical advice from the public sector are : 4 bakers, 7 carpenters, and one dressmaker; 2 tailors, 2 shoe repairers, one auto repairer, 2 smiths and a photographer. In terms of technical training, the recipients are : 2 carpenters, 3 auto repairers, 2 electrical and electronic repairers and one each from hairstyling and weaving enterprises.
6. In the final analysis, however, all inputs come from the formal sector institutions because they have the means to import supplies into the country. In the trading sector, about 37% of all supplies come directly from formal sector commercial networks.
7. This is equivalent to Aryee's forward linkage.
8. 4.8% of carpenters; 19.4% of food preparators; 25% of potters and 14.3% of weavers depend directly on farmers for their material inputs.
9. A large proportion of sales are made to ordinary customers (76.5%) . This may include a large number of farmers, particularly in the small centres.

CHAPTER EIGHT

CHARACTERISTICS OF THE ENTREPRENEURS

CHAPTER EIGHT

CHARACTERISTICS OF THE ENTREPRENEURS

The operating characteristics of the informal sector enterprises, particularly the sources of inputs, were discussed in chapter six. These discussions were brought together in the form of linkages existing between the informal sector enterprises and other sectors of the economy (national, regional and urban) in chapter seven. However, in these discussions, one major factor or variable in the operation of the whole informal sector economy was excluded. The factor is entrepreneurship and its exclusion was due to the fact that it needs to be discussed in detail and hence it requires a separate treatment.

This chapter discusses the characteristics of the entrepreneurs with the view to discussing those attributes of entrepreneurship which may shed light on their ability to operate their enterprises and to generate output and employment. These attributes may also act as barriers for prospective entrants into the informal sector. As has been noted in chapter four, information on the characteristics of the entrepreneurs are important in assessing the growth of informal sector enterprises. This vital information includes their sex, age, educational and training backgrounds, their previous job experience, job mobility and business diversification activities and plans. Throughout the discussion relationships would be drawn between these characteristics and the size category of the centres in which the entrepreneurs operate their enterprises.

A. Personal characteristics of the entrepreneurs

(i) Sex : The proportion of males and females in the sample gives an indication of which sex group dominates which enterprise in the informal sector as a whole. Throughout the selected centres, there is evidence of the domination of males in the informal industrial enterprises. 73% of all sampled enterprises are operated by men. This domination is much more prevalent in the medium-sized centres (78.3%) than in the large centre (66.7%) and small centres (70.8%).

Male domination prevails in all industrial enterprises except in the bakery industry (which traditionally is a woman's occupation in Ghana); food preparation; dressmaking; hair-styling and pottery. In these activities over 90% of all operators are women. In the petty trading and services sector, however, though males dominate, their domination is reduced : only 60% of the enterprises are controlled by men. However, like the industrial sector, the proportion of men operating trading and services enterprises is larger for the medium-sized centres (75%) than in the large centre (50%) and small centres (49%).

(ii) Age distribution

Age distribution of entrepreneurs offer insights into the likely trend of the age group of entrepreneurs entering the informal sector and its implication for self employment and labour absorption in the informal sector. About 16% of all entrepreneurs in the industrial sector are very young, less than 25 years old, while the majority of the entrepreneurs (52%) are between the ages of 26 and 40 years; after this age group the proportion of entrepreneurs in other age groups decrease. A similar age distribution is observed for

entrepreneurs in the trading sector.

In the industrial sector, while the age distribution pattern holds for all enterprises in general, one finds relatively "younger" entrepreneurs in the "modern" repair and petty fabricating enterprises, such as tailoring, dressmaking, hair-styling, photography, electrical and electronic repairs. The traditional crafts such as carpentry and smithing are operated by relatively "older" entrepreneurs (table 8.1). On a comparative basis, medium-sized centres contain on the average a larger proportion of "young" entrepreneurs than both the large and small centres. The opposite pattern is true for "older" entrepreneurs as well (table 8.1).

(iii) Levels of Education : The role of education in the success of business enterprises in general cannot be overestimated. This is particularly true for large and medium-scale enterprises which require advanced management techniques for the success of the enterprises. This requirement may not hold for small informal sector enterprises. Evidence from the Volta region of Ghana seems to suggest that education may not be an important entry requirement to apprenticeship training, and hence for entry into the informal sector, particularly into the old crafts such as smithing and carpentry. It may be an important requirement for those who wish to enter the "modern" crafts and repair enterprises (Ritter, 1976, p53ff).

In this study almost a fourth of the entrepreneurs covered in the detailed interviews in the industrial sector have never been to school. About half of them have had up to 10 years of elementary education, although only 13% have had post middle school education (ie. over 10 years elementary education).

Table 8.1 Types of Industrial Enterprises and Age Distribution of Entrepreneurs

Type of Enterprise	Percentage of Entrepreneurs and their Age Distribution						
	15-20	21-25	26-30	31-40	41-50	51-60	60+
Bakery	-	1.4	7.3	36.7	20.5	20.5	10.2 2.9
Carpentry	-	3.2	30.6	41.9	11.2	4.8	1.6 6.4
Dressmaking	3.3	27.1	38.9	20.3	1.6	-	- 8.4
Tailoring	2.4	29.0	34.6	13.7	7.2	3.2	- 9.6
Metal work	-	-	19.2	12.0	34.6	11.5	7.6 3.8
Shoe repairs	3.8	13.4	36.5	28.8	7.6	5.7	- 3.8
Watch repairs	2.5	-	13.3	53.3	26.6	6.6	- -
Auto repairs	-	4.7	31.7	41.2	14.2	-	- 7.9
Electrical repairs	-	16.7	28.0	32.0	8.0	4.0	- 12.0
Smithing	8.3	-	16.6	16.6	33.3	25.0	- -
Food Preparation	-	6.4	19.3	45.1	16.1	6.4	- 6.4
Milling	7.6	7.6	23.0	23.0	-	38.4	- -
Photography	-	10	40	30	0	10	- 10
Hairstyling	-	33.3	66.6	-	-	-	- -
Weaving	-	28.5	14.2	28.5	28.5	-	- -
Pottery	-	-	-	50	50	-	- -
Rubber Processing	-	50	-	50	-	-	- -
Miscellaneous	-	50	-	50	-	-	- -
Column Total*	1.5 (9)	13.7 (82)	28.5 (169)	29.1 (174)	12.2 (73)	6.7 (40)	1.6 (8) 6.3 (38)

* Actual frequencies in brackets.

These include Technical, Secondary schools, Commercial and University education. This compares more favourably with the petty trading and services enterprises where 41% of all entrepreneurs have never been to school, 45% up to middle school or 10 years of schooling, and only 11% have had post middle school education. Table 8.2 indicates that it entrepreneurs in the food preparations, bakery, shoe repairing, metal works and pottery, most of whom have never been to schools.

The few entrepreneurs who have had some form of post middle schooling are found in such enterprises as dress making, cement block manufacturing, electrical and electronic repairs. Table 8.3 shows that a larger proportion of the older entrepreneurs have either no formal education at all or have attained at best fewer years of schooling than the comparatively 'younger' entrepreneurs. A similar pattern of the relationship between age and educational level was observed by Aryee in Kumasi, Ghana (Aryee 1976 p 5-6).

Also, there seems to be no significant association between the educational attainment of the entrepreneurs and the period during which their enterprises were set up. A slightly greater proportion of entrepreneurs who operate enterprises set up after 1970 have attained post-middle school education than those which were established earlier than 1970. In the case of the trading and services sector this pattern is not so apparent.

(iv) Technical training

Most of the enumerated industrial enterprises are not easy to enter because the entrepreneurs have to acquire skills in a particular trade to be able to set up their own enterprises. The most prevalent form or mode of skill acquisition in the

Table 8.2 Percentage Distribution of Entrepreneurs in Informal Sector industries and levels of Education

Type of industries	Level of Education						
	None	Primary	Middle	Technical	Second.	Vocat.	Univ. Total S.S.
1. Bakery	45.6	17.6	29.4	-	2.9	2.9	- 11.4 (68)
2. Block making	8.3	8.3	50	-	33.3	-	- 2.0 (12)
3. Carpentry	27.4	19.4	48.4	4.8	-	-	- 10.4 (62)
4. Dressmaking	5.1	3.4	33.9	-	3.4	54.2	- 9.9 (59)
5. Tailoring	15.5	15.4	65.9	-	1.6	1.6	10.7(123)
6. Metal works	30.8	26.9	38.5	3.8	-	-	- 4.4 (26)
7. Shoe repairs	34.6	19.2	46.2	-	-	-	- 8.7 (52)
8. Watch repairs	6.7	-	86.7	-	-	6.7	- 2.5 (15)
9. Auto repairs	20.6	12.7	60.3	6.3	-	-	- 10.6 (63)
10. Electrical repairs	-	-	48.0	40.0	8.0	-	4.0 4.2 (25)
11. Smithing	16.7	50	25	8.3	-	-	- 2.0 (12)
12. Food Prep.	58.1	19.4	22.6	-	-	-	- 5.2 (31)
13. Milling	7.7	15.4	61.5	-	7.7	7.7	- 2.2 (13)
14. Photography	-	10	80	-	-	10	- 1.7 (10)
15. Hair styling	-	-	83.3	-	-	16.7	- 1.0 (6)
16. Printing	-	-	100	-	-	-	- 0.2 (1)
17. Weaving	14.3	14.3	71.4	-	-	-	- 1.2 (7)
18. Pottery	100	-	-	-	-	-	- 0.7 (4)
19. Rubber processing	50	-	50	-	-	-	- 0.3 (2)
20. Miscellaneous	25	25	25	25	-	-	- 0.7 (4)
Column Total*	22.5 (134)	14.8 (88)	49.2 (293)			12.3 (73)	100 (595)

* Frequencies in brackets. Source : Authors Survey

Table 8.3 Age Distribution of Entrepreneurs and their Levels of Education

Level of Education	Age Distribution							
	15-20	21-25	26-30	31-40	41-50	51-60	61+	No Response Total
None	11.1	13.1	15.4	27.0	27.4	35.0	60	23.7 22.5
Primary School	33.3	6.1	12.4	17.8	19.2	27.5	20	2.6 14.8
Middle School	44.4	58.5	56.8	46.0	43.8	30.0	10	50.6 49.2
Technical College	-	3.7	4.7	2.9	2.7	2.5	-	2.6 2.2
Secondary School	-	1.2	0.6	2.3	2.7	5.0	-	7.9 2.2
Vocational School	-	14.6	10.1	3.4	1.4	-	-	10.5 6.7
University	-	-	-	1.4	-	-	-	- 0.2
Others	11.1	2.4	-	0.6	1.4	-	10	- 1.0
S Total *	1.5 (9)	13.8 (82)	28.4 (169)	29.2 (174)	12.3 (73)	6.7 (40)	1.6 (8)	6.4 (38) 100 (595)

* Actual frequencies in brackets.

Source : Authors survey of Central Region 1977/78.

informal industrial enterprises is the traditional apprenticeship system (which will be described in the next chapter). About 69% of all sampled industrial entrepreneurs received their training through this system. Table 8.4 shows that it is the common form of training acquired by entrepreneurs in all age groups though from the table one notices a slight decrease in the proportion of industrial entrepreneurs who received apprenticeship training with increasing age. The table also suggests that training in formal sector institutions (technical schools, elementary continuation and some of the vocational training schemes) has not played a major part in the training of entrepreneurs above the age of 50 years. In general, parents, close relatives constitutes 70% of all sponsors in the apprenticeship system. Only a few of the sampled industrial entrepreneurs sponsored themselves or were sponsored by friends and other benefactors.

(B) JOB PATTERNS OF ENTREPRENEURS.

The discussion of job pattern would centre around an examination of the previous work experience and the entrepreneurs present major economic activities. An analysis of previous work experience could point to problems faced by would-be craftsman or business operators once they have acquired their skill training. It also indicates the pattern of job modility of entrepreneurs from other sectors to the informal sector and vice versa, which, as has been discussed in the last chapter, has implication for Capital and Skill transfers from other sectors to the informal sector.

TABLE 8.4 Age distribution of Entrepreneurs and type of training in Informal sector industries

Type of Training	Age Distribution							
	15-20	21-25	26-30	31-40	41-50	51-60	60+	NR
None	-	1.2	7.1	19.5	15.1	27.5	30.0	5.3
Apprenticeship	77.8	74.4	71.6	64.9	65.8	62.5	50.0	73.7
Vocational	11.1	7.3	7.7	3.4	1.4	1.4	-	10.5
Technical	11.1	11.0	8.9	6.9	6.8	-	-	7.9
Other formal (elementary Continuation, Business schools Teacher training	-	3.6	3.0	0	4.1	-	-	-
Others	-	2.4	1.8	5.2	6.8	10.0	20	2.6
5% S. Total	1.5 (9)	13.8 (82)	28.4 (169)	29.2 (174)	12.3 (73)	6.7 (40)	1.6 (10)	6.4 (38)
								100% (595)

* Actual frequencies in brackets

Source: Author's survey of Central region: Ghana 1977/78

(i) Previous work Experience

Most entrepreneurs in the informal sector, particularly those in the industrial sector, worked either before or after skill training or both before setting up their present enterprises. In most cases they work to acquire the experience and the confidence needed to set up and operate their own enterprises or they work to build up goodwill for their future businesses or enterprises while working in the wage sector in both the public and private sectors. Others work to build up their savings to purchase the necessary tools, equipments and stock with which to start their businesses. In this study 53% of the industrial entrepreneurs worked for a year or two before setting up their present businesses; 15% worked for three to five years; 8% - five to ten years and 7% worked for over ten years. Tables 8.5 and 8.6 demonstrate the variety of work done by the entrepreneurs before their present jobs. It also demonstrates the extent of movement or mobility of entrepreneurs from one activity to another in all sectors of the economy.

In both the industrial or the trading (and services) sectors, a significant proportion of the entrepreneurs or operators were previously formers. Petty trading and wage employment each previously employed about 15% of all the entrepreneurs in the industrial sector. It is also interesting to note the movement of industrial entrepreneurs into enterprises in the trading and services sector: About 11% of the operators in the trading and services sectors at the time of the survey were previously artisans or were engaged in some form of informal industrial activities (Table 8.6). The proportion of entrepreneurs in the industrial activities for whom artisan activities

TABLE 8.5 % distribution of industrial entrepreneurs and
their main previous and present occupations *

Activity	Col.1 % Previous main occupation	Col.2 % Present main occupation	
1 Craft	19 (113)	60.9 (363)	} Informal manufacturing
2 Bakery	4.9 (29)	9.2 (55)	
3 Food preparations	1.8 (11)	4.2 (25)	
4 Trading	13.3 (79)	4.4 (26)	
5 Contracting	0.8 (5)	1.7 (10)	
6 Farming	20.6 (123)	1.0 (6)	
7 Teaching	3.2 (19)	0.5 (3)	
8 Civil service	4.5 (27)	0.3 (2)	
9 Management	0.7 (4)	2.9 (17)	
10 Other Combinations	8 (48)	14 (83)	
11 Labourers	7.0 (42)	-	
12 None	16.2 (96)	1.1 (6)	
TOTAL	100% (595)	100% (595)	

* Actual frequencies in brackets

Source: Author's survey

TABLE 8.6 % distribution of entrepreneurs in the trading
(and service) sector and their main previous
and present occupations

Occupation or activity	Previous main occupation	Present main occupation
1 Artisan (craft)	10.9 (73)	1.0 (7)
2 Farming	6.7 (73)	0.9 (6)
3 Trading	49.9 (335)	91.1 (611)
4 Teaching	4.0 (27)	0.6 (4)
5 Contracting	0.1 (1)	0.3 (2)
6 Civil service	2.4 (16)	0.7 (5)
7 Others	16.1 (108)	4.8 (32)
8 None	9.8 (66)	0.6 (4)
TOTAL	100 (671)	100 (671)

Source: Author's survey 1977/78

were their previous main occupation decreases with the size of centres - being 18%, 26% and 30% for the large, medium and small-sized centres. This suggests that on comparative basis the proportion of industrial entrepreneurs who were previously fully committed to their enterprises as their main occupation is inversely related to the size range of centres.

(ii) Present main occupation of the entrepreneurs.

To ascertain the size and proportion of entrepreneurs who can be described as committed to their enterprises, their present main occupations were recorded. In the industrial sector 74% of all entrepreneurs consider their present enterprises their main business preoccupation while only 26% of them operate their respective enterprises as secondary occupations.

Unlike the main previous occupations, the proportion of industrial entrepreneurs for whom participation in informal industrial activities constitutes the main present occupation vary directly with the size of centres. The proportions are 81%, 73% and 70% for the large, medium sized and small centres respectively (Table 8.7).

In the trading (and services) sector, however, 91% of all entrepreneurs operate their enterprises as their main business occupation. The proportion of such entrepreneurs is larger for those in the medium sized centres than those operating in the large and small centres. It is also worth noting that prior to their present occupations or employment, a greater proportion of entrepreneurs in the medium-sized and small centres than in the large centre were already operating various trading and services enterprises (Table 8.8). On the other hand, about a quarter of the entrepreneurs operating trading (and services)

Table 8.7 Proportion of entrepreneurs in informal sector industries and their main previous and present occupations - in large, medium and small centres

Activity	<u>Previous main occupation</u>			<u>Present main occupation</u>		
	Large	centre medium	small	Large	centre medium	small
1 Craft	9.1(16)	20.8(44)	24.2(50)	(57.4(101)	63.7(135)	60.9(126)
2 Bakery	7.4(13)	5.7(12)	1.9(4)	{ 15.9(28)	6.1(13)	6.8(14)
3 Food prep.	1.1(2)	0.5(1)	4.3(9)	{ 8.0(14)	2.8(6)	2.4(5)
4 Trading	10.2(18)	12.3(26)	3.4(7)	1.7(3)	2.8(6)	8.2(17)
5 Contracting	1.7(3)	0.5(1)	0.5(1)	5.1(9)	-	0.5(1)
6 Farming	5.7(10)	33.0(70)	21.7(45)	-	0.9(2)	1.9(4)
7 Teaching	0.6(1)	5.2(11)	3.4(7)	-	1.4(3)	-
8 Civil service	8.0(14)	1.9(4)	4.3(9)	0.6(1)	-	0.5(1)
9 Management	2.3(4)	-	-	8.0(14)	0.9(2)	0.5(1)
10 Other combinations	3.4(6)	12.2(26)	7.2(15)	2.3(4)	20.7(44)	27.4(36)
11 Labourers	12.5(22)	3.3(7)	6.3(13)	-	-	-
12 None	38.1(67)	4.7(10)	9.2(19)	1.2(2)	0.5(1)	1.0(2)
13 TOTAL						

* Actual frequencies in brackets

Source: Author's survey 1977/78

TABLE 8.8 proportion of entrepreneurs in the trading (and service) sector :
main previous and present occupations - range of centres

Activity	<u>Previous main occupation</u>			<u>Present main occupation</u>		
	Large	medium	small	large	medium	small
Artisan	11.2 (19)	9.0 (24)	12.9 (30)	1.2 (2)	1.1 (3)	0.9 (2)
Farming	2.9 (5)	7.8 (21)	8.2 (19)	-	0.4 (1)	2.1 (5)
Trading	39.4 (67)	53.4 (143)	53.6 (125)	94.7 (161)	95.9 (257)	82.8 (193)
Teaching	1.8 (3)	3.4 (9)	6.4 (15)	-	-	1.7 (4)
Contracting	-	-	0.4 (1)	-	-	0.9 (2)
Civil service	2.9 (5)	4.1 (11)	-	-	-	-
Others	26.5 (28)	17.2 (46)	14.6 (34)	3.5 (6)	1.9 (5)	10.1 (26)
None	25.3 (43)	5.2 (14)	3.9 (9)	6.6 (1)	0.7 (2)	0.4 (1)
TOTAL	100 (170)	100 (268)	100 (233)	100 (170)	100 (268)	100 (233)

Source: Author's survey

enterprises in the large centre were, prior to their present business interests or concerns, not employed or engaged in the informal sector at all. It would therefore seem that a greater proportion of new entrants in the informal sector trading and services activities are located in the large rather than in the medium and small centres.

(iii) Other business interests.

Apart from their main occupations some of the operators or entrepreneurs are engaged in other economic activities. They have interests in such activities in the centres in which they operate and the surrounding towns and villages. Others have invested in activities outside the Central region, most often in their home towns. Tables 8.9 and 8.10 show the extent of secondary occupations and investments by entrepreneurs in both the industrial, trading (and services) sectors. 51% of operators in the industrial sector have investments or secondary occupations in the selected centres and about 20% of them in their surrounding towns and villages, respectively. This compares with 41% and 15% of the trading (and services) entrepreneurs who have similar investments respectively. The proportion of industrial entrepreneurs with secondary jobs and investments is larger in the medium sized centres (68%) than in the small centres (59%) and large centres (11%). The corresponding proportions for entrepreneurs in the trading (and services) enterprises are 53%, 32% and 3% for medium, small and large centres respectively.

This pattern seems to suggest that a greater proportion of entrepreneurs in the two sectors of informal sector economy studied in the large centres are much more "employed" in their respective activities than those in the medium sized and small

TABLE 8.9 Proportion of Informal industrial entrepreneurs
and their investments in the selected centres
and districts

Centres	Entrepreneurs with % of investments in the selected centres	Of Entrepreneurs % with investments in district of selected centres	Size of sample
Cape Coast	10.9 (9)	6.1 (5)	82
Winneba	54.4 (25)	6.5 (3)	46
Swedru	80.6 (58)	25 (18)	72
Salt Pond	12.5 (3)	4.2 (1)	24
Elmina	54.5 (18)	9.1 (3)	33
Fosu	83 (20)	45.8 (11)	24
Asikuma	79.3 (23)	65.5 (19)	29
Komendu	50.0 (7)	7.1 (1)	14
Mankesim	75 (12)	12.5 (2)	16
All centres	51.5 (175)	19.52 (66)	340

Actual frequencies in brackets

Source : Author's survey (Revisits) 1978

TABLE 8.10 Proportion of informal trading and services
sector entrepreneurs and their investments
in selected centres and districts

Centres	% with investments in selected centres	% with investments in districts of selected centres	Size of sample
Cape coast	30 (21)	2.8 (2)	70
Winneba	48 (30)	0	62
Swedru	54.8 (46)	34.5 (29)	84
Salt Pond	0	0	23
Elmina	37 (13)	8.6 (3)	35
Fosu	38.9 (7)	22.2 (4)	18
Asikuma	69.2 (9)	53.8 (7)	13
Komendu	30 (3)	20 (2)	10
Mankesim	33.3 (3)	11.1 (1)	7
All centres	40.7 (132)	9.5 (48)	324

Actual frequencies in brackets

Source: Author's survey

centres. Also it suggests that opportunities for "fuller employment" in a single informal sector occupation may be greater in the large than in the other centres. This directly or indirectly may be related to the broader range of opportunities that may exist for small scale activities in the large centre compared with other size categories of centres.

Compared with investments in the selected centres, less than a quarter of entrepreneurs in the selected centres have any form of business interests in the surrounding towns and villages. However, a larger proportion of entrepreneurs in the small centres have some form of investments or business interest in the surrounding areas than those in the large and medium sized centres. In the industrial sector as a whole, therefore only 24%, 16% and zero per cent of entrepreneurs in the small, medium sized and large centres have investments outside the selected centres. The corresponding figures for entrepreneurs in the trading (and services) sectors are: 20%, 16% and 3% respectively.

The predominant form of secondary investments or occupation are those related to the primary sector - fishing and farming (Tables 8.11 to 8.14). This is particularly the case in the investments in the surrounding towns and villages of their respective centres. Tables 8.12 and 8.14 show that about 75% and 67% of entrepreneurs in the industrial trading (and services) sectors centres respectively who have any business interests in areas outside the selected centres and in farming and fishing. Within the selected centres, however, the main form of investments are in petty trading. 35% of all industrial entrepreneurs with other business interests in the centres have one or two retail shops. In addition, 11% of the entrepreneurs in the trading

Table 8.11 Proportion of industrial entrepreneurs with other business interests
in the 9 selected centres

Type of Activities	Centres								
	Cape Coast	Winneba	Swedru	Salt pond	Elmina	Fosu	Asikuma	Kumenda	Mankesim Total
1. Petty trading	33.3 (3)	17.4 (4)	41.4 (24)	66.6 (2)	44.4 (8)	33.3 (6)	26.1 (6)	28.6 (2)	58 (7) 34.6 (62)
2. Farming/ Fishing	33.3 (3)	82.6 (19)	34.5 (20)	33.3 (1)	22.2 (4)	55.6 (10)	52.2 (12)	71.4 (5)	16.7 (2) 42.5 (76)
3. Contracting	11.1 (1)	-	-	-	-	-	-	16.7 (2)	1.8 (3)
4. Transport	11.1 (1)	-	6.9 (4)	-	11.1 (2)	11.1 (2)	4.4 (1)	-	13.4 (24)
5. Other artisanal	11.1 (1)	-	17.2 (10)	-	5.6 (1)	11.1 (2)	13.1 (3)	-	8.4 (1) 5 (9)
6. Services	-	-	12.1 (7)	-	11.1 (2)	-	-	-	2.8 (5)
7. Miscellaneous	-	-	5.2 (3)	-	5.6 (1)	-	4.4 (1)	-	100 (179)
Total	5%	14%	32.4%	1.7%	10%	11.2%	12.8%	3.9%	6.7%
Sample Size	(9)	(25)	(58)	(3)	(18)	(20)	(23)	(7)	(12)

Actual frequencies in brackets.

Source : Revisits (detailed interviews) 1978.

Table 8.12. Proportion of industrial entrepreneurs and their investments in districts of selected centres

Type of Activity	Centres							
	Cape Coast	Winneba	Swedru	Salt pond	Elmina	Fosu	Asikuma	Kumenda Mankesim Total
1. Trading	42.9 (3)	-	3		33.3 (1)			10.8 (7)
2. Farming	57.1 (4)	100 (3)		100 (1)	66.7 (2)	100 (10)	52.9 (9)	100 (2)
3. Artisans	-	-	-	-	-	-	17.6 (3)	-
4. Transport- ation	-	-	-	-	-	-	11.8 (2)	-
5. Contract- ing	28.6 (2)	-	-	-	-	-	17.6 (3)	-
Total Sample Size	10.8% (7)	4.6% (3)	32.3% (21)	1.5% (1)	3% (2)	15.4% (10)	26.2% (17)	1.5% (1)
								3% (2)
								100 (65)

Actual frequencies in brackets

Source : Revisits (detailed interviews), 1978.

Table 8.13 Proportion of entrepreneurs in the trading (and services) sector and their
Secondary occupation or investments

Type of Activities	Centres									
	Cape Coast	Winneba	Swedru	Pond	Elmina	Fosu	Asikuma	Komenda	Mankesim	Total
1. Petty Trading	23.8 (5)	3.3 (1)	-	-	23.1 (3)	14.3 (1)	22.2 (2)	33.3 (1)	33.3 (1)	10.6 (14)
2. Farming/ Fishing	38.1 (8)	53.3 (16)	60.9 (28)	-	46.2 (6)	42.9 (3)	22.2 (2)	33.3 (1)	33.3 (1)	49.2 (65)
3. Contract- ing	-	-	-	-	-	-	-	33.3 (1)	33.3 (1)	0.8 (1)
4. Transport Services	9.5 (2)	16.7 (5)	4.4 (2)	-	7.7 (1)	-	11.1 (1)	-	-	7.6 (10)
5. Other Artisans	23.8 (5)	20 (6)	26.1 (12)	-	7.7 (1)	14.3 (1)	33.3 (3)	-	-	21.2 (28)
6. Services	-	-	-	-	15.4 (2)	14.3 (1)	-	-	-	2.3 (3)
7. Miscellan- eous	4.8 (1)	6.7 (2)	13 (6)	-	-	14.3 (1)	11.1 (1)	-	-	8.3 (11)
Total Sample Size	21	30	46	-	13	7	9	3	3	132

Actual frequencies in brackets

Source : Author survey (Revisits (detailed survey), 1978.

Table 8.14 Proportion of entrepreneurs in the trading (and services) Sector and the types
of Investments in districts of selected centres

Type of Activity	Centres									
	Cape Coast	Winneba	Swedru	Salt Pond	Elmina	Fosu	Asikuma	Komenda	Mankesim	Total
1. Trading	-	-	3.4 (1)	-	-	25 (1)	14.3 (1)	-	-	6.3
2. Farming	50 (1)	-	-	-	-	50 (2)	57.1 (4)	50 (1)	100 (1)	66.7
3. Other Artisan	-	-	3.4 (1)	-	66.7 (2)	-	28.6 (2)	-	-	10.4
4. Transport Services	-	-	3.4 (1)	-	-	25 (1)	-	50 (1)	-	6.3
5. Contracting	50 (1)	-	-	-	-	-	-	-	-	2.0
6. Miscell.	-	-	10.3 (3)	-	33.3 (1)	-	-	-	-	8.3
Total Sample Size	2	0	29	-	3	4	7	2	1	48

Source : Authors survey : Revisits (detailed survey), 1978

(and services) sectors have more than one extra shop, most of which are managed by wives and close relatives of the entrepreneurs whose capital have gone into such investments.

Business diversification indicates the extent to which entrepreneurial efforts and resources are spread over a number of investments and this is a source of the strength and weakness for the informal sector as a whole. Spreading one's efforts and resources over a number of activities affects one's ability to manage adequately one main occupation or enterprise, and this could retard the growth process of that enterprise with direct and indirect implications for employment generation. On the other hand, business diversification could also be a safeguard against the downward trends in the "business cycle" for informal sector activities. An entrepreneur can quickly divert his resources and effort to other investments when trade slumps in one activity or when income opportunities become available in others. Also business diversification is, and can be, one of the major sources of capital for operating major or main enterprises. Information obtained from this study (revisits of detailed interviews) points to this. Some of the entrepreneurs regard business diversification as a profitable venture. 24% and 44% of all respondents in the industrial or trading (and services) activities who have other investments consider them to be profitable investments. Part of the turn over from other investments are spent on their main enterprises. In addition, business diversification is a means of creating further employment in the informal, non-farm sector as a whole 92% of the respondents in the industrial sector who have other economic activities in the selected centres employ at least one person each in their secondary occupations.

SUMMARY.

In examining the characteristics of the entrepreneur in the sampled enterprises, one notes the predominance of the participation of males in the informal sector in the central region as a whole. 73% of all sampled entrepreneurs in the industrial sector and 60% of their counterparts in the trading and services activities are males.

Most of the entrepreneurs are fairly young. The dominant age group is the 26 to 40 years group to which at least 52% of all sampled industrial entrepreneurs belong. In the industrial sector a greater proportion of the "young" entrepreneurs are found in the more modern repairs and petty fabricating activities whereas the more "traditional" crafts such as "Carpentry" and "Smithing" are dominated by comparatively "older" entrepreneurs.

Almost a quarter of the sampled entrepreneurs in the industrial activities have never been to school. This proportion, however, compares favourably with as many as 41% of entrepreneurs in the trading and services sectors who have never had any formal education. 49% and 45% of operators in industrial, trading and services enterprises have completed middle schools (10 year elementary education) whilst only about 13% and 11% of the operators in the two sectors respectively have had any form of post middle school education. The "young" entrepreneurs have comparatively better education than the "older" entrepreneurs most of whom have no schooling at all or at best only a few years in the primary school (i.e. 6 years system). In the industrial sector, a greater proportion of entrepreneurs who entered business after 1970 have had post-middle school education.

For most of the entrepreneurs in the industrial sector, the traditional apprenticeship system is the means whereby most of

them were trained particularly for the "older" entrepreneurs for whom training in the formal sector institutions have had little part to play in their skill acquisition.

There is evidence of job changes among the sampled entrepreneurs. A larger proportion of the entrepreneurs in all categories of centres were previously engaged in other primary or main activities other than participation in the informal sector. However, once they have moved into the informal sector economy for a greater proportion of all entrepreneurs the informal sector becomes their main source of business activity or employment. The survey also shows the extent of business diversification or secondary and tertiary employment or investments in other activities. However much of such investments of activities are in farming and fishing (i.e. in the primary sector) and also partly in petty trading and services.

Business diversification, though may prevent an entrepreneur from concentrating his energies and resources on one enterprise and thus build it up and expand it could be the source of strength too for the informal sector. It involves capital generated from one activity to finance the day to day running and expanding other (mostly the main enterprise) enterprises. Above all, it leads to further employment generation in the sector.

This chapter thus has implication for planning strategy to promote the development of informal sector enterprises in the region. Using entrepreneurship as a variable in this strategy an administrator can devise criteria for selecting the "desired" entrepreneurs to benefit from any aid giving scheme. Again, a knowledge of entrepreneurs background points to areas of strength

and weaknesses with respect to the management and growth of the informal sector enterprises as a whole.

Having examined the characteristics of the "nuclei" around which the informal sector activities revolve, it is pertinent to examine the main "vehicles" through which the industrial entrepreneurs are trained before they set up their enterprises. This is the traditional apprenticeship system and it is the subject of the next chapter.

NOTES

1. Note that this information collected during the revisits as part of the detailed survey.
2. This does not mean the entrepreneurs are actually physically engaged in such activities. In some cases they may have provided the capital for the activities - particularly for fishing and large scale farming in cash crops.
3. We did not ascertain investment in land and building (i.e. real estate) which could be very substantial. The available evidence shows that African businessmen are interested in such investments. See Garlick in Ghana (1959), and in Kenya by Somerset and Harris (1971).

CHAPTER NINE

CHARACTERISTICS OF THE APPRENTICESHIP SYSTEM

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CHARACTERISTICS OF THE APPRENTICESHIP SYSTEM

It was noted in chapter six that in the informal industrial activities at least, apprentices form the bulk of the labour force in general and the bulk of the full-time employees. Their use is widespread in the central region and indeed in the whole of Ghana. It was also noted in chapter eight that at least 60% of all entrepreneurs in the industrial activities, particularly the "older" entrepreneurs, received their training through the traditional apprenticeship system. (1) This chapter examines further the apprenticeship system and some of its salient characteristics. This is because, in addition to providing the bulk of labour in the industrial enterprises, the traditional apprenticeship system provides the vehicle for training labour for all informal activities. Thus acquisition of training, largely through the apprenticeship system, provides both opportunities and constraints to entry into the informal sector. It can thus sustain the process of self employment and employment generation in general in the sector. Another source of interest in the apprenticeship system is the fact that most of today's apprentices would, all things being equal, become the master craftsmen in the future who would continue the process of labour recruitment and training. Thus the system is very vital to the survival of those activities in the informal sector which use it.

The traditional apprenticeship system in Africa has received some interest among researchers. Particularly relevant works include Callaway's work in Nigeria (Callaway, A., 1964, 1967),

King's work in Kenya (1974) and Peil's work in Ghana (1970) and other west African countries (Peil, no dates), and the I.L.O. sponsored study in Ghana (Ritter, 1976). This chapter is based partly on the literature and partly on the information obtained from the industrial entrepreneurs through the detailed interviews.

(i) The history of the apprenticeship system

The traditional apprenticeship system is essentially a system whereby a master craftsman or an artisan recruits apprentices as source of labour and also trains them on the job. So skills and techniques are acquired not through classroom tuition, but by learning to do things, for the luckier ones, under proper supervision and guidance of the master of the workshop himself.

The vast apprenticeship training system began as part of the wider education process in which the indigenous societies of the country passed on their cultural heritage from one generation to another. (2). The skills "owned" by a family were highly valued and in some cases secrets were valued, guarded and passed on from one generation to another. Learning a craft often began with personal service to the masters. Young boys would become house servants to close relatives, who would feed them and after some years of promising usefulness, would then gradually introduce them to the craft of the guardian (Callaway, 1964, p63). The duration of training was usually quite long - the learning period in fact stretching into a productive period, when the youths paid for their training by serving the masters. Generally the system widened from family to the clan, the clan to the tribe, until today, in response to the more progressive

enterprises, it is not uncommon to find intertribal relationships (Callaway, 1964, p64).

The changes in the apprenticeship system have kept pace with the transitions in society, the growth of the economy and the rate of urbanization. The development of foreign trade during this century has had a part to play in this change process, with the introduction of the money economy, improvements in communication and the enlargement of internal markets. As urban centres grew and the demand for more modern goods and amenities became stronger, crafts were diversified away from the more traditional ones such as smithing, weaving, pottery-making, leather work, etc., and a group of artisans arose. At the same time government services have expanded at all levels and these have set a pattern for on-the-job training which had its affects in shaping the contractual aspects for apprentices. The apprentice's contracts are normally not written when the apprentice is a close relative of the employer. But for non-relatives, a written contract is almost equal to the verbal one (Callaway, 1964 op.cit. p68). Apprentices are normally trained for a period of time, the duration of which is usually precise and clearly understood by both parties - the apprentice (with his sponsor) and the employers.

B. Characteristics of the apprenticeship system in the Central region

(i) Duration of apprentices' training

Results from the detailed interviews show that the duration of the apprenticeship varies with the type of skill being acquired. Most training periods last between a year and five years. It can be noticed from table 9.1 (in Appendix A) that

about 33% of all the industrial enterprises covered in the detailed interviews require one or two years. In particular, this is the case with dressmaking units and (industrial) service enterprises such as hair-styling, photography and watch repairing. Most activities (about 36%) need between three and five years training, particularly among auto and related repair units (76%); carpentry, which includes furniture making and joinery (60%), metal works and steel bending (50%), tailoring (43%) and electrical repairs (44%). There are only 21 enterprises, (ie. 3.5%) in which the duration of apprenticeship lasts more than 5 years.

Enterprises which do not normally use apprentices (namely, bakery, block manufacturing, milling, food preparation) do not generally have any training opportunities for apprentices (3).

There are relationships in proportionate terms between the duration of the apprenticeship training and the size category of centres. On the whole, a greater proportion of enterprises in the small centres require a shorter period of apprenticeship than those in the medium-sized and the large centres (table 9.2). In other words, the table suggests that the duration of apprenticeship seems to increase with the size category of centres. In some cases, the actual period of training and stay with the masters exceed the duration agreed upon in the contract. About 60% of all entrepreneurs reported that their apprentices do stay beyond the required period; about 179% of them stay for at least one or two more years, giving various reasons for staying. In some cases, apprentices or their sponsors are unable to pay the final fee or perform the final rites due to financial problems, so the apprentices have to work

for the master craftsman for some years to compensate for the outstanding fees. Some stay out of loyalty towards their masters and the desire for security; others stay to acquire some money to buy the tools and equipment needed to start one's own business, and at the same time acquire more on-the-job experience. Some even end up staying with the masters and working either as co-partners with them or working for them as skilled labour, or both. This is particularly so now that it is so difficult to get established independently, and most apprentices must find interim work in order to accumulate the necessary capital.

Table 9.2 Duration of apprenticeship in large, medium-sized and small centres

Centres	Duration				Total sample size
	None	1-2 yrs.	3-5 yrs.	6+ yrs.	
Large	67 (38.1)	21 (11.9)	74 (44.9)	9 (4.6)	176 (29.6)
Medium	66 (31.6)	68 (32.1)	74 (34.9)	3 (1.4)	212 (34.6)
Small	41 (19.1)	99 (47.8)	58 (28)	9 (4.4)	202 (33.9)
Total frequencies	169 (28.4)	188 (31.6)	211 (35.5)	21 (3.5)	595 (100)

* Percentage of respondents in brackets.

Source : Authors survey 1977/78.

(ii) Apprenticeship fees

A large number of apprentices are required to pay some fee, however token it may be. Generally a lump sum is paid to the master craftsman at the end of the training period, though normally the apprentices or their sponsors incur some expendit-

ure on initiation ceremonies. In a few cases, the masters even waive the terminal fee expected from the apprentices, and even offer them some tools to start their own businesses (I.L.O/JASPA, 1977, p11).

In this study it was found that apart from Komenda, a small centre, the proportion of entrepreneurs who charge apprenticeship fees decreases with the size category of centres (table 9.3). About 80%, 66% and 57% of the industrial entrepreneurs in the small, medium-sized and large centres respectively, require learning fees. (table 9.3). A similar variation has been shown to exist in Sierra Leone as well (Liedholm and Chuta, 1976, p46) (4). Liedholm and Chuta suggest that this variation may be traceable to a differing underlying pattern of demand for, and supply of apprentices in centres of different sizes. A chi-square test shows that in our study, there is a statistically significant association between the proportion of entrepreneurs charging or requiring training fees, and the size category of centres: (Appendix A) There are also differences in the amount charged by entrepreneurs in various trades or skills. In general, about 46% of the entrepreneurs charge between 50 and 150 cedis. These include entrepreneurs in carpentry (48%); dressmaking (35%); tailoring (55%); metal works (58%); auto repairs (52%). (see table 9.4. Appendix A for details).

On the whole, however, the training provided through the apprenticeship system is said to be far cheaper than that provided by formal sector training institutions (I.L.O/JASPA, 1977, Planungsgrupper Ritter, 1976, p52ff) (5). Further, those graduating from these training institutions are said to be better in theory, but they have very little practical knowledge to do

the job. Moreover, the bulk of such graduates are absorbed into formal sector wage employment rather than in self employment, whereas most of those trained in the informal sector are likely to remain either as self employed artisans or as co-partners with other artisans. In this sense, the informal sector plays a vital role in small-scale employment generation in the country as a whole. Another economic benefit of the apprenticeship system is that the apprentices' fees and labour enable the master craftsmen to capitalize their business, especially if in the long run the economic value of apprentices' labour exceeds the cost of shelter, food and pocket money (Planungsgrupper Rutter, 1976, p56).

Table 9.3 Percentage distribution of fees required by all Enterprises in small, medium-sized and large urban centres in Central region

Fees	Centres				Total No. of enterprises
	Large	Medium	Small	%	
1. None	42.6 (75)	33.5 (71)	19.8 (41)	31.4	187
2. 50	9.7 (17)	22.2 (47)	12.6 (26)	15.1	90
3. 50-100	28.4 (50)	13.2 (28)	29.0 (60)	23.2	138
4. 101-150	10.2 (18)	11.8 (25)	16.4 (34)	12.9	77 ==
5. 151-200	2.8 (5)	5.6 (11)	6.8 (14)	5.2	30
6. 200+	6.3 (11)	13.7 (30)	15.4 (32)	4.5	28
Total	100 (176)	100 (212)	100 (202)		

* Frequencies in brackets.

Source : Authors survey 1977/78.

(iii) Remuneration

One of the criticisms that is often advanced against small enterprises as a whole is that remunerations received by their workers are lower than the wages of workers in similar employment in the formal sector. In addition, it is said that workers in the informal sector work longer hours and have no social security cover compared to their counterparts in the formal sector. But what is often not stressed is that the informal sector enterprises offer opportunities for self employment and income in the future, for which sacrifices must be made now. In addition, apprentices everywhere in Ghana receive some form of "wages" from their master craftsmen either in kind, in cash or both (6). Such remunerations are meant to cover meals and transportation costs. In addition they receive income through tips for good services and they work extra hours and at weekends, the proceeds of which normally end up in the apprentices' pockets. (7). The system is flexible in so far as some masters raise their daily payment to their apprentices in accordance with their contribution to the "output" of their enterprise as the years of training received by the apprentices increase.

At the time of this study the entrepreneurs on average paid their apprentices just over three cedis (¢3) per week (8). while those who had already completed their apprenticeship (skilled workers) and were largely working with their former masters, received on average, four cedis (¢4) a week. (9).

(iv) Job pattern after apprenticeship

Once apprentices leave their masters, after going through the training and "graduation" ceremonies, they find themselves working on their own or with other artisans, or look for wage

employment in public or private sector organisations. In the selected centres, entrepreneurs were asked whether they kept track of their previous apprentices. Only about 8% of the industrial entrepreneurs could say what work their ex-apprentices were now doing or where they were. About 44% of the respondents said most of their apprentices set up their own enterprises; 35% worked either on their own or with other artisans, while 13% said that most of their former apprentices found wage employment in large-scale firms and public services.

C. Summary

The apprenticeship system is crucial to the survival and growth of the informal sector as a whole, particularly in the industrial (petty manufacturing and services enterprises) sector. It is an old system of training which is undergoing changes. Though we did not investigate the nature of such changes, it is quite possible that as young and educated entrepreneurs enter the sector, and when changes in technology of production and management are diffused into the sector, the apprenticeship system is likely to undergo change too.

The apprenticeship system is a cheap means of skill acquisition on the part of the apprentices, and also a cheap source of labour for the master craftsmen. The system needs upgrading and this should include a system whereby master craftsmen are able to effect improvement in the living conditions of their apprentices. It should also include a scheme to upgrade the skills acquired through intensive on-the-job training which may have to be supplemented by training in the theoretical aspects of their skills. In addition, it requires that the general level of education of the apprentices need to be upgraded

as well. Difficulties involved in setting up one's enterprise after training, which compel some apprentices to seek wage employment, does not auger well for self employment and growth in output and employment in the informal sector. These difficulties thus have implications for growth policies towards the informal sector.

Notes

1. The traditional apprenticeship system operates in all aspects of the informal sector economy, from retail trading through service activities and craft and small-scale industries. In petty trading, for instance, young helpers who are usually members of the immediate family or close relatives of the entrepreneurs, may help at market stalls or follow itinerant traders as load-carriers; they may sell an array of goods from street stalls in the late evenings. The apprenticeship system also prevails in the transport sector. A driver of a truck or lorry often has besides him a spare driver (a former apprentice, now licensed) and in the rear of the vehicle several apprentice drivers.

Similarly in the construction industry, contractors ranging from petty sand and gravel sub-contractors, through independent artisans (bricklayers or masons, carpenters, painters, electricians) all have apprentices.

However, our interest in this section is on apprentices in the craft and small-scale industries. This discussion is not based on a special study of the apprenticeship system; it is however, based on the existing literature supplemented by data about the training background of the entrepreneurs and their own apprentices.

2. The discussion draws on the study of the apprenticeship system in Nigeria by Archibald Callaway (1964).

3. In the case of bakeries, for instance, one often finds where baking has been a long standing activity with businesses being passed on from one generation to another. They operate with very simple equipment and the enterprises vary in size according to the number of ovens and their sizes, the frequency of baking and the systems of sales. Most of the workers in the very small enterprises are more or less family "helpers" in either the baking of bread or sales of bread. However, one often finds more modern medium-sized bakeries which differ significantly from the common type of poorly equipped small family businesses. They have paid employees and what may be described as "apprentices" not only in baking but sale of the products. Likewise the food preparation enterprises have either paid employees or "helpers". In the case of the block manufacturing enterprises, all workers are wage employees.
4. However, the variation observed in the selected centres in the central region is not as marked as that found in Sierra Leone, where 73% of the firms in the rural localities require learning fees, while only 13% of firms in the national capital, Freetown, required fees.
5. This, however, depends on the effectiveness of the education the apprentices have received. How seriously the master is involved in the training of his apprentices depends on his willingness to impart his skills to his apprentices as well as the time factor. Despite their good intentions, they cannot pass on knowledge they do not have; there is therefore a ceiling, not to their ambition, but to their technical and managerial proficiencies. Apprentices learn by observation and carrying out the allotted tasks which become more complicated as time passes. In all enterprises, besides technical knowledge, certain basic attitudes are required if the apprentices are to obtain the maximum benefits out of their training. Loyalty to master and crafts, concentration of mind, personal discipline and struggle for achievement are necessary for these are the basic elements in the making of craftsmen and entrepreneurs anywhere (Callaway, 1964, p74).

6. 6. Some entrepreneurs provide living arrangements for their apprentices. Those living with masters often sleep on mats in the workshop and act as guards to the premises. Food is sometimes provided by the master and sometimes not. Some apprentices live with their parents and close relatives. A few live by themselves sharing rooms with other apprentices and paying their share of the rent from accumulated savings, if any at all, or from the small wages received.
7. Information obtained through informal interviews with master craftsmen and apprentices. The interviews were unstructured and no records kept of response rates.
8. At the time of the survey (between Sept. 1977 and April 1978) the bank or official exchange rate of the cedi to a pound was about $\text{¢}2 = \text{£}1$.
9. Most skilled workers don't receive wages at all, but obtain income from their own products. This could happen in cases where the skilled workers are working to obtain capital to set up their own enterprises and thus have to use someone else's premises and equipment for the meantime. It may also be that they are working to pay their apprenticeship fees.

CHAPTER TEN

FACTORS INFLUENCING OUTPUT (OR TURNOVER) AND EMPLOYMENT IN THE INFORMAL INDUSTRIAL ENTERPRISES

CHAPTER TEN

FACTORS INFLUENCING OUTPUT (OR TURNOVER) AND EMPLOYMENT IN THE INFORMAL INDUSTRIAL ENTERPRISES

Chapters six to nine have been devoted to the analyses of employment and other operating characteristics of the informal sector enterprises covered in this study. Types of human and sources of material and capital inputs in the productive process have been described, and emphasis has been put on the entrepreneurs because they are the nuclei around whom the whole informal sector economy revolve. In addition, differences between entrepreneurs operating their enterprises in different centres have been highlighted. The results presented in these chapters are a description of the pattern of responses to the questions contained in the questionnaires. This chapter takes the analysis to a further stage by examining factors that explain variations in the output or turnover and size of present employment in the informal sector.

The growth of output and employment in the informal sector is a major theme of this study and thus it becomes necessary to examine in detail, factors that have influenced their growth in the past and are likely to do so in the future. The analysis will be focused on enterprises in the industrial sector only (1). A simple model will be developed and this model will bring together the major or main entrepreneurial characteristics, input sources and operating characteristics of enterprises in the industrial sector which relate to output and employment in any economic undertaking (2). These will be combined as independent variables in a basic multiple regression model (3). The basic

model is however the same for both output and employment. All the industrial enterprises studied in all centres (595 observations) will be analysed together before they are disaggregated into the main industrial enterprises or centres and combination of centres.

The aim of the whole analysis is to attempt to provide a formulae which decision makers can use in any programme of aid to the informal sector enterprises. If such a formulae can be found, it could make the task of the administrators easy, for it can provide a guide for selecting enterprises which can benefit from aid by ascertaining whether individual entrepreneurs and their enterprises have a certain criterion or criteria which will qualify them for aid. By examining the signs and sizes of the regression coefficients, one can become aware of the variables which have positive and negative impact on turnover and employment. This could indicate policies which may be needed to promote the expansion of output and employment in the enterprises, or to remove constraints to such objectives in areas where they can be applicable. In addition, it would help to appreciate the variation in the explanatory power of the regression model between centres of different sizes. This could be an aid to planners in both the process of selecting prospective growth centres with the informal sector as an important element in the growth process, and also in allocating infrastructure and other facilities necessary for the development of the informal sector.

The second part of this chapter will be devoted to examining the perception patterns of the entrepreneurs towards the performance of their enterprises in the last few years, and

the likely trends in the future. It will also cover the plans of the entrepreneurs towards their enterprises, particularly in employment generation. Differences among entrepreneurs operating their enterprises in different centres in these issues are also discussed.

A. The Model

(i) Variables in the model

The relationship between entrepreneurial attributes and other input characteristics of the industrial enterprises and their levels of output and employment can be ascertained through a multiple regression model. The purpose, here, is not to attempt to use the model to predict the future size of output and employment since it would be hazardous to undertake such an exercise, but rather to examine the "direction" of relationships. In such an exercise, one cannot take all variables into consideration because most of them cannot be quantified or reduced to the form suitable for a regression analysis. It is in the light of this that the socio-economic characteristics of the entrepreneurs, which might shed light on their ability to operate their enterprises profitably, have to be emphasised. Thus there are several characteristics which can be hypothesised to have important effects on the size of output and employment in the industrial enterprises.

First, the number of years during which an entrepreneur has been operating an enterprise is significant. All things being equal, it is expected that entrepreneurs with considerable years of experience in operating their enterprises would have overcome the constraints to smooth running of the enterprises. These

problems are usually characteristic of the early years of any business. To overcome these problems, entrepreneurs must have built up contact networks for the supply of raw materials and spare parts, and also sales outlets and probably reliable sources of finance as well. With this at the background, it may be hypothesised that the value of output and size of present employment are positively related to the age of an enterprise.

Related to the above is the age of the entrepreneurs themselves. It may be assumed that the "older" entrepreneurs have been operating their present enterprises for a much longer period than the comparatively "young" ones, and thus apart from the experience that they may have acquired in running the enterprises, it is also likely they might have built up considerable internally-generated resources for running and expanding their enterprises. However, this assumption may perhaps hold when it is assumed that all enterprises begin at the same scale (in terms of size of enterprise) or level of operation. Even here this cannot be assumed for all types of industrial activity. What may be considered a large scale undertaking in one activity may not necessarily be considered as such in another activity. Moreover, the age of entrepreneurs may not be a useful guide for the future expansion and/or survival of industrial enterprises. We have already seen that "older" entrepreneurs are on the average more prevalent in the traditional and virtually "dying" industrial activities such as smithing, while most comparatively "young" entrepreneurs are mainly found in the "modern" petty production and repair units. Despite this, it is quite useful to examine the relationships between age of the entrepreneurs and the level of output (turnover) and employment in the industrial activities. It is thus hypothesised that

the age of an entrepreneur is positively related to the output and employment of his enterprise.

Another potentially important characteristic of the entrepreneurs is their level of education and type or source of industrial training. An acquisition of some form of education and training can contribute to the entrepreneur's managerial, organizational and technical skills and therefore, all things being equal, these variables should have positive impacts on their productive capacity and thus on their size of turnover and employment. It is thus hypothesised that entrepreneurs with some form of education and training should be able to combine the resource input at their disposal and thus generate more output and create more employment than those without.

It may be difficult to assess the impact of formal education on the success of small (informal) enterprises. It could be true that some of the most essential attributes of a good craftsman or businessman can be acquired through formal education and training, yet it can also be true that such training cannot be substituted for flair and experience. Formal education can equip an entrepreneur with certain techniques and methods of approaching problems, but as to whether this has significant relationship with the success of small businesses cannot be ascertained easily. In a study of businessmen in Kenya, who have had assistance from the government or formal sector financial institutions, Marris and Somerset (1971, p215ff) found no correlation between education and business success (4). In a study of Nigerians making footwear, Nafziger (1970, p349-60) concluded that there was a negative correlayion between education of the entrepreneurs and the profitability of their enterprises (5). Nafziger attributed this to the tendency of capable

educated people's preference for better paid and more secure and prestigious employment in government and expatriate firms. Kilby (1965, p92 quoted by De Wilde p13) on the other hand found that there was a neutral relationship between educational attainment and business success in his study of the Nigerian baking industry. Again, in a survey of Nigerian businessmen, Harris concluded that there was

"a nearly significant correlation between formal education and the index of success but this varied considerably among various branches of industrial activity."

Harris observed that when each industry is considered separately, education and success are positively correlated in baking and other industries, and negatively correlated in rubber processing. In general, however, Harris found the relationship between formal education and entrepreneurial performance "much weaker" than he had expected (Harris, 1965 p1, quoted by De Wilde, p13). Aryee (1976, p14) on the other hand, found a close association between the "intensity of employment" and the level of education in informal manufacturing enterprises in Kumasi, Ghana. The intensity of employment tends to be higher among those with formal education than among those who have not been exposed to the formal educational system. However, Aryee found that additional schooling after the ten year elementary education does not confer any positive effects or impact and that even there appear to be diminishing returns to education after the middle school level had been reached. In this study some relationships or association was found between the level of education and the mean size of employment per enterprise in the industrial sector. The mean sizes being 4.7, 5.2 and 7 employees for all industrial enterprises whose entrepreneurs

have had no education at all, schooling up to the middle school level and those with post-middle school education respectively.

With respect to output or turnover, those who have had post-middle school education obtain a higher weekly turnover (₦378) than those without any education at all (₦180) and those with up to middle school education (₦159)(6). However, a very weak simple correlation coefficient of 0.113 was found between the level of education and size of employment and an even weaker correlation coefficient of 0.06 was found between the level of education and weekly turnover.

Despite the low correlation coefficient it is possible that in the long run, the educated entrepreneurs have some advantages over their uneducated counterparts. Increased education and training may "widen" the information field of the entrepreneurs, not only in seeking knowledge on prices and marketing their products, but also their education could enable them to deal with the financial institutions and to arrange for necessary finance when the need arises. Again, an educated entrepreneur should have a better appreciation of the need to engage competent personnel and to delegate some measure of responsibility to them (7). One may even assume that education and "literacy" of the entrepreneurs could set limits to size and complexity of firms.

With this background with respect to education and output and employment, it is hypothesised that in general an educated entrepreneur has advantages over the uneducated one, and thus should, all things being equal, achieve a higher level of output and employment than the uneducated entrepreneurs.

Training is also an important attribute of the entrepreneurs in the industrial sector. The type of training acquired by an

entrepreneur may have impact on the size and type of labour force engaged by him. For instance, an entrepreneur who acquired his skill through the traditional apprenticeship system is more likely to employ more apprentices than an entrepreneur from formal sector institutions, for instance, from a technical college or university. Such an entrepreneur is more likely to employ more skilled and probably wage employees than apprentices. The type and size of labour force directly or indirectly have an impact on the level of patronage or size of market for each enterprise, and thus on their level of output or turnover.

This study has shown that most of the entrepreneurs in the industrial sector were trained through the traditional apprenticeship system compared with a small proportion who were trained in the formal sector. To tell whether there are differences between the two forms of skill acquisition, as reflected in level of output and employment, it is hypothesised that training in the formal sector confers more advantages to an entrepreneur than his counterpart who was trained in the traditional apprenticeship system, and this should be reflected in higher levels of output and employment in enterprises whose entrepreneurs have had such training than those whose operators were trained in the traditional system (8).

In addition to the above personal characteristics of entrepreneurs, one may assume that entrepreneurs whose main present occupations are the industrial enterprises they are managing or operating, are likely to concentrate all their efforts on them. With such concentration, not only in time and effort, but financial as well, they would be able to expand production and hence output and employment in their enterprises (9). It is

thus hypothesised that entrepreneurs whose main occupations are their present enterprises have a larger output and bigger workforce than those for whom participation in the industrial sector is regarded as only secondary occupations.

Some of the operating (and input) characteristics of the enterprises are also hypothesised to have direct and indirect impact on output and employment in the informal sector. One of such characteristics is work-sharing or sub-contracting between the informal industrial enterprises and formal sector institutions, and among the informal enterprises themselves (10). Sale of products to formal sector institution assures a guaranteed market for the products and services of the informal industrial enterprises. This has "direct" financial implications for not only would such interaction ensure a "safe" market, but also capital can become available for further investment. All things being equal then, enterprises which have sub-contracting arrangements with formal sector institutions are hypothesised to yield greater output and generate more employment than those without such arrangements.

Similar arguments can be advanced for work-sharing among the informal sector enterprises. Work-sharing comes about when one enterprise is "overloaded" with work and thus diverts part to other enterprises. This occurs particularly among a few auto repair units. Though work-sharing is not a significantly marked feature of the enterprises, it has in-built advantages. It could ensure that enterprises engaged in such arrangements have work to do throughout a specified period and thus can obtain higher turnover and probably employ more people to work than those without such arrangements.

Also the source of capital and raw material inputs have a

direct impact on the size or scale at which one can begin and even run an enterprise. It may also affect the prospects for expanding output and employment in an enterprise. Capital is very crucial to the survival of any economic undertaking, particularly for the very small-scale entrepreneur who normally finds it difficult to obtain capital from the formal sector sources. It is thus hypothesised that given the imperfect capital market, one would expect considerable advantages to accrue to entrepreneurs who had "direct" access to capital from formal sector sources. This advantage would enable entrepreneurs to start their businesses on a larger scale and thus, all things being equal, they should be able to generate more output or turnover, enabling them to reinvest part of the profit in the business and to generate more output and create more employment.

An extension of this argument is that entrepreneurs who run their businesses with only the internally generated capital would have lower economic profits than those who obtain capital from "formal" sector sources (Liedholm and Chuta, 1976 p100) and this should have a direct and indirect impact on turnover and employment.

Again, a similar argument may be advanced in the case of sources of raw materials and spare parts. Thus it can be hypothesised that direct access to the formal sector sources for raw materials and spare parts could ensure regular supplies at "reasonable" costs than supplies from middlemen and other sources. This would help the running of the enterprises and directly and indirectly affecting the size of output and employment. Thus it is hypothesised that enterprises which obtain their raw materials and spare parts from formal sector sources should obtain greater output or turnover and, all things being

equal, should employ more people than those which receive their supplies through middlemen and other non-formal sector sources (11).

Finally, the size of labour force per enterprise should directly relate to the weekly turnover of the enterprise. Thus the bigger the size of the labour force, the more output is expected to be generated (12). On the other hand, it may not hold that the size of turnover would have direct and positive impact on the size of the labour force because not all entrepreneurs (as would be seen in the next section) are interested in creating more employment in their enterprises despite the level of output. It is expected that the level of turnover can have direct and indirect influence on an entrepreneur's decision to create more employment in his enterprise.

In setting up the hypotheses to build the regression model, both turnover or output and employment were discussed. In the model each of these would be used in turn as dependent variables. The hypotheses are examined empirically with the assumption that the characteristics are quite independent of each other. The hypotheses are examined together by statistically estimating single equations for each of the dependent variables of the following form :

$$(i) \quad O_E = a + b_1 AG_p + b_2 AG_E + b_3 Ed_E + b_4 T_E + b_5 PRMoc + b_6 S_F + b_7 W_S + b_8 I_c + b_9 R_c + b_{10} Rms + b_{11} S_L + R.$$

where O_E and S_L Output of firm or enterprise (output measured in terms of turnover) and size of labour force.

$$(ii) \quad S_L = a + b_1 AG_p + b_2 AG_E + b_3 Ed_E + b_4 T_E + b_5 PRMoc + b_6 S_F + b_7 W_S + b_8 I_c + b_9 R_c + b_{10} RMs + b_{11} O_E + R$$

a, is a constant and b_1 to b_{12} are coefficients to be determined.

Most of the data are qualitative in nature and are therefore used as dummy variables (13).

AG_p is the age of each enterprise (value cannot be assigned according to the precise year of establishment, so it is assumed that all enterprises set up before 1970 generate more output and employment than those set up after that period. Thus the dummy variable of one is assigned to those set up on or before 1970 and zero to those set up after 1970).

AG_E is the age of entrepreneurs

Ed_E is the educational level of the entrepreneurs; a dummy variable of one is assigned to all with education (irrespective of level of education) and zero to those without any form of education at all.

T_E is the type of training received; a dummy variable of one is assigned to those who received training from formal sector institutions and zero to those who were trained under the traditional apprenticeship system.

PR_{Moc} is the Present main occupation of the operators; a dummy variable of one is given to those engaged mainly in artisanal activities and zero to those who are not.

S_F = Sub-contracting or sale of products and services to formal sector institutions; a dummy variable of one is allocated to those with such arrangements and zero for those without.

W_s is work-sharing among informal sector enterprises; a dummy variable of one is assigned to those who share work among themselves and zero for those who do not.

I_c , R_c and R_{Ms} represent sources of initial capital, running capital and raw materials/spare parts respectively; dummy

variables of one each to those entrepreneurs whose main source was from formal sector and zero to those from informal sector sources.

S_L is the size of total labour force per enterprise.

R is the residual.

The regression analysis is based on the 595 observations of informal sector industries in the 9 selected centres.

(ii) Results of the Regression Analysis

(ii)a. Turnover (or output) :

Table 10.1 presents the results of the stepwise regression.

The squared multiple correlation coefficient (R^2) is very low and is thus a poor fit for variations observed in output (or turnover) of all the 595 observations in the 9 selected centres. The regression line explains only 13% of the variations in turnover. Thus the residual accounts for 87 per cent unexplained by the regression equation (14). However, despite being low the R^2 is found to be statistically significant (appendix B D.)

The low R^2 or explanatory power of the regression equation can be attributed to a number of factors. Perhaps the most important reason is the quality of data. It has been pointed out already the difficulties involved in obtaining reliable data on income or turnover from small-scale entrepreneurs who do not usually keep records of day to day transactions and proceeds from sales and expenditure. A way out of this difficulty would have been to use a time series analysis with data obtained for a number of years. It was impossible to use a time series analysis, so this study resorted to the use of cross-sectional data for analysis. Also in the equation there are only two

variables with ordinal data. These are turnover and size of employment; the rest are all dummy variables.

The effects of the use of dummy variables in the regression analysis is perhaps reflected in the generally weak correlations between the dependent and independent variables (table 10.2). The size of the coefficients are small. None of the independent variables seem to correlate highly with the dependent variable (output or turnover). The largest positive coefficient (0.24) was obtained for those enterprises whose entrepreneurs have had some form of industrial training before setting up their enterprises. This is followed by their main source of raw material and spare parts from the formal sector (0.19), and size of present labour force per enterprise (0.18). Correlation coefficients obtained for other variables are either positively or negatively very weak (see table 10.3).

The low level of simple correlation coefficients makes it difficult to obtain any meaningful results from the regression analysis. The squared multiple correlation coefficient is very low, perhaps because most of the independent variables are not significant or because most of the relationships may not be linear given the complexities of the real world situation. The F-distributions obtained for the variables in the equation show that only four variables can be considered to be significant. These are : training of entrepreneurs; source of raw materials (and spare parts) from the formal sector sources; main present occupations of the entrepreneurs and size of present labour force per enterprise. The rest are not significant (the F ratios obtained are below the theoretical one for 5% to 1% level of significance). Thus it is the above four variables which have a significant impact on the dependent variable.

An important aspect of the regression analysis is the size and sign of the intercepts. From table 10.1 it can be seen that positive signs were obtained for training, sources of raw materials (and spare parts), size of present employment, and sub-contracting or sales of goods and services to formal sector institutions and enterprises. This clearly indicates that training is essential for the expansion of informal sector industrial output. Training explained 5% of the variation in output and it is the single most important factor though it accounted for so little. Also, direct source of raw materials (and spare parts) from the formal sector is important; however it explained only 3% of the observed variation in output. Sub-contracting or sale of goods and services to formal sector institutions and enterprises is essential for increased output in informal sector industrial enterprises. And finally, size of employment which has a two-way relationship with output. It is difficult to determine which of them influences the size of the other. These four factors seem to support the hypotheses set forth to explain the relationships between output per enterprise in informal sector industries and the attributes of the operators and the enterprises themselves.

The results of the regression analysis seem to indicate that the ages of the enterprises and the entrepreneurs themselves are not significant factors, and hence have negative regression coefficients with output. Also, it seems the success of an entrepreneur does not depend on his or her educational background as hypothesised. In addition, the sources of initial and running capital from formal sector sources do not seem to have a significant bearing on output. Finally, work-sharing among the industrial enterprises does not have a positive impact on output. On the contrary, it has a

Table 10.2 Correlation Matrix : Output (turnover) dependent variable and independent variables

	O_E	AG_P	AG_E	Ed_E	T_E	PR_{Moc}	W_S	S_F	I_C	R_C	R_{ms}	R_L
O_E	1											
AG_P	-0.6434	1										
AG_E	-0.2645	0.397	1									
Ed_E	0.0067	-1.389	-0.156	1								
T_E	0.2372	-0.334	0.295	-0.033	1							
PR_{Moc}	-0.069	0.025	-0.256	-0.077	0.159	1						
W_S	0.1667	-0.017	-0.051	0.106	-0.036	-0.034	1					
S_F	0.0734	0.068	0.104	0.107	0.050	-0.041	0.323	1				
I_C	0.0066	0.051	0.014	0.056	0.069	-0.155	-0.498	-0.620	1			
R_C	-0.0089	0.054	0.284	0.007	0.071	-0.026	0.037	-0.057	0.240	1		
R_{ms}	0.19433	0.182	0.086	-0.039	0.158	0.072	-0.042	-0.033	0.037	0.117	1	
S_L	0.1836	0.048	0.009	0.059	0.113	0.237	0.179	0.147	0.024	0.070	0.071	1

negative impact.

Variations in the explanatory power of the regression equation was observed among the selected centres. For our three categories of centres the lowest squared multiple correlation coefficient (R^2) was obtained for the medium-sized centres (table 10.3).

Among the centres, however, the highest R^2 (0.99) was obtained for all industrial enterprises operating in Elmina, and the lowest R^2 (0.15) was obtained for those operating in Fosu. Both centres are classified as small centres.

Variations were also found among the main industrial enterprises (15)- table 10.4 - The highest R^2 was obtained for block manufacturing units and the lowest for tailoring and dressmaking enterprises. Part of the differences in R^2 observed in table 10.4 is due to the sample sizes of the enterprises.

Table 10.4 Variations in R^2 for Turnover among the main industrial enterprises in all centres

R^2	Type of enterprise					
	Block making	Bakery & Food Prep.	Carpentry	Tailoring & Dress-making	Auto repairs	Electrical & Electronic
R^2	0.99	0.49	0.34	0.19	0.34	0.47
Total Sample Size	12	99	62	182	63	25

(ii)b. Size of (present) employment.

Like the R^2 for turnover, a very low R^2 (0.15) was obtained. Thus the regression model explains only 15% of the variation in total employment per enterprise (table 10.5). The R^2 (0.15) is low but

it is statistically significant (Appendix B E). Like output, the low R^2 can partly be attributed to the use of qualitative data in the form of dummy variables. The effects of which is reflected in the weak correlation coefficient between the dependent and independent variables (table 10.6). It can partly be attributed to the use of total employment as the dependent variable. As has been noted in chapter six, there are various types of labour used in the industrial sector; the largest proportion is apprenticeship labour. It is difficult to determine the impact of the independent variables on the various types of labour used. Table 10.5 shows that the main independent variables are the primary occupation of the entrepreneur in artisanal activities, work sharing among industrial enterprises, turnover or output of each enterprise and linkages with the formal sector through sales of goods and services to the formal sector. The results of the analysis suggests that these variables have a positive impact on the size of employment per enterprise. Unlike output or turnover, however, only the age of the industrial entrepreneurs produced a negative coefficient with size of employment; other variables do not have any significant association with labour force as hypothesised.

Variations in the explanatory power of the regression model were found among all enterprises in different centres. The highest R^2 was obtained for all the industrial enterprises in the large centre (0.47) and the lowest was obtained for enterprises in the small centres (0.17); table 10.7 gives further details. The highest R^2 was obtained for enterprises in Komenda and the lowest for those in Asikuma.

Table 10.5 Variation in present size of employment in Informal Sector : Regression model
All Centres

Dependent Variables	Constant term	Regression Coefficients											
		AG _P	AG _E	T _E	PR _{Moc}	S _F	W _S	I _C	R _C	R _{ms}	O _E	Ed _E	R ²
S _L	3.26	0.65	-0.01	0.08	0.31	1.11	1.85	0.01	0.18	0.02	0.002	0.71	0.15
		(2.23) [*]	(0.22)	(0.53)	(40.12)	(4.23)	(13.59)	(0.11)	(2.26)	(0.23)	(18.72)	(2.17)	
		(0.06) ^{**}	(-0.02)	(0.03)	(0.25)	(0.08)	(0.15)	(0.01)	(0.06)	(0.02)	(0.17)	(0.06)	

* F ratio in brackets.

** Beta in brackets.

Table 10.6 Correlation Matrix : size of labour force (dependent variable) and independent variables

	S_L	AG_P	AG_E	Ed_E	T_E	PR_{Moc}	W_s	S_F	I_c	R_c	R_{ms}	O_E
S_L	1											
AG_P	0.048	1										
AG_E	-0.009	0.397	1									
Ed_E	0.059	-0.139	-0.154	1								
T_E	0.113	-0.334	0.030	-0.033	1							
PR_{Moc}	0.237	0.245	-0.026	-0.077	0.159	1						
W_s	0.178	-0.017	-0.051	0.106	-0.036	-0.034	1					
S_F	0.147	0.068	0.104	0.107	0.050	-0.041	0.323	1				
I_c	0.024	0.051	0.014	0.056	0.069	-0.015	-0.050	-0.02	1			
R_c	0.070	0.054	0.029	0.007	0.0670	-0.026	0.369	0.026	0.24	1		
R_{ms}	0.071	0.018	0.085	-0.039	0.158	0.072	-0.044	-0.03	0.037	0.118	1	
O_E	0.184	-0.065	-0.027	0.007	0.237	-0.027	0.017	0.074	0.007	-0.008	0.194	1

Among the main industrial enterprises, the highest R^2 was obtained for those in block manufacturing (0.96) and the lowest for those in bakeries (table 10.8). The differences in R^2 may partly be attributed to the differences in the sample sizes. The results of the regression analysis have indicated that it may be difficult for administrators to use a regression model as formula for decision making. The low R^2 s obtained for both dependent variables is an indication of the complexities of real world situation. The results indicate that no direct relationship exists between the dependent and independent variables. To this end, the author used log transformation methods to examine the extent of non-linear relationships between the dependent and independent variables. However, poor results were obtained. R^2 s of 0.09 and 0.12 were obtained for output and size of employment respectively. As has been pointed out, the nature of data used partly explains the low R^2 s obtained. Therefore the model needs to be extended to include other variables. These should include the various types of employees, nature of demand pattern and seasonality of activities; the ability of entrepreneurs to manage their enterprises and the peculiar characteristic of the selected centres. In addition, problems or constraints facing each of entrepreneur. These possible variables cannot be quantified and hence their potential explanatory role is lost. It would be interesting to see how much these add to explanatory power of the model. This thus is a fertile area for future research.

In the absence of an adequate model or framework within which administrators can operate in deciding which areas need public support and the impact of that on employment and output, one has to rely on ones own personal decisions by

Table 10.7 Variation in R^2 for size of Employment among the selected centres

R^2	Centres									
	Cape Coast	Winneba	Swedru	Saltpond	Elmina	Fosu	Asikuma	Komenda	Mankesim Centre	All Centres
R^2	0.47	0.30	0.40	0.46	0.45	0.43	0.18	0.94	0.73	0.17
Total Sample Size	176	85	127	44	44	40	49	14	16	595

Table 10.8 Variation in R^2 for size of employment among the main industrial enterprises in All Centres

R^2	Type of Enterprise				
	Block making	Bakery and Food Prep.	Carpentry	Tailoring and Dressmaking	Auto repairs
					Electrical repairs
R^2	0.96	0.22	0.5	0.33	0.40
					0.83
Total Sample Size	12	99	62	182	63
					25

devising criteria for selecting enterprises and for action. In this way the perception of the entrepreneurs towards the performance of their businesses in the last five years, and possibly in future can be of help in deciding which types of enterprises have the potential for growth. Secondly it may be of help in determining which centres such enterprises are likely to be

B. Entrepreneurs' perception of business prospects

(i) Variation in entrepreneurial responses

The purpose of this section is to ascertain the entrepreneurs' own opinion of the progress or fortunes of their enterprises over the last five years. In this respect they were asked whether in their own opinions their businesses experienced "improved performances" or whether no change in their performances occurred, or whether they experienced a "decline" in output. The purpose in ascertaining this information is to examine variations in responses with respect to three attributes of general entrepreneurial characteristics : age, type of training and level of education. If there are apparent or significant variations in response to the above, it could contribute to isolating those factors or characteristics which have had and could possibly have an impact on the expansion or otherwise of output and employment in the informal sector. Also, it is worth knowing the variations in response among entrepreneurs in the various types of industrial and trading enterprises, so as to know in general the business fortunes of various enterprises, particularly those in the industrial sector. In addition, it is useful to examine the variations

in business fortunes of entrepreneurs operating in the various selected centres. This would be a guide to policies needed to aid the various informal sector enterprises. Having examined these responses, entrepreneurs were thus asked about their plans for their various enterprises, particularly plans for employment expansion. Again these responses are analysed with respect to the variables mentioned above in mind.

The responses to the question of business fortunes in the last few years indicate that less than a fifth of all operators or entrepreneurs in the industrial sector, compared with as many as a third of their counterparts in the trading and services activities, thought that compared with previous years their enterprises experienced a decline in performance in the last five years. The differences in the proportion of entrepreneurs in the two sectors of the informal economy whose businesses declined indicate that the problem of acute shortages of raw materials and spare parts affected enterprises in the trading sector more seriously than those in the industrial enterprises. This may be due to the fact that petty traders and small-scale services units are only engaged in buying and selling goods, and when supply sources are cut or disrupted, their enterprises are adversely affected.

An examination of the cross-tabulations of the responses with the personal characteristics of entrepreneurs in the industrial sector, show that there are no major differences between their age groups and their perceptions of the fortunes of their businesses. However, a comparatively larger proportion of entrepreneurs above the age of 40 years seem to have experienced declines in business activities. On the other hand, on the surface at least, there seems to be some association between the level of educational attainment of the

industrial entrepreneurs and the performance of their businesses. The proportion of entrepreneurs who thought their businesses experienced improvement tends to increase with increased level of education.

No significant pattern was noticed between the type of training received by the industrial entrepreneurs and their perception of the fortunes of their enterprises. In fact, a greater proportion of those without any form of training at all thought their enterprises experienced improvement in business performance.

Perceptions of industrial entrepreneurs differ from centre to centre. However, among the three categories of centres, a greater proportion of entrepreneurs in the large centre (ie. 43.2%) compared with those in the medium-sized centres (40%) and small centres (41%) thought they experienced improvement, but the differences in proportion do not seem significant. On the other hand, a greater proportion of operators in the small centres (ie. 29%) than in other size categories of centres considered their businesses to have declined in output in the last few years (table 10.9).

Unlike the industrial entrepreneurs, a greater proportion of entrepreneurs in the trading and services enterprises whose businesses experienced improved performance, are located in the small centres (47.2%) than in both the large (21%) and medium-sized centres (19%). Again, unlike their counterparts in the industrial activities, a greater proportion of operators in the large centre thought their enterprises suffered absolute decline (58%), while only 12% and 37% of those in the medium-sized and small centres respectively held the same view (table 10.10).

Table 10.9 Perception of business fortunes among industrial entrepreneurs in large, medium-sized and small centres

Response	Centres			
	Large	Medium	Small	All Centres
Improved	43.2 (76)	39.6 (84)	40.6 (84)	40.8 (242)
Same	27.8 (49)	56.1 (119)	31 (64)	38.8 (231)
Declined	25 (44)	4.2 (9)	29 (59)	18.3 (109)
Others (Don't know)	4 (7)	-	-	1.2 (13)
Sample size	176	212	207	595

* Actual frequencies in brackets

Source : Authors survey Central Region 1977/78

Table 10.10 Perception of business fortunes among entrepreneurs in the trading and services sector in large, medium-sized and small centres

Response	Centres			
	Large	Medium	Small	All centres
Improved	20 (34)	18.7 (50)	47.2 (110)	28.9 (194)
Same	20.6 (35)	61.6 (165)	12.9 (30)	34.3 (230)
Declined	57.6 (98)	11.9 (32)	37.3 (87)	32.3 (217)
Don't know	1.8 (3)	7.8 (21)	2.5 (6)	4.4 (30)
Sample size	170	268	233	671

*Actual frequencies in brackets

Source : Authors survey Central region 1977/78

The reasoning behind changes in business fortune can mainly be related to the general economic conditions of the country in the last five years. As such it was difficult for most of the entrepreneurs interviewed to ascribe the fortunes of their enterprises to any single factor. It seems that the business performance of each enterprise was influenced by a composite of factors. It is thus not surprising that only 30% of the industrial, and 17% of entrepreneurs in the trading and services sector, could relate their improved economic performance to increased sales or patronage of their goods and services. Only about 7% of industrial operators considered decreased competition due largely to shortage of raw material inputs, which may have forced some entrepreneurs out of business, as the main reason for improved performance. 5% of them attributed their improved performance to availability of capital largely from formal sector sources.

For those whose businesses declined, lack of material inputs was the major factor. In addition, those in the trading and services sector suffered additional problems through the credit sales system from customers who in most cases either refused to pay at all or did not pay on time. Such difficulties affected the amount of cash available for day to day running of the enterprises.

(ii) Proportion to stay in business in future

In addition to seeking information about their perception of future patterns of business fortunes, the entrepreneurs were also asked whether despite fluctuations in business fortunes in the past, and the likely uncertainties about the future, they would like to continue operating or cease to operate their

enterprises. 84% and 78% of all the sampled entrepreneurs in the industrial or trading (and services) enterprises respectively, hope to continue operating their enterprises in future. However, for operators in both sectors, the proportion of those who are likely to stay in business is larger in the medium-sized centres, whereas a smaller proportion of those in the large centre hope to do likewise (table 10.11). Secondly, for the industrial entrepreneurs a larger proportion with post-middle school education (table 10.12) want to stay in business. Besides this no significant pattern of association or relationship between desire to stay in business and operators' other personal characteristics such as age and training was observed. (Tables 10.13, 10.14.)

Most of the industrial entrepreneurs who want to continue operating their enterprises are doing so for a variety of reasons. 36% of them thought they had acquired training and experience in their trades, so they might as well put their talent, skill and interest to good use. In addition, 10% of them want to be self employed or masters of their own enterprises, while for 8% of them, there is no other choice but to continue with their present jobs because they do not want to learn new trades and cannot easily change jobs. 26% had other reasons for keeping and operating their businesses in the future. They hope to operate the enterprises and leave them as a legacy to their children after their death, or as a means of subsistence or extra source of income; 17% of them gave various other reasons. For the 59 entrepreneurs who do not plan to continue operating their enterprises in future, 29% of them plan to retire. This is related to age - about 75% of whom are above the age of 50 years; 27% of them hope to learn new trades or skills. Only 13% and 15% want to seek employment in the

Table 10.11 Proportion of industrial entrepreneurs likely to stay in Business : large, medium-sized and small centres

Response	Centres*		
	Large	Medium	Small
1. Yes	73.3 (130)	89.6 (190)	87.9 (182)
2. No	14.8 (26)	9.4 (20)	6.3 (13)
3. Don't know	11.4 (20)	1 (2)	5.8 (12)
Total Sample Size	176	212	207

* Actual frequencies in brackets

Table 10.12 Educational level of entrepreneurs and plans to stay or not stay in business

Response	Level of Education *			
	None	Primary school	Middle school	Post-Middle school
Yes	76.9(103)	75 (66)	88.4(294)	95.9 (71)
No	15.7 (21)	15.9(14)	6.8(20)	1.4 (1)
Don't know	7.5(10)	9.1(8)	4.8(14)	2.7(2)
Total Sample Size	134	88	293	74

* Actual Frequencies in brackets

Source : Authors survey Central Region 1977/78.

Table 10.13 Cross-tabulation : Age of entrepreneurs and their responses to continue to operate or close down enterprises : Industrial Sector

Response	Age group (percentages)						No age given	All age groups
	15-20	21-25	26-30	31-40	41-50	51-60	60+	
Yes	66.7	91.5	86.4	85.6	82.2	62.5	80	86.8
								84.4(502)
No	33.3	3.7	7.7	6.3	15.1	35.0	20	5.3
								9.9(59)
Don't know	-	4.8	5.9	8.1	2.7	2.5	-	7.9
								5.7(34)
Total Sample Size *	1.5 (9)	13.8 (82)	28.4 (169)	29.2 (174)	12.3 (73)	6.7 (40)	1.6 (10)	6.4 (38)
								100 (595)

Chi-square = 54.65 with 24 degrees of freedom
significance = 0.0004

* Actual frequencies in brackets.

Table 10.14 Cross-tabulation : Proportion of entrepreneurs to stay or leave the
Sector and their training backgrounds

Response	Types of training (percentages)						
	None	Apprentice-ship	Vocational training	Technical training	Elementary continuation	Business Management	Others
Yes	85.1	81.9	96.8	95.6	100	100	84.2
No	9.5	11.5	3.2	2.2	-	-	15.8
Don't know	5.4	6.6	-	2.2	-	-	-
Total Sample Size *	12.4 (74)	68.6 (408)	5.2 (31)	7.6 (45)	0.3 (2)	0.5 (3)	5.6 (32)
							100 (595)

* Actual frequencies in brackets.

formal or public sector and to do farming respectively.

Responses from entrepreneurs in the trading and services activities indicate that the majority of them (41%) hope to continue operating their enterprises because they have no other jobs to go to if they should cease operating their present enterprises. This seems to be a negative reason. This is perhaps compensated for by the 33% of the respondents who think the experience they have gained over the years and contacts they have built up would help them achieve a better economic performance in the future. 12% seem to be encouraged by the high turnover, part of which the inflation has helped to create. Others (14%) hope to continue operating for other reasons like self employment, family business, legacy, subsistence. For the 35 entrepreneurs who wish to close down their enterprises, 23% of them want to do farming, another 23% want to acquire new skills and move to informal industrial enterprises, and the rest may leave because of the raw material constraint, poor patronage and lack of adequate turnover.

The picture presented above represents the total response of entrepreneurs' perception of the business prospects for the enterprises they are operating. However, differences in responses among entrepreneurs in different activities have to be noted, particularly those in the industrial sector, as well as among entrepreneurs in different age groups, but no major differences were noticed among entrepreneurs and their levels of educational and training backgrounds. Table 10.15a shows that the proportion of entrepreneurs who wish or hope to stay in business in future is high in all the industrial enterprises - only a few operators, particularly in metal working, tin-smithing, milling, repair units and personal services industries

(eg. photography and hair-styling) may cease to operate their businesses in future.

A cross-tabulation of the age of industrial entrepreneurs and their decision to continue or cease to operate their present enterprises in future, indicates that in proportional terms, the size of industrial entrepreneurs who are not likely to continue operating their businesses in future increases with the age of the entrepreneurs (table 10.13). So that one may infer that most entrepreneurs who are likely to quit the sector are probably the "older" rather than the comparatively "younger" entrepreneurs. This could adversely affect the future of industrial enterprises dominated by comparatively older entrepreneurs. Such enterprises include, baking, carpentry and smithing. This situation may not arise if new enterprises operated by "young" entrepreneurs enter the sector to replace those enterprises likely to be closed or moved to other areas in the future. These differences are not marked among respondents in the trading and services sector. Again, apart from the age of the entrepreneurs, there are no apparent relationships between the response pattern and the entrepreneurs' education and training backgrounds.

C. Entrepreneurs plans towards their enterprises

It is difficult to predict the future output and employment generation plans of each informal sector entrepreneur. In fact it is even more hazardous to predict the proportion of enterprises operating now which would survive the hardships of this period and continue to operate in the next decade at least. Entrepreneurs' perception of their business prospects in future

Table 10.15a. Industrial sector enterprises and the proportion of Entrepreneurs to stay in business in future

Entrepreneurs' Response	Type of Enterprises																	
	Bakery	Block making	Carpentry	Dress-making	Tailoring	Metal works	Shoe Repairs	Watch Repairs	Auto Repairs	Elec. Repairs	Smiths Food Prep.	Food Mill	Photo. styling	Hair-Weaving	Others	Total		
Yes	89.7 (61)	100 (12)	80.6 (50)	91.5 (54)	88.6 (109)	65.4 (17)	76.9 (40)	80 (12)	88.9 (56)	96 (24)	75 (9)	80.6 (25)	61.5 (8)	70 (7)	66.7 (4)	85.7 (6)	72 (8)	84.4 (502)
No	10.3 (7)	-	9.7 (6)	3.4 (2)	4.9 (6)	30.8 (8)	21.2 (1)	20 (3)	1.6 (1)	4 (1)	25 (3)	3.2 (1)	30.8 (4)	30 (3)	33.3 (2)	-	28 (3)	10.3 (61)
Dont'd know	-	-	9.7 (6)	5.1 (3)	6.5 (8)	3.8 (1)	1.9 (1)	-	9.5 (6)	-	-	16.1 (5)	7.7 (1)	-	-	14.3 (1)	-	5.1 (32)

Actual frequencies in brackets.

Source : Authors survey 1977/78.

could change with changes in the economic situation of the country in the near future. In this study an attempt was made to ascertain in very broad terms what is likely to be the situation with respect to production and employment in the enterprises in future. Entrepreneurs were asked about their plans for employment, physical improvement and mobility patterns. This study will consider the relationships between the original and future locations and centres likely to attract informal sector enterprises.

(i) Plans for physical improvements in premises

Informal industrial activities are carried out in permanent structures which may be free standing or part of residential accommodation, in rooms, or corridors or verandas of houses, in front of retail shops or in semi-permanent and temporary erected structures, such as wooden and cardboard kiosks, sheds, in the open air and under trees (table 10.15b). The type of workshop of the enterprises depends on the size or volume of business and obviously on the entrepreneurs "purchasing" power (ie. their ability to pay the rent charged). Table 10.16 shows the status of their workplaces. Almost 40% of all industrial enterprises are either located close to the entrepreneurs' homes or is part of their residential accommodation. However, in proportionate terms, the majority of business premises are rented: the largest proportion of those who own their workshops are in the bakery (84%), carpentry (44%), dressmaking (39%) and tailoring (34%). Enterprises in rented premises are mainly in the auto repair units (89%), electrical repairs (60%), metal working and tin smithing (65%), block manufacturing (92%), tailoring (66%), dressmaking (61%) and carpentry (56%).

Table 10. 15b Types of workshops : Industrial Sector
All Centres combined

Type	Proportion
Permanent workshops (a)	38.3 (328)
Rooms (Part of residences or otherwise) (b)	18.6 (111)
Open air & under trees (c)	14.4 (86)
Corridor of retail shops (d)	6.7 (40)
In retail shops	9.1 (54)
In house	5.7 (34)
Kiosks (temporary)	3.7 (21)
Others	2.0
	100 (595)

(a) mainly for Carpentry (66%) auto repair workshops (69.8%)
 electrical repair units (76.6%), printing, milling (92.3%)
 smithing and photography 50% each.

(b) mainly with tailoring, dressmaking, shoe repairs and some
 photography units

(c) mainly auto repair, metal working and tin smiths, black-
 smiths.

(d) dressmaking, tailoring.

Source : Authors survey 1977/78.

Table 10.16. Status of business premises in the industrial sector enterprises : (%)

Status	Category of Centre			
	Large	Medium	Small	All Centres
Own	22.2%	43.4%	30.0%	33.4%
Rent	49.4%	38.7%	46.9%	44.5%
Free	28.4%	18.0%	22.2%	22.1%

Source : Authors survey Central Region 1977/78.

In the trading and services sector, however, 70% of all enterprises operate from stores which are mostly permanent structures. 13% operate in temporary or semi-permanent structures such as kiosks, stalls, while the rest (10%) are operated in buildings and in houses; 6% operate in the open air or under sheds. In contrast to the industrial enterprises, however, only 23% of all retailing shops form part of the residences of their entrepreneurs. Moreover, as many as 72% of retailing and services enterprises rent their business premises.

When entrepreneurs were asked about their plans to physically improve their shops and workshops, only 35% of the industrial entrepreneurs wanted to rebuild, build new workshops or renovate their existing ones. The question is whether the entrepreneurs who do not have similar plans are satisfied with their workshops or do not have the means to expand, renovate or build new workshops. It seems the industrial entrepreneurs would rather invest more money in tools and equipment rather than in workshops. 64% of the industrial entrepreneurs want to acquire new machines and 10% others hope to repair broken down machines when spare parts become available.

(ii) Plans for employment generation

Perhaps due to the constraints to production of goods and services in the informal sector, a large proportion of entrepreneurs in both sectors do not wish to increase their work force in future despite the fact that some of them may have plans to physically improve or expand production in their enterprises. There are, however, differences (in response) among entrepreneurs in various industrial enterprises. The enterprises in which at least half of the entrepreneurs wish to expand employment are : carpentry (50%), dressmaking (64%), tailoring (50%), hair-styling (67%), smithing (50%). Also significant are auto and electrical repair units (42%).

A comparatively smaller number of entrepreneurs operating "older" enterprises (generally those established before 1970) wish to expand employment in their enterprises in future (table 10.17). The table thus suggests that with age, informal sector enterprises seem to be labour saturated and their scope for long term employment expansion may be limited. It should not be forgotten, however, that new enterprises may enter the sector over the years and these could add to and replace the old ones so the process of employment generation in the informal sector is a continuing one. In this respect, one may say that informal sector enterprises have prospects for both short and long term employment growth but these are largely determined or influenced by the economic conditions in which they operate. With respect to attributes of the entrepreneurs, there are no significant differences between the age and education levels of the industrial entrepreneurs and their future plans.

In the trading and services sector, only 26% of the

sampled entrepreneurs wish to, or have plans to increase the size of their work force, while 58% of them did not have such plans at all and 16% of them said their decision as to whether to increase their employment levels would depend upon the economic conditions in future. Entrepreneurs who seem to have immediate plans to employ more people are in the service sector activities, mainly in night clubs and drinking pubs (56%). Like enterprises in the industrial sector, there are no differences (in proportional terms) between entrepreneurs' age groups the educational backgrounds and their plans for employment expansion.

One significant finding is that a greater proportion of all entrepreneurs in all sectors who wish to, or plan to expand employment in future, was in the small rather than both the large and medium-sized centres. This is quite significant for the development of informal sector enterprises in the small centres in view of the fact that they seem to be faced with more serious and varied constraints (see chapter 11) in operating their enterprises than their counterparts in the other centres. However, as table 10.18 shows, the proportion of those industrial entrepreneurs who wish to expand employment varies among the small centres as well. The proportion is larger for the bigger small centres (ie. Saltpond and Elmina) than for the other small centres. The differences in proportion observed among the three categories of centres is found to be statistically significant using a chi-square test. (Appendix B, C).

Like the response from the industrial sector, the proportion of entrepreneurs in the retail and services sector who plan to expand employment is larger in the two bigger small centres (ie. Saltpond and particularly Elmina) than in other small centres.

Table 10.17 Age of Industrial enterprises and entrepreneurs
employment expansion plans

Entrepreneurs' response	Age groups of enterprises					Total
	Before 1960	1961-1965	1966-1970	1971-1975	1976-1978	
Yes	67.2 (39)	78.3 (72)	89.8 (168)	86.4 (178)	86.5 (45)	84.4 (502)
No	25.9 (15)	16.3 (15)	6.4 (12)	5.8 (12)	9.6 (5)	9.9 (59)
Don't know	6.9 (4)	5.4 (5)	3.7 (7)	7.3 (15)	3.8 (2)	5.6 (34)

Actual frequencies in brackets.

(iii) Mobility plans of the entrepreneurs

(iii)a. Previous location : 77% of the industrial entrepreneurs began their enterprises in the selected centres. About 85% of all the sampled enterprises in each of the centres have their origins in the selected centres and their surrounding towns and villages. Only about 11% of the industrial enterprises were originated in other centres outside the central region. Out of this proportion, 6.7% were started in the three main urban centres in the country, namely, Accra-Tema metropolitan area, Kumasi city and Sekondi-Takoradi twin city. (table 10.19).

A larger proportion of enterprises in the trading and services activities (ie. 85%) began their operation in the sampled centres, while 7.2% began in other towns and villages in the central region. Unlike enterprises in the industrial sector, however, only 2% of all enterprises in the trading and services sector originated in the three main centres in the country (table 10.20). This indicates that in general there has been a very small or minute level of "migration" of enter-

Table 10. 18 Centres and proportion of entrepreneurs and their employment expansion plans

Entrepreneurs' Response	Centres											
	Cape Coast	Winneba	Swedru	Saltpond	Elmina	Fosu	Asikuma	Komenda	Mankesim	Large Centre	Medium Centres	Small Centres
Yes	46(81)	23.5(20)	25.2(32)	75 (33)	90.9(40)	27.5(11)	24.5(12)	50(7)	31.3(5)	46(81)	24.6(52)	52.2(108)
No	45(79)	74.1(63)	73.2(93)	25 (11)	4.5(2)	67.5(27)	75.5(37)	50(7)	68.7(11)	44.9(79)	73.6(156)	45.9(95)
Dont'd know	9(16)	2.4(2)	1.6(2)	-	4.5(2)	5 (2)	-	-	-	9.1(16)	1.8(4)	1.9(4)

Actual frequencies in brackets.
Source : Authors Survey, 1977/78.

prises from other towns and villages within and outside the central region to the selected centres. The proportion, however, is larger for industrial rather than for trading and services enterprises.

In aggregate terms, there seems to be some relationships between the 3 categories of centres and the proportion of industrial enterprise that have their origin in them. 92.6%, 79.2% and 66.7% of all the industrial enterprises operating in large, medium-sized and small centres originated from them. A chi-square test shows that there is statistically significant association between the categories of centres and the proportion of sampled enterprises which have their origins in them (Appendix B.B) Unlike the industrial enterprises, however, there is no significant association between categories of centres and proportion of trading and services sector enterprises that originated in them. However, in this sector, a greater proportion of the enterprises in the medium-sized centres were started in them than those which are now operating in the large and small centres.

A further examination of the tables 10.19 and 10.20 indicate that the proportion of industrial enterprises that migrated from elsewhere into the selected centres is inversely related to the size categories of the selected centres. Less than 1%, 4.7% and 13.6% of all the industrial enterprises in the large, medium-sized and small centres respectively, began operating or originated in other centres within the districts of the selected centres. A note should also be taken of the proportion of enterprises in each centre which were started in the three main centres in the country. This proportion is also inversely related to the size of centre (table 10.19).

Table 10.19 (Location) origin of enterprises in the
selected centres : Industrial sector

Locational origin	Range of Centres			
	Large centre	Medium centres	Small centres	All centres
1. Sampled Centre (s.c)	92.6 (163)	79.2 (168)	66.7 (138)	77.9 (463)
2. Towns & villages (district of s.c.)	0.6 (1)	4.7 (10)	13.6 (28)	6.5 (39)
3. Towns & villages (Region of s.c.)	1.2 (2)	7.1 (15)	5.8 (12)	4.9 (29)
4. Towns & villages outside region of s.c.	1.1 (2)	4.7 (10)	5.8 (12)	4 (24)
5. Main urban centres (national)	4.5 (8)	4.3 (9)	8.2 (17)	6.7 (40)
Total sample size	100 (176)	100 (212)	100 (207)	100 (595)

Source : Author's Survey

Table 10.20 Locational origin of trading and service
sectors enterprises

Locational origin	Centres			
	Large centre	Medium centre	Small centre	All centres
1. Sampled centre (s.c.)	76.5 (130)	95.9 (257)	79.4(185)	85.2(572)
2. Towns & village (district of s.c.)	1.8 (3)	-	4.7 (11)	2.1 (14)
3. Towns & villages (region of s.c.)	10.6 (18)	4.1 (11)	8.2 (26)	7.2 (48)
4. Towns & villages (outside region of s.c.)	4.7 (8)	-	3.5 (8)	2.4 (16)
5. Main urban centres (national)	6.5 (11)	-	4.2 (10)	2.4 (17)
Total sample size	100 (170)	100 (268)	100 (233)	100 (671)

Source : Author's Survey

This pattern thus indicates that in proportionate terms, the size of "migrant" enterprises in the selected centres is inversely related to the size range of centres. In contrast, none of the enterprises in the trading and service sector in the medium-sized centres were begun in any of the three main urban centres in the country, whereas 6.5% and 4.2% of those in the large and small centres respectively were started in at least one of the main national centres.

Personal factors dominate the choice of centres in which enterprises were interviewed (table 10.21). In addition to their main enterprises, a significant proportion of entrepreneurs in the industrial sector enterprises are engaged in other secondary and tertiary activities or investment in the selected centres and the surrounding areas, primarily because the centres happen to be their home towns or for other personal (social) reasons, or because entrepreneurs migrated to the centres and have chosen to settle there.

The second major reason for starting and operating their enterprises in the centres is economic. However, as can be seen in table 10.21, the pattern of responses vary from one centre to another. In general, however, the personal factor (87%) seemed to outweigh the economic factors in the decision of entrepreneurs operating their enterprises in the medium-sized centres, whereas these personal factors are less important in the small-sized centres (45%), and least important in the large centre (43%). On the other hand, the economic reasons are more important reasons behind the investment decisions of entrepreneurs in the large centres, while it is the least important reason for entrepreneurs investing in the medium-sized centres (table 10.22).

Table 10.21 Reasons for locating in selected centres : All Centres- Industrial

Main locational factors	Centres										Total *
	Cape Coast	Winneba	Swedru	Salt-pond	Elmina	Fosu	Asikuma	Komenda	Mankesim		
1. Home town	29	27	24	13	10	11	10	6	2	37 (128)	
2. Personal reasons *	7	18	45	1	1	3	-	3	-	22.5 (78)	
3. Good business	45	2	10	4	14	7	12	5	3	29.5 (102)	
4. Convenience	2	1	5	1	1	-	1	-	1	3.5 (12)	
5. Market Centre	-	-	-	-	-	-	4	-	10	4.1 (14)	
6. Lack of competition	1	-	-	-	6	-	2	-	-	2.6 (9)	
7. Source of raw materials	-	-	-	-	-	3	-	-	-	0.87 (3)	
8. All others	-	-	-	-	-	-	-	-	-	-	

* under Personal reasons are: those who have settled in the centre; those whose spouses and other family members have settled there.

Source : Authors survey Central Region 1977/78.

Table 10.22 Differences among centres with respect to
main location factors of Informal Sector
Enterprises : Industrial

Main locational factors	Centres (% of responses)			
	large	medium	small	All centres
1. Home town	34.5%	38.6%	38.8%	37% (128)
2. Personal reasons	8.3	48.5	5.9	22.5 (78)
3. Good business prospects	53.6	9.1	44.0	29.5 (102)
4. All other factors	3.6	3.8	11.3	11% (38)
Total Sample Size	84	132	130	100 (346)

Similar responses were obtained from the entrepreneurs in the trading and services sector (table 10.23). Again, like the industrial sector enterprises, the pattern of responses from the entrepreneurs vary somewhat among the centres, though it is clear from the table that personal factors dominate for entrepreneurs in both the large and medium-sized centres, whereas economic considerations seem to have been the main point for entrepreneurs in the small centres, except Saltpond.

In actual fact it is difficult to clearly distinguish between what are generally labelled "personal" and "economic" factors. It is quite likely that economic considerations are behind the personal or social factors given for operating enterprises in the selected centres.

(iii)b. Choosing present site within the selected centres

Within the selected centres five various factors generally appear to influence the siting of the informal sector enterprises, particularly the industrial sector enterprises. Entrepreneurs chose sites which to them were the most convenient at the time of starting their enterprises. The sites were convenient ones because in most cases, they are close to the residences of the entrepreneurs. Also, sites were chosen because there were workshops or land on which to build workshops available at the time. In addition, sites were chosen because of the facilities on or near to them. Moreover, entrepreneurs chose sites which can attract the largest number of customers. This was particularly important for the retail and services enterprises which sought sites close to or in lorry stations, near to or in markets and along the main commercial streets in the centres.

These are sites which attract a large volume of vehicular and pedestrian traffic. Finally, the regulatory control of local

Table 10.23 Reasons for site selection in Centres : Trading (and Services) enterprises

Reasons	Centres									
	Cape Coast	Winneba	Swedru	Salt-pond	Elmina	Fosu	Asikuma	Komenda	Mankesim	Total
1. Home town	34	17	28	13	1	4	1	-	2	100(21.1)
2. Personal reasons	15	33	47	5	-	5	1	-	1	107(34.3)
3. Good business	15	8	7	3	-	4	4	8	3	52(16.7)
4. Convenience	1	3	2	2	18	-	2	-	-	28(5.2)
5. Market Centre	-	-	-	-	-	-	2	-	5	7(2.2)
6. Lack of competition	-	-	-	-	-	-	-	2	-	2(0.6)
7. Source of raw materials	-	-	-	-	11	11	-	-	-	15(4.8)
8. All others	-	-	-	-	1	-	-	-	-	1(0.3)
Total Sample Size	65	61	84	23	31	17	10	10	11	312(108)

Source : Authors survey 1977/78.

or municipal councils and planning authorities may prevent some enterprises, particularly in the industrial sector, from being sited in their most desired areas for aesthetic and perhaps for environmental reasons as well.

In the industrial sector, most enterprises are sited close to or as part of the residences of the entrepreneurs, and thus accessibility to an operator's home is the most important single site selection consideration, while sites which attract a large volume of traffic is the second major consideration. 16.5% of all industrial enterprises are sited in areas which are not suitable to their enterprises for environmental reasons, or from the standpoint of the provision of infrastructural services, but have been "forced" or compelled to locate there because they cannot obtain suitable sites elsewhere, or they have been forced to locate their enterprises in areas allocated by the local or municipal council or physical planning officer. This has been the case of automobile repair and related enterprises in Cape Coast where most of the "wayside" fitters have been relocated in an area which used to be a refuse dump, with poor drainage and environmental conditions. Apart from these locational considerations, small informal sector enterprises are generally scattered in the centres, particularly along the major commercial and other urban transport networks or routes.

In the trading and services sector, local authorities have not had any impact in the site selection of these enterprises except that those operating their activities in temporary and semi-permanent structures mainly along the main streets have to pay an annual tax for the use of the site. But this is only a measure to solve the problem of over-crowding in areas which attract traffic. It has been tried in Accra without any success because

it was found that the kiosks occupy more space than had been anticipated by the city authorities (J.A.S.P.A., 1977)

(iii)c. Future location plans of the entrepreneurs (16)

All things being equal, one would expect entrepreneurs to have, or make plans towards moving to areas or centres with better opportunities for their enterprises. This is possible assuming entrepreneurs are prepared to move and that there is no information gap between their expectations and the actual conditions existing in various centres. When entrepreneurs were asked whether they intend to relocate to other centres or areas in future, it was found that about 70% of the industrial entrepreneurs have not given any thought to that. Only about 30% of them really intend to move out of the centres in which they operate their businesses at the moment. Of the 70% who have not thought about relocation, 50% do not intend to relocate at all in future and 20% were not sure whether they would like to do so. Of the 30% who want to relocate, about 16% want to move to either Cape Coast or Swedru, the two main commercial centres in the region, and 19% want to move to other centres in the region - of which Mankesim - the smallest of the selected centres - featured prominently. This is largely due to its position at the junction of the major road network in the southern part of the region and also as an important traditional market centre noted for its large catchment area. However, most of those who would like to relocate to Mankesim are from other small centres, particularly Fosu, Asikuma and Saltpond. About 27% want to move to their traditional home towns, if they want to move at all. These are towns and villages within and outside the central region.

The greatest proportion of all the industrial entrepreneurs (ie. 29%) who wish to relocate in future would like to move to one of the three main national centres(17) Table 10.24 shows that in all the selected centres, the proportion of entrepreneurs who do not wish or intend to relocate, together with those who have not made up their minds in this direction, is largest in the medium-sized centres and smallest in the small centres.

Another significant feature of this table is that a greater proportion of entrepreneurs in the large centre than those in the medium-sized and small centres, wish or intend to move to the main national centres where perhaps, in the national space economy, the best opportunities for production and employment in the informal sector exist.

Relocation plans among entrepreneurs in the trading and services sector do not seem to be different from those of the industrial entrepreneurs. Only a third of the sampled entrepreneurs intend to relocate (table 10.25). mostly to the main national centres (17.5%) and other centres within and without the central region (16.8%). In contrast with the entrepreneurs in the industrial sector, however, there is no difference in proportionate terms among the entrepreneurs in the trading and services activities in the three categories of centres with respect to their intentions or plans to relocate to the main national centres.

Like their choice of centres in which they are now operating their enterprises, the main reasons behind entrepreneurs' plans either to relocate or not, are a combination of economic, social and personal factors. For those who do not intend to

Table 10.24 Plans and destinations for relocation for Industrial Entrepreneurs in the large, medium-sized and small centres *

Plans/ Destinations	Centres			
	Large	Medium	Small	All Centres
1. No movement	52.4 (44)	57.6 (76)	33.3 (47)	45.5 (167)
2. Can't tell	21.4 (18)	30.3 (40)	18.4 (26)	20.2 (74)
3. Yes, to Home town	-	-	9.2 (13)	3.5 (13)
4. To towns/villages in District (sampled centres)	6.0 (5)	0.8 (1)	19.9 (28)	8.7 (32)
5. Other towns/ villages (Central region)	7.1 (6)	2.3 (3)	7.8 (11)	5.5 (20)
6. Towns/villages (rest of Ghana)	2.4 (2)	3.8 (5)	0.7 (1)	2.2 (8)
7. Accra-Tema	9.5 (8)	5.3 (7)	1.4 (2)	4.6 (17)
8. Kumasi	1.2 (1)	-	1.4 (2)	0.8 (3)
9. Sekondi-Tadi	-	-	6.4 (9)	3 (11)
Total Sample Size	84	132	141	367

Actual frequencies in brackets.

Table 10.25 Future mobility plans of entrepreneurs in the Trading (and Services) Sector in the large, medium-sized and small centres

Movement/ No Movement/ Destination	Centres			
	Large	Medium	Small	All Centres
1. No movement at all	33.8 (23)	51.7 (75)	28.6 (28)	43.3 (126)
2. Can't tell (ie. no definite plan or decision)	27.9 (19)	20 (29)	19.4 (19)	21.3 (62)
3. Movement to towns and villages in Districts of Sampled Centres	-	-	21.4 (21)	7.2 (21)
4. Movement to other towns in and out of Region	24 (15)	31.1 (19)	14.3 (14)	16.8 (49)
5. Movement to main national Centres	16.2 (11)	15.2 (22)	16.3 (16)	17.5 (51)
Total Sample Size	23.4 (68)	49.8 (145)	33.7 (98)	100 (291)

* Actual frequencies in brackets.

relocate, the idea of living in their home town or where they have settled with their families and perhaps engaging in other socio-economic activities, seem to them to be more important than perhaps some economic gain elsewhere which nobody could be sure of anyway. 35% and 33% of entrepreneurs in the industrial sector on one hand and trading (and services) on the other respectively, gave this socio-economic reason for not relocating in future. On the other hand, a portion of entrepreneurs who want to relocate their enterprises to their home towns are planning to do so for socio-economic reasons as well. In addition, the prospects of business expansion underlie plans for remaining in selected centres or relocating to other areas both within and outside the central region. 23% and 22% of entrepreneurs in the industrial or trading (and services) sectors respectively gave this as their main reason for their relocation plans (tables 10.26, 10.27).

Summary

In this chapter an attempt has been made to build a simple model as an aid in deciding which factors have important or positive impact on output (or turnover) and the size of employment in the informal industrial enterprises. The main variables used in the model are entrepreneurial characteristics and other salient operating features of the industrial enterprises.

In examining the relationships between entrepreneurial attributes and the operative characteristics of their enterprises on one hand, and variations in output and employment in the sampled enterprises on the other, a number of variables

Table 10.26 Main reasons for relocation and no relocation plans : Industrial Sector, in large, medium-sized and small centres*

Reasons	Centres			
	Large	Medium	Small	All Centres
1. Home town, here (sampled centre)	36.9 (31)	22.7 (30)	34.7 (43)	27.7) (94))
2. Settled here (sampled Centres)	-	11.4 (15)	6.5 (8)	6.8) (23))
3. To Home town (outside sampled Centres)	14.3 (12)	18.9 (25)	10.5 (13)	14.7 (50)
4. Good Business prospects	25 (21)	12.1 (16)	32.3 (40)	22.7 (77)
5. Source : Raw materials	-	-	1.6 (2)	1.2 (4)
6. Other reasons	7.1 (6)	0.8 (1)	0.8 (1)	2.1 (7)
7. NR/No special reasons	16.7 (14)	34.1 (45)	13.7 (17)	24.8 (84)
Total Sample Size	84	132	124	340

Actual frequencies of response in brackets.

Source : Authors survey.

Table 10.27 Main reasons for Non relocation and relocation in large, medium-sized and small centres : Trading (and Services) Sector

Reasons	Centres			
	Large	Medium	Small	All Centres
1. Home town here (sampled Centres)	40.3 (27)	27.9 (39)	19.5 (17)	28.6 (84)
2. Settled here (in sampled centres)	1.5 (1)	5 (7)	4.6 (4)	4.1 (12)
3. To Home town (outside sampled centres)	16.4 (11)	12.1 (17)	4.6 (4)	6.8 (20)
4. Good business prospects	6 (4)	17.1 (24)	40.2 (35)	21.4 (63)
5. Source : Raw materials	1.5 (1)	5.7 (8)	5.7 (5)	4.8 (14)
6. Other reasons	-	0.7 (1)	2.3 (2)	2.4 (7)
7. MR/the special reason	34.3 (23)	32.9 (46)	22.9 (20)	30.3 (89)
8. Total Sample Size	67	140	87	298

Actual frequencies in brackets.

Source : Authors Survey.

which are considered to have a positive impact are discussed, relevant hypotheses set and rationale behind them briefly discussed. The R^2 obtained for output (0.13) and employment (0.15) though very low are significant. However, for both output and employment, different R^2 s were obtained for enterprises operating in different centres and for the main industrial enterprises.

In terms of output, the main or significant independent variables obtained from the regression analysis are : industrial training, direct source of raw materials and spare parts from formal sector sources; the main employment of the entrepreneurs in the enterprises they are operating at the moment and the size of employment per enterprise.

In the case of size of employment, the main occupation of the entrepreneurs, work-sharing among enterprises, turnover or output and linkage of industrial enterprises with formal sector institutions through the sale of goods and services to such institutions, are the main independent variables. In both regression equations, the residual explains over 80% of the variations observed among the industrial enterprises.

The results of the regression analysis have indicated that it is difficult to isolate major factors influencing output (or turnover) and employment because of the complexities of the real world situation. The model thus cannot be a "complete" formula to decision-making with respect to enterprises in the industrial sector. It therefore becomes necessary for the decision maker to use personal judgement. In this case there are other important factors or variables to consider but which could not be incorporated in the model in their

present form. These factors include entrepreneurs' own perceptions of the performance of their businesses in the past and the likely trends in the future, their plans for physical improvement to their enterprises, employment expansion and relocation plans.

An examination of the above variables could give a guide as to which types of enterprises have improved their economic performance and are likely to do so in the future. It also indicated the proportion likely to stay in their present businesses in the future and which centres are likely to retain their enterprises or attract new ones from other areas, or even lose some of the existing ones altogether.

In terms of perception pattern, only a fifth of all sampled industrial entrepreneurs in the industrial sector thought their enterprises declined in business performance in the last few years. On a comparative basis, there are more entrepreneurs above the age of 40 years whose businesses declined. Secondly, the proportion of industrial entrepreneurs whose businesses achieved some progress increased with their educational levels. Thirdly, a greater proportion of entrepreneurs in the large centre achieved some measure of success. Fourthly, a greater proportion of entrepreneurs in the small centres thought their enterprises declined in activity in the last few years. This is quite the opposite situation for operators in the trading and services activities.

However, despite fluctuations in business fortunes of enterprises, 84% and 78% of all entrepreneurs in industrial enterprises, trading and services activities, plan to continue operating their enterprises in future. The proportion of

entrepreneurs in both sectors likely to stay on is larger in the medium-sized centres than in both the large and small centres. Despite the proportion who hope to stay in business only a small proportion of them hope to, or wish to increase the size of their labour force. This proportion varies for entrepreneurs operating different enterprises in different centres. It is quite significant to note that a greater proportion of entrepreneurs in the small, rather than the large and medium-sized centres, wish to expand employment in their enterprises. In terms of future mobility plans, only about 30% of the industrial entrepreneurs want to move to other centres. 26% of them want to move to Cape Coast and Swedru, the two main commercial centres in the region, but the greatest proportion of those who have relocation plans may move to one of the main urban centres of the nation. The significant aspect of this mobility plan is that a large proportion of the entrepreneurs operating in the large centre want to move to the main urban centres in the country mainly for economic reasons. This seems to indicate that there is a direct relationship between urban size and opportunities for the informal sector. One of the factors which have a significant impact on output and employment in all informal sector enterprises is the constraints facing the enterprises. This, like other factors, was not included in the model. It does, however, merit detailed discussion. The next chapter discusses the constraints to the informal sector enterprises.

NOTES

1. The analysis focuses on the industrial sector alone because enterprises in the sector unlike those in trading and services units do differ to some extent in the size of labour employed and turnover or output, though enterprises in the trading and services sector also differ insofar as the profit generated in their enterprises is concerned.
2. Output of any enterprise can be measured in terms of the total value of goods and services produced in a given time period. In this study though, these data are quite unreliable because of lack of record keeping, weekly turnover per enterprise is used as surrogate of total output.
3. Multiple regression analysis allows one to study the linear relationships between a set of independent variables and a number of dependent variables while taking into account the interrelationships among independent variables. The linear combinations can then be used to "predict" the value of the dependent variable, the difference between the value of the dependent variable and the value predicted by the linear combination of the independent variable, is known as the residual (see Norman H. Nie, et al. S.P.S.S. (MacGraw Hill, 1970, p175).)
4. Marris and Somerset did not consider the very small-scale industrialists. Moreover, their study focused on enterprises in the commercial sector to their conclusion may not be fully applicable to enterprises in the informal sector as a whole.
5. Nafziger tested three hypotheses : (1) that educational level of entrepreneurs will be higher than the educational level of the population as a whole. (2) Educational attainment of the entrepreneurs will be positively related to the value of a firm's output. (3) The educational attainment of the entrepreneur will be positively related to the firm's rate of output. He concluded that "on the basis of evidence from the data of this study, educational attainment is positively or neutrally related to entrepreneurs

participation rate, positively related to value of firm's output and negatively related to the firm's rate of profit" (Nafziger, op.cit. p351).

6. When the analysis was extended to entrepreneurs in the trading and services activities, similar observations were made. In terms of the mean size of present employment per enterprise, it was observed that entrepreneurs who have had some post-middle school education employ more people than those with up to middle school education and those without. The means were 1.75, 1.92 and 3.8 for enterprises whose operators have no education at all, those with up to middle school education and those with post-middle schooling, respectively. The mean weekly turnover per enterprise follows a similar pattern. The means are ₦ 298.5, ₦ 261.9 and ₦ 406.6 respectively for entrepreneurs in both the industrial, trading and services sectors,; the mean weekly turnover for those with post-middle school education is almost double the mean for those without any education at all and those with up to middle school education.
7. This may not be entirely applicable to informal sector activities most of which are purely one-man enterprises.
8. This, however, may not be the case. Here we are interested in knowing whether training in the formal sector institutions is better than training through the traditional apprenticeship system.
9. This may depend on the size of the enterprises and the amount of money available for running or operating the enterprises.
10. Sub-contracting is a broad term used here to refer to sale of product of informal sector enterprises to formal sector institutions. E.g. sale of furniture or food items by informal industrial enterprises to say schools and colleges. Contracts given by other repair units by formal sector enterprises or institutions is also covered under that term. Among informal sector enterprises themselves work-sharing could be a form of sub-contracting, but on a very minor scale.
11. Only a few industrial enterprises obtain much of their supplies direct from the formal sector. These include block-making units and some bakers. A larger proportion of the

sampled enterprises obtain their raw materials and spare parts inputs from varied sources (including both formal and informal sector sources).

12. The size of labour is not the only issue here. The issue of labour rests also with the type of labour and the status of labour. The number of skilled labour viz a viz the number of apprentices, can influence the quality of work produced by an enterprise, and thus the level of patronage or size of market and hence the output of the enterprise. Secondly, it depends on the proportion of permanent viz a viz, number of part-time workers in each enterprise. There is a weak correlation between the size of weekly turnover and the various components of labour. A weak correlation of 0.18 (sig 0.001); and 0.25 (sig. 0.001) exist between weekly turnover and total size of labour force and total size of full-time employee per enterprise was obtained. Rather insignificant and weak correlation exist between turnover and total number of apprentices (0.11, sig. 0.003) and total number of skilled employees (0.363, sig. 0.063).
13. The use of dummy variables as proxies for variables which cannot be quantified or measured in any particular manner; as proxies to qualitative factors (e.g. - education, training, sub-contracting, work-sharing) or as proxies to numerical factors (eg. age of enterprise) and other uses in regression model have been explained by A. Koutsoyiannis (1977, pp281-285, 18) and J. Johnston.(1972, p176-186).
14. The residual is that part of the variation of the dependent variable which is not explained by the regression line and it is attributed to the existence of disturbance variable.
15. The main industrial enterprises were selected for analysis on the basis of their contribution to the total number of all enterprises and total size of employment generated in them.
16. This section is based on information obtained from revisits during the detailed interviews.
17. The 29% is divided into : 16% for Accra-Tema metropolitan areas; 10.3% for Sekondi-Takoradi and 2.9% for Kumasi.

CHAPTER ELEVEN

CONSTRAINTS TO PRODUCTION AND EMPLOYMENT

IN THE INFORMAL SECTOR

CHAPTER ELEVEN

CONSTRAINTS TO PRODUCTION AND EMPLOYMENT IN THE INFORMAL SECTOR

In the last chapter, an attempt was made to develop a multiple regression model to explain variations observed in turnover (or output) and employment in the industrial sector enterprises. It was noted that the regression model explained less than a fifth of the variations observed, and the low explanatory power of the model was ascribed to the complex relationships existing between the variables in the model. It was pointed out that other variables or factors which cannot be reduced to forms suitable to be included in the model are important as well. Since that model cannot provide enough guidelines to decision making, one has to consider other factors. The second part of the last chapter was devoted to examining the perception pattern of the entrepreneurs to the growth patterns of their businesses in the last five years and their prospects for growth in the future. It also looked at the plans of the entrepreneurs towards physical improvements of their enterprises, employment generation and future location patterns. These considerations give some guidelines as to which enterprises have experienced growth in the past and are likely to do so in future, and also the enterprises and in which centres future employment is likely to be generated, and to which existing centres new enterprises are likely to move. However, there is one important consideration which was not pointed out and that is the problems or constraints facing the entrepreneurs in operating their enterprises.

This chapter discusses the problems as perceived by the entrepreneurs themselves. This discussion will not only lead to perhaps a deeper understanding of the numerous constraints facing the entrepreneurs in the informal sector economy, but it can also be a guide to planners as to how best to combine economic and physical planning policies to mitigate constraints facing the informal sector entrepreneurs in the central region. Wherever possible the "intensity" of the constraints will be related to entrepreneurial characteristics and also differences in response among the entrepreneurs in different centres will be highlighted. This chapter is based on two hypotheses or themes :

- (1) The constraints facing the informal sector entrepreneurs in operating their enterprises arise from the operating characteristics of their enterprises and from the general economic environment in which they operate.
- (2) It is expected that the range of opportunities for operating informal sector enterprises is related to the size of a centre and hence the "intensity" or "severity" of the constraints facing the informal sector entrepreneurs should generally decrease with the increasing size of centres.

Due to the different operating conditions between enterprises in the industrial sector on one hand, and trading (and services) enterprises on the other, this chapter will discuss the constraints facing enterprises in each sector in turn. The emphasis, however, will be on the industrial sector enterprises.

A. Problems facing enterprises in the Industrial Sector

(i) The main problems

The industrial sector entrepreneurs were asked to list the most serious problems facing their enterprises. The results show that the problems facing the industrial entrepreneurs are varied but when all centres are taken together, of the 595 industrial entrepreneurs, 42% indicated that difficulties of obtaining raw materials and spare parts was the most serious constraint; 19% of them ranked as the most serious problem lack of adequate market or demand for their goods and services; 10% of the entrepreneurs pointed to the shortage of capital, in all forms, as the most serious hinderance to their enterprises. About 30% of the entrepreneurs indicated that they faced more than one "very serious" problem.

The proportion of entrepreneurs facing each of the "serious" constraints vary among the enterprises (table 11.1 in Appendix A) and from one centre to another. Table 11.2 shows that the spare parts and raw material problem confronts a greater proportion in all centres, except entrepreneurs in Swedru where only about 8% of them considered that as their most serious constraint. This problem seems to be more acute among entrepreneurs operating their enterprises in the small centres than the large or medium-sized centres (table 11.3). Among the small centres, table 11.2 shows that the problem is most serious for entrepreneurs in Mankesim (75%), Elmina (77%), Asikuma (65%) and Saltpond (59%).

On the other hand, the problem of inadequate patronage of goods and services seems to confront a greater proportion

Table 11.2 * Main problems for Informal Industrial Enterprises in Central region

Problem	Centres									
	Cape Coast	Winneba	Swedru	Salt pond	Elmina	Fosu	Asikuma	Komenda	Mankesim	Total
1. Raw material	38.6 (68)	15.3 (13)	6.3 (8)	29.5 (13)	56.8 (25)	17.5 (7)	53.1 (26)	28.6 (4)	31.3 (5)	28.4 (169)
2. Spare parts	16.5 (29)	4.7 (4)	1.6 (2)	29.5 (13)	20.5 (9)	17.5 (7)	12.2 (6)	14.3 (2)	43.7 (7)	13.3 (79)
3. Customers	8.0 (14)	47.1 (40)	28.3 (36)	-	6.8 (3)	27.5 (11)	8.2 (4)	28.6 (4)	-	18.6 (111)
4. Capital	17.6 (31)	-	-	6.8 (3)	6.8 (3)	35 (14)	6.1 (3)	-	18.7 (3)	9.6 (57)
5. Customers, raw mat. & spare pts.	6.8 (12)	22.4 (19)	44.9 (57)	11.4 (5)	4.5 (2)	-	2.0 (1)	21.4 (3)	-	16.3 (97)
6. Other Comb.	11.4 (20)	10.6 (9)	18.1 (23)	22.8 (10)	2.3 (1)	2.5 (1)	16.3 (8)	7.1 (1)	6.2 (1)	7.7 (72)
7. No response	1.1 (2)	-	0.8 (1)	-	2.3 (1)	-	2.0 (1)	-	-	1.8 (11)
Total										(100) (595)

Source : Author's survey 1977/78

* Actual frequencies in parentheses.

of entrepreneurs in the medium-sized centres of Winneba (47%) and Swedru (28%) than those operating in other centres. A greater proportion of entrepreneurs in Cape Coast and Mankesim face the capital problem than those in other centres. Each of these major constraints is discussed in detail below. The problems are discussed according to the proportion of entrepreneurs in all centres who indicated particular problems as their most serious problem.

Table 11.3 * Main problems for Industrial Sector Entrepreneurs in the large, medium-sized and small centres

Nature of Problems	Centres			
	Large	Medium	Small	All Centres
1. Raw materials	38.6 (68)	9.9 (21)	38.6 (80)	28.4 (169)
2. Spare parts	16.5 (29)	2.8 (6)	21.3 (44)	13.3 (79)
3. Customers	8.0 (14)	35.8 (76)	10.6 (22)	18.6 (111)
4. Capital	17.6 (31)	-	12.6 (26)	9.6 (57)
5. Customers, raw material and spare parts	6.8 (12)	41.5 (88)	6.3 (13)	16.3 (97)
6. Other combinations	11.4 (20)	8.5 (18)	9.6 (20)	7.7 (72)
7. None	1.1 (2)	0.5 (1)	1.0 (2)	1.8 (11)

* Actual response in brackets.

(ii) Raw material and spare parts

This problem is not peculiar to informal sector enterprises in the central region. It seems to be one of the major constraints to production and employment in small-scale enterprises in all developing countries (Steel , 1977, p180). The purchase of raw materials and spare parts is one area of operation where small-scale operators are at a great disadvantage compared with large-scale enterprises, although small-scale fabricators sometimes have the advantage of being able to use cheap local raw materials of quality that would not be suitable for processing by large-scale industry.

Informal sector enterprises cannot buy in bulk either because of the inadequate finances to do this, or because the nature of production and demand does not support this and they are therefore usually unable to obtain discounts that go with bulk purchasing. Buying in bits not only swells the cost of raw material and spare parts inputs, but also one cannot keep stock against periods of shortages.

Another reason, according to Steel (Steel , 1977, p180) is the rationing system for imports (or domestically produced materials) which tends to favour the economically and politically powerful large-scale enterprises, putting the small-scale entrepreneurs at great disadvantage. They have to buy from large-scale enterprises, usually wholesale and major departmental stores, which both raise their costs and put them in a highly vulnerable position when supplies become scarce and the large-scale firms begin to conserve their stock. This situation may thus compel small-scale operators to be tied down to single or a few avenues of suppliers who may be able to profit from their monopolistic position.

In chapter six, it was noted that industrial sector entrepreneurs in the selected centres obtain raw materials and spare parts from various sources of which only a small proportion is obtained directly from the formal sector. This perhaps accounts for a large proportion (43%) of all entrepreneurs who consider this as the most serious problem facing their enterprises. Considering the possible relationship between the attributes of the entrepreneurs and this problem, it is noticed that the problem is common to all the industrial entrepreneurs at all ages, educational and training backgrounds. However, on the comparative basis the problem seems to be more acute among entrepreneurs who have received up to middle school education (1) (Table 11.4). This may be due to the preponderance of entrepreneurs who have received up to middle school education only (86.5%).

Table 11.4 Level of Education and proportion of entrepreneurs who experience raw material and spare parts problems - Industrial Sector

Level of Education	Proportion of entrepreneurs in each educational category All Centres *	Proportion of entrepreneurs in all educational categories.
None	62 (48.9%)	25%
Primary	44 (50%)	17.7%
Middle	112 (38%)	45%
Technical	8 (49)	11.3%
Secondary	9 (60)	
Vocational	11 (27)	
Others	2 (30)	

Source : Authors Survey 1977/78

* Percentages in brackets.

(iii) Marketing problems

Lack of effective demand for the products and services is the second most important general problem facing the informal sector industrial enterprises in the central region. For small operators, the size of the national and international markets in general are not crucial to their businesses except, perhaps, in the case of those craft industries which produce for the national and tourist markets. As has been seen already, over 80% of their products and services are sold and consumed in the centres of operation. Naturally entrepreneurs have to be concerned with the local markets. In view of this, complaints about demand problems indicate the extent of competition among informal sector entrepreneurs in each centre and in each activity area. It is expected that the larger the centre and hence the market area, the greater the opportunities for the informal sector. The results of this study do not entirely support this. 8% , 36% and 11% of entrepreneurs in the large, medium-sized and small centres respectively, consider the demand problem as the most serious constraint facing their enterprises. An examination of table 11.1 (in Appendix A) shows that this problem is faced mainly by entrepreneurs in watch repairing, food preparation, metal works, carpentry, dressmaking and tailoring.

Details of the marketing problem point to the negative impact of competition in the informal sector. About 33% of the entrepreneurs complained about lack of enough customers, while another 26% complained about clients who fail to collect and pay for the work done on time. This tends to put a lot of financial strain on the entrepreneurs, most of whom operate on work to order system. This problem is particularly serious for entrepreneurs in the small centres (42%).

(iv) Capital (financial) problem

In the great majority of cases, it is often believed that the small-scale entrepreneurs consider capital their principal problem. Small-scale entrepreneurs, particularly those in the informal sector, do not in general terms have access to, or do not avail themselves the use of formal sector financial sources or both. Compared with entrepreneurs in the medium-sized and large-scale public and private sector enterprises, they generally face much greater difficulties in obtaining short, medium and long term credit through institutional channels. Kochav et al (1974) in a study of 8 developing countries brought out this problem vividly. The large-scale firms almost exclusively benefit from public sector sources of finance. From the point of view of financial institutions, small-scale enterprises are less attractive than the larger ones due to their smaller profit potential; administrative difficulties and institutional inertia (Kochav et al op.cit p12). The relative importance of these factors vary from country to country and from sector to sector, but all three are contributory factors to the generally prevailing shortage of institutional credit to informal sector enterprises. The potential profit in lending to small-scale enterprises is less than in lending to larger enterprises because of higher lending costs, greater risks and the fact that small enterprises typically do not make significant use of other revenue yielding services offered by financial institutions, such as letters of credit and guarantees. Lending costs tend to be high because small enterprises generally need to borrow only small amounts, while the cost of loan administration contains a

significant fixed component which is proportional to the amount loaned. In addition, dealing with inexperienced borrowers requires a relatively large amount of staff time input. Risks tend to be greater because small-scale enterprises are typically deficient in equity and acceptable collateral, particularly among the new and young enterprises.

These constraints apart, there are other administrative difficulties. Lending to a large number of heterogeneous and widely dispersed enterprises is more demanding in terms of both time and effort than in dealing with a smaller number of well established and more familiar firms. The basic problem of communications often represents a severe constraint - distance, language problems or illiteracy, unfamiliarity with accounting and documentation may prevent the informal sector entrepreneurs, whose educational level may at best be middle school, and may discourage them from seeking financial resources in the public sector and banking institutions. Worst of all, as De Wilde has pointed out (De Wilde, 1975, p18) that banking institutions in developing countries do not adapt their banking procedures to suit the particular circumstances of small-scale producers. Referring specifically to African businessmen, De Wilde added that the banking institutions in Africa lack the capacity to identify these Africans who have demonstrated their potentialities as entrepreneurs.

"In Africa there is a considerable number of African businessmen whose performance appears to justify financing but who evidently have been unable to get access to the institutional finance that would enable them to expand their enterprises more rapidly."

(De Wilde op.cit. p18)

Again, it seems most banking officials do not fully appreciate the particular problems of the small-scale operators.

(Watanable 1974, p412; quoted by Steel , 1977, p181).

In the absence of easy access to institutional sources of finance, informal sector entrepreneurs are excessively dependent upon informal sources. The importance of these sources in informal sector enterprises shows the role of such enterprises in national capital formation by drawing and stimulating savings that would otherwise not be used, or that would not be available through established financial intermediaries. (Staley and Morse, 1965, p236). Again, partly as a consequence of limited access to credit, informal sector, and indeed small-scale enterprises as a whole, are found to be potentially more efficient in utilizing capital than are large-scale import-substitution industries (Steel , 1977, p181).

In this survey, however, the capital problem is considered the third most serious problem. Only about 10% of all industrial entrepreneurs covered in the detailed interviews indicated the capital problem as the most serious problem facing their enterprises. The low figure is due primarily to the acute shortage of raw materials and spare parts which have directly and indirectly adversely affected the activities of the enterprises. Thus the capital shortage problem which seems to be the most important one in other economies is overshadowed by material input problem in an economy fighting against higher inflationary situation

In examining the nature of the capital problem of the industrial entrepreneurs, it was found that the most pressing problem is that of capital to run their enterprises (32%).

Though it is recognised that capital is an important problem, yet the problem reflects a more basic problem of inadequate managerial and technical skills of the entrepreneurs.

According to De Wilde (1971) experience in Africa has amply demonstrated that the provision of finance can be very wasteful unless it is accompanied by measures to aid the entrepreneurs by providing the necessary assistance in management and production techniques and to resolve marketing difficulties.

(v) Management problem

Management has been identified as a problem which underlies all the problems faced by small-scale entrepreneurs (De Wilde 1971, Child, 1976, Marris and Somerset, 1971). This is in part due to insufficient training and experience which can be attributed largely to the medium of training - the traditional apprenticeship system in which apprentices are trained on the job. This training certainly lacks essential inputs in management techniques, and this is particularly serious for those with poor educational backgrounds, or without work experience before setting up their own enterprises. It is also partly due to the fact that most small-scale enterprises are essentially one person operated activities, or at best a partnership with spouses, family members or friends (2). The owner-manager is himself responsible for all aspects of management, including financing, hiring and supervision of work force, if there are employees, procurement of material and financial inputs and equipment; the supervision of accounting, costing, production and marketing. He either perceives no need to delegate any of his responsibilities since his enterprise is still small, or finds it difficult to find trustworthy and capable personnel to whom to delegate responsibilities when his enterprise attains a size where one man management can no longer be effective. However, while this

may be true for a few informal sector enterprises, most of them may not grow beyond the point where management and control cannot be effected by an entrepreneur or owner-manager.

In this study, though management as a problem was not perceived as one of the most serious problems by the industrial sector entrepreneurs, the form of business organisation at least indicates there is a problem. 90% of all the industrial sector enterprises covered in the detailed interviews are one-man enterprises. Partnership and co-operative spirit are virtually absent. Only about 9% of all the industrial enterprises belong to partners and only about 15% belong to some form of "self help" or co-operative society, though 4% of the entrepreneurs complained there are no such societies in their centres of operation to which they can join. The few societies that exist are mainly raw material procurement societies. This is noticed among bakers (82%), particularly in Cape Coast (large centre) and Saltpond (small centre) and, to some extent, among the block manufacturing firms in Cape Coast which have come together to present a "united front" to the central regional administration for direct supply of cement from public or formal sector sources. The self help spirit does not exist to any appreciable extent in other enterprises. It is not noticed among dressmakers; in tailoring there is only one co-operative society in Cape Coast (large centre) and another in Asikuma (small centre). Only 4.8% of entrepreneurs in the auto repair and related activities belong to "self help" societies (3). Others are carpentry (9.7%)(4), food preparation (23%)(5). A larger proportion of entrepreneurs in the large centre (23.3%) than in the medium-sized centres (7.5%) and the small centres (12.1%) belong to co-operatives or "self help" associations.

The predominance of a "one man business" in the informal sector does not auger well for the survival of the enterprises. Thus ensuring continuity of effective management in the event of the retirement or even the death of the owner-manager can be a serious managerial problem for the informal sector as a whole. If this is not taken care of a business enterprise has to fold up, especially in the situation where nobody has been closely associated with the taking of important decisions as well as the day to day administration of the business (Lewis, 1977, p1075). In developing countries, particularly in Africa, this is one of the weakest features of the small owner-managed enterprises, and it arises from the character of individual entrepreneurs and from the very human reluctance to envisage the possibilities of one's ill health or death.

Related to the above is the question of trust. It has been said that many African businessmen (particularly in the trading and services sectors) do not trust themselves. Lewis (1977, p1075) has noted this for businessmen in Nigeria, but it could hold for businessmen in Ghana as well.

"one of the reasons for the popularity of sole ownership is that the average Nigerian is distrustful of the intentions of his neighbours. Carried into the realm of business, this attitude compels businessmen to be doubtful of the financial trustworthiness of one another. There is the belief that if they team up with others, they might lose whatever capital they have as a result of the malpractices of their partners. Even when they agree to team up, there are usually conflicts over the sharing of responsibilities with each partner wanting to control financial matters."

Indications of this lack of trust is shown among the industrial entrepreneurs in the survey of the central region. Not only do they not share equipment and tools amongst themselves, but also the majority do not want to share with others tools and facilities if provided by the government.

Only 17.3% expressed the desire to share communal tools and equipment if the public sector should provide them; 9.5% were not sure whether they would like to, but as many as 73.3% do not want to share at all. The main reasons for not wanting to share are that they would not have control over the facilities (21.5%), lack of convenience in use of publicly owned facilities (17%), fear of loss, conflict in use (17.6%) and a host of other minor reasons. Thus any facility the use of which individual entrepreneurs cannot control, does not appeal to them. This lack of trust and unwillingness to share responsibilities and facilities operate to limit the size of the businesses which can be managed by one person.

Another aspect of the management problem is presented by business diversification among entrepreneurs in the informal sector. However, business diversification, as has been noted in chapter eight, is a response to income opportunities elsewhere.

Other major managerial constraints or deficiencies are accounting and costing, market assessment and inadequate financial planning which limits the ability of entrepreneurs to anticipate the need to plan for the services of debts, replacement of stock and equipment, and the tendency to mix business with personal finance. There is also the sociological problems. Traditional family obligations have hindered African entrepreneurship in so many ways. Business men are often expected to share their incomes with other members of the extended family since they are to a greater or lesser extent participants in the relationships and values of traditional society (Schadler, p32, Kennedy, 1976). They are expected to come to the aid of their relatives in time of financial hardships and sometimes

to employ some of them regardless of whether they are efficient. All these aspects directly or indirectly affect the efficiency of small-scale enterprises in general and thus their survival and ability to generate employment.

Accounting or book-keeping is the most serious management problem facing informal sector industrial entrepreneurs in the sampled centres. 58.4% of all those who consider management as a problem, listed book-keeping as their main problem, followed by problems in keeping up with repairs, lack of proper attention (due largely to business diversification). Management problems do not seem to have any relationships with the attributes of entrepreneurship (ie. age, level of education, age of business, etc.). It is a problem faced by informal sector enterprises as a whole, irrespective of the above attributes of entrepreneurship.

However, differences exist among the entrepreneurs in the various centres as regards their perception of management constraints. A greater proportion of entrepreneurs in the small centres seem to have greater problems managing their enterprises than those in other centres. As many as 80% think they have a problem, compared with 55% and 8.5% of entrepreneurs in the large and medium-sized centres respectively. In addition, 40.3% and 38.6% of respondents in the large and small centres respectively mentioned book-keeping as their most pressing managerial problem. (table 11.6). Inability to keep and maintain tools and equipment is also an important problem, particularly in the small centres. However, this problem is rather connected with the more serious problem of shortages of raw materials and spare parts than perhaps due to inherent (personal) shortcomings of small-scale entrepreneurship.

Table 11.6 Size and nature of the management problem for
Informal industrial enterprises in large, medium-
sized and small centres

Size and type of problem	Size range of Centres			
	Large	Medium	Small	All Centres
1. No Problem	44.9 (79)	91.5 (194)	19.8 (41)	52.9 (315)
2. Bookkeeping	40.3 (71)	6.1 (13)	38.6 (80)	27.3 (163)
3. Maintaining repairs etc.	5.1 (9)	0.5 (1)	14.5 (30)	6.7 (40)
4. Lack of attention	1.7 (3)	0.5 (1)	3.9 (8)	2 (12)
5. Storage	3.4 (6)	0.5 (1)	5.3 (11)	3 (18)
6. All above combined	1.1 (2)	0.5 (1)	15.5 (32)	5.9 (35)
7. All others	3.4 (6)	0.5 (1)	1.5 (3)	2 (13)
Total Sample Size	176	212	207	595

Actual frequencies in brackets

Source : Authors survey 1977/78

(vi) Labour problems

Added to the problems of management, some of the operators in the industrial sector face problems with their labour force or employees. 57% of all respondents thought they had no such problems. For the 43% who have labour problems, the most significant problem is rapid labour turnover or loss of workers. This is connected with the apprenticeship system whereby those who have completed their training leave their masters. The master craftsmen thus tend to face the problem of keeping and attracting skilled workers and apprentices to their fold, and this may be difficult at times. One reason is perhaps the natural inclination for skilled craftsmen to be masters of their own enterprises and employ a number of apprentices and other workers, rather than to work for, or on some form of partnership system, with other skilled craftsmen (Kennedy, 1976). In addition to lack of skilled labour, 4.5% (ie. 27) of the industrial sector entrepreneurs face the problem of shortage of apprentices and skilled workers. This may be due to competition among the industrial entrepreneurs for apprentices and skilled labour, in which case it is a dangerous one for the survival of those enterprises which cannot compete. It may also be due partly to the entrepreneurs' inability, or perhaps unwillingness, to pay adequate wages to attract the required labour. 10% of the industrial entrepreneurs interviewed complained about the wages paid to their skilled workers. This indicates either the unwillingness of the entrepreneurs to pay at least the minimum national wage, or their inability to do so, or both. Inability to pay a decent wage is directly or indirectly related to the inability of the entrepreneurs to generate enough capital to run their enterprises.

In general, a greater proportion of the industrial entrepreneurs in the small centres face labour problems than their counterparts in the medium and large centres (table 11.7). Again, the main labour problems identified seem more serious with enterprises in the small rather than in medium-sized and large centres. Note in particular, the problem of lack of apprentices in small centres. This may be related to the terms of apprenticeship system and the fees charged to apprentices in the small centres compared with other centres.

(vii) Physical and environmental problems

Informal industrial enterprises are known to operate under difficult physical and environmental conditions. Most of them operate in poorly constructed temporary, semi-permanent and permanent structures, small in size thus hampering possible physical expansion on the existing sites. Others are unable to construct their own workshops for various reasons. They cannot afford the workshops or do not have control over the land on which to build workshops, assuming they can afford them in the first place. Local and municipal council regulations regarding the location and structure of workshops may also be inhibiting factors. In certain cases, particularly those of auto repairing and related enterprises (welding, spraying, etc.) local planning and municipal regulations have forced them out of "prime" locations where they could "capture" as many customers as possible, to the outskirts of the centres. The sites they occupied have been zoned for other uses - important commercial, residential or for community facilities, or else their workshops are regarded as an eyesore, and therefore have to be moved to peripheral locations. In Cape Coast, the large centre, for instance, a number of auto and related

Table 11.7 Size and nature of the labour problems for
Informal Industrial enterprises in large, medium-
sized and small centres

Size and type of problem	Size range of Centres			
	Large	Medium	Small	All Centres
1. No problems	59.1 (104)	75.5 (160)	35.7 (74)	56.9 (338)
2. Lack of skilled labour	9.1 (16)	1.4 (3)	17.9 (37)	9.2 (55)
3. Turnover/ mobility	19.9 (35)	9.0 (19)	17.9 (37)	15.3 (91)
4. High wage rate	1.7 (3)	12.7 (27)	14 (29)	9.9 (59)
5. Unreliability of labour	6.8 (12)	1.4 (3)	2.4 (5)	3.4 (20)
6. Lack of apprentices	2.3 (4)	-	11.1 (23)	4.5 (27)
7. All others	1.1 (2)	-	1.0 (2)	0.9 (5)
Total Sample Size	176	212	207	595

Actual frequencies in brackets

Source : Authors survey 1977/78.

repairing units scattered over the municipality, have been moved to a site which was originally a refuse dump, but which belongs to the Cape Coast municipal council. In addition, most of the sites where informal industrial activities are carried out lack the necessary services and facilities. Table 11.8 shows that about 46% of industrial entrepreneurs in all the selected centres complained about poor environmental conditions, particularly with respect to drainage. There is also the problem of poor services. These include lack of access roads, water, toilets and electricity. Then there are the problems of workshops, rents and land tenure.

The proportion of the entrepreneurs who complained about this problem varies among the centres. Poor or uncongenial environmental problems is a major problem in the large and medium-sized centres. For small centres, in addition to the poor conditions and the small-sized workshops, which entrepreneurs in all centres face, a greater proportion of those in the small centres face more serious problems in terms of rents and environmental services than those in both the large and medium-sized centres.

B. Problems facing the enterprises in the Trading (and Services) Sector

In the case of the trading (and services) sector lack of adequate supplies is the most important problem; 55% of all the entrepreneurs mentioned it as their major problem, though the proportion of entrepreneurs who face this problem increases with the size of centre (table 11.9). Supplies are obtained mainly from formal sector commercial institutions and enterprises, which depend mostly on imports for their own supplies.

Table 11.8 Nature of Environmental and Physical problems
of Informal industrial enterprises in large,
medium-sized and small centres

Nature of problem	Size range of Centres			
	Large	Medium	Small	All Centres
1. General poor conditions	44.3 (78)	77.4 (164)	15 (31)	46.4 (276)
2. Small workshops	8.0 (14)	7.1 (15)	11.1 (23)	8.7 (52)
3. Rents	21.0 (37)	5.7 (12)	27.1 (56)	17.6 (104)
4. Poor Services	6.8 (12)	2.9 (6)	13.1 (27)	6.4 (38)
5. Lack of tenure	9.1 (16)	0.9 (2)	4.8 (10)	4.7 (28)
6. All others combined	9.1 (16)	6.2 (13)	28.9 (60)	14.8 (88)
7. None	1.7 (3)	-	-	0.5 (3)
Total Sample Size	176	212	207	595

Actual frequencies in brackets

Source : Authors survey 1977/78.

Table 11.9 Nature of main problems in Informal Trading and Services enterprises in large, medium-sized and small centres

Nature of Problem	Categories of Centres			
	Large	Medium	Small	All centres
1. Supplies	71.6 (120)	62.7 (168)	34.8 (81)	55 (369)
2. Lack of capital to run business	10.6 (18)	7.5 (20)	15.9 (37)	11.2 (75)
3. Transportation	7.1 (12)	4.1 (11)	33 (77)	14.9 (100)
4. Demand problem	4.1 (7)	17.2 (46)	6.9 (16)	10.3 (69)
5. High taxation rate and Govt. restrictions	4.7 (8)	0.4 (1)	4.3 (10)	2.8 (19)
6. All other problems	2.4 (4)	0.4 (1)	4.3 (10)	2.5 (17)
7. None	0.6 (1)	7.8 (21)	0.9 (2)	3.3 (22)
Total Sample Size	170	268	233	671

Actual frequencies in brackets

Source : Authors survey 1977/78.

In periods of shortages, therefore, the supply sources are drastically affected. This is very much unlike the industrial sector which uses a lot of scrap and recycle materials obtained from both formal and informal sectors. A greater proportion of enterprises in the large and medium-sized centres face the problem of supplies because, apart from the shortages, they have to compete with enterprises in the small centres and in the rural areas for the scarce supplies. In view of this, entrepreneurs in the small centres have to incur a lot of transportation expenditure. This is reflected in the proportion of entrepreneurs in the small centres to whom transportation cost is the most important constraint facing their enterprise. 33% of all such entrepreneurs complained about the transportation difficulties and cost involved in carting the goods from the main centres to the small centres. Like the industrial sector, capital is the third most important problem for all centres, while the demand problem seems to have a greater effect in the medium-sized and small centres than in the large centre.

C. Summary

This chapter has discussed two themes : that the constraints facing informal sector enterprises can be attributed to factors relating to the operations of the enterprises, their size, structure of employment and organization. Secondly, that increasing size of centre should have a minimizing impact on the constraints facing their operations. While evidence from the survey seems to support the first hypothesis, it seems that urban size does not have a marked impact on the problems facing the sector. This is because if the various constraints are considered separately, it is found that only a slightly larger

proportion of entrepreneurs in the small centres experience the various problems than those in the medium and the large centre. Secondly, there seems to be no difference between the medium-sized and the large centre in terms of the proportion of enterprises which experience particular problems.

Informal industrial enterprises face diverse problems but raw material inputs is the most serious constraint to their operations. Enterprises in the large and medium-sized centres experience acute shortages while in the small centres, in addition to this, they have to bear extra transportation costs and exploitation by agents and middlemen. Marketing problems hit hard the enterprises in small centres, largely because clients fail to collect their orders on time. The capital problem is common to enterprises in all centres. The most pressing problem being capital to run and expand the enterprises. Though management is not regarded as an important constraint to the operation of informal industrial enterprises in the sampled centres, it has been identified as the underlying problem to all difficulties facing small enterprises in the developing countries as a whole. Accounting and book-keeping have been identified as the most serious management constraint in the sampled centres, particularly for the enterprises in the small centres.

Rapid turnover of labour due largely to the apprenticeship system, and the desire to be independent deprive master craftsmen of skilled labour force. Again a greater proportion of entrepreneurs in the small centres face this problem than their counterparts.

Physical and environmental problems affecting the operations of industrial enterprises are also common to all centres.

However, enterprises in the small centres suffer an additional problem of how to cope with land and workshop rent.

While most of these problems are common to trading and services enterprises, shortages of supplies is a major constraint and again this problem hits hardest the enterprises in the small centres. Most of the problems faced by the informal sector entrepreneurs in the central region are common to all entrepreneurs elsewhere in Ghana and other developing countries. However, most of the problems are overshadowed by the raw material and spare parts problems, which may be typical of economies experiencing inflation and shortages. The problem, therefore, is to determine what can be done to aid informal sector entrepreneurs in the region. Part three of this dissertation is devoted to this.

NOTES

1. Elementary school education in Ghana lasts for 10 years (6 years primary and 4 years middle schooling).
2. In partnership, the partners who are not related to each other may have known each other long before going into business together. For details of this form of business organization, particularly in the Commerce sector, see Marris and Somerset, op.cit. p105-140.
3. In the auto repair units, there were 2 self help societies in Cape Coast and one in Winneba.
4. 4 in Swedru and 2 in Saltpond.
5. 6 in Cape Coast and 1 in Swedru.

PART THREE

SUMMARY OF THE CASE STUDY AND RECOMMENDATIONS FOR
A PLANNING STRATEGY FOR THE INFORMAL SECTOR IN THE
CENTRAL REGION.

CHAPTER TWELVE:

**A REVIEW OF THE FORMS OF AID TO SMALL ENTERPRISES
IN THE DEVELOPING COUNTRIES AND GHANA.**

CHAPTER TWELVE

A REVIEW OF THE FORMS OF AID TO SMALL ENTERPRISES IN THE DEVELOPING COUNTRIES AND GHANA

This chapter summarises the main findings of the study of informal sector in the central region and reviews the various approaches to support small-scale enterprises in developing countries in general and Ghana in particular. The aim of this discussion is to ascertain whether enough support for the development of the informal sector has been done elsewhere and lessons will then be drawn from it in proposing a planning strategy for the informal sector in the central region.

A. Summary of the case study

The second part of this dissertation has been devoted to a study of the informal sector in the Central region. This case study was undertaken to test some hypotheses relating to the characteristics of the entrepreneurs and operating conditions of informal sector industrial, trading and services enterprises.

The Central hypothesis of this study, as has been noted is: that the informal sector enterprises have potential for both short and long term employment generation.

Secondly, the capacity for employment generation by the informal sector enterprises depends on both endogeneous characteristics relating to the operations of the enterprises and exogeneous factors.

Thirdly, it is hypothesised that opportunities for employment generation vary somewhat directly with the size of the centres in which the entrepreneurs operate their various

enterprises. This is because it is expected that with size, the problems confronting the operators should minimise through the combination of urbanisation economies and related factors.

Fourthly, the literature review indicates weak sectoral linkages with formal and agricultural sectors. It is thus hypothesised that in the study area, weak linkages have developed between informal sector enterprises and the whole of formal sector institutions and the agricultural sector.

The Case Study was carried out through questionnaire survey which was considered the best approach in the light of the lack of published and unpublished data sources on the informal sector and in the form suitable for the purpose of this study. It is, however, recognised that this approach has its weaknesses as well and this affected the quality of data obtained through the survey and analysis of the data.

Considering the findings of this case study, there seems to be some scope for employment generation in the informal sector enterprises in the Central region. This is seen from a number of perspectives. The rapid growth in the number of enterprises that were set up in post 1966 era particularly after 1970. Secondly, most of the enterprises set up in this period are operated by comparatively younger and "better educated" entrepreneurs who, all things being equal, should operate their enterprises much longer than the "older" entrepreneurs most of whom may soon quite the sector. With their education, they should be able to bring fresh ideas and better management ideas into their day to day running of their enterprises. Thirdly, majority of all entrepreneurs interviewed, hope to continue operating

their enterprises despite apparent serious constraints to production in their enterprises.

On the other hand, one is tempted to cast doubt on the ability of the informal sector enterprises to provide long term employment opportunities. This is because the size of total employment per enterprise is very small. The majority of all enterprises have less than five employees. In the case of trading enterprises, a significant proportion of the enterprises is one-person operated enterprises (chapter six). No significant changes have occurred between the periods the enterprises were set up and the time of the author's survey. Despite their plans to continue operating their enterprises, most of the entrepreneurs have no plans at all or have not made up their minds to employ any more people in near and distant future. One major reason behind this is the problems facing the activities of informal sector enterprises in the Case study area. These problems arise partly from the inherent weaknesses of the informal sector enterprises, most of which result from their being small and poorly managed and partly from the general economic difficulties the whole country is going through at the moment. These problems and others have compelled some entrepreneurs to quit the sector. It may even discourage prospective entrepreneurs from setting up any enterprises in the sector and this could have serious consequences for production and employment growth in the sector.

However, it is hoped the present economic difficulties would be over and raw material and spare parts shortages would no longer be a major hinderance.

On the positive side, the informal sector would always be an avenue for self employment considering the nature of the Ghanaian entrepreneurs to be independent of each other. This source of self employment is supported by the traditional apprenticeship system which, as has been seen in Chapter nine, would need to be modernised if its full benefits as a source of training and skill acquisition in the informal sector are to be realised.

In a nutshell, the above summary of the findings of the case study support the hypothesis that the informal sector has the potential for both short and long term employment generation though there is a limit to the number of enterprises which can survive. However, the successful ones may employ employees from unsuccessful enterprises which may have to wind up. It should be added, however, that the potential for employment lies more in the form of self employment rather than in wage and other forms of employment. This is possible through the traditional apprenticeship system. This study has shown that the capacity for employment generation in the informal sector depends very much on the general economic "environment" in which the entrepreneurs operate their enterprises and also the particular internal operating characteristics of the enterprises themselves.

With regards to the third hypothesis, the selected centres were divided into three categories of large, medium and small sized centres. Variations observed among entrepreneurs and enterprises operating in the three categories of centres were highlighted in Chapter six. It was shown that no significant differences exist among the centres in terms of composition, mean size of initial and present employment

per enterprise. On the other hand, in all the enterprises, the value of turnover or output vary directly with size of centres and these differences were found to be significant too. Secondly, the problems facing the enterprises are felt by all entrepreneurs operating in all centres although it is recognised that those in the small centres are hardest hit. This is not surprising because informal sector enterprises in all the selected centres seem to operate in similar manner to each other. The conclusion that can be drawn from Chapter eleven is that urban size does not seem to have a marked impact on the problems facing entrepreneurs operating informal sector enterprises.

Also with regards to employment generation in informal sector, Chapter ten has shown that the proportion of the entrepreneurs in all enterprises who wish to, or have planned to expand employment, does not relate to the size category of centres. In fact, it was found that a greater proportion of entrepreneurs in the small than large and medium sized centres have such plans. The above findings thus seem to suggest that opportunities for employment in the informal sector enterprises does not vary directly with the size of centers per se, but upon a host of other factors, of which the size of centre may be a part.

Finally, the result of the analysis clearly shows that there are direct weak connections or linkages among the informal sector enterprises themselves and between them and formal sector and its institutions and the rural or agricultural sector. However, a measure of indirect linkages suggest a substantial connection between the informal sector and the other sectors of the economy.

The results of this study indicate that the informal sector needs planning for if its potential for production and employment generation is to be realised. For this to be possible, there is a need to evolve a planning strategy to aid the existing and future informal sector entrepreneurs to overcome the constraints that hinder the growth of output and employment in the informal sector enterprises so that their growth prospects are not entirely determined by the "changing economic conditions" of the country as a whole. The concept "planning strategy" is used here to refer to the broad and specific policy issues and implementation measures that can be employed to mitigate severity of constraints facing the enterprises and also to ensure their orderly development.

All too often planning for, or devising developmental policies to aid small-scale enterprises, particularly small-scale industries, concentrate on the modern small-scale industries and virtually ignore the specific needs of the informal sector as the review in the next section shows.

B. Aid to small-scale enterprises in developing countries

In reviewing the various developmental devices it should be realised that the subject is complex and the literature extensive. This is because countries vary in their stages of industrialisation, different politico-economic approaches to national development and above all, countries differ in their perception of the role which small-scale industries or enterprises play or could play in national economic development. Therefore, variations in approach to small-scale industrial development are bound to happen. (1)

Despite the variations in approaches, requirements of the development of enterprises of all sizes in any country comprise a wide range of public policies, private as well as public services and facilities (Staley and Morse 1965 p. 386). On the whole, comparison between developed and developing countries indicate that in most developing countries, small scale industry promotion measures have been largely ineffective for a variety of reasons.

"The stated interest in the promotion of small-scale industries represents something like 'lip service', the 'revealed preference' of government incentives and assistance programmes point out that in practice, priority is given to large enterprises; the goals set for small-scale industries usually surpass reasonable expectation, particularly if existing policies and incentives discriminate against small and labour intensive units, the resources allocated to small-scale industry programmes are not sufficient and this is compounded by the inefficient way in which the programmes are implemented, programmes for small-scale industries are not integrated with the rest of industrial and other sector development; linkage potential are therefore not utilised"

(Kochav et al for IBRD IDA SIDA 1974, p.8)

(I) Types of promotional measures

There are two basic approaches to small-scale industry development in developing countries : Protective and developmental (Nanjundan et al p.13). The protective approach has been employed in India to protect small-scale largely traditional ones against the competitive in roads of larger and more modern industry . On the other hand, the developmental approach is concerned with improving the productive efficiency of existing small-scale industries; to encourage the establishment and growth of modern small-scale manufacturing units in suitable types of production and create good employment in viable enterprises which can stand on their own feet without depending perpetually on subsidy from the public sector.

"In developmental approach, the emphasis instead of being negative and defensive, is positive and forward looking. Small industry is aided not by handicapping other competing sectors of industry but by helping small producers to adopt new methods and in some instances to shift to a more promising line of production " (Nanjundan et al p. 14).

Measures suitable for developmental policy of small-scale industries have been grouped by Staley and Morse (1965 p. 356) into two basic types: the management improvement triad and developmental facilities. They consist of industrial advisory services, industrial training for entrepreneurs, industrial research services, while the developmental facilities include developmental finance, the procurement of raw material inputs and equipments, marketing aid, subcontracting and physical facilities in the form of industrial estates.

The above points to the needs to approach small-scale industrial development on a more comprehensive and integrated basis. Piecemeal assistance is worthless since each enterprise needs guidance and assistance in all aspects of their activities. Developmental programmes should thus be devised to take full account of what Staley and Morse term "the principle of combinations and interactions".

"The development of small-scale industry in developing countries depends not on one factor approach. Hence, any single factor approach is likely to be ineffective and wasteful. An integrated programme that works on carefully selected combinations of factors simultaneously - the exact combinations depending on local conditions is much more likely to prove worthwhile" (Staley and Morse 1965 p. 353) (4).

Unfortunately, in many developing countries where small-scale industries have been supported by the public sector, most of the measures have been considered in isolation. The need for overall development programme has been expressed on many occasions, in particular in symposia (OECD 1967, UNIDO 1970). For instance, a paper presented by the United Nations industrial development organisation (UNIDO 1970 p.49-54) has explored the interrelationships between extensions services

and such other promotional measures such as financing, research, industrial estates and other measures.

Moreover, much of the promotional measures are aimed at creating indigenous manager for modern small-scale industry rather than for the informal sector per se. However, it is worth examining what has been done elsewhere so as to be able to adapt various approaches to the planning issues of the informal sector in the central region.

(II) Developmental finance

The problem of providing financial assistance to small-scale industries is distinct and urgent but differences of opinion prevail regarding the form and nature such assistances should take. In response to these needs:

"There have been a proliferation in recent years of special programmes for a broad sector variously defined but generally labelled as small industry. Unfortunately, many of these efforts have not so far produced anything worthwhile. Often the programmes have been hastily and vaguely conceived without clear decision about what their precise objectives and methods should be. Many of them have proved more expensive and less effective than expected The small industrialists have often found that administration of the programme is dilatory, the amount of financing available is too small, the requirements for qualifying too burdensome or the terms all ill adapted to their needs"

(Davenport op cit p. 7)

Yet the belief persists that financing can be an important and relatively, a very effective tool for fostering the development of small-scale industries (5)

Adequate access to capital and credit is a big requirement of any small-scale industry programme oriented to development. In most developing countries, the usual sources of finance for small industry are personal savings from a previous employment of the entrepreneur or proprietor and his family and borrowing from friends, relatives and money lenders who, because they take great risks, charge very high interest

rates. However, it would seem that most small scale fabricators prefer this form of financing to institutional forms due largely to the informal nature of arranging for funds. Institutional financing for this class of borrowers is generally inadequate.

In most developing countries, more adequate institutional arrangements are needed through which promising small industrial entrepreneurs may supplement their capital resources, or obtain short term credit. Measures have been devised in some countries to encourage the regular banking system to do a better job of aiding small enterprises or special institutions have been set up for loans to small industrial enterprises or both. In addition to these, some countries, particularly India, have adopted indirect methods of relieving the financial strain of small industry through such measures as hire purchase system, of supplying machinery or the provision of factory space on rental or hire purchase as in industrial estates.

A number of institutional arrangements (and their combinations) may be suitable under varying circumstances for channeling credit to small-scale industries. An effective programme for financing such industries should incorporate the following elements:

"Provision of all types of loans, including medium and long term funds for fixed assets and permanent working capitals as well as short term loans; a branch network to reach small enterprises spread out over widely dispersed neighbourhood in metropolitan areas as well as in urban and rural areas, provision of basic financial management services" (K. Chav p. 18).

One of the major obstacles facing financing schemes for small industry is that of achieving widespread geographic coverage. In countries where commercial banks are well established, it would be desirable to make the maximum use of their branch networks and trained staff. In others

where it is impracticable to use the commercial banking network as intermediaries, it would be necessary to establish or strengthen specialised lending institutions. In such cases, means would have to be found for servicing industries in locations other than the city or areas containing the headquarters of the specialised institutions. Perhaps the best way to reach such potential borrowers would be to set up, over a period of time, a number of branch offices. This has been done with some success in Korea, Israel and Colombia (Kochav p. 18).

Equipment leasing and hire purchase arrangements also have potential advantages as they could mitigate the problem of financial security for loans. Lease contracts can, within broad limits, be tailored to the circumstances of individual small enterprises. On the other hand, there are off setting disadvantages. The concept as well as the contractual procedures involved may be unfamiliar both to institutional staff and to small entrepreneurs. Cultural and historical factors may predispose many small entrepreneurs to prefer formal ownership of equipment over availability for use, even though the practical consequences may be identical (Kochav, p. 18-19). Moreover, leasing companies are not common in developing countries. However, they could be encouraged for they can be established as subsidiaries or divisions of commercial banks or developmental banking institutions.

In view of the numerous problems of institutionally financing small-scale industries, Kochav et al (p. 19 ff) have suggested alternative institutional channels for that purpose.

II.a. FORMS OF FINANCIAL INSTITUTIONS FOR SMALL SCALE INDUSTRY

II.a.i. Specialised small industry financial institutions

These are to provide short, medium and long term financing. These institutions could be manned by staff specifically trained in, and oriented towards the problem of lending to small entrepreneurs. But the problem likely to face such an institution is competition from well-established commercial banks.

They may not be able to attract regular depositors on a significant scale, but, perhaps attract small entrepreneurs wishing to establish a banking relationship under which they might be able to receive short term credit. The artisan bank in Korea is a typical type of such an institution. It accepts deposits from the public and lends for short-term working capital needs along with providing medium term and long term loans. Another example is the medium industry bank in Korea (it provides only short term loans). With the establishment of such institutions, individual entrepreneurs or artisans could be encouraged to subscribe to the share capital (as in the case with the artisan bank in Israel). Apart from the capital problem, such institutions are likely to face manpower problems and the problem of administering loans to small entrepreneurs located outside the city served by the institution. In Colombia, Israel and Korea such institutions have established a number of branch offices in other major centres and their experiences indicate that such branches are viable.

II.a.ii. Specialised small industry division of a development bank

Such a bank would be in a position rather than specialised financial institutions to raise funds from domestic private

sources and from external loans. On the other hand, development banking institutions are generally pre-occupied with their larger clients or those small firms which are well established and can meet customary collateral requirements. Even if they were to be strongly disposed towards increased small scale industry lending. Smaller enterprises might, in practice, tend to receive lower priority than larger ones. Some of these constraints might be reduced if a special division of financing small-scale industries is established within a development bank.

II.a.iii. Small industry fund with central or development bank

The effectiveness of such an approach would depend primarily upon the extent to which the commercial banking system of a given country is willing and able to function profitably within the context of small-scale industry financing programme.

II.a.iv. Commercial banks

Commercial banks are underutilised potential source of industrial short and medium term finance in most developing countries. To stimulate bank lending to industry, incentives and aid are necessary, such as favourable rediscount policies and collateral requirements, development of credit information and exchange, training of industrial loan appraisal officers etc. In many developing countries, commercial banks would have significant advantages as intermediaries for channelling credit to small-scale industries. They have relatively large and competent staff and often extensive branch network offering widespread geographic coverage and are capable of offering various types of loans. On the other hand, they are probably more sensitive than other types of financial institutions to the constraints upon the small industry

financing. For this reason, commercial banks could serve as effective intermediaries for small-scale industry financing if they are offered sufficient motivation and are provided with efficient guidance in the unique problem of lending to small-scale enterprises. Potentially, commercial banks could serve as intermediaries for the provision of a combination of long, medium and short term credit to small enterprises. In providing these services, the banks could serve as agents of a specialised small industry financing institution, a specialised division of a development bank or small industry development fund as well.

Lessons from developing countries, particularly in India, show that in looking for ways to reduce the financial obstacles of the small-scale operators, attempts have been made to obtain too much with too little.

"Available resources in funds and staff have been too thinly spread by efforts to provide credit through a wide range of institutional channels on a very low cost and liberal terms for a large and diverse group of enterprises. Not enough attention has been given in individual measures to working arrangements in sufficient depth and details to ensure that all practical requirements for their operation will be met ..." (Davenport op cit p. 19)

In addition, there have been inadequate provisions for co-ordinating, monitoring, stimulating and adjusting the various institutional arrangements to ensure they meet the most pressing needs of the small-scale industrialist.

However, it can hardly be said that financial problems of the small scale enterprises are just financial. They are usually symptoms of other problems. As such financial solution alone is not likely to have any significant impact on the total or 'global' problems facing the small-scale entrepreneurs. Financial aid therefore needs to be

combined with improving the managerial skill and training of the entrepreneurs thus increasing their information field. In addition, physical facilities need to be provided.

III.a. Management development

Entrepreneurship is not only an important aspect of industrial development, but also economic development in general. In any study of the informal sector, the issue of entrepreneurship is central to the growth of the sector (as has been elaborated upon already). In developing countries in particular where this type of man power is generally lacking, strengthening managerial ability or entrepreneurship is a central requirement for promoting the development and modernisation of enterprises of all sizes - both small and large. Poor management is the root cause of all other problems, but most entrepreneurs do not see it that way because it is perhaps difficult to admit one's own inadequacies. Staley and Morse believe that the modernising triad of training extension services and research which has proved so valuable in agricultural development in several countries, can be applied to industrial management improvement as well.

III.a.i. Management training

Two types of training programmes are needed for effective development of modern small-scale industry: training of entrepreneur-manager and training of workers (Nanjudan et al p. 16). Formal and informal training include short courses, self education aids and preparatory training (Staley and Morse p. 362 ff). Management development programmes are only gradually being developed in the developing countries. In Africa for instance, a considerable number of public sector

institutions have been set up to provide management and related consulting services for private enterprise. Most of these facilities have been sponsored by the International Labour Office (ILO) and the United Nations Development Programme (UNDP). These include the National Institute for Productivity in Tanzania, the Centre for Entrepreneurship and Management in Ethiopia, and the Management Training and Advisory Centre in Kenya. In Francophone Africa, the quase-public French Association pour la formation des Cadres de l'industrie et l'administracion (A.F.C.A.) has provided some training and advisory servies in Zaire, Brazaville and Cameroon. The French Federation des Industries Mechanique et Trans formatrices des Metaux has been instrumental in developing modest training programmes in Senegal and Ivory Coast (De Wilde 1971). Similar institutions have been set up in Latin American and Asian countries as well. In the advanced countries, however, most of these services are provided by private agencies.

A crucial aspect of training small entrepreneurs is that it has to be approached with extreme care. Training topics should be chosen and course materials designed

"on the basis of key problems that repeatedly arise during in plant diagnosis and counselling. Problems of current importance to several small firms and different industries should be chosen similar enough to make examples tangible and vivid to each manager-trainee" (Staley and Morse 1965 p. 363).

III.a.ii. Industrial exentsion services

These are needed for economic guidance on promising new lines of manufacture, expansion of existing firms or the establishment of new ones. Technical advice is needed on problems such as the selection of machinery and materials and their uses, plant layout, product design and improvement

costing, marketing and financing⁽⁷⁾. A successful industrial extension service depends on adequate and well trained personnel who will be able to diagnose problems, suggest feasible solutions and be able to communicate the results to industrialists for them to understand, accept and implement those ideas. Sometimes much depends on the choice of extension methods. Different methods of extension work are adapted to different problems and the choice of each method is determined by the purpose in view and with regards to the resources available. The various extension methods may be classified into the industrial approach, the group approach and the mass approach⁽⁸⁾.

In the individual approach, direct contacts are maintained between the extension workers and small industrial plants. This is considered more effective and efficient and the method to be applied can be fully adapted to the particular conditions of the individual small scale industrial units, taking into account the skill and aptitude of the entrepreneur, his workers and his financial resources. An advantage of this method is that it provides an opportunity for disseminating information to both the entrepreneur and his workers within an industrial unit, but this may, however, involve a large operating cost especially where a large number of industrial units have to be covered.

The group approach is more effective when the advice to be given is generally applicable to selected groups of small-scale industrialists of some social and economic level and technical skills and where variations in methods and conditions of work in the individual units are not large. Thus the method may be used to provide training in simple management techniques such as book-keeping, elementary cost accounting

and principles of co-operative action. It is also valuable in providing general technical training in production techniques such as the use of raw materials or the manufacture of new commodities within the scope of existing skills.

The mass approach is achieved through meetings, exhibitions and other forms of mass communications such as films, televisions and radios. However, this approach can only be useful as a supplement to the individual and group approach. The three methods are not mutually exclusive, they are complementary rather than competitive and may be useful employed in combinations. The choice of each method depends on the availability of funds and qualified extension personnel. The mass approach may have impact on a large number of people; the individual approach may have impact on a large number of people. The individual approach combines in different degrees the advantages and disadvantages of the other two approaches.

Because of the considerable diversity of the pattern and emphasis in industrial extension services that have been established in different countries to help small-scale industry, there can be no single model for all countries. In the developing countries of Asia, Latin America and Africa, there is a general lack of adequate institutions providing services and facilities required by industry. While some countries have made some effort at providing some technical services, the services generally reach only a small fraction of the more modern small industry, leaving a large segment of the traditional (informal) ones largely untouched. Technical services, are weakly developed and also they are too small in scale to reach the very large number of small enterprises. Moreover, they are often not equipped to provide the very basic form of assistance that such enterprises usually require and can

be put to effective use. The services provided are too sophisticated and too far removed from the actual needs of small-scale fabricators (Kochav et al p. 27). The problem is even more complicated than that. The very small industries have not developed to the stage where they can induce private agencies to organise such services and facilities for them and thus a vicious circle develops. The absence of services (technical etc.) and facilities prevent the development of small industries and this discourages the establishment of institutional agencies to provide such services and facilities (UNIDO op cit p. 58).

In the advanced, industrialised countries on the other hand, apart from the governmentalised institutions providing technical aid and facilities to small-scale industry, there are a number of private agencies providing marketing and other counselling services. Industrial raw materials and equipment suppliers are frequently among the better sources of assistance available (Staley and Morse p. 387). Initially, these countries did not have any formal industrial guidance from public and private agencies but with the development of industry, these services grew largely from private sources. It is only in recent years that governments in these countries have made serious attempts to supply such services (Stepanek 1960 p. 85).

III.a.iii. Industrial research services

Some developing countries have set up industrial research laboratories and industrial research institutions like the Council for Scientific and Industrial Research (C.S.I.R.) in India. It would seem that in the case of developing countries, two kinds of applied research are

needed: Research on technical production problems and research on problems of economic and business management. The first seeks and adapts the best available production techniques, fitting them to the special needs of small-scale industry in the country concerned. The second is concerned with such things as market analysis and demand forecasting, appraisal of economic outlooks for different lines of production. In developing countries, often industrial research has been carried out without an adequate extension service to disseminate the results and to bring problems encountered in industrial production to research organisation. This gravely limits the usefulness of research. Conversely, to establish an industrial extension service without supporting research activities, is equally serious⁽⁹⁾. Development finance, management training, extensive services and research facilities can only solve part of the problems. Small scale industries also need to operate in very suitable surroundings and facilities. The physical planners approach to the environmental problems facing the small-scale industries is the provision of some form of industrial estate.

IV Industrial Estates

A large proportion of small-scale industries, especially those in the informal sector do not have permanent workshops, inadequate access to services such as water, sewerage, transport, electricity so that their development requires that better working places, factory sites and other forms of infrastructure and services are provided. The idea of using industrial estates to achieve this, has virtually come to stay with industrial planners. It is regarded an effective means by which the small-scale industrialist can save his effort, time and capital in setting up a factory of

his own. An estate, therefore, is an attempt to provide on rental basis, good accommodation and other basic facilities to groups of small entrepreneurs who would otherwise find it difficult to secure these facilities at a reasonable price. It is also an effective and comparatively safe way of helping small industrialists financially; the opportunity to rent suitable quarters or to buy or hire purchase is as good as a loan to a small industrialist who would otherwise have to finance his own factory building. Again, an industrial estate reduces the cost and relieves the small industrialist of the time consuming task of getting titles to land, having buildings designed and constructed and arranging for other infrastructure. Moreover, it offers a focal point for a wide range of other activities to assist small industrial growth. These include industrial training and extension services. It can also serve as important tool in city planning and control of urban growth since they can be located to fit anticipated or desired traffic configuration and zoning patterns in order to reduce congestion and keep the dirt and noise of industrial operation out of the residential sections (Staley and Morse, P. 373-374, Dhar and Lydall p. 35).

Industrial estates originated with the developed countrys' attempts to attract industries to "depressed areas" by providing industrial infrastructure etc. In the last quarter of the century, this concept has been used in a variety of ways in developing countries, especially in India and Pakistan and they range from an economic way of providing infrastructure for modern manufacturing sector to attempts to combine assistance to small-scale industries with rural development objectives (Kochav et al p. 33).

The experience of India is worth noting. The idea of industrial estate was incorporated in India's second 5 year plan (1951-56). The principal objective was

"to enable a number of small-scale units to have the advantage of common services and other facilities such as good site, electricity, water, gas, steam compressed air, railway sidings, watch and ward etc." (Dhar and Lydall p. 35)

Since in an industrial estate a number of manufacturing establishments are located within the same area, it was also expected that an estate would, in effect, become a complex of interdependent and interrelated industries. Such a complex is expected to have the advantages of agglomeration and external economies which are necessary for the growth of an individual industrial unit. The industrial estates were also expected to:

"relieve the existing congestion in industrial areas and big towns; stimulate the growth of small industries in the townships surrounding major industrial plants and thus to promote the growth of ancillary industries; decentralise industries towards smaller towns and larger villages and thus control urban growth and regulate location of industry". (Dhar and Lydall p. 36).

Most of the functioning estates in India are sited near cities or big towns and some medium-sized towns. All estates are on branch roads and near railway stations or sidings. Rural estates are near small towns or big villages. The Indian experiences indicate that rural industrial estates require a large number of social and economic overheads and the need for entrepreneurs who are willing and capable of taking advantage of factory shed. In the absence of these, the idea of rural industrial estate appears to be somewhat premature. Even the proximity of large and medium towns does not necessarily guarantee the success of an estate. Again the Indian experiences show that it is

difficult to establish successful estates in backward areas where the necessary infrastructure of communications, market and financial facilities are lacking. Pakistan and Japan also have rich experience in industrial estates.

Industrial estates are today the most prevalent form of planned group location of industry in a number of African and Latin American countries as well. Such estates have been set up not only in or near large urban centres, but sometimes also in the smaller towns mainly to cater for the needs of large and medium sized industries (UN 1965 p. 45)

However, industrial estates specifically established for small-scale industries particularly for the informal sector, are very few. In Africa, the two main examples are the small scale industries promotion centre in Zaria, Northern Nigeria and Kenya Rural Industrial Development Centres (RIDC). The RIDCs for instance, have workshops equipped with modern machinery and other facilities but on the whole, the centres have had limited impact on the development of small-scale industries in the centres in which they are located and those in the districts as well (Livingstone 1977) The Centres have been found to be too costly to run because the equipments are underutilised since only few clients use the facilities. The lack of significant impact the Centres have had on the small-scale entrepreneurs brings to focus the need for the designers of such schemes to understand the particular needs of the types of enterprises to be catered for.

In some countries such as Tanzania and Zambia, the effort to provide better accommodation and facilities have taken the form of the creation of workshops or workshop clusters rather than industrial estates (De wilde 1971 p. 22 Livingstone 1972).

Unlike the industrial estates which cater for any number of heterogeneous activities conducted independently, workshop cluster concentrates on a limited range of craft industries in which artisans can receive central help. Major and minor "workshop clusters" could be established according to the size of centre and the distribution of artisans who require assistance (Livingstone 1977 p. 503).

V. Procurement of inputs and sale of products: scope for co-operatives

Procurement of inputs is one major problem area for small entrepreneurs. This is particularly the case in an economy with a serious inflation problem such as that of Ghana. There is no easy solution to this problem. One solution that has been suggested is through co-operatives movements. Small-scale industrialists could be encouraged to form co-operative societies or associations in which entrepreneurs can band themselves for joint purchase of material inputs and also for sale of products where there is scope for it.

Apart from these, members of the association can take advantage of credit on terms more favourable than they can attain individually. Moreover, it provides a convenient means of disseminating technical and commercial knowledge to members (Schadler 1968). Co-operative or other enterprises can interact among themselves. However, this is something that cannot be forced on the small-scale entrepreneurs. Its success must be based on mutual confidence. Again, this form of association could be extended to cover linkages with large scale enterprises by means of sub-contracting or where small-scale businesses serve as suppliers of components or products to large enterprises. Vertical

linkages between small and large industries can help sustain the growth of small-scale industries or in some cases, even help new enterprises. Large scale enterprises can also assist subcontractors in the purchase of materials, provision of capital and even training of workers. (10)

Co-operatives have been essential ingredient in the development of small enterprises in many developed countries. In Japan, for instance, thousands of common facility co-operatives have been organised by the voluntary action of small businessmen. In the developing countries, on the other hand, co-operatives have not made a significant contribution to the promotion of small-scale industries except under particular conditions and for particular services. For instance, the procurement of raw materials for small businesses has been undertaken on a co-operative basis in the West Indies. The guarantee of loans to small business can, in some cases be partly covered by co-operative arrangements for mutual guarantees. In others, some of the more difficult functions facing small businesses could be assumed in whole or in part by central or public organisation which could order and market a variety of products made in small workshops. Such an arrangement is particularly suitable for artisans and handicrafts. In Tunisia, for example, artisans service a large number of artisans. The review of the main forms of promotional measures that have been discussed and in some cases tried in other developing countries show that planning for small businesses is not just applying the developmental aids in isolation but that it requires co-ordination of policies and programmes and that a systematic and a pragmatic approach needs to be adopted.

in administering them. Also the review has shown that the informal sector has been neglected. Most of the forms of aids enumerated above have been applied to modern small-scale industries and enterprises. This also shows that it is perhaps very difficult to plan for the informal sector. The review so far has not highlighted the approaches adopted to aid small enterprises in Ghana. It is thus pertinent to examine how the range of ideas and policies discussed and tried elsewhere have been tried in Ghana and the successes and failures that have been achieved. This is important if one can become aware of what can be done to help the informal sector entrepreneurs in the Central region.

C. Aid to small-scale enterprises in Ghana

In Ghana, aid to small-scale enterprises in general and small-scale industries in particular, has taken the form of: technical assistance and training schemes and credit schemes.

(i) On-going technical assistance activities ⁽¹¹⁾

Technical assistance activities which are financed in part at least by the government of Ghana, are conducted by the Council for Scientific and Industrial Research (C.S.I.R.); the Ghana Enterprises Development Commission (G.E.D.C.); the Management Development and Productivity Institute (M.D.P.I.); the Small-Scale Industry Development and Training Centre (S.C.I.D.T.C.) and the Technology Consultancy Centre (T.C.C.)

i.a. Council for Scientific and Industrial Research

The Council for Scientific and Industrial Research (CSIR) was established as a Statutory Corporation in October, 1968. However, it has a history extending back to August, 1958, when the National Research Council (NRC) was created by the Ghana Government to organise and co-ordinate scientific research activities in Ghana. Following the acceptance by the Government of the report of the Cockroft Committee, the CSIR was created and assigned control of nine specialised research institutes.

The functions of the CSIR include the provision of advice to Government on scientific and technological matters of importance to the utilisation and conservation of Ghana's natural resources; encouragement of scientific and technological research of importance to industry, technology, agriculture and medicine; establishment, where necessary, of research institutes, units and projects; co-ordination of research in all its aspects in Ghana; and collation, publication and dissemination of the results of research and other useful technical information.

Several of the nine research institutions under the management of CSIR are making a contribution to the development of small-scale industries. The Institute most directly concerned is the Industrial Research Institute. However, the institute is more concerned with the problems of formal sector industries than those in the informal sector.

i.b. Ghana Enterprises Development Commission (GEDC), Accra

Since December 11, 1970, the GEDC has been providing financial and technical assistance to newly established small industry and to Ghanaian managers of former alien

manufacturing facilities. GEDC's authorised complement of professionals was 47 as of July 1, 1976. Its annual operating budget of about ₵450,000 is provided by the Government through the Ministry of Economic Planning.

In 1975, the Government established GEDC under the Ghanaian Enterprises Development Decree (NRDC 330) to carry out the following functions:

- implement the provisions of the Investment Policy Decree 1975 (NRCD 329), and to ensure the assumption of the control of the economy by Ghanaians within the shortest possible time;
- create an effective institution providing technical and financial assistance; as well as a general advisory service to Ghanaian businessmen; and
- examine any question concerning commerce or industry affecting Ghanaian business which the Government may refer to the Commission and to report to the Government on all such questions so referred.

Four main categories of investment are identified under the Government's Investment Policy. These are:

- Enterprises wholly reserved for Ghanaians;
- Enterprises partly reserved for Ghanaians;
- Enterprises in which State participation is required; and
- Other unspecified enterprises without specific participation requirements.

The enterprises in the industrial field listed under the Decree include:

- Bakeries
- Printing of books and stationery (including publishing)
- Manufacture of cement blocks
- Ordinary manufacturing/tailoring of garments such as Jormi, shirts, blouses, ladies dresses and children's wear

- Textile screen hand printing (including tie-and-dye)
- Tire reading
- Manufacture of suitcases, brief cases, portfolios, handbags, shopping bags, purses, wallets
- Sugar, salt, soap, detergents
- Fertilisers, petroleum products, lubricants
- Machetes, hoes and other manually-operated agricultural implements
- Animal feed, milk, baby food
- Textiles
- Matches, beer, cement, rubber, tires and tubes, and flour
- Timber enterprises
- Mineral development
- Bauxite extraction
- Processing of bauxite and alumina
- Production of crude oil

The last five industries require varying percentages of Government-held equity.

GEDC's experience in the above industrial fields covers all nine regions of Ghana where GEDC has branch offices. Its technical assistance activities have been related primarily to its lending operations under the Small Business Credit Scheme.

i.c. Management Development and Productivity Institute
(MDPI, Accra)

The MDPI was established on October 26, 1967, when the Government of Ghana signed a plan of operation with the United Nations Development Program and the International Labor Office. The new Institute replaced its forerunner, the National Productivity Center, which had been established

in June, 1964, as part of the then Planning Commission (now the Ministry of Economic Planning) and later incorporated on October 22, 1965, under the Statutory Corporations Act of 1964.

The broad objectives of the Institute are:

- to introduce suitable practices and techniques to promote increased productivity; and
- to improve and develop standards of management in all aspects.

More specifically, the MDPI is engaged in the following activities:

- organising training courses, conferences, seminars for personnel from all sectors of industry in fields of general management, industrial engineering, financial and management accounting, marketing and sales;
- providing an advisory and consulting service to all sectors of industry on the solution of problems concerning the raising of productivity and efficiency;
- carrying out studies, inquiries, and research in the fields of management development and productivity, in cooperation with industry and organisations with related interests;
- publishing information collected and the results of the studies, inquiries, and surveys in the form of books, periodicals, bulletins and bibliographies; and
- serving as a center for collecting information on modern developments in management and organisation and making such information readily and constantly available to those responsible for the running of the national economy.

The Institute conducts courses and seminars of varying duration in management for all levels of management.

Admission is open to candidates who satisfy requirements for particular courses. Candidates are sponsored by their employers. The Institute's activities have been very useful to large enterprises particularly expatriate, state owned

concerns. Thus its beneficiaries have largely been companies which probably could and should provide their own training facilities (De wilde vol. 2 annex 4, p. 11-13). However, following a review by a U.N.D.P. mission in 1970, the Institute undertook a partial re-orientation of its activities in the direction of promoting and training small and medium scale Ghanaian entrepreneurs and their staff. In 1971, it established a Ghanaian Business Bureau for this purpose.

i.d. The Small-scale Industrial Development and Training Centre (SSIDTC) Tema

This started operation in late 1974 in Tema with the Government of India providing some of the personnel. It is not yet fully operational but it is expected that when it is in full operation, services provided by the Centre will include technical information for factory production, advisory services to industry, industrial extension work, reports on potential industrial projects, the preparation of product designs and plant layouts and the manufacture of prototype products and training in factory production. Facilities at the Centre include an engineering workshop, training workshop, classrooms and laboratories for the development of prototype equipment. They are also to expand operations of a similar nature to three other localities where new centres will be called Intermediate Technology Transfer Units (I.T.T.U.s)

i.e. The Technology Consultancy Center (TCC), Kumasi

The TCC was established in January, 1972, by the University of Science and Technology in Kumasi. Through

the TCC, the University seeks to make available its expertise and resources in the promotion of the industrial development of Ghana. The Center enables government departments, established industries and individual entrepreneurs to draw upon the services of the professionally qualified staff of the faculties of Art, Agriculture, Architecture, Engineering, Pharmacy, Science and Social Sciences.

The Center has become established as an agency for the stimulation of industrial development by means of "intermediate" technology. It seeks to upgrade existing small-scale industries such as textiles, pottery and wood-working by the introduction of new products and improved manufacturing techniques and it endeavors to generate new small-scale industries based on prototypes developed in the faculties of the University and utilising, as far as possible, locally-produced raw materials.

The TCC operates demonstration manufacturing facilities such as steel bolts, ceramic products for household use, soap and caustic soda, and textiles. These facilities help to train production workers, demonstrate technologies to potential entrepreneurs, and defray the costs of the TCC.

Some of the activities of TCC relevant for the development of the informal sector are in the promotion of local innovative capacity of blacksmiths in rural areas by introducing appropriate new techniques, and other activities envisages for the future include design layout and construction of workshops, design of metal products such as hand operated well pumps and metal components of traffic lights (JASPA 1977 part 2, 4.5)

II. On-going credit programme for small-scale industry

Ghana has had a very short period of public participation in the financing of small-scale enterprises. Measures that have so far been introduced are the Credit Guarantee Scheme (C.G.S.), the Ghana Enterprises Development Commission (GEDC), the Commercial and the Agriculture Development Banks (ADB).

II.a. Credit Guarantee Scheme (CGS)

The CGS, administered by the Bank of Ghana, is designed to provide guarantees to commercial banks against losses from default on loans made to SSI borrowers. Under the CGS, SSI borrowers are defined as those having fixed assets in plant and machinery not in excess of ₵100,000 and annual turnover not in excess of ₵300,000.

The protection to commercial banks afforded by the CGS ranges from 66 per cent to 100 per cent, depending on the type of loan. While most loans are guaranteed for 66 per cent, loans to Ghanaians acquiring former alien-controlled companies are guaranteed up to 75 per cent, loans to export industries (except for cocoa, timber and mining - the traditional export lines), up to 90 per cent, and loans for the import of raw materials up to 100 per cent.

The objectives of the scheme were not only to increase the volume of lending but also to direct a large proportion of it to "priority sectors" such as agriculture, livestock breeding, mining, extractive industry, manufacturing, water, road transport and services industry. The initial results of the scheme disappointed the government. By the end of 1970, the Bank of Ghana found not only that the volume of lending had not significantly increased, but also the expected shift

in the composition of loans from the commercial sector to the "priority" sector had not taken place. Trade credits alone accounted for 80% of the number and 72% of the amount of guaranteed loans. (De wilde 1971, Annex 4).

In an effort to remedy this situation, the Bank of Ghana announced that it would extend, subject to certain conditions, a 100 per cent guarantee to loans for priority undertakings including agricultural projects, food processing plants and small and medium sized manufacturing enterprises producing goods which are currently imported and for which raw materials can be obtained locally. This approach seems to have been effective. Guarantees covering loans for processing and manufacturing (mostly for working capital) grew at an average annual rate of 76% between 1970 and 1975, while the overall total loan guarantees grew at an average of 48% between these years. The largest volume of guarantees were to the state-owned Ghana commercial bank. (Govt. of Ghana op cit 1977 Annex 11.2).

Interest rates on loans covered by the C.G.S. vary. Typical rates are 11% for loans to export industries, 10% for agricultural production loans and 12% on loans to industry, transport, storage facilities, commodity training and construction.

11.b. The Ghana Enterprises Development Commission (G.E.D.C.)

As has been pointed out already, one of the functions of G.E.D.C. was to lend to small businesses under the small business credit scheme. By June 1975, the credit programme of the Commission had resulted in the cumulative lending of £16.3 million; of this amount 15% went to small-scale industries. (12)

In general, the G.E.D.C. lending to small-scale industry has served three purposes: financing the acquisition by Ghanaians of former alien owned facilities, the establishment or expansion of small-scale industry (manufacturing or service companies) and financing of borrowers unable to offer the collateral usually required by commercial banks. With respect to this, the GEDC has successfully financed several manufacturing enterprises who are now able to meet the criteria of credit-worthiness established by the commercial banks. (Govt. of Ghana 1977 *ibid*) The interest rate on GEDC loans is 10% with a ₵250,000 limit on the loan amount. The loan amortisation schedule varies depending on the project feasibility study. The borrowers' equity is negotiated and title to fixed assets is vested in the GEDC until the loan has been repaid. (13)

II.c. The commercial banks

Commercial banks concentrate on short-term financing through discounting bills and also provide facilities for overdrafts which for most part are in principle payable on demand. Security is a problem since many Ghanaian businessmen have no real property to offer as security. Moreover, there is often no clear title to land and real property may be difficult to sell in the event of foreclosure. Banks tend to be pre-occupied with security to the detriment of adequate consideration for the purpose of the projects for which loans or credit are sought. Nevertheless, the commercial banks have been making increasing efforts to accommodate small businessmen. By mid 1970 the Ghana commercial bank had extended the medium term loans to a total of ₵5.5 million (about £2.5 million at the time) for a wide range of projects including automotive engineering, food

manufacture, dressmaking, furniture production.

II.d. The Agricultural Development Bank (ADB)

The ADB operations began in August 1965. Initially, it concentrated on making loans intended to raise the output of food and industrial crops, and to expand the livestock and fishing industries.

The Agro-Business Department of the ADB was formed in 1968 to provide support for medium-size agro-industry. The focus of its lending activities has been on: food and edible oil processing, food distribution and marketing, tractor leasing services and cold storage facilities for the fishing industry. As of July 31, 1976, 11 projects had been financed. The total financing involved was ₦4.6 million, of which 74 per cent, or ₦3.4 million, consisted of loan funds, and 26 per cent, or ₦1.2 million, of equity investment by borrowers. The 11 loans to agro-industry were in the following fields: edible oil processing (2 projects); rice milling (2 projects); meat processing (2 projects); egg tray manufacture (1); fishing boat building (1); ginger processing (1); salt production (1); and machete manufacture (1). The average loan size was ₦311,000; the average equity contribution was ₦110,000 and the average total financing per project was ₦421,000. The ADB charge 12.5% interest on loans to agro-based industries and the amortization schedule is based on the project pay out, usually more than five years.

In addition to the above, there are indirect incentives through the Government's revenue sources like custom duties and the direct tax structure. For instance, a high proportion of the kinds of equipment used by small-scale industries are duty free. In a similar fashion the income Tax Decree of

1975 provides for lower co-operative tax rates on companies whose annual sales do not exceed ₵200,000 most of which belong to the small-scale industrial sector.

Overall, however, in comparison to assistance given to small-scale industries elsewhere, much more help for small-scale industries is needed in Ghana. It must be noted however, that the right approaches have been adopted in Ghana. However, like in other developing countries, there is the need to extend the existing technical and managerial training and services to the very small-scale activities of the informal sector and also to extend their coverage throughout the regions as well. Government sponsored and financed services appear to be essential for this purpose. Such an extension or diversification of the functions of the business bureau of the MDPI, for example, would require effective staffing and financing to take on such services. In terms of financing small-scale industries, the government can encourage the development of artisan or co-operative banks with wider geographical coverage.

Most of the aid schemes and incentive schemes enumerated above, relate specifically to the modern small-scale industries. The government does not appear to have seriously considered extending these aid schemes to the informal sector enterprises for which planning is needed. Consequently, public sector activities in the informal sector will now be reviewed.

III. Assistance to the informal sector in Ghana

While the public sector has not tried to hinder the growth and proliferation of informal sector activities by way of harassment and prohibitive regulations in Ghana, it has not done enough to encourage their development either. Existing

evidence indicates that even though the public sector is trying hard to develop small-scale enterprises, most of the recipients of public sector support are from the modern small and medium scale sectors (Hakam, J.A.S.P.A., N.U.T.I.).

Public sector support appears to be in areas of manpower development through the upgrading of skills (i.e. mainly through the apprenticeship system).

III.a. Manpower training: Technical institutes

The Government of Ghana realises the need to develop the manpower resources of the country not only as a means of solving the manpower and employment problems but also as part of the general process of material development. Until recently, however, much effort had been put into developing manpower for the public sector and large scale public and private enterprises. Developing manpower for the informal sector was left out of this process. However, since the late 1960s, the Government has provided some facilities for developing and upgrading skill and manpower resources in the informal sector. In co-operation with international agencies and foreign technical assistance, training institutions which generally do not require secondary schooling for entry have been set up. (Hakam 1976 p. 55)

The first of these institutes, established with the Canadian Government's assistance, is the Accra Technical Training Centre (A.T.T.C.) which between 1967-1975, trained about 600 workers for periods of 13 workers. Many of the trainees however, were drawn from large-scale public and private enterprises (Hakam p. 55). In addition to training, the Centre sends out consultants to informal sector enterprises in order to give "crash-on-the-job training and

consultancy to master craftsmen and their apprentices" (Hakam p. 57). Apart from the fact that only enterprises in the main urban centres of the country were visited, the number of workshops covered was small indeed. Hakam has claimed that by 1977 only 90 workshops involving 140 master craftsmen and 500 apprentices had been visited (Hakam ibid p. 57).

The second informal sector related training institution is the Ghanaian-German Technical Institute in Kumasi which has confined its training mainly to work on Mercedes-Benz vehicles and to "students who would be eventually hired in an assembly plant for Mercedes-Benz" (Hakam p. 56, 5 ASPA, 1977 Part 2 Chp. 3 4.2). Moreover, its intake is very small; it accepted only 75 trainees out of 1,325 applicants between 1974 and 1975 (Hakam p. 56).

The third institution is the opportunities industrialisation Centre in Kumasi which also has very limited enrolment. The Centre was able to train only 155 people between 1971 and 1975 though the number of applicants exceeded 900.

These institutes, no doubt, have expanded opportunities for training despite their limited enrolment. However, their major weakness seems to be their inability to reach the informal sector participants. The only training institute which has a more direct bearing on the informal bearing is the National Vocational Training Institute (N.V.T.I.)

III.b. Manpower training: National Vocational Training Institute (N.V.T.I.) (14)

The NVTI is an autonomous agency established by the Government of Ghana in 1969 with technical assistance from the International Labour Organisation (I.L.O.). and

the United Nations Development Programme (UNDP). It is the apprenticeship training section of its training programmes which is most relevant for the informal sector. The apprenticeship department is charged with a number of functions among which are:

" ... to study existing schemes of apprenticeship in relation to standards of training and certification at the completion of training, and if necessary, make recommendation for their improvement, ... To study apprenticeship trades in respect of initiation of new apprenticeship schemes and, where necessary, recommend specific schemes for each trade; to study and advise on the use of educational institutions and vocational training, Centres to implement or improve related instructions to apprentices"

The NVTI has established a number of pilot and experimental training centres in the country. These are manned by highly skiller personnel with vast practical and industrial experience. The centres are equipped with modern machines and tools. Table 12.1 show the local of the project centres, the types of courses offered and the number fo people trained in each centre by December 1977. The training programmes used in these centres are drawn up not only to meet local demands, but also to fall in line with national industrial requirements. The training programmes fall into three categories, namely formal apprenticeship training, rural apprenticeship training and pre-apprenticeship training.

The formal apprenticeship trianing is organised for those registered with the Institute by their employers under a contract of apprenticeship for a predetermined period not exceeding four years. The second type is similar to the formal or normal apprenticeship training but with an emphasis on training them for the type of work to be undertaken in the rural areas. Such training schemes provide trainees with

Table 12.1

Pilot Centres of N.V.T.I. Courses and Total Number Trained
By December 1977.

Training Centres	Year Set up	Type of Course Given	Total No. trained
ACCRA	1974	Building Trades, metal, electric and auto repair trades.	302
KUMASI	1973	Metal, automotive Printing trades.	1137
TAMALE	1974	Building Trades	101
NANDOM	1977	Building Trades	180
YAMFO	1977	Building Trades	15
DORMAA	1977	Building Trades	15
BIRIWA	1974	Building Trades	135

Source: N.V.T.I. Seminar 6-8 December, 1977 Accra, Ghana

a range of skills as there is less opportunity for rural craftsmen to specialise in any single craft; for example, the rural builder is trained in masonry, carpentry and plumbing.

The pre-apprenticeship training is organised for school-leavers and dropouts who are selected to undergo a period of training designed to make them acquire certain basic skills to enable them gain (wage) employment in industry. The training period does not exceed six months. The "graduates" are placed in gainful employment and employers are encouraged to register the apprentices so they can follow the training through the normal apprenticeship training.

Like all other schemes, the apprenticeship training schemes of the Institute do not benefit most informal sector operators. Only a few of those trained through NVTI programmes belong directly to the informal sector. By December 1977, the apprenticeship department had registered 3720 apprentices under the apprenticeship contract of the NVTI. However, this number was made up mainly of apprentices from large employers in the public and private sectors.

(Akushie 1977, p. 7)⁽¹⁵⁾ The limited informal sector involvement may be due to a number of reasons. There may be a serious lack of information on the training needs of the smaller industrial and commercial employers; a survey might be required to ascertain the qualitative and quantitative training requirements in order so as to evolve a suitable programme for them. Greater involvement would also require extending the NVTI training schemes to the regions, particularly and district centres.

Perhaps the major reason for the lack of impact on the informal sector is the regulations regarding apprenticeship training. Under the provisions of the regulations, any employer wishing to engage an apprentice should obtain a written permission from the controller of apprenticeship to do so. The controller then will have to be satisfied that the employer has the necessary tools, equipment, skilled personnel to carry out effective training in his establishment. When approval is given, the employer would be supplied with contract forms which should be completed in respect of the apprentices and submitted to the controller for registration. It is after the registration that the department supervises the training of the apprentices to ensure the implementation of the conditions of the contract of apprenticeship with regard to work progress, discipline etc. through constant inspections by inspectors of the institute (Akushie, 1977 p. 5-6). This approach can be off-putting to informal sector entrepreneurs who, in almost all cases, negotiate the terms of apprenticeship with the family of the apprentices or the potential apprentices themselves. Any formal registration with the institute may not appeal to them.

Another facet of the NVTI activity which may prevent potential entrepreneurs availing themselves of their facilities in future, is the technical standardization function which has been given to it. It has set up trade testing and trade certification department that ensures that a certain material minimum technical qualification is achieved for registration. The department also ensures that certain labour employment conditions are fulfilled by employer trade examination certificate is useful in giving wage employment for apprentices

who complete the training. These externally imposed registration and minimum employment conditions pose a grave threat to the informal sector entrepreneurs and it is likely that they would resist such interference (Hakam 1976, p. 59).

III.c. Other forms of aid

Apart from the NVTI, the work of some government ministries particularly ministry of labour, social welfare and co-operatives have a direct and indirect bearing on the informal sector. This ministry, in collaboration with the I.L.O. indicated some work in the area of the rural non-form sector during the 1974-1976 period.

During the course of the preparatory work undertaken, several deficiencies were discovered in the on-going training programmes in building trades, in vocational training for girls and women, in rural handicrafts and in small industries. Projects on rural non-form occupations were designed to remedy some of these deficiencies (UNDP/ILO, 1975).

Under this project a considerable amount of work was done, particularly in the area of improving the technology used in pottery, blacksmithing, tanning, woodcarving, weaving soap making, strawhat making, coir fibre products, charcoal burning and processing of cassava - all these activities are important informal sector activities particularly for women in the rural areas (J.A.S.P. 1974, 4.11).

D. Aid to Enterprises in Trading (and services) Sector

Unlike the industrial activities, virtually nothing has been done by the public sector to stimulate employment

in the informal sector trading enterprises. The concern of physical planners for this sector has arisen out of the congestion problem caused by vehicular and pedestrian traffic. Accidents, criminal activities and sanitation arise out of the informal sector activities in the centre of the main cities, particularly in Accra and Kumasi. These problems which have prompted urban authorities to do something to relieve the excessive concentration of these activities. In Accra, many of the petty traders have been asked by the city's authorities to operate their enterprises from kiosks (wooden, temporary structures) since 1976 with the hope of relieving congestion. However, this approach rather made the congestion problem worse than before. The demand for the kiosks far exceeded expectations and so more space was occupied by kiosks, so an alternative solution had to be found. The Accra city authorities have now adopted a policy of relocating the kiosks away from the centre of the city into new residential markets and banned kiosks on main roads and unpesid a fee ranging from ¢10 to ¢150 per year per kiosk (J.A.S.P.A., 1977 part 2 4.12). A similar approach has been adopted by the Kumasi city authorities where efforts at least are being made to provide infrastructural facilities to petty traders. Efforts are being made to develop new market centres away from city centre by acquiring land and putting up simple structures and encouraging enterprises to move out of the city centre. In this effort, the cities are constrained by the lack of resources in creating new infrastructural facilities in various parts of the cities. Changes in location can seriously affect the market of petty traders who depend largely on areas of major traffic attraction to sell their wares.

E. Summary

In bringing together the various types of aids to small enterprises in general, it is evident that in Ghana as well as in other developing countries the informal sector has been neglected. Most of the aids have benefited the large-scale and the modern small-scale sector leaving the informal sector enterprises to literally struggle on their own for existence. In Ghana relevant institutions for the informal sector have been set up. What is needed is for the policy makers and administrators of the institutes and agencies to broaden the scope of their activities to cover the informal sector as well. This will require that a wider coverage in the activities of the institutes must be aimed at if they should have a significant impact on the informal sector. A wider coverage necessitates the broadening of their activities away from the main urban centres into the regions. This has implications for administrative re-organisation of the agencies to reflect this spatial coverage. It also has implications for manpower and other material resources. To plan for the informal sector thus entails a lot of things. Perhaps it is these considerations which have prevented the public sector from reaching out to the informal sector. However, it may be possible to develop a framework for developing the informal sector. The central region can thus be used as a model and this is what the next chapter will discuss.

NOTES

CHAPTER TWELVE

1. This section draws heavily on the following books and mimeographs Staley and Morse op cit chap. 13-15 pp. 351-427; I.L.O. (1965 p. 35-155); O.E.C.D. (1967) I.B.R.D., I.D.A. and S.I.D.A. (1974); De Wilde 1971 Vol. 2 U.N.I.D.O. (1970); Nanjudan et al (1962); Dhar and Lydall (1961) Sketty (1963); Davenport (1967).
2. Though we shall consider examples from the developed countries as well, our interest is mainly in what has been achieved in developing countries in the area of small scale promotion measures.
3. In India, concern for millions of hand loom weavers and their families has led to this approach. In the 1950s and the 1960s such measures included a system of production quotas and reserved markets for hand loom products and excise tax on putput of large textile factories; the proceeds of which were used to subsidise the sale of hand loom cloth. Again, there were taxes on the output of the shoe factories using machinery of two horse power or more. From the material income point of view, these measures led to a decrease in productive efficiency of industry as a whole and lessened total material product. For details of the Indian experience, see Dandehar 1966 and Sketty 1963, p. 25-58.
4. The principle of "combinations and interractions" is an important principle of soil management. Staley

and Morse adapted the terminology from Charles E. Kellogg. "Basic theory of soil conservation plan" Soil Conservation Vol. 26 feb. 1961, p. 51.

5. Davenport contents that there is confusion over the terminology or definition of small-scale industry and that failure to distinguish between different forms of small scale industry is sometimes responsible for the no clear objectives and inappropriate measures in financial programmes. He concerned himself with the financial problems of small (modern) industry and not household or craft (artisanal) activities. He defines small-scale industry to be manufacturing establishments employing between 10 and 100 people with assets of not more than \$100,000.
6. This is largely due to many uncertainties, the low rate of return, the experience of administration, financial assistance to small-scale entrepreneurs has been lacking from both government and commercial sources.
7. For details see: Staley and Morse op cit p. 358
I.L.O. (1965) chap. 4 ff; U.N.I.D.O. (1970) p. 12 ff.
8. See I.L.O. ibid p. 36 ff for details.
9. For the interrelationships see Nanjudan 5 et al 1962
p. 20 ff
10. The above and other aspects of interform interactions for the common good of all firms concerned have been

referred to as "collective action". This term was a subject of OEED symposium. See also Mahaveda (1967 p. 173-178) for details of the forms of collective actions used in industrialised countries.

11. This section draws heavily on De wilde (1971) and Government of Ghana (1977 annex 10 and 11).
12. In its first year of operation, the G.E.D.C. granted over 5000 loans under 500 cedis each. Virtually all of them went to operators in the trading sector. About 80% of the money lent went to over 100 large businesses - three quarters of which were in the transport or commerce sector - averaging about 5000 cedis each. However, lack of administrative capacity to screen and to deal with large number of small borrowers soon led the commission to abandon the small loan category and concentrate on loans of over 1000 cedis each to the more established businesses across a wide range of activities. Some of the loans averaged over 13,000 cedis for those in Accra at the end of 1974 and about half that for the nation as a whole.
13. Although by the end of June 1975, the G.E.D.C. had distributed loans to over 7000 businesses, it cannot be acclaimed as a major means of initiating the intermediate sector expansion given its tendency to favour large, well established businesses (see W.F. Steel, 1977 p. 181-183).

14. For details of the functions and activities of the institute see: Akushie J.K., "Apprenticeship training in Ghana" (2nd Annual Seminars, N.V.T.I., Accra 6th-8th December 1977; also see N.V.T.I. Seminar, Accra, December (1977)).
15. In contrast to the apprenticeship system, however, the N.V.T.I. has a programme of inplant training which seems to have made a relatively larger contribution to the informal sector development. Out of 2029 persons trained between 1969 and 1977, 513 belonged to the informal sector. Most of which were organised wayside auto mechanics in Kumasi (J.A.S.P.A., 1977 4.10).

CHAPTER THIRTEEN

PLANNING PROPOSALS FOR THE INFORMAL SECTOR ENTERPRISES IN THE CENTRAL REGION

CHAPTER THIRTEEN

PLANNING PROPOSALS FOR THE INFORMAL SECTOR ENTERPRISES IN THE CENTRAL REGION

The reviews of the forms of aid to small-scale enterprises presented in the last chapter indicate that in Ghana as well as in developing countries as a whole, the informal sector has been neglected. In Ghana, however, some institutions have been established for small-scale enterprises but almost all of them cater for the needs of the modern small-scale industries and the medium and large-scale enterprises. It is necessary for the public sector to come to the aid of the informal sector by extending the activities of the existing institutions to the informal sector as well and by establishing special institutions for the specific needs of the informal sector economy. In addition, to achieve a meaningful impact, the existing and future institutions have to extend their activities to the regions, districts and towns where it is necessary to do so.

The reviews also suggest that any planning strategy for the development of the informal sector in the region needs to be comprehensive. This comprehensiveness arises from the fact that the problems confronting the entrepreneurs in the informal sector are many and varied and a solution to one problem necessarily requires a solution to another for them to be effective and reinforcing. However, the need for a comprehensive approach does not necessarily mean that all the forms of aid that were reviewed in chapter twelve should be strictly applied to the informal sector enterprises in the region. This approach could involve a huge financial outlay and would require the deployment of vast human resources due to the large number of

enterprises in the sector. A second argument for a comprehensive approach lies in the heterogeneous nature of the informal sector economy. The enterprises in the sector are not homogeneous in terms of levels of output and employment. Some enterprises in the industrial sector are skill intensive and others are not and hence the scope for employment generation and growth in output differs from one type of enterprise to another.

A comprehensive approach to the planning for the informal sector in the region will involve a combination of economic policies and physical planning guidelines. Moreover, a comprehensive approach will require that priorities be set as regards enterprises to which aid should be extended. Initially, aid could be extended to those enterprises which are considered "productive", most of which are skill intensive activities. These generally have a better capability for skill development and employment in the future. This, however, does not suggest that in the long run the less "productive" activities should be entirely ignored. On the contrary, every effort should be made to increase the productive and earning capacities of all enterprises. The rationale behind this approach stems from the belief that an entrepreneur does not have to be helped simply because he operates a "small" enterprise, but because he has shown a capacity for growth in output and employment and can become "bigger" in the future. In this way, the informal sector enterprises should, to a significant extent, become the nursery for the development of medium-scale and large-scale enterprises (De Wilde, 1975, p483).

To be effective, the comprehensive approach should include spatial aspects of the development of the informal sector.

This will have to be effected through a body or organization which will implement the strategy so that the needs of enterprises in the various centres are met. To this end the organization should be decentralized so that activities reach the "desired" entrepreneurs. This will require a monitoring and feed back mechanism to the administrators of the scheme so that they become aware of the impact of the scheme on the enterprises, and also to help the administrators improve their methods of approach to the problems of the informal sector. A planning strategy for the informal sector must begin by ascertaining the specific needs of the entrepreneurs and then suggest the necessary devices to solve them. This is also related to the question of the organizational framework which will implement the strategy.

A. Needs of the Informal Sector enterprises in the Central Region

A related but critical question that needs to be answered in any planning strategy for the informal sector is whether the entrepreneurs want any form of government or public sector support in solving the numerous problems facing their enterprises. Again, it may be necessary to enquire from the entrepreneurs the extent to which they will allow any public sector interferences in the running of their enterprises. This is important because unless it is made clear that informal sector entrepreneurs want to give up part of their independence for the limited interference or intervention by the public sector, any suggestions as to the forms of aid that should be extended to them may be meaningless. In view of this the study ascertained the forms of public support that the entrepreneurs felt

they required. Tables 13.1 and 13.2 present the responses of entrepreneurs in both the industrial and trading (and services) enterprises. The two tables show that most entrepreneurs want some form of government assistance, though the proportion of such entrepreneurs is greater for those in the industrial sector. Using these two tables, specific economic and physical planning proposals are made for the enterprises in the industrial sector on one hand and those in the trading (and services) activities on the other. Emphasis, however, will be on the industrial sector. A distinction is made between the two sub-sectors of the informal sector economy because their needs are different from each other.

B. Proposals for Economic Policy towards the Informal Sector

(i) The Industrial Sector

(i)a. Capital and credit (Developmental finance):

In chapter 11 it was noted that a greater proportion of all entrepreneurs pointed to the problem with raw material and spare parts as the most serious constraint facing their enterprises. However, when the entrepreneurs were asked the main areas where they would like to seek public sector support, the majority of the industrial entrepreneurs opted for capital assistance. The question is whether capital from the formal or public sector sources has had a significant and positive impact on output and employment in the informal sector, but the results of the regression analysis (in chapter ten) did not confirm this due to the overwhelming importance of the personal and other capital from informal sector sources.

Table 13.1 Forms of assistance required from the Government
Industrial Entrepreneurs

Type of Assistance	Proportion of entrepreneurial response in Centres			
	Large Centre	Medium Centre	Small Centre	All Centres
1. Raw material and spare parts	30.1 (53)	10.5 (22)	17.4 (36)	18.7 (111)
2. Bank loan and other financial assistance	18.2 (32)	35.3 (75)	22.2 (46)	25.7 (153)
3. Physical infrastructure	1.1 (2)	0.9 (2)	4.3 (9)	2.2 (14)
4. Reduce Taxation	1.7 (3)	4.7 (10)	0.5 (1)	2.4 (14)
5. Others (2 types of assistance required)	23.9 (42)	37.4 (79)	34.3 (71)	32.3 (192)
6. All others	23.4 (41)	6.6 (14)	21.3 (44)	16.6 (99)
7. None	1.7 (3)	4.7 (10)	-	2.2 (13)
Total Sample Size	176	212	207	595

Actual frequencies in brackets.

Source : Authors Survey

Table 13.2 Forms of assistance required from the Government :
Entrepreneurs in trading (and Services) enterprises

Type of Assistance	Proportion of entrepreneurial response in Centres			
	Large Centre	Medium Centres	Small Centres	All Centres
1. Loan	34.1 (58)	26.9 (72)	52.3 (122)	37.6 (252)
2. Supplies	48.2 (82)	16.8 (45)	5.2 (12)	20.7 (139)
3. Improve Transportation	1.2 (2)	0.4 (1)	3.0 (7)	1.5 (10)
4. Reduce Taxation	7.1 (12)	3.0 (8)	-	3.0 (20)
5. Others	5.9 (10)	7.5 (20)	32.7 (76)	10.9 (106)
6. None	3.5 (6)	45.5 (122)	6.9 (16)	21.5 (144)
Total Sample Size	170	268	233	671

Actual frequencies in brackets.

Source : Authors Survey.

The need for institutional capital both to maintain the stock of materials and products necessary for the smooth running of the enterprises and to put into effect expansion programmes, cannot be ignored. Therefore there is an urgent need to extend liberal credit facilities to meet their working capital requirements and also capital for future expansion in production and employment in the sector as a whole. However, in the central region it will be necessary for a special study to assess the specific credit requirements of the entrepreneurs to determine the type of capital or credit required. Depending on the outcome of this study, it will be necessary to set up in the region a small-scale industrial development bank, as in the case of Korea and Israel, with the expressed objective of promoting the development of the informal sector enterprises and other small-scale activities by meeting their credit requirements. This is necessary because such an institution can direct its programmes and the development of its staff to the specific needs of the very small-scale operators whose needs are normally ignored by the normal commercial banks and other financial institutions. This specialized financial institution can be set up as a branch of a commercial bank, for example the Ghana Commercial Bank, or as an autonomous or semi-autonomous credit institution funded by the Central Government. The sole purpose of this institution is to cater for the credit requirements of the small-scale enterprises in general. A research division has to be set up to assess the credit worthiness of the small-scale entrepreneurs and the progress of their business before credit is extended to them. However, for this institution to be viable one, care has to be taken to ensure that borrowers honour their

debt payments. Again, the rules of the institutions regarding lending may not have to be strictly applied so that a large number of entrepreneurs and potential entrepreneurs can benefit from the scheme. As an alternative to the setting up of a new body, it may be necessary to fully utilize the facilities already provided by the public sector. It was seen in the last chapter that the main credit giving body to the small-scale sector is the Ghana Enterprises Development Commission (GEDC), which, though firmly established in the capital, Accra, has not been very active in the regions. However, recently branch offices have been opened in the regions. The G.E.D.C. in the central region can be used as a medium for providing capital to the informal sector.

If it is found that the functions being performed by the G.E.D.C. are too broad for it to have special considerations for the informal sector enterprises in the region, it will be necessary to set up within the G.E.D.C. special 'Small Enterprises Credit Fund Scheme', the implementation of which has to be strictly supervised by the personnel of the G.E.D.C. However, once the scheme is well established, it will be necessary to take on manpower specifically trained in this and other related areas of small enterprises. The concept of supervised credit to small-scale entrepreneurs can work as the Northern Nigerian experience shows (Faust 1969), but according to Faust (1969, op.cit), it can only work with adequate technical and managerial assistance and other favourable Government policies and incentives. The concept itself means :

"that the lending agency either provides and arranges for close supervision and assistance in the selection of equipment, use of loan funds, managerial and legal aspects and technical assistance. In return the borrower does more than repay his loans, he assumes a responsibility to improve his performance in all aspects of his business."

(Faust, 1969, p206)

This concept should be adopted to the particular circumstances of the informal sector in the central region.

The alternative institutional framework in which the concept of supervised credit can work is the Ministry of Industries. The Ministry has a small-scale industry division which is supposed to cater for the promotion and development of small-scale industries (Government of Ghana, 1977, p185). (It must be emphasised that the interest of the government is mainly in the modern small-scale processing and extractive industries rather than in the informal sector enterprises.) The danger in operating within the Ministry in the central region, and indeed in any other region, is that the implementation of the scheme may be subjected to the bureaucratic structure of the Ministry. Moreover, the scheme will be dependent upon the Ministry's operational budget which will mean competing with other needs of the Ministry. In addition, if the scheme is operated through the Ministry, it may lose some control over its lending policies and programmes, since it will invariably have to depend on the Ministry of Finance for funds. Its activities may also be inhibited by the difficulty of attracting the right quality of manpower and above all it may be subjected to political pressures (Faust, 1969, p206-207).

Therefore, though the G.E.D.C. does not appear to have made an impact on the informal sector, it can be made to do so

in the central region through an orientation of its functions to serve the needs of the informal sector enterprises. Policies relating to credit can be formulated, particularly with respect to the amount of credit that can be extended to the enterprises and the period of repayments. Again, the administrators of the scheme can determine when to extend loans in the form of cash and when it is necessary that the loans should be in kind (such as equipment) instead of cash. Also means for securing the loans and methods for selecting enterprises which should benefit from the scheme must be sought.

(i)b. Supply of material inputs

In addition to development finance, about 19% of the entrepreneurs in the industrial sector enterprises want the Government to help them to solve their raw material and spare parts problems. The regression analysis presented in chapter ten suggests that direct sources of raw materials and spare parts from the formal sector can have a significant impact on output and employment for the industrial sector enterprises. It is therefore necessary that means by which entrepreneurs can obtain much of their supplies from the formal sector sources be found. There are a few enterprises which already receive part of their supplies from the Central Region Organization. This arrangement should be extended to other enterprises as well. It does seem that an appropriate approach to this problem is for an agency to be set up for that purpose. If this is done, entrepreneurs will be assured of regular supplies at wholesale or Government controlled prices. A raw material procurement agency should be set up under the G.E.D.C. or as

an autonomous body of the Central Region Organization, but affiliated both to the Regional Organization and the G.E.D.C. The first task of this agency will be to assess the range of inputs and the quantity needed by each enterprise at specified periods. However, to do this successfully, the agency may have to compile a list of all informal sector enterprises which may require public sector support in this direction in each centre and also devise a strategy for reaching them at the least cost.

To reach a majority of the enterprises, the agency may require as a precondition for receiving aid, membership of a co-operative society or association. This study has shown that the co-operative spirit is virtually non-existent in the central region. It will therefore become necessary for the agency to encourage the entrepreneurs to organize themselves into industrial co-operatives on the basis of the types of activities and also on locational basis. Thus auto repairs and related activities in Cape Coast for instance can organize themselves into some form of association. It is through the co-operative associations and the specific requirements of the members that the agency may become aware of the magnitude of the input problem and how best to tackle it. It is also through the co-operatives that specific allocation of inputs can reach enterprises in each activity area. However, for the co-operative societies to be vital elements in the procurement of inputs, the agency may have to regulate them by establishing limits such as the minimum and maximum size of members in each society; but it is not necessary and desirable to attempt to form and control the members directly (Steel, 1977, p169-170).

The co-operative spirit should emerge from among the entrepreneurs themselves rather than being imposed from outside. Promoting the co-operative spirit among the informal sector entrepreneurs may require an intensive campaign aimed at educating them as to the advantages to be gained from being members of co-operative societies. In this exercise the agency may have to seek help from the Ministry of Social Welfare and from co-operatives which have the manpower for this job.

In addition to the procurement of raw materials, a strong co-operative movement among the entrepreneurs in the region will be a great asset to the G.E.D.C. as well, for it will enable it to extend financial aid to the enterprises. Thus it will be necessary for the input procurement agency to become an integral part of the G.E.D.C. and these together will operate as a wing, or division, of the Regional Planning Organization or machinery (we shall return to this later). Credit and procurement of input schemes alone are not enough in any comprehensive development programme for the informal sector. An area which needs attention as well is the provision of technical aid and improvement of managerial skills.

(i)c. Managerial and technical skills

The industrial entrepreneurs in the central region, like their counterparts in other developing countries, do not consider deficiencies in management one of the crucial problems to their economic activities. An aspect of the problems of management is total lack of bookkeeping practice among the entrepreneurs. Any scheme to provide credit to the entrepreneurs in the informal sector must be accompanied by a programme of education in simple business skills such as bookkeeping and price setting. Probably the best method is to incorporate

these courses in the curricula of the elementary school system. It could be taught in the elementary school continuation programme so that by the time school-leavers set up their own enterprises after their training, they would have acquired the basic skills and habits of bookkeeping. Commercial courses are gradually being introduced into the curricula of a number of secondary schools in the country. This process should be speeded up and facilities should be made available to the elementary schools as well. More advanced management training schemes are needed to help the successful entrepreneurs make the transition to the modern small-scale sector.

The above proposals apply mainly to prospective entrepreneurs who are likely to set up their enterprises in the future. The problem is how to assist the present entrepreneurs who do not keep accounts and lack other management techniques. To assist such entrepreneurs will require the creation of a business extension service unit appropriate to the needs of the informal sector. This service too should become part of the G.E.D.C. in the region for efficient administration and the achievement of some economy in the use of personnel and facilities. A major prerequisite for a successful extension programme is that the personnel involved must have had practical experience in the type of industrial activity they will be dealing with, and this should be supplemented by training in extension methods. A problem that an extension programme may run into is that of adequate staff. It may be necessary to provide adequate incentives to attract the right calibre of staff. Care must be taken so that such services do not degenerate into routine government services. The method of approach

is also essential; the staff should be taken into confidence by the entrepreneurs who in turn must be made to understand the needs and purposes of such services. Unless these are taken seriously, most entrepreneurs, particularly the older ones, may interpret any genuine help that may come from the extension staff as a source of interference, and may not co-operate with the extension workers.

Technical training is also crucial to output and employment in the informal sector industrial enterprises as the regression analysis in chapter ten indicates. This study has shown that the formal sector is not very important as a source of technical training for the entrepreneurs in the industrial sector, but rather it is the traditional apprenticeship system which is the most important. The importance of this system cannot be taken for granted so that there is the need to upgrade the system so as to increase the productivity of the labour force in the informal sector. This could be achieved through the injection of improved technical skills by the public sector. Short courses of accelerated training could be arranged for selected masters and apprentices in the centres in which they work. Since more apprentices are new school-leavers, they may understand elementary theory and may also be capable of more advanced technical work. The apprentices could be admitted to trade schools for short periods and what they learn will supplement what they gain from the traditional system. In this way they can work within the system to improve it, retaining continuity of the system and at the same time still upgrade the skills in it. (Callaway, 1967,p168). Such training schemes could be performed as part of the

extension services which can help promising units by working out programmes to suit the needs of groups of industrial units. It would be recalled from the last chapter that the National Vocational Training Institute has pilot projects in apprenticeship training in certain centres throughout the country. There is only one project centre in the central region and this is at Biriwa, a fishing village about fifteen miles east of Cape Coast, on the Accra-Takoradi trunk road. This centre was opened in 1974 and it gives courses in the building trades. However, only 135 people had been trained by December 1977. It is necessary to fully utilize the facilities provided at this rural industrial centre. In addition, the facilities for apprenticeship training provided by the N.V.T.I. need to be extended to the regions. Hence in the central region, a branch of the N.V.T.I. needs to be established and again, like other agencies, this should become an integral part of the overall development body (G.E.D.C.).

Skill upgrading in the informal sector needs to be taken seriously, but progress in this direction may be difficult to achieve unless the informal sector entrepreneurs realize or accept the value of this training and are willing to avail themselves of the opportunities for widening their knowledge and horizons. They must also be willing to release their apprentices for short training courses where the apprentices or their sponsors can afford this extra tuition. The problem is how best to fit this training programme into the work schedules of the informal sector entrepreneurs. A scheme for skill upgrading may work where the training can be provided in the evenings, so that employers do not have to release their workers during the day. A special study is therefore

needed to ascertain the willingness of entrepreneurs to release their apprentices for further training, to contribute towards the costs of training and to increase their wages upon completion of the training.

(i)d. Marketing aid:

There are various other economic aids through which the informal sector enterprises in the central region may be developed. One such avenue is in the field of marketing. For most of the industrial sector entrepreneurs, the local market is all that they know and it is their sole concern; much of their sales are made to the ordinary customers or the general public at large. Sales to the formal sector institutions could have a positive impact on output and employment growth. It is thus an area where the government can aid the informal sector by setting an example by buying products from the informal sector. Contracts for the provision of furniture, school uniforms, construction and the like can be awarded to successful informal sector operators. At the moment there are already a few carpenters, bakers, metal working and block manufacturers who supply schools and colleges, particularly those in Cape Coast. This trend in intersectoral linkages is a healthy sign indicating the recognition by the formal sector of the quality of goods and services that can come from the informal sector. It needs to be pursued further through campaigns on the part of the government who can even encourage all those institutions who make such purchases to allocate a specific proportion of their purchases to sources in the informal sector. The government can go even further by making concessions to institutions which follow such ideas. However, such policies should not be

pursued to the detriment of the formal sector enterprises. The campaign should be waged in order not to hinder the smooth running of the informal sector enterprises. They should be paid immediately to avoid the long delay often involved in collecting payments from the public sector, particularly by the government.

In return for this campaign the government or its agency could ask entrepreneurs to increase the size of the labour force. However, the ability of the informal sector entrepreneurs to comply with this depends on resources or equipment at hand, the number of customers over a specified period (or the volume of business) and obviously the willingness of such entrepreneurs to increase their labour force despite apparent successes.

(i)e. Reduce taxation :

At least 2% of all entrepreneurs interviewed said this is the area in which they need the government's help most. Due to the difficulty in determining the turnover of enterprises in the small-scale sector because of the lack of bookkeeping and obvious tax evasion, the government has ^{or} fixed/flat rate of annual tax for categories of small-scale enterprises. This seems to hit very hard the very small operators who can hardly break even, let alone make profits. The problem seems to have been aggravated by the difficulties in operating the enterprises due to shortages of raw materials and spare parts. What is perhaps needed to alleviate the "sufferings" of those who cannot pay their taxes is for the government to review the tax system for the small-scale entrepreneurs and try to use indices for taxing the individual entrepreneurs. Such indices could

include the type and size of the workshop, tools and the number of machines used or the size of total employment, particularly of wage employees. However, it is quite likely that the moment these proposals are implemented, the entrepreneurs may find means to evade taxation. They may not be willing to employ the number of people necessary to reduce their tax burden. Alternatively, entrepreneurs may be required to buy trade licences before they can operate their enterprises. The licence may be renewed annually. However, it is quite likely that the tax burden may be thrown to the consumer in the form of high prices of goods and services, but this will not auger well for the productive activities of the informal sector since they can lose customers through that. Also the trade licence may discourage prospective entrepreneurs from setting up new enterprises. It is not unlikely that the licence officers may use this to victimise some entrepreneurs.

Removing the tax burden altogether may not be a feasible solution because other taxpayers, particularly civil servants, may react strongly against it. Instead of reducing the tax or removing the burden altogether, the public sector should rather try to ensure that the necessary inputs are available. This will enable the entrepreneurs to operate their enterprises and generate enough profits to help them pay off their taxes.

B. Petty trading (and Services) Enterprises

Most of the economic policy proposals that have been made for the industrial sector enterprises may be applicable to the enterprises in the trading (and services) sector if public policy makers decide to aid them irrespective of their potential for development and employment generation. It must be emphasised

again that priority should be given to the skill intensive activities. Later, public sector aid should be extended to the trading (and services) sector for social and political reasons so that the public sector aid giving agency will not appear to have ignored or discriminated against traders.

The most important forms of aid required by entrepreneurs in the commerce sector, like their counterparts in the industrial sector, are capital to run and expand their businesses and regular reliable source of stock. With regards to capital, the Ghana Enterprises Development Commission is already noted for its help to traders. It was noted in the last chapter that much of the loans from the G.E.D.C. to the small entrepreneurs in the country went to traders. In the central region, this service to the traders could be carried on. However, in giving out loans to the traders, a balance must be struck between the capital available and the priority areas of the G.E.D.C.

With respect to the regular and reliable supply of stock, it appears the most reliable way to do this is through the formation of co-operatives. Through them members can obtain direct supplies from the large commercial houses and government organizations at wholesale prices, and thus cut off the stranglehold of middlemen. Also if the co-operative societies perform well, credit can be extended to the members of the societies by the G.E.D.C. or even the Commercial Banks when the societies become credit worthy. However, the members in each society have to be registered and have to have fixed business premises so that they can easily be reached. This is a requirement that may discourage a large number of operators from joining the societies. Most informal sector operators would wish not to have direct dealings with the public sector or its agencies.

But without this requirement there seems to be no feasible way by which the public sector can reach and assist them.

Other forms of aid requested by entrepreneurs in the trading (and services) enterprises include a plea to the government to reduce taxes or to improve the transportation system by providing regular and reliable transport facilities and also reduce fares. These, however, are less important issues compared with the problems with capital and supplies.

C. Infrastructure/Physical Planning needs

Adequate provision of infrastructure is one that needs to be tackled. Attention must be directed to the specific types of infrastructural requirements needed and the location of such facilities to reach the majority of industrial enterprises. The industrial entrepreneurs were asked the form of infrastructure that they would like the government to provide for them. Table 13.3 shows that a greater proportion of entrepreneurs operating in the large and small centres want to be provided with workshops, while their counterparts in the medium-sized centres want other facilities like tools and equipment.

The provision of a suitable workshop is very essential to the activities of the industrial enterprises. However, in each centre the problem of siting the workshop has to be resolved. Lack of control or tenure over the plots on which present workshops are sited has discouraged some of the entrepreneurs to improve their workshops and unless the problem of tenure is so resolved, the public sector may have to develop workshop clusters on the land acquired or owned by the local authority. These workshop clusters, as has been tried in Tanzania, are mini

Table 13.3 Requirements of infrastructure and other
facilities from the Public Sector :
Industrial Entrepreneurs

Type of facilities required	Proportion of Entrepreneurs in Centres			
	Large	Medium	Small	All Centres*
(a)				
1. Workshops or premises	27.3	18.9	37.2	27.5(164)
(b)				
2. Equipment	25.6	49.5	19.3	31.5(188)
(c)				
3. Combination of 1 & 2.	3.4	6.7	1.9	4 (24)
4. None	43.7	24.5	41.5	35.7(212)
Total Sample Size	176	212	207	595

* Actual frequencies in brackets

(a) Infrastructure

(b) Facilities like tools and equipment

(c) Combination of (a) and (b).

industrial estates which are geared to the needs of the informal sector. They are workshops provided with simple services such as running water, electricity, sewerage and service roads. They can also be provided with simple tools where necessary. The workshops should be constructed to allow for central supervision and the shops can be leased on hire purchase basis to the entrepreneurs. Clusters of workshops can be developed for each type of activities. For instance, clusters can be developed for tailors, carpenters, auto repairers et cetera. The number of workshop clusters and the size of each cluster in each centre will depend on the types and number of enterprises. It will also depend on potential demand for such facilities in each centre. In addition, in each centre workshop clusters will have to be sited to ensure maximum convenience and accessibility to the potential users.

In addition to resolving the site problem, it has to be ascertained how many entrepreneurs can afford to locate in the workshop clusters. The idea of an industrial estate can be too expensive for the informal sector entrepreneurs to bear. A workshop cluster provided with just the basic services in a congenial environment should be able to meet the pockets of the small-scale entrepreneur. It has to be ascertained whether the potential occupants can afford the rent. Most operators in our sample rent their premises, so the idea of renting new premises provided by the government should not be new to them.

It has to be recognised that not all the industrial entrepreneurs may want to locate in a public sector industrial estate. In this case, such entrepreneurs may have to be encouraged to rebuild their workshops to a certain standard where necessary. However, a loan scheme which can be operated as part of the

development finance scheme should be initiated aimed at helping entrepreneurs to physically improve their work premises. However, for this to be a success two things have to be considered: the question of tenure and problems with zoning regulations.

The tenure problem can be a serious one since without control or ownership of the plot on which a workshop is located, an entrepreneur may feel reluctant to physically improve his workshop. To solve this problem, entrepreneurs may be encouraged to take loans to buy the plots on which their present workshops are sited, but this will be possible only where the land-owners agree to sell. An alternative solution lies in a land banking scheme by the local authority. In each centre, pockets of land or vacant plots could be assembled over a number of years and sold to the informal sector entrepreneurs. However, there should be a provision for the plots to be resold to the local authority so that they may remain public property, but be available for use by the private sector.

In cases where entrepreneurs want to physically improve their premises, the zoning regulations may have to be relaxed to accommodate such structures. The development agency, however, may have to provide technical assistance in the layout and the construction of the workshops. Thus the above two problems require that the physical planning authorities have to take the informal sector into consideration in any future physical development plans for the centres. It also means that the Informal Sector Development agency has to obtain the agreement of the planning authority or the local and municipal councils in the matter of the location of the informal sector industrial enterprises and their workshops. This will help to prevent any source of harassment to the informal sector entrepreneurs,

particularly when they are threatened with ejection and demolition of their premises. Fortunately, none of the entrepreneurs interviewed had been threatened that way. A suitable approach needed to be adopted for enterprises in the petty trading (and services) enterprises where necessary. This means that as much as possible the traders should not be obstructed in siting in areas where they do not pose serious dangers to both vehicular and pedestrian traffic. Most of them operate in kiosks along the main commercial streets and in residential areas. They should be allowed to continue to operate that way. However, their location in the centre of town may have to be restricted wherever they pose a danger to traffic.

The drinking bars and public eating places have to be controlled for health purposes. The entrepreneurs in these enterprises will have to move to suitable sites and operate in suitable premises. These could be semi-permanent structures such as kiosks or in permanent buildings. Care should be taken in implementing this strategy in order not to discourage some entrepreneurs who may decide to wind up their businesses to prevent further harassment from the local authorities.

D. Implementation of Proposals: Implications for Regional Planning and growth centre strategy

(i) Development of organizational framework

It has been suggested in this chapter the need for a semi autonomous or autonomous body which will be responsible for the development of the informal sector enterprises in the central region. In view of the bureaucratic nature of the civil service, it may be better to use the regional branch of of the Ghana Enterprises Development Commission as the body which will initially at least be responsible for extending credit and other forms of capital aid to the entrepreneurs.

However, it was seen that capital aid must be accompanied by supply of raw materials (and spare parts) and technical and managerial skill development. It has been suggested that a scheme can be developed under the supervision of the G.E.D.C. to cater for these needs as well.

For the G.E.D.C. to avail itself of institutions responsible for regional planning and development of the central region, it has to operate as a wing of either the Regional Resource Planning unit of the Ministry of Economic Planning, or as a wing of the Central Regional Development Corporation. However, of the two institutions, it is the Regional Resource Planning unit which has had a longer period of existence. The Central Regional Corporation was set up in the early 1970s and it appears it is still not off the ground yet, even though it is actively engaged in feasibility studies for the development of the resources in the region by the private sector. The need to operate as a wing of the Regional Planning unit is that through it, the G.E.D.C. will be able to use the manpower resources of the unit and that of other Ministries as well. In particular, the regional unit of G.E.D.C. will have to use personnel from the Ministry of Social Welfare and Co-operatives in developing the co-operative spirit among the entrepreneurs. It will need assistance from the Ministry of Industries as well as all public and private agencies whose activities are directly or indirectly related to the development of the informal sector in the region.

To ensure maximum use of public sector institutions and facilities, the G.E.D.C. has to be departmentalised. For instance, the creation of a department of technical training and extension services can use the staff and expertise of the

* National Vocational Training Institute (N.V.T.I) in devising an appropriate training and extension programme for the entrepreneurs in different activity areas. Again,^a materials and supplies department can work with the Ministry of Trade and the major commercial houses so that inputs and other supplies reach the enterprises through their co-operative societies. Working with the already existing agencies and institutions can cut down the manpower requirements of the G.E.D.C. and also its cost of operation.

To achieve a geographical coverage of the enterprises, the activities of the Development Agency have to be decentralized. Branch offices need to be set up, initially at least, in the district capitals as well. The size of the required staff will depend on the number of enterprises in each district. Eventually the decentralization process will have to be extended to the main or growth centres.

(ii) Functions of the administrators

The development of a hierarchical structure of an organization for the development of the informal sector enterprises must be accompanied by a job description of the administrators at each level in the hierarchy. The details of job descriptions will be spelt out over a number of years, but immediately, certain functions should become apparent. At the apex of the hierarchy will be the regional administrators who would be responsible for giving broad guidelines to the administrators in the other levels of the hierarchy, as to the types of enterprises to which aid should be extended. All things being equal, the aid should be extended to those enterprises which exhibit potential for growth in output and expansion of employment. It

might need another study to develop criteria for identifying such enterprises.

These criteria may include the size of the present labour force and the structure of labour force. Emphasis could be placed on the size of skilled and apprenticeship labour per enterprise. Another criterion may be developed from the entrepreneurs' plans for expanding their enterprises in future. These plans may include plans for employment generation as well. In addition, the administrators will have to take into consideration the locational mobility plans of the entrepreneur. Sources of inputs, particularly capital and raw material inputs are important indicators. In this way, entrepreneurs whose main sources of capital are from their own savings and other informal sources, may be given preference over those which already have well established business relationships with formal sector institutions.

The administrators at the regional capital will also be responsible for co-ordinating plans and programmes of action for the informal sector in these regions. These plans should initially be drawn up by the administrators at the district and local levels. In co-ordinating the plans at the regional level, it will help to strike a balance between the resources available over a certain period and the needs of the enterprises. In doing this priorities need to be set. These priorities may include the type of aids that are urgently needed and the type and number of enterprises that can be covered over a certain period. With the help of administrators at the district and local levels, the needs of each centre have to be ascertained. This implies the number and types of enterprises that have to be in each centre, locality and district. This is very necessary in order

to prevent excessive competition among the enterprises. For instance, if a centre has too many tailors or bakers than the local economy can support, a way must be found to direct some of these enterprises to centres and localities which on the comparative basis fall short of such activities. The problem is how to achieve this. Informal sector entrepreneurs, as this study has shown, are generally not mobile and it may need special incentive or discriminatory policies to achieve some level of success in this direction. This implies that priority be given to the enterprises which are prepared to relocate in the desired centres and/or to give greater incentives to the prospective entrepreneurs who will set up new enterprises in such centres.

The policy of redirecting enterprises to certain centres and location can influence the choice of locations or centres in which the Development Agency will locate infrastructure, such as the workshop clusters. However, this whole scheme will take time, but it is worth starting from the growth centres which already have some facilities and in which the public sector will invest more public resources to improve the existing infrastructure.

The district and local administrators will have to locate in the growth centres from which to extend their activities to centres in their hinterlands. These administrators will also be instruments in directing or encouraging enterprises to relocate in the growth centres and other centres so as to achieve spatial balance in the distribution of the enterprises and the need for them in their districts. It is also at the district and local levels that funds could be allocated to programmes and individual entrepreneurs in accordance with the criteria

developed by the administrators are the regional capital. The allocation of funds may have to be controlled by a working committee which will serve a catalytic function in the planning and implementation of programmes for the development of the informal sector in the region.

In developing the organizational framework and the functions that have to be performed by the administrators at each level, one has to be mindful of the cost of running a scheme of this nature. The size of the staff at each level will be determined by the size of informal sector enterprises in the area, or centre. It is quite possible that one or two people may be able to operate the scheme in a centre depending on the present size and prospective future size of the informal sector enterprises in the centre. Initially, however, the staff will have to be in the growth centres and operate from there to other areas. It is difficult to determine the cost of the scheme at this moment, but an idea of the cost could be determined through pilot projects.

(iii) Pilot Schemes

The proposals need to be tested in order to ascertain how much it will cost and the size of staff needed. Above all, it would enable the administrators to test the workability of the criteria for selecting enterprises and how to improve upon them. Also a pilot scheme will be a very useful way of testing the entrepreneurs' reaction to the scheme and the possible impact that the scheme has on the informal sector. To achieve some tangible results it may be necessary that the pilot scheme be located in a few centres. It is proposed that three pilot schemes should be initiated, one in Cape Coast, the regional

capital, another in Swedru, a medium-sized town, and one in a small centre, probably Fosu or Asikuma. These centres are different in terms of the present provision of infrastructure and other services, and also they have different productive structures so that the problems of organization and implementation of the proposals within a hierarchy of growth centres can be ascertained. The infrastructure and other services which may be required for enterprises at different level of centres will become apparent during the pilot scheme, and this will be of help to the Development Agency in requesting public sector to provide these services. In addition, workers at each project site should communicate with each other through meetings and discussions groups, or on an informal basis, to compare experiences and to adopt a common strategy for approaching the problems that may arise.

Above all, it is during the pilot scheme stage that entrepreneurs should be made aware of the existence of a scheme to help them. The scheme has to be publicised using the national mass media. The administrators should be able to approach the entrepreneurs and establish working relationships with them in order to dispel any fears that the entrepreneurs might have, and also to build up confidence between the entrepreneurs and the administrators. It is also during the pilot scheme that a profile of the size of each type of enterprise which needs to be relocated into the centres and those which may have to move out, can be established. Moreover, the pilot scheme will help to shape up the administrative structure for the scheme. It will also help in devising criteria for selecting enterprises to which aid could be extended and above all, it will help the administrators refine their methods of implementing the scheme.

(iv) Monitoring and feedback Systems

A scheme of this nature has to be on-going if the desired impact is to be achieved. This suggests that there should be a monitoring and feedback system to enable the administrators of the scheme to re-establish their priorities and modus operandi. This requires that research should be part of the whole scheme. Periodic surveys can be carried out to find out the number or size of enterprises benefitting from the scheme, their use of capital or loans from the agency, the impact of the extension services, and how well their co-operative societies are functioning. Above all, it will be necessary to find out whether the scheme has helped entrepreneurs to improve their job performance and prospects for growth in output and employment. These are a few of the areas which the research team can direct its attention. Other possible areas of investigation will become apparent over the years during which the scheme is implemented.

The problem with a monitoring and feedback system is that it has to be done by a separate unit within the agency. These units must be attached to the district and local agencies and again they have to operate from the growth centres. The cost of maintaining such a unit may put too much constraints on the financial resources of the agency. However, to save some funds and perhaps to obtain a high level of practical and academic results from the research, the agency may contract out this function to the Centre for Development Studies at the University of Cape Coast. The Central Region is lucky in this respect, a facility which other regions both in Ghana and elsewhere may not have.

(v) Summary

This chapter has discussed planning methods that can be used to support the growth of the informal sector enterprises in the Central region. These planning methods involve a combination of economic policies and physical planning methods, but their implementation require the development or setting up of an organization which should be semi or fully autonomous of the civil service. On the other hand, the organization needs to use manpower and other resources from the public sector. Hence it is suggested that it forms a wing of the regional resource planning units which is already established in the region and under whose direction the agency can shape up its organizational structure.

Secondly, there should be a strong spatial component in the implementation of the strategy hence the need to set up in the districts and localities branch offices of the Development Agency. These offices should be located in the growth centres from which the activities of the administrators can be extended to the rural areas as well. Moreover, it is in the growth centres that most of the informal sector enterprises are located.

The implementation of the scheme also requires that certain specific needs of the enterprises be ascertained. Also criteria for selecting enterprises which can be helped, need to be developed together with the need to achieve spatial balance between the spatial distribution of the enterprises and the needs at each centre or locality. This will help in reducing excessive competition among certain enterprises in certain locations.

All these issues can be determined and a final strategy adopted after a pilot scheme to be located in three centres. As an on-going developmental scheme, there is a need for a monitoring and feedback system. The cost of such a system might make it necessary to use the facilities of the Research Institute at the University of Cape Coast. Throughout this chapter the value of growth centres as a medium through which a strategy for the development of the informal sector enterprises in the central region can be implemented is highlighted. In this way the growth centre approach adopted by the Regional planners in Ghana can play a significant role in employment aspects of regional development in Ghana.

The next chapter provides a summary of the whole study and points to the direction where future research will be needed in the studies of the informal sector, growth centres and regional planning.

CHAPTER FOURTEEN

SUMMARY AND CONCLUSIONS

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This study has attempted to examine the potential for employment generation and output in the informal sector enterprises in the central region of Ghana. A planning strategy, which incorporates economic policies and physical planning issues, has been proposed for the development of enterprises in the sector in the central region. These proposals are closely related to the growth centre strategy and the regional planning machinery in the region.

The first part of this study was devoted to trying to establish the need for the public sector to consider the role of the informal sector in its development efforts. In particular, the need becomes apparent when the urban employment problems is brought into focus. This argument was extended to the neglect of employment considerations in the regional planning approaches that have been adopted in Ghana. The adoption of a growth centre strategy thus offers another opportunity to the planners to consider the informal sector. It is argued that planners in Ghana should consider the role the informal sector employment can play in a growth centre strategy and, on the other hand, how best to use a growth centre approach to promote the growth and development of the informal sector in Ghana. The central region was chosen to examine these arguments. The findings of the case study are contained in the second part of this study.

A variety of enterprises operate in the centres studied but the predominant types of activities in terms of the number

of enterprises operating and their contribution to employment in the sector are tailoring and dressmaking, bakery and other food preparations, carpentry, and modern repair units such as auto, electrical and electronic repair enterprises. No significant association was found between the size and composition of the enterprises and the size of centres studied, as hypothesised.

In general the informal sector enterprises in the region employ very few people per enterprise; their sources of inputs are varied and they are weakly linked to the other sectors of the economy. Their entrepreneurs are generally young, not very well educated and most of them have had their training through the traditional apprenticeship system. In addition to the sources and structure of inputs, the nature of the demand for their goods and services make it difficult for the entrepreneurs to plan ahead in terms of their requirements for stock or supplies. Together with these shortages of raw materials and spare parts, which are largely a result of an inflationary condition of the national economy, the combination of problems has made the future seem uncertain for the majority of the entrepreneurs.

Despite these problems, the overwhelming majority of the entrepreneurs in all the enterprises studied will continue to operate their enterprises in the future. On the other hand, less than half of the entrepreneurs have plans to take on more people, and this is despite the fact that some of them have plans to physically improve their businesses and even expand their output. The entrepreneurs' perception of the past and the future prospects for their enterprises and their plans

for employment generation may seem to cast doubt on the ability of the informal sector enterprises to generate substantial employment in the urban centres of the central region in the future. It is the view of the author that some of the informal sector enterprises have the potential for employment generation particularly in self-employment, and this is possible through the apprenticeship system. The belief in the potential of the informal sector for employment growth is based on the analyses of the growth pattern of the enterprises, the age groups and educational backgrounds of the entrepreneurs in the sector and the types of enterprises being set up. It is recognised, however, that the size of employees per enterprise is quite small. But it is the belief of the author that if solutions can be found to the numerous constraints facing the entrepreneurs in the sector, the potential for employment generation of the enterprises in the sector can be harnessed. This solution demands a conscious planning strategy which will combine economic policies and physical (locational) planning measures to meet the needs of the enterprises. These were considered in the third part of this study.

To set the strategy which can be adopted to promote the development of the informal sector in the central region in its proper context, the forms of aids to small enterprises that have been discussed, and in some cases have been tried in other developing countries, were examined in chapter twelve. The attempts that have been made in Ghana were also highlighted. The conclusion that was drawn from these reviews was that in the developing countries, as well as in Ghana, the informal sector has generally been neglected in any development policy

issues. Most of the aid that has been applied to small enterprises has benefitted the modern small-scale enterprises rather than the very small, unorganized, informal sector enterprises. In Ghana it appears that some of the institutions and agencies that have been set up for the development of the small enterprises can do a good job for the informal sector as well. What is perhaps needed is for the institutions to direct their activities to the informal sector and also to extend their activities to the regions, districts and towns in Ghana as a whole and in the central region in particular.

The reviews presented in chapter twelve served as a background for proposing a planning strategy for the informal sector in the central region. Methods for implementing the proposals were suggested. These include the setting up of an institution or agency which will be responsible for implementing the proposals, and under which departments will be set up to perform specific functions. The Central Region's Regional Planning Resource Unit is largely responsible for implementing a growth centre policy in the region. Thus to relate the strategy to a growth centre policy, and also to make full use of other public sector ministeries, institutions and agencies, it is proposed that the Development Agency operate as a wing of the Regional Planning Unit. Due to the possible danger that the civil service bureaucratic system may pose to the activities of the Agency, it is suggested that the Agency operates as a semi or full autonomous institution, but with the support of the public sector funds.

The location of the headquarters and the branch offices of the Development Agency in the region and the physical

planning aspects of the proposals envisage the use of growth centres as bases from which to operate and to reach a large number of enterprises as possible in the region. The centres will also be used as the bases for the provision of infra-structural needs of the informal sector, for the initial pilot projects and monitoring systems. In this light, one can see the value of the growth centre concept as a strategy for regional development.

The proposals call for the need to adopt a comprehensive approach to planning for the informal sector. The reviews presented in chapter twelve suggest this. In the case of the central region, a comprehensive approach will mean setting up priorities in terms of the type of entrepreneurs and their enterprises to whom aid should be extended and the type of aid to extend. It will also mean adopting a time frame within which programmes for action will be implemented. Above all, a comprehensive approach has implications in terms of the future location of the enterprises and the need to strike a balance between the needs for a range of centres and distribution of enterprises. This will also help reduce undue competition among enterprises. Selecting entrepreneurs to whom aid will be extended will not be an easy task. In chapter ten an attempt was made to develop a simple econometric model which can act as formulae for isolating enterprises and entrepreneurs to benefit from the aid scheme. The multiple regression model developed showed that the characteristics of the entrepreneurs and their enterprises alone explain very little of the variations observed in output (or turnover) and the present size of the labour force per enterprise. Much,

therefore, will be left to the personal judgement of the administrators in deciding which enterprises need to be helped. It is in this direction that further research will be needed in developing indices for selecting the types of enterprises and in looking for entrepreneurs whose businesses have potential for development and to whom aid will be extended. Again, further research will be needed to define the priorities and strategies for action. Much of this work has to be done during the operation of the pilot schemes. In addition, it has been pointed out that in meeting the capital, technical and managerial requirements of the entrepreneurs, further research will be needed to determine their specific needs in terms of the types of aid needed and also the amount involved. This information will be useful guides to the administrators of the development scheme in its planning, programming and budgeting work. This has to be done periodically to enable the administrators to revise their approach and redefine their priority areas.

The potential for the growth in output and employment in the informal sector enterprises in the central region appears to be encouraging despite the difficult economic environment in which the enterprises are operated. This sector really deserves the consideration of development planners, particularly by regional development planners, who are attempting to promote regional development through a growth centre approach. Planners can direct the implementation of this strategy to the development of the informal sector economy. In this way one of the real values of the growth centres to regional development planning both in Ghana and in other developing countries can be judged. This aspect of the growth centre strategy has not

been seriously considered in Ghana. A growth centre policy can be used as a medium for the promotion of a sector of a national economy which has been largely neglected. In turn when solutions are found to the problems of the enterprises in the sector through a planning approach, the employment generated in them can contribute significantly to the solution of urban employment in general and the growth of small-scale employment in the growth centres in particular.

It is in the examination of the above interrelationships that this study has made a contribution to the studies in the informal sector and the debate of the value of the growth centres in regional development in Ghana. The proposals contained in this study may be applicable to other regions in Ghana and other developing countries, but further research may be needed to enable the planners to readapt the proposals to suit the particular circumstances of that country or region.

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APPENDIX A

TABLE ONETable 1 Distribution of Health personnel in Ghana 1971

	Accra	Other towns of over 20,000 Pop.	Localities less than 20,000 Pop.	Total
Physicians	259	205	271	715
Health Centre Supt.	13	30	186	229
Dental Surgeons	19	22	2	43
Midwives	608	552	1,795	2,955
Nurses	1,559	1,547	4,239	7,345
Auxilliary nurses	150	198	719	1,067
Sanitarians	16	50	154	220
Aux. Sanitarians	161	104	-	
Lab. Technicians	84	70	31	185
Pharmacists	214	149	60	423

Source: Emusi Social and Economic Indicators 1977 p 83.

TABLE TWOTable 2 The Extent of illiteracy and primary school enrolment in Ghana, 1970

Region	Proportion of adults who have attended schools	Primary school enrolment ratio
Western	37.9	65.4
Central	33.3	60.1
Greater Accra	50.9	74.0
Eastern	42.8	70.1
Volta	37.5	60.3
Ashanti	27.9	71.6
Brong Akafo	38.0	55.9
Northern	7.7	17.3
Upper	7.4	19.3

Source Emusi (1977)

APPENDIX A

TABLE 3ATable 3A Electricity Supply by Regions in Ghana - 1970

Region	Population served	
	Number	%
Western	119,643	6.8
Central	157,075	9.0
Greater Accra	759,293	43.2
Eastern	207,103	11.8
Volta	53,004	3.0
Ashanti	300,036	17.5
Brong Akafo	45,666	2.6
Northern	87,887	5.0
Upper	18,719	1.1
Ghana	1,748,426	100.0

Source: C.D.K. Kudiabor (1971) Table 8 p 13

TABLE 3BTable 3B Water supply by regions in Ghana - 1970

Regions	% of total population of Ghana	Population served	
		Number	%
Western	9.0	314,565	40.1
Central	10.4	260,351	29.2
Greater Accra	9.9	729,351	85.9
Eastern	14.8	370,666	29.4
Ashanti	17.3	477,750	32.3
Brong Akafo	8.9	215,394	28.2
Northern	8.5	191,415	26.2
Upper	10.0	115,277	13.4
Volta	11.1	288,738	30.4
Ghana	100	2,963,869	34.7

Source: Kudiabor (1971) Table 3 p7

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APPENDIX A

Table 6.1 Central Region : Distribution of Small-Scale Industries and Employment by Industrial Categories and Centres 1977

Industrial Sector	Cape Coast										Winneba										Swedru										Saltpond										Elmina										Fosu										Asikuma										Komenda										Mankesim										Total										Percent. of 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Source : Census Survey of small-scale industries in 9 centres in the Central Region of Ghana. Oct. 1977.

APPENDIX A

Table 9.1 Length of Apprentice's training/enterprise
Industrial Sector (All Centres)

Enter- prise	1-2 yrs	3-5 yrs	6-8 yrs	over 8 yrs	None	
Bakery	14(20.6)	4(5.9)	0	2(2.9)	48(70.6)	
Block- making	1(8.2)	0	0	0	11(91.7)	
Carpen- try	18(29)	37(59.7)	-	1(1.6)	6(9.7)	
Dress- making	27(45.8)	23(39)	0	1(1.7)	8(13.6)	
Tailor- ing	46(37.4)	53(43.1)	1(0.8)	6(4.9)	17(13.8)	
Metal works	8(30.8)	13(50.0)	2(7.7)	-	3(11.5)	
Shoe repairs	19(36.5)	11(21.2)	-	-	22(42.3)	
Watch repairs	8(53.3)	-	-	2(13.3)	5(33.3)	
Auto repairs	10(15.9)	48(76.2)	0	1(1.6)	4(6.3)	
Electric	8(32.0)	11(44.0)	0	1(4.0)	5(20.0)	
Smith	4(33.3)	3(25)	0	1(8.3)	4(33.3)	
Food	1(3.2)	0	0	0	30(96.8)	
Mill	2(15.4)	1(7.7)	2(15.4)	1(7.7)	7(53.8)	
Photo	4(40.0)	3(30.0)	0	0	3(30.0)	
Hair- styling	3(50)	2(33.3)	0	0	1(16.7)	
Print- ing	0	1(100)	0	0	0	
Weaving	7(100)	0	0	0	0	
Pottery	4(100)	0	0	0	0	
Rubber	1(50)	1(50)	0	0	0	
Misc.	3(75)	0	0	0	1(25)	
Total *	188 (31.6)	211 (35.5)	5 (0.8)	16 (2.7)	175 (29.4)	595 (100)

Percentages in brackets

* Percentage of sample size in brackets

APPENDIX 2

Table 2.4 Types of enterprises and percentage distribution of apprentices' fees (All Centres)

Enterprise	Fees (in cedis)						Total *
	None	50	50-100	100-150	151-200	200+	
Bakery	89.7	10.3	-	-	-	-	11.4(68)
Block-making	100	-	-	-	-	-	2 (12)
Carpentry	9.7	17.7	32.3	16.1	11.3	25.2	10.4(62)
Dressmaking	15.6	25.4	16.9	18.9	6.8	17.0	9.9(59)
Tailoring	15.4	14.6	34.1	21.1	2.4	12.0	20.7(123)
Metal work	15.3	23.1	38.5	19.2	-	3.8	4.4 (26)
Shoe repair	40.4	17.3	17.3	11.5	5.7	7.6	8.7(52)
Watch repair	33.3	33.3	6.7	6.7	0	20	2.5(15)
Auto repair	6.3	9.5	39.7	12.7	14.7	15.9	10.6(63)
Electrical repair	12.0	20	20	12	12	24	4.2(25)
Food Preparation	100	-	-	-	-	-	5.2(31)
Milling	62.5	7.7	7.7	-	-	23.1	2.2(13)
Photography	40	-	40	20	-	-	1.7(10)
Hairstyling	16.7	16.7	50	16.7	-	-	1.0(6)
Printing	-	-	100	-	-	-	0.2(1)
Weaving	-	42.9	42.9	-	-	14.3	1.2(7)
Pottery	25	-	25	-	-	50	0.7(4)
Rubber treating	50	-	-	-	50	-	0.3(2)
Miscellaneous	-	25	50	25	50	-	0.7(4)
Total percentage	31.4	15.1	23.2	12.9	5.2	4.5	100
Distribution *	(187)	(90)	(138)	(77)	(31)	(27)	(595)
	38.3%						
	18.1%						
	4.5%						

*Actual frequencies in paranthesis.

Source : Authors survey of Central Region - Ghana 1977/78

Table 11.1: Proportion of enterprises and their main problems - All Centres

APPENDIX A

Types of Enterprises	Main Problems						Total Sample Size
	Raw Materials	Spare Parts	Customers or Patronage	Capital & Storage	Customers raw material and spare parts	Other Combinations	
Bakery	82.4(56)	-	8.8(6)	1.5(1)	5.9(4)	1.5(1)	11(68)
Block Mfg.	91.7(11)	-	-	-	-	83(1)	2(12)
Carpentry	21 (13)	1.6(1)	25.8(16)	19.4(12)	21(13)	9.7(6)	10.4(62)
Dressmaking	20.3(12)	3.4(2)	25.4(15)	13.6(8)	27.1(16)	8.5(5)	9.9(59)
Tailoring	21.1(26)	11.4(14)	22(27)	13.0(16)	21.1(26)	12.1(15)	20.7(123)
Metal works	23.1(6)	3.8(1)	19.2(5)	13.1(6)	11.5(3)	19.2(5)	4.4(26)
Shoe repairs	19.2(10)	1.9(1)	38.5(20)	9.6(5)	26.9(14)	3.8(2)	8.7(52)
Watch "	-	40(6)	40(6)	-	20(3)	-	2.5(15)
Auto "	4.8(3)	46(29)	4.8(3)	1.6(1)	22(14)	19(12)	10.6(63)
Elec. "	-	60(15)	8.0(2)	4.0(1)	12(3)	16(4)	4.2(25)
Smithing	33.3(4)	8.3(1)	-	-	50(6)	8.3(1)	2.0(12)
Food Prep.	51.6(16)	-	19.4(6)	3.2(1)	19.4(6)	3.2(1)	5.1(31)
Milling	-	61.5(8)	7.7(1)	7.7(1)	15.4(2)	7.7(1)	2.2(13)
Photography	20(2)	-	20(2)	20(2)	30(3)	10 (1)	1.7(10)
Hairstyling	50(3)	-	-	-	-	50(3)	1.0(6)
Printing	-	-	-	-	-	100(1)	0.2(1)
Weaving	42.9(3)	-	14.3(1)	14.3(1)	-	28.6(2)	4.2(7)
Pottery	25(1)	--	50(2)	25(1)	--	-	0.7(4)
Rubber Pr.	-	50(1)	-	-	-	50(1)	0.3(2)
Miscellaneous	75(3)	-	-	25(1)	-	-	0.7(4)
Total	28.4(169)	13.3(79)	18.8(112)	9.3(57)	19(113)	10.4(61)	100(595)

Actual frequencies in brackets.

APPENDIX B

A Differences among centres - proportion of entrepreneurs requiring apprenticeship fees

	Large centre (P ₁)	Medium centre (P ₂)	Small centre (P ₃)
Require no fees	75	71	41
Require fees	101	141	161
SS	176	212	202

$$H_0 = P_1 = P_2 = P_3 = 0 \quad H_A = P_1 \neq P_2 \neq P_3 \neq 0$$

$$\text{Frequency} = \frac{75}{176} + \frac{71}{212} + \frac{41}{202} = \frac{187}{595} = 0.31$$

Expected frequencies

Centres

	Large	Medium	Small
No fees	75 (55)	71 (66)	41 (63)
Fees	101 (121)	141 (146)	161 (139)

Expected frequencies shown in Parenthesis

$$\begin{aligned}
 2 &= \frac{(f-e)^2}{e} \\
 &= \frac{(75-55)^2}{55} + \frac{(71-66)^2}{66} + \frac{(41-63)^2}{63} + \frac{(101-121)^2}{121} + \\
 &\quad \frac{(141-146)^2}{146} + \frac{(161-139)^2}{139} \\
 &= \frac{400}{55} + \frac{25}{66} + \frac{484}{63} + \frac{400}{121} + \frac{25}{146} + \frac{484}{139} \\
 &= 7.27 + 0.38 + 7.6 + 3.30 + 0.17 + 3.48 \\
 2 &= 22.29
 \end{aligned}$$

since 22.29 exceeds 10.597 at the value of χ^2 for 2degrees of freedom, we reject the hypothesis 0.005 that the observed difference occurred by chance

B

APPENDIX B

Differences among centres. Proportion of enterprises
which were started in the large, medium and small
sized centres. Industrial sector

	Centres		
	Large centre(P_1)	Medium Centre(P_2)	Small centre (P_3)
Yes	0.926 (163)	0.792 (168)	0.667 (138)
No	0.074 (13)	0.208 (44)	0.333 (69)

$$H_0 \quad P_1 = P_2 = P_3 = 0$$

$$H_A \quad P_1 \neq P_2 \neq P_3 \neq 0$$

$$\text{observed frequency} = \frac{163}{176} + \frac{168}{212} + \frac{138}{207} = \frac{469}{595} = 0.79$$

Expected frequencies (in brackets)

	Centres		
	Large	Medium	Small
Yes	163 (139)	168 (157)	138 (164)
No	13 (37)	44 (55)	69 (43)

$$\chi^2 = \frac{(163 - 139)^2}{139} + \frac{(168 - 157)^2}{157} + \frac{(138 - 164)^2}{164} + \frac{(13 - 37)^2}{37}$$

$$+ \frac{(44 - 55)^2}{55} + \frac{(69 - 43)^2}{43}$$

$$= \frac{(24)^2}{139} + \frac{11^2}{157} + \frac{26^2}{164} + \frac{24^2}{37} + \frac{11^2}{55} + \frac{26^2}{43}$$

$$= \frac{576}{139} + \frac{121}{157} + \frac{676}{164} + \frac{576}{37} + \frac{121}{55} + \frac{676}{43}$$

$$\chi^2 = 4.144 + 0.771 + 4.122 + 15.568 + 2.200 + 15.721$$

$$= 42.526$$

since χ^2 of 42.526 exceeds 10.597 at the value of χ^2 for 2 degrees of freedom, we reject the Null hypothesis 0.005 that the observed differences in proportion occurred by chance sampling and accept the accurate hypothesis.

C

APPENDIX B

Differences among the small centres: proportion of
entrepreneurs and their plans towards employment
generation in future

Response*	Centres					
	Saltpond (P ¹)	Elmina (P ²)	Fosu (P ³)	Asikuma (P ⁴)	Komendu (P ⁵)	Mankesim (P ⁶)
Yes	33	40	11	12	7	5
No	11	4	29	37	7	11
SS	44	44	40	49	14	16

$$H_0 = P_1 = P_2 = P_3 = P_4 = P_5 = P_6 = 0$$

$$H_A = P_1 \neq P_2 \neq P_3 \neq P_4 \neq P_5 \neq P_6 \neq 0$$

observed frequencies

$$\frac{33}{44} + \frac{40}{44} + \frac{11}{40} + \frac{12}{49} + \frac{7}{14} + \frac{5}{16} = \frac{118}{207} = 0.57$$

Expected frequencies (shown in parenthesis below)

<u>Response</u>	<u>Centres</u>					
	Saltpond	Elmina	Fosu	Asikuma	Komendu	Mankesim
Yes	33 (19)	40 (23)	11 (6)	12 (7)	7 (4)	5 (3)
No	11 (25)	4 (17)	29 (34)	37 (42)	7 (10)	11 (13)

$$\begin{aligned}
 \chi^2 &= \sum \frac{(f - e)^2}{e} \\
 &= \frac{(33-19)^2}{19} + \frac{(40-23)^2}{23} + \frac{(11-6)^2}{6} + \frac{(12-7)^2}{7} + \frac{(7-4)^2}{4} + \frac{(5-3)^2}{3} \\
 &+ \frac{(11-25)^2}{25} + \frac{(4-17)^2}{17} + \frac{(29-34)^2}{34} + \frac{(37-42)^2}{42} + \frac{(7-10)^2}{10} + \frac{(11-13)^2}{13} \\
 &= \frac{14^2}{19} + \frac{17^2}{23} + \frac{5^2}{6} + \frac{5^2}{7} + \frac{3^2}{4} + \frac{2^2}{3} + \frac{14^2}{25} + \frac{13^2}{17} + \frac{5^2}{34} + \frac{5^2}{42} + \frac{3^2}{10}
 \end{aligned}$$

* There are few respondents who were not sure about their plans. It has been assumed that such entrepreneurs do not have any plans so were included under 'No's'

C

$$\begin{aligned}
& + \frac{2^2}{13} \\
& = \frac{196}{19} + \frac{289}{23} + \frac{25}{6} + \frac{25}{7} + \frac{9}{4} + \frac{4}{3} + \frac{196}{25} + \frac{169}{17} \\
& \quad + \frac{25}{34} + \frac{25}{42} + \frac{9}{10} + \frac{4}{3} \\
& = 10.32 + 12.57 + 4.17 + 3.57 + 2.25 + 1.33 + 7.84 \\
& \quad + 0.73 + 0.60 + 0.90 + 0.30 \\
& \quad^2 = 44.58
\end{aligned}$$

Since 44.58 exceeds 16.750 at the value of χ^2 for 5 degrees of freedom, we reject the Null hypothesis that the observed variation occurred by chance sampling.

APPENDIX B

D Test of significance of regression coefficient
variation in output (or turnover) of industrial
sector enterprises

$$H_0 : b_1 = b_2 - - - b_{11} = 0$$

$$H_A : \text{Not all } b_1 \text{ are zero}$$

Significance level 5%

$$F = \frac{R^2/(K-1)}{(1-R^2)/(N-K)}$$

where K = number of b's (including intercept a)

N = number of observations in sample

$$F = \frac{0.13/(12-1)}{(0.87)/(595-12)}$$

$$= \frac{0.13/11}{0.87/583}$$

$$= \frac{0.13 \times 583}{0.87 \times 11}$$

$$= 7.92$$

Compare with F^x at 5% level with $U_1 = K-1$ and

$$U_2 = N-K = 1.75$$

We thus reject the Null hypothesis and accept that the regression in coefficient (ie not all bcs' are zero) is significant

APPENDIX B

E Test of significance of regression coefficient variation in size of labour force in industrial enterprises

$$H_0 : b_1 = b_2 = b = 0$$

$$H_1 : \text{Not all } b_1 \text{ are zero}$$

Significance level 5%

$$F = \frac{R^2/(K-1)}{(1-R^2)/(N-k)}$$

where K = number of b's
(including intercept a).

N = Number of observations
in sample

$$F = \frac{(0.15)/(12.1)}{(0.75)/(595-12)}$$

$$F = \frac{0.15/11}{0.75/583}$$

$$F = \frac{0.15 \times 583}{0.75 \times 11}$$

$$F = \frac{87.45}{8.25}$$

$$F = 10.5$$

Compare with theoretical F (i.e. F^x) at 5% level

$$\begin{aligned} \text{with } V &= K-1; \quad V_2 = N-K \\ &= 1.75 \end{aligned}$$

Thus the Null hypothesis is rejected and alternative hypothesis accepted that the Regression coefficient is significant

APPENDIX C

The National urban centres likely to experience a high growth rate by 1980

Rank	Name of Community	Region	Annual growth rate 1960-70 (%)	1970 actual (000's)	1980 estimated (000's)
1	Metro Accra	Gt.Accra	2.5%	814	1,043
2	Kumasi Metro	Ashanti	2.8%	444	558
3	Tema	Gt.Accra	16.8%	71	221
4	Sekondi-Takoradi	Western	1.3%	184	210
5	Tamale	Northern	7.6%	84	175
6	Akosombo	Eastern	64.9%	8	112
7	Cape Coast	Central	2.3%	52	65
8	Bolgatanga	Upper	13.1%	19	62
9	Koforidua	Eastern	2.9%	46	61
10	Sunyani	Brang Akafo	6.9%	24	47
11	Akimoda	Eastern	4.3%	30	46
12	Ho	Volta	5.2%	24	40
13	Obuasi	Ashanti	2.8%	30	40
14	Winneba	Central	2.0%	31	38
15	Nkawkaw	Eastern	4.0%	23	34
16	Bawhu	Upper	4.9%	21	34
17	Nsawam	Eastern	2.3%	26	33
18	Wa	Upper	4.1%	21	31
19	Yendi	Northern	3.2%	22	30
20	Agona swedru	Central	1.6%	22	26

a) Average decline in average annual growth from 64.9% to 30%

Source: Government of Ghana: Small scale Industry in Ghana (1977) Table 1.4

APPENDIX D

Table 6.2 Summary of Characteristics of the Selected Centres in the Central Region.

Characteristics (1970)	Centres									
	Cape Coast	Winneba	Swedru	Saltpond	Elmina	Fosu	Asikuma	Komenda	Mankessim	
	size	size	size	size	size	size	size	size	size	size
1. Total Population	51653	30778	21522	11848	11401	7249	6948	5966	4142	
Total aged 15+	28785	16073	11257	6237	6458	3964	3655	3500	2194	
as percentage of total population	55.7	52.2	52.3	52.6	55.6	54.7	52.6	58.7	53	
2. Labour force										
Total	28785	16073	11257	6237	6458	3964	3655	3500	2194	
as percentage of total population	55.7	52.2	52.3	52.6	55.6	54.7	52.6	58.7	53	
3. Employment										
(i) Total	16199	10177	8277	3988	4572	2756	2500	2524	1730	
(ii) As percent. of total labour force	56.0	63.3	73.5	63.6	70.8	69.5	68.4	72.0	78.9	
(iii) Agric. employment	1381	2411	1230	638	1232	1157	1247	605	535	
(iv) As percent. of total employment	8.5	23.7	14.9	15.9	27.0	42.0	49.9	24.0	31.0	
(v) Non-agricultural employment	14818	7766	7047	3350	3340	1599	1253	1919	1195	
(vi) As percent. of total labour force	51.5	48.3	62.6	53.7	51.7	40.3	34.2	54.8	54.4	
4. Unemployment										
(i) Total	2550	1101	689	563	327	113	142	136	133	
(ii) As percent. of total labour force	8.9	6.9	6.1	9.0	5.1	2.9	3.9	3.9	6.1	
(iii) As percent. of total non-agric. labour force	16.9	14.2	9.8	16.8	9.8	7.1	31.3	7.1	11.1	
5. 1960-1970 growth rate										
Population	2.3	2.0	1.6	1.9	2.9	3.2	2.6	3.5	4.0	

Source : Calculated from 1970 Census Report : Report D : Economic characteristics of Enumeration Areas.

APPENDIX E

1) Brief description of the main centres in the central region

There are three centres which can be described as medium sized and large urban centres within the regional context. These centres are Cape Coast (a large centre with a population of over 50,000 in 1970); Winneba and Swedru, the two medium sized centres with populations between 20,000 and 50,000 in 1970. This appendix describes very briefly the importance of each of these centres in the regional economy.

E (i) Cape Coast is the administrative headquarters of the central region. It is located about 95 miles south west of Accra and 50 miles east of the twin city of Sekondi-Takoradi. Traditionally Cape Coast is a centre of education in Ghana. This can be explained by Cape Coast's former prominent position as a trading centre on the Guinea coast and its subsequent selection as the Capital in the Gold Coast colony in 1876.

In 1970 there were as many as 9 secondary schools and a number of post middle school institutions (i.e. polytechnics, commercial schools, teacher training) and in addition a university. The educational institutions have considerable impact on the urban economy in terms of the number of people employed, the amount of wages paid and by the proportion of their budget spent by the schools in Cape Coast and its surroundings. (Hinderink and Sterkenburg 1975). In 1971, the educational institutions employed 2,646 persons - over 40% of all employees in

Cape Coast in that year - more than two-thirds of whom worked for the university. In 1971 the university provided employment to about 60% of all employees in educational services and to no less than 25% of all employees in Cape Coast. All educational services together gave direct employment to one in every 7 persons of 15 years and over. (Hinderink and Sterbenburg 1975).

When the central region was separated from the then Western region in mid 1960, Cape Coast became the automatic regional headquarters. This resulted in the establishment and expansion of a large number of government departments and subsequent increase in employment opportunities. In 1971, the government departments employed only 4.6% of all employees in the city. Taken together, the public services and related institutions employed about 2,500 people (i.e. 14.6% of all employees in 1971).

Services employed not less than 32% of the working force; Commerce, the most important activity employed over 38% of the totally economically active population - a small number of which was engaged in wholesale and other departmental stores and supermarkets whilst the vast majority were engaged in various types of retail trade.

Cape Coast, like most other centres of its size in Ghana is not an industrial centre, however, as can be seen in Fig. 5.7 most of the region's industries are located in Cape Coast and its surrounding areas. Industrial development is in the direction of agro-based and processing industries. The reasons behind Cape Coast's poor development of such functions as industrial, plus power and communications centre is primarily due to its position

relative to Accra-Tema on the East and Sekondi Takoradi on the West, two of the three main urban centres and consequently industrial centres in Ghana. These centres also have the highest level of services (Grove and Huszar 1964 p 62).

In addition, Cape Coast has a small hinterland due primarily to its coastal location without any railway link with the interior (see Fig.5.3)

E2 Winneba is a town with a population of about 32,000 in 1970. It is located about 40 miles west of Accra and 55 miles east of Cape Coast. Traditionally it is the administrative headquarters of a district which encompasses the traditional areas of Effutu - Awutu and Gomoa. From the 17th century until 1962, Winneba was an important surf port and the port attracted to it commercial activities. From the late 1930's there appeared some decline in the port activities which caused a gradual departure of the commercial firms from the town. The port was closed in 1962 following the opening of the new harbour at Tema in 1961.

Despite the closing of the port junctions which apparently sapped Winneba's vitality, the town continued to perform administrative and service functions. The educational function which the town assumed since the late 1950's is the most important function the town performs today and it is the main source of employment (Aidoo 1973 p 21).

Like Cape Coast, the educational institutions in the town have direct and indirect impact on the local economy

in form of wages, purchases by the institutions and housing thus sustaining petty production and commercial activities in the town.

E3 Swedru situated about 15 miles north of Winneba and about 50 miles from Accra is a district administrative headquarters. The town witnessed rapid growth in population since the late 1920's due largely to cocoa cultivation which started in its hinterland around the 1920's and also by the fact that it controlled much of the flow of goods into and out of the sea port of Winneba. (Amankra 1973). Though the closure of the Winneba surf port in 1962 affected the growth of Swedru, yet its commercial importance in the south eastern part of the region made it an attractive centre. It has fewer post elementary school institutions compared with Cape Coast and Winneba, but when it was made a district administrative headquarters in the 1970's the town has attracted public sector institutions and services.

APPENDIX F

Preliminary census of industrial sector enterprises with
fixed locations in the Central Region

- Time & Date of
- Interview:
- 1 Interviewer:.....Interview:
- 2 Town:
- 3 Type of enterprise (specific e.g. Tailoring.....
- 4 Location of enterprise (eg. Along the main Commercial
Street.....
- 5 Owner(s) of the enterprise:.....
- 6 Address(es) of owner(s):.....
- 7 Number of employees (all types):.....
- 8 Number of customers per day:.....
- 9 Number of months enterprise (or shop) is opened:.....
- 10 Year enterprise (shop) started:.....
- 11 Number of months enterprise (shop) is closed:.....
- 12 Average daily turnover:.....
- 13 What are the main problems you face with this business
(Interviewers should note separately each problem and
rank them according to order of severity).

- 1
- 2
- 3
- 4
- 5

Detailed Interviews of small-scale Industries in the Central Region

TOWN/VILLAGE:.....
 DATE:.....

1. Type of enterprise
2. when was this business started.....
 0. Before 1960, 1. 1961-65, 2. 1966 - 70, 3. 1971-75
 4. 1976 - 78, 5. Other (specify).....
- A. ENTREPRENEUR DATA
3. Sex - (0. M 1. F)
4. Age - 0. 15 - 20, 1. 21.- 25, 2. 26 - 30, 3. 31 - 40,
 5. 41 - 50, 6. 51 - 60, 7. 61 - 70, 8. 71 and above.
5. Place of birth - 0. In this town, 1. In this district,
 2. Region, 3. Elsewhere in Ghana, 4. Outside Ghana
 5. Other (specify).....
6. Level of education - 0. None, 1. up to Primary 6,
 2. up to Middle 4, 3. Technical School, 4. Secondary School
 5. vocational/Commercial, 6. University, 7. Other (Specify)
7. Type of Training - 0. None, 1. Apprenticeship, 2. Vocational
 3. Teaching, 4. Vocational/Technical School,
 5. Elementary continuation, 6. Business management
 8. Other (Specify).....
8. Length of training - 0. less than one year, 1. 1 - 2yrs.,
 2. 3 - 4, 3. 5 - 6, 4. 6 and above.
9. Total cost of training (in cedis) - 0. less than 50, 1. 50 - 100,
 2. 101 - 150, 3. 151 - 200, 4. 201-250, 5. 251 - 300,
 6. above 300, 7. other (specify).....
10. Who paid for your training - 0. Father, 1. A relative,
 2. other (specify).
11. Present main occupation(s) (rank them if more than one)
 0. craftsman 1. business/trading 2. contractor
 3. farmer 4. teacher 5. civil servant
 6. Labourer 7. Manager/Supervisor 8. other (specify)
12. Previous main occupation(s) (rank them if more than one)
 0. craftsman 1. business/Trading 2. Contractor
 3. Farmer 4. Teacher 5. Civil Servant 6. Labourer
 7. Manager/Supervisor 8. other (specify)...
13. How long after your apprenticeship/Training before you started this job.
 0. 1 - 2yrs. 2. 3 - 5 3. 5 - 10 4. 10 and above
 5. other (specify).

14. How much do you charge your apprentices (in cedis)
 0. less than 50, 1. 51 - 100, 2. 101 - 150, 3. 151 - 200
 4. 200 and above, 5. other (specify)
15. Length of training for your apprentices - 0. 1 - 2yrs, 1. 3 - 5
2. 6 - 8, 3. other (specify).
16. Type of ownership - 0. Sole ownership, 1. Partnership, 2. Company
3. Co-operatives, 4. Other (specify)....
17. No. of Partners, if Partnership.
18. No. of share holders, if Company firm.

B. EMPLOYMENT DATE

19. No. of people employed (including the owner) when business was started.....
20. Total number of people employed (including owner) now.....
21. Total number of family employees.....
22. Total number of apprentices.....
23. How many workers have already completed their apprenticeship.....
24. How many of your workers are full time workers.....
25. How many workers on part time.....
26. No. of days in a week you operate this business.....
27. In which month(s) of the year do you get a lot of business
28. In which month(s) is work slowest.....
29. Which months of the year do you close your shop.....
30. How long do apprentices stay with you when they complete their training.....
31. Why do they have to stay with you.... 0. For further experience
1. To repay cost of apprenticeship, 2. To get enough money for tools and equipments, 3. To work as partners with owner of business, 4. In appreciation for training, 5. No job elsewhere for them immediately, 6. To prepare for self-employment, 7. other (specify),.....
32. What type of work do most of them do when they leave you -
0. To large firms, 1. To Public Services, 2. Work with other Artisans, 3. Work on their own, 4. Others (specify),.....
33. How many people have approached you for employment this year -
0. None , 1. 1 - 2, 2. 3-5, 3. 6 - 10, 5. other (Specify)
.....
34. How many did you employ.....

35. Do you receive work or give work to other artisans
0. Yes, 1. No, 2. Other (Specify).....
36. Do you receive or give out work to large companies and firms
0. Yes, 1. No,
37. If yes, which company is that.....
38. How much do you pay your apprentices in a day.. ..
39. How much do you pay your skilled workers in a day.. ..
40. Is your business a member of any co-operative society
0. Yes, 1. No, 3. Other (Specify)
41. If yes, which type 0. All purpose, 1. Raw material,
2. Marketing, 3. Credit, 4. Other (Specify).....
.....

C. PHYSICAL DATA.

42. Where is business carried out. 0. Workshop, 1. Room,
2. Store, 3. Varanda, 4. Openair, 5. Under tree,
6. Other (Specify).....
43. Are these premises part of your house. 0. Yes, 1. No.
44. Are these premises own or rented. 0. Owned, 1. rented,
2. Free.
45. If rented, what is the rent for a month (in cedis). 0. up to 5,
1. 6 - 10, 2. 11 - 15, 3. 16 - 20, 4. 21 - 30, 5. 31 - 40,
6. 41 - 50, 7. Specify.....
46. Types of machines and tools. 0. Hand tools, 1. Portable machines,
2. Stationery machines, 3. None, 4. Other (Specify)...
.....
47. Who owns tools and machines. 0. Owner of business, 1. Patners;
2. Company, 3. Co-operative, 4. Other (Spedify).....
.....
48. If madhines and tools are hired, rent per month
.....
49. Source of power for machines and tools. 0. Manpower and electricity,
1. Manpower alone, 2. electricity alone; 3. Other (specify)..
.....
50. Do you share tdols and equipments with other articans - 0. Yes,
2. No, 3. Other (specify).....
51. Would you like to share government tools, machines and workshop with
other artisans. 0. Yes, 1. No, 3. Can't tell, 4. Other
(Specify).....

52. If no, why - 0. Not convenient, 1. want to have control over tools and equipments, 2. To avoid loss of tools and equipment, 3. To avoid conflicts, 4. Don't know, 5. Competitors will copy me, 6. Higher cost, 7. other (specify).....
53. If yes, where would you like to have the workshop - 0. on this site 1. Elsewhere in this town or village, 2. Elsewhere in this district, 3. other (specify).....
54. What facilities do you want provided - 1. Premises, 2. Equipment, 3. Workshops,
55. Why did you choose this site - 1. Near owners home, 2. mere customers, 3. Inherited workshop, 4. The only land available, 5. Gov't assigned plot, 6. Free workshop or premises, 7. other (specify).....
56. Where did you start this business.....
57. What services are available on this site (note if nearby); 1. Water, 2. electricity, 3. lorry Park, 4. market, 5. railway, 6. other (specify).....
- D. MATERIAL INPUT
58. From whom do you obtain most of the raw materials and spare parts you use in your business; 1. local retail shops, 2. local dept. stores, 3. customers, 4. Agents/Middlemen, 5. Farmers, 6. Imported personally, 7. other (specify).....
59. From which town do you obtain much of there.....
60. How do you obtain them - 1. By cash, 2. on credit, 3. other (specify).....
61. Who gave you money to start this business - 1. From own savings, 2. Husband, 3. Parents, 4. Partner, 5. From bank loan, 6. Gov't loan, 7. Relative, 8. Money lender, 9. other (Specify).....
62. Where do you obtain money to run this business - 1. From own Savings, 2. Husband, 3. Parents, 4. bank/Gov't loan, 5. Relative, 6. Money lender, 7. Patners, 8. other (specify).....
63. If you want to expand your business, where would you get the money for it.....
64. Have you ever received a bank/Gov't loan - 0. Yes, 1. No, 3. other (specify).....
65. What form of assistance have you ever received from a bank or the Government - 1. Loans, 2. Advice, 3. Technical Training, 4. Purchase, 5. others (specify).....

66. What type of assistance would you like to receive from the Government.

1. Bank loan, 2. Raw materials, 3. spare parts, 4. Financial assistance, 5. Training, 6. Workshop and tools, 7. None, 8. other (specify).....

MARKETING

67. Who are your main customers - 1. Direct to ordinary customers, 2. Local traders, 3. Local wholesale, 4. Sales agents/Middlemen, 5. Traders outside this town, 6. Contractors, 7. Farmers, 8. other (specify).....

68. Where do you sell most of your products - 1. Customers come to this workshop, 2. In and around the workshop, 3. Generally in this town, 4. Mainly outside this town, 5. Else where (specify).....

69. If you sell most of your products outside this workshop, how do you transport them - 1. Public transport, 2. own transport, 3. Private transport, 4. Head portage, 5. other (specify)

70. How much do you spend in a week transporting your products (in cedis).....

71. How much profit do you make in a day (week/month/Year (delete according to how the question is answered).....

PROBLEMS:

72. In general what is the most important problem that faces your business. - 1. Lack of customers, 2. Lack of raw materials, 3. Lack of spare parts, 4. Lack of capital, 5. other (specify)

(From questions 73 - 78 rank them according to order of severity).

a. Non-existent, b. slight, c. significant, d. Serious, 3. very serious.

73. What are the main problems with your premises. 1. Poor conditions, 2. Too small, 3. Rent too expensive, 4. No access road, 5. No security against thieves, 6. No security for land, 7. No water supply, 8. No electricity, 9. No sewerage.

74. What are the main problems that you face in purchasing raw materials and spare parts. - 1. Scarcity, 2. High cost, 3. Middlemen, 4. Right type of raw materials and spare parts, 5. Unreliable supplies, 6. Poor quality, 7. Lack of credit facilities, 8. Transportation problems, 9. Lack of credit facilities.

75. What are the main problems that you face in managing this business - 1. No book keeping experience, 2. Unable to maintain or repair equipments, 3. Lack of enough attention for this business, 4. Storage of equipment, 5. In controlling workers.

76. What problems do you face with customers - 1. Lack of enough customers
2. Customers refuse to collect articles in time,
3. Transportation, 4. Irregular purchase of product.
77. What are your main labour problems - 1. Lack of trained labour,
2. Labour turnover, 3. High wage rates, 4. Unreliability
of labour, 5. Lack of apprentices.
78. What are the major financial/Capital problems that face your work.
1. Capital to purchase tools and equipments,
2. Capital to purchase raw materials and parts,
3. Capital for expanding the business,
4. Lack of security to borrow loans, 5. No bank in town,
6. Delays, 7. Unacceptable terms.

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PLANS AND PROSPECTS

79. What is the state of business this year - 1. Improved, 2. The same,
3. Declined, 4. Other (specify).....
80. Why did business Improve - 1. Increased purchase, 2. Loan
available for business, 3. decrease in competition,
4. other (specify).....
81. If business declined, why - 1. High cost of goods and services
2. Scarcity of raw materials and parts, 3. Decrease in
demand, 4. No loan for business, 5. Increased competition,
6. other (specify).....
82. Do you expect business to change in the next 3 years -
1. Improve, 2. decline, 3. about the same, 4. Can't tell,
5. other (specify).....
83. Would you like to remain in this business - 0. Yes, 1. No, 3. Don't
know, 4. other (specify).....
84. If yes, why - 1. That is why profession/Talent
2. Self employment, 3. Interest, 4. The only trade learnt,
5. It offers bright future, 6. Profitable business,
7. Want to transfer business to children/relations,
8. Other (specify).....
85. If no, why - 1. Old age, 2. Want to learn another trade
3. Look for job in Public Service, 4. Leave to do agriculture,
5. Too much work involved, 6. Other (specify).....
.....
86. Do you have plans to relocate your business - 0. yes, 1. No,
2. Can't tell, 3. Other (specify).....
87. If yes, why - 1. To a better workshop, 2. Prospects of good
business, 3. Government allocated plot, 4. Available of
workshop, 5. Lack of tenure at present site.
88. Do you have any definite expansion plans - 1. Yes, underway,
2. Next year, 3. In two years time, 4. No, nothing,
5. Would like to but nothing definite, 6. other (specify).....

7/..

89. Plans on premises (workshop) - 1. None, 2. Rent a new one,
3. Build, 4. Other (specify).....
90. What would be the ideal location for your new premises -
1. Near Home, 2. Near market, 3. Near other small business,
4. Near main road, 5. Near bustx stop or railway station, .
6. Near lorry Park, 7. In town centre, 8. In town,outskirts,
9. Other (specify).....
91. Plans for tools and machinery - 1. To buy tools/equipments,
2. To repair tools/equipment, 3. To h ire tools/equipments,
4. Other (specify).....
92. Do you plan to take on more workers - 0. Yes, 1. No, 2. Other
(specify).....

.....
Can you make same suggestions which could be passed onto a government
ministry for solving your problems and creating suitable conditions
in which your business could flourish.

Tank you for your attention and Co-operation.

Interviewers comments.

.....
.....
.....
.....
.....
.....
.....

APPENDIX H

Detailed interviews survey of petty trading (and services) enterprises in the Central Region

- 1 (1) Interviewer's Name.....
- Town/Village.....
- Date.....
- 1 Type of enterprise: (i) General (ii) Provisions
(iii) Hardware (iv) Restaurant (v) Night Club/disco
(vi) Other (specify)
- 2 When was this business started.....
- 3 Where was it started.....
- 4 Number of people employed when the business was
started.....
- 5 How many workers are employed now.....
- 6 How many of the workers work with you always.....
- 7 How many of them work on part time basis.....
- 8 How many of the workers are your relatives.....
- 9 How many people have approached you for employment
this year.....
- 10 How many did you employ.....

PHYSICAL DATA

- 11 Where is business carried out(eg. in a kiosk).....
-
- 12 Is this shop part of your house.....
- 13 Do you own or rent this shop.....
- 14 If rented, how much rent do you pay in a month.....
- 15 From whom do you obtain your supplies.....
-

- 16 From which town do you obtain much of your supplies
.....
- 17 Who gave you money to start this business.....
- 18 Where do you get money from to run this business...
.....
- 19 If you want to expand your business, where would you
get money from.....
- 20 Have you ever received a bank/government loan.....
- 21 What form of assistance have you ever received from
a bank or the government.....
- 22 What type of assistance would you like to receive
from the government.....
- 23 What is your weekly turnover

PROBLEMS

- 24 What are your main problems:
- i).....
- ii).....
- iii).....
- 25 Have you always faced these problems.....

PLANS AND PROSPECTS

- 26 What is the state of your business this year.....
.....
- 27 If business progressed, why.....
.....
- 28 If business declined, why.....
.....
- 29 Do you expect business to improve, decline or to stay
the same in the next 3 years.....

- 30 Would you like to remain in this business.....
- 31 If yes, why.....
.....
- 32 If no, why.....
.....
- 33 Do you have plans to take your business to another
town.....
- 34 If yes, why.....
.....
- 35 Do you have plans to expand your business.....
.....
- 36 Do you have plans to employ more people in future
.....

ENTREPRENEUR DATA

- 37
- 38 Age.....
- 39 Place of birth.....
- 40 How long have you been in this town.....
- 41 Level of education.....
- 42 Type of skill acquired.....
- 43 Present main occupation(s).....
.....
- 44 Previous occupation(s).....
.....
- 45 Who owns this job.....
- 46 Why are you in this business.....
- Interviewers comments.....
.....

APPENDIX I : REVISITS

Interviewer's Name.....
Town/village.....
date.....
Type of main enterprise.....

A Other business interests

- 1 What other economic activities are you involved in
in this town.....
.....
- 2 How many people are involved/employed in it.....
- 3 What investments do you have in this district/region
.....
- 4 How many people are employed in it.....
- 5 How much profit or income do you obtain from these
activities in a week or month or year.....
- 6 How much do you spend on this work out of the profit
or income from other economic activities in a week or
month or year.....
- 7 Did you receive money from a relative, or parent or
friend to start this business.....
- 8 In what job was he or she.....
- 9 If you received money from a relative, a parent or
friend to run this business, in what kind of job is
the person.....

B TOWN AND JOB PROSPECTS

- 10 Why are you in this other job.....
- 11 Why are you operating this job in this town.....
.....
- 12 What are the future prospects of this job in this
town.....
- 13 Do you intend to move this job to another town.....
- 14 If you intend to move your job, into which town
would you move.....
- 15 Why.....

APPENDIX J

Survey of the modern medium and large-scale manufacturing enterprises in the selected centres in Central Region

Name of Enterprise	Location of Enterprise	Size of Employment	Plans to Expand Enterprise	Plans to Expand Employment	Size of additional Labour force	Main Problems	Impact of problems on expansion plans and employment growth
1. Mfantseman Printing Press	Cape Coast	59	Yes	Yes	about 100	Raw materials Machinery Import licence	Lay off workers
2. Catholic Press	Cape Coast	60	Yes	Yes	140	Raw materials	None
3. Bar and Flake Soap	Cape Coast	about 250	not sure	not sure	-	Raw materials	Lay off workers
4. Sawn Mills	Cape Coast	200	can't tell	can't tell	-	Spare parts Import licence Machinery	-
5. Boat Building	Cape Coast	30	Yes	Yes	60	Tools & machinery	-
6. Burnt Bricks	Ankaful (Cape Coast)	85	Yes	can't tell	can't tell	Raw materials Spare parts Proper management	Lay off workers
7. Bricks and Tiles	Ankaful	50	Yes	Yes	20	Raw materials	Reduce labour force in future
8. Poultry	Ankaful	100	No	Yes	50	Raw materials and other inputs	Lay off workers
9. Salt industry	Elmina	46	Yes	Yes	90	Storage facilities	-
10. Sugar factory	Komenda	350	Yes	Yes	can't tell	Machinery and spare parts	-
11. Ceramic	Saltpond	250	Yes	can't tell	-	Raw materials Spare parts	-
12. Sand Paper Factory	Asikuma	36	Yes	Yes	-	Machinery and tools	-

Source : Authors Survey in Central Region, 1977

CENTRAL REGION - ADMINISTRATIVE DISTRICT COUNCILS

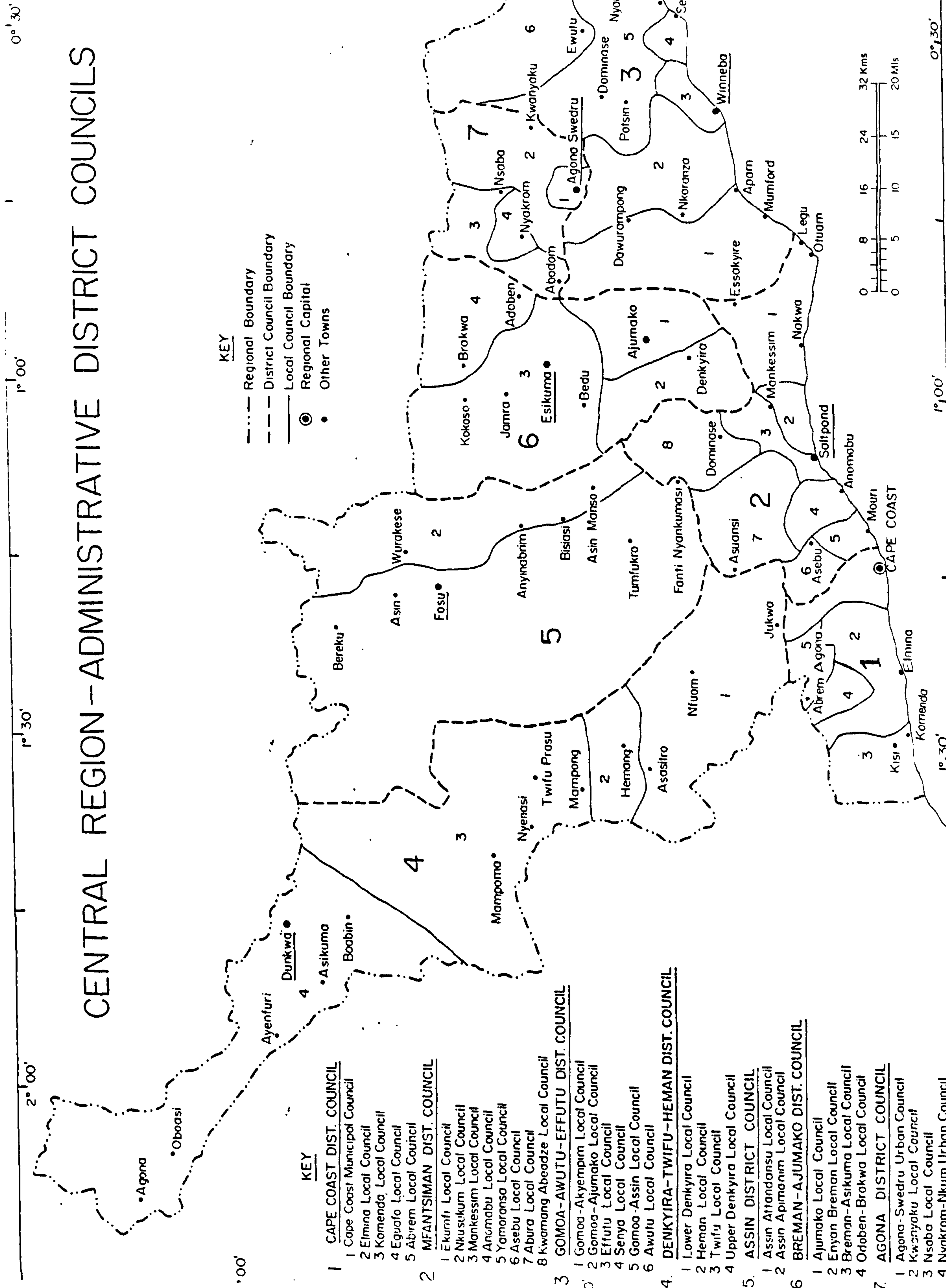
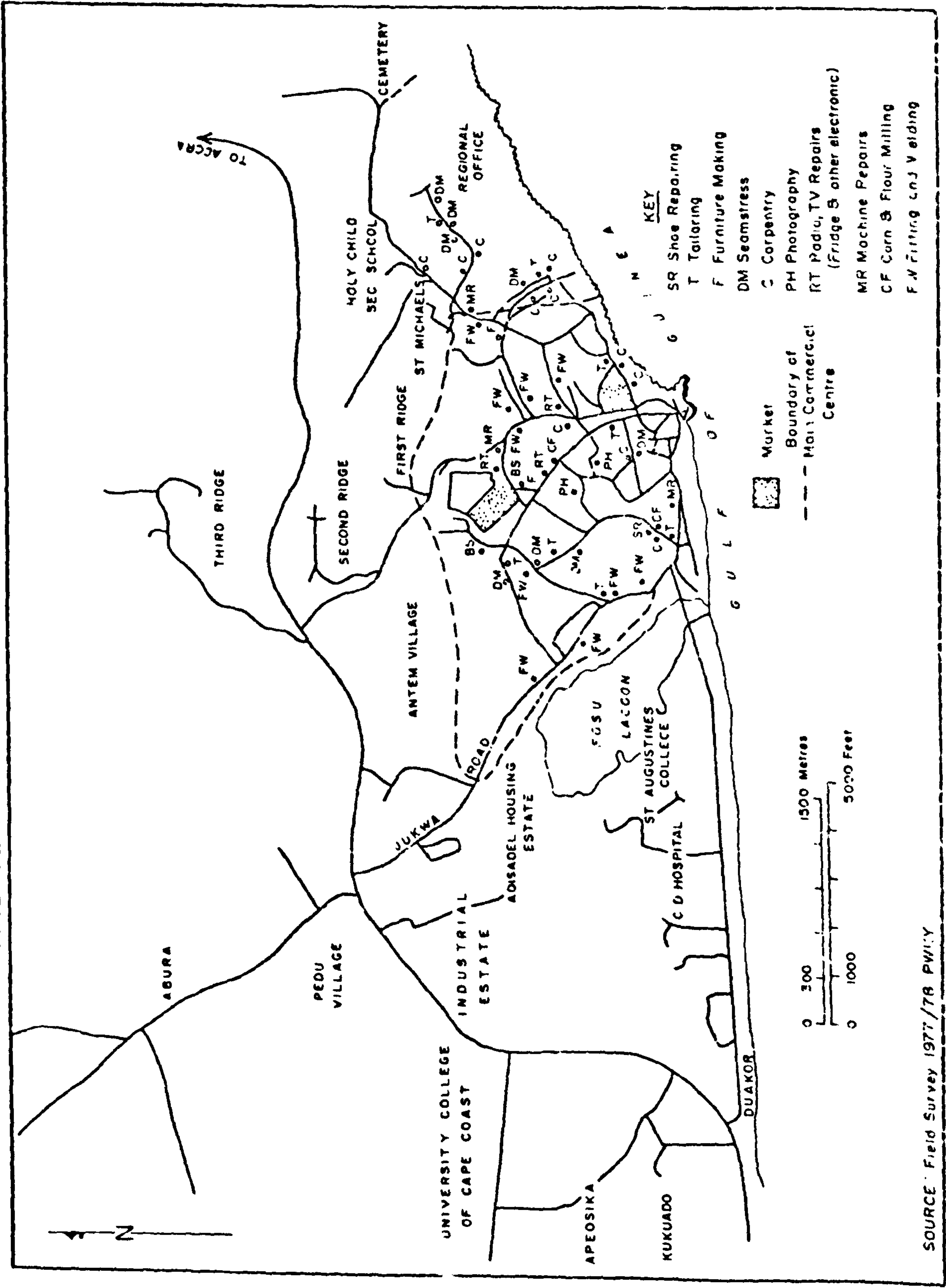


Fig. 2

APPENDIX K

CAPE COAST: LOCATION OF MAJOR LIGHT INDUSTRIAL AREAS; SMALL-SCALE ARTISANAL AND SERVICE INDUSTRIES (FIXED LOCATIONS)



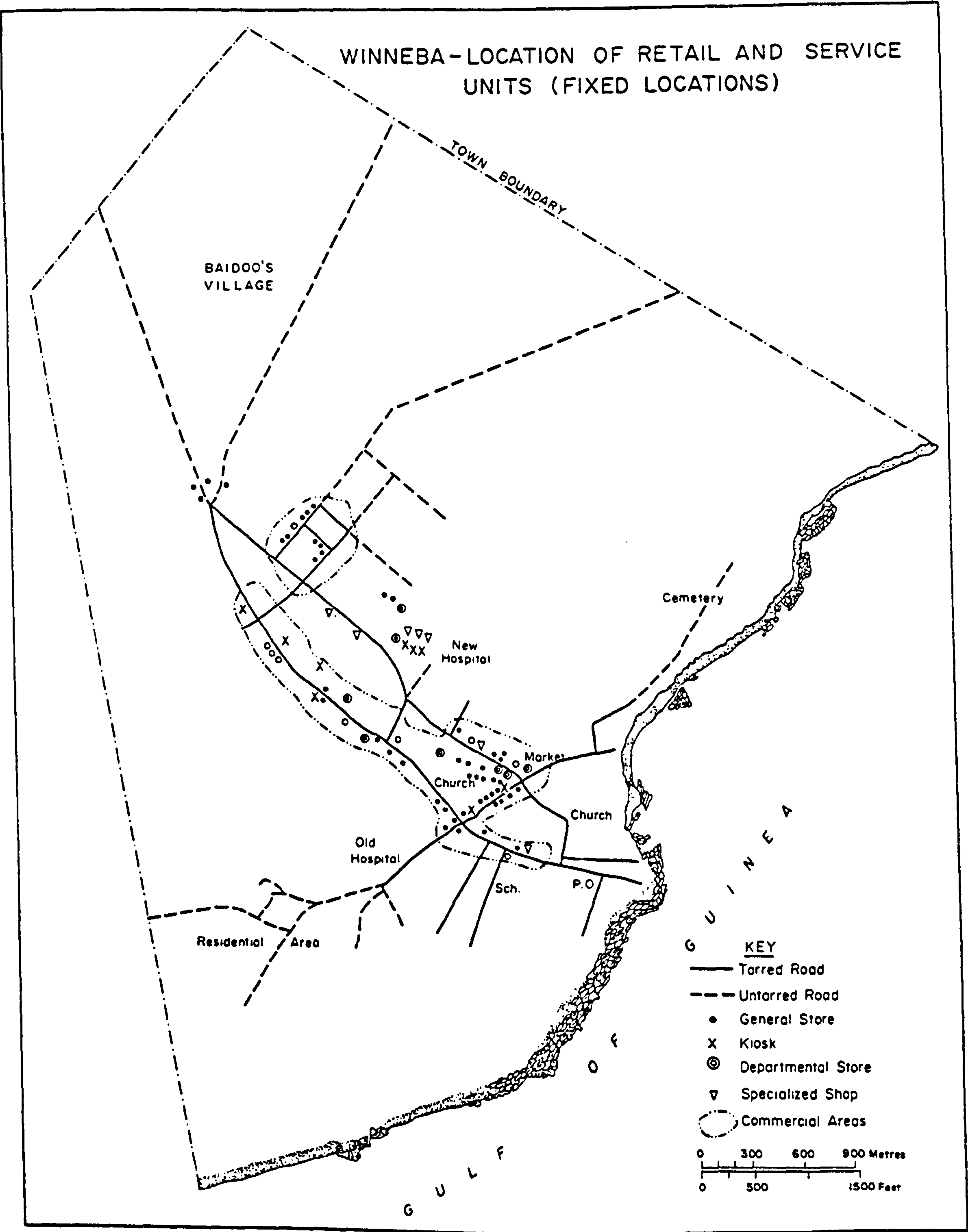
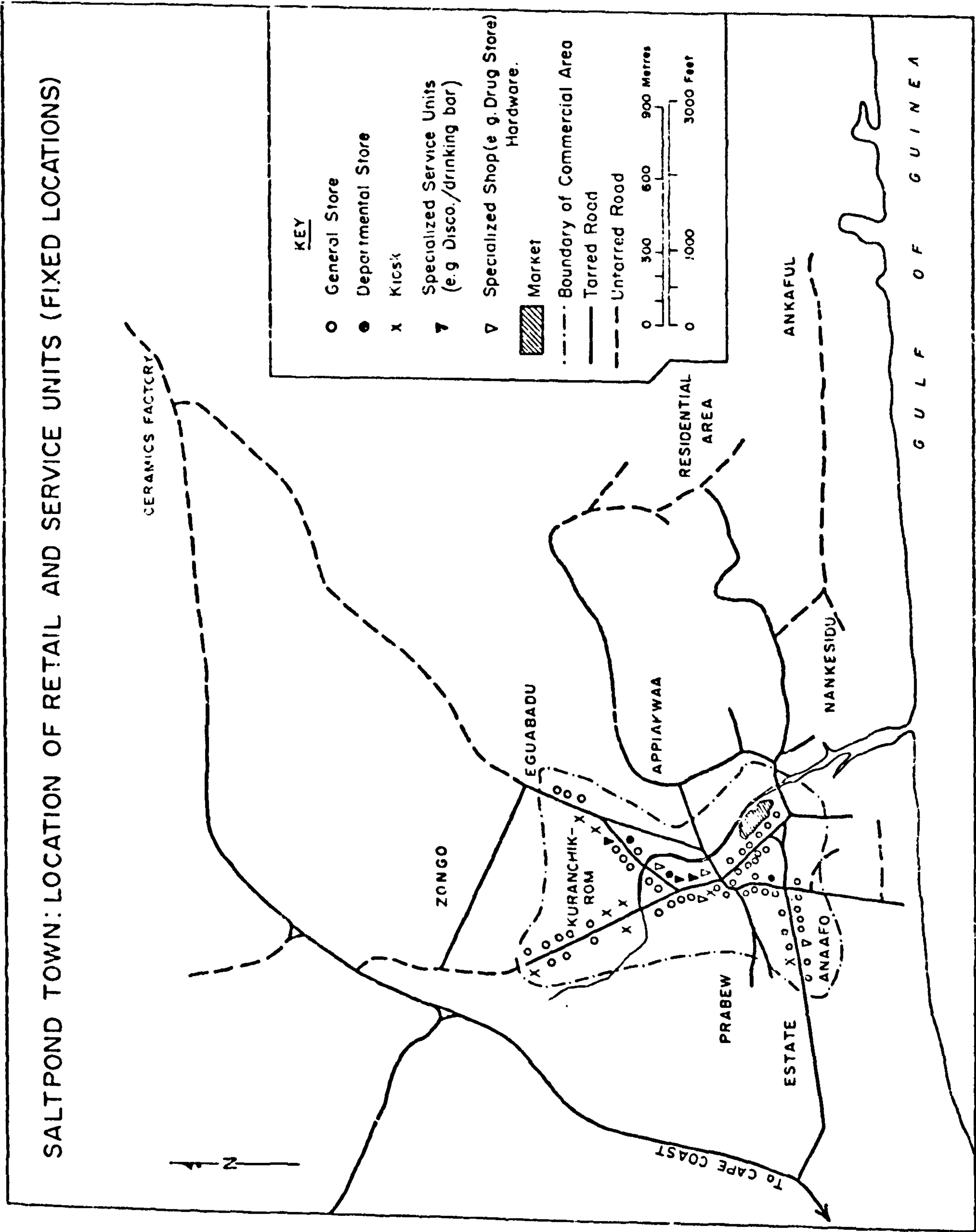


Fig. 4

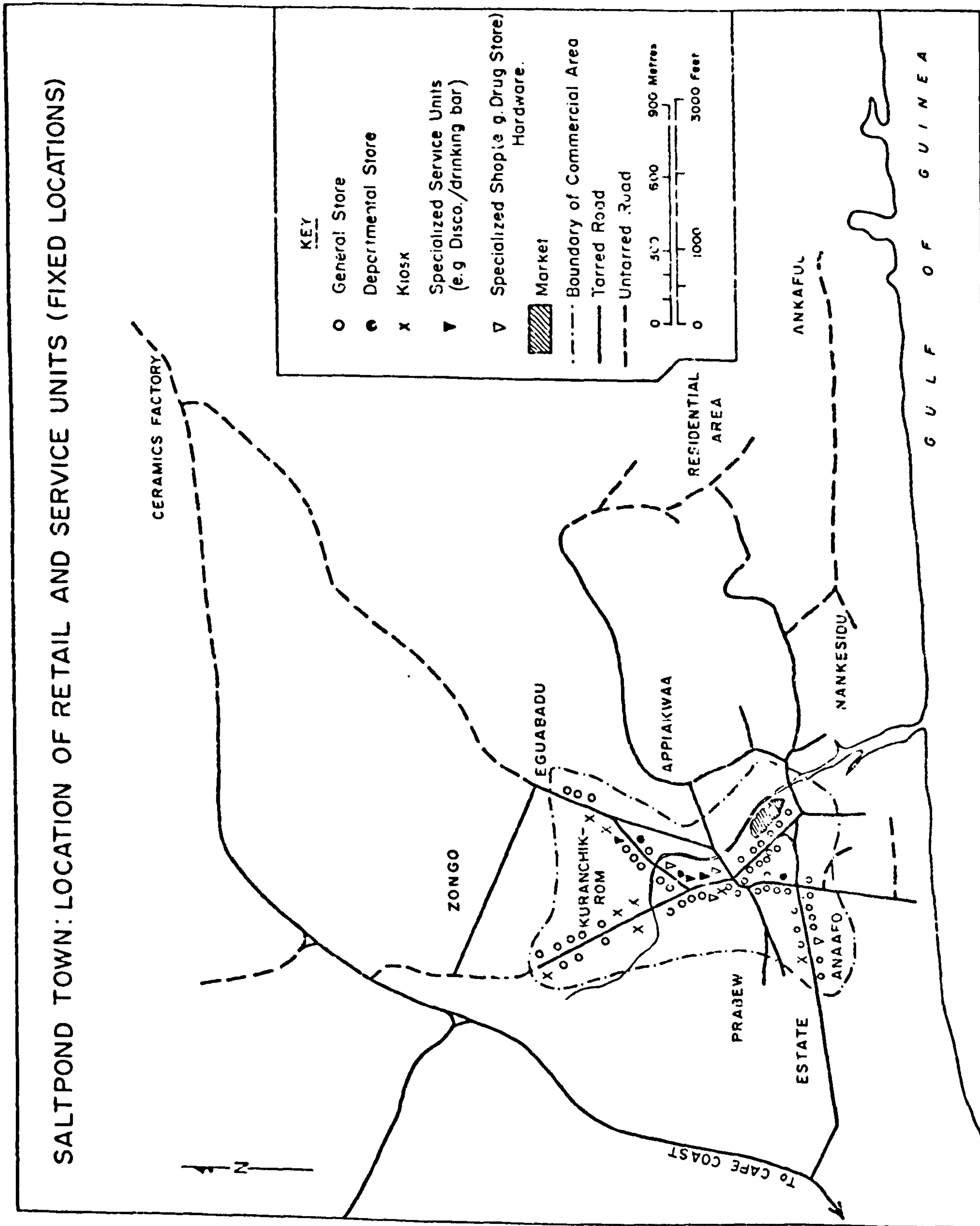
APPENDIX K



(Source: Field Survey 1977/79 PWKY)

Fig. 5

APPENDIX K



(Source: Field Survey 1977/78 PWKY)

