

RECENT POPULATION MOVEMENTS IN ZAMBIA:
SOME ASPECTS OF THE 1969 CENSUS.

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CHANGES OF PLACE NAME

<u>Present Name</u>	<u>Past Name</u>
Chililabombwe	Bancroft
Chinata	Fort Jameson
Copperbelt Province	Western Province
Kabwe	Broken Hill
Kaoma	Mankoya
Malawi	Nyasaland
Mansa	Fort Roseberry
Mbala	Abercorn
Tanzania	Tanganyika
Western Province	Barotse Province
Zaire	Congo Kinshasa - Katanga
Zambezi	Balovale
Zambia	Northern Rhodesia

Preface

I would like to thank my supervisors, Dr. R. Henkel and Dr. S. Nieuwolt for the help and advice which they have given during the preparation of this dissertation. My thanks are also due to Mr. F. Walusiku, Director of the Central Statistical Office for his help with the data, to the staff members of Geography, UNZA, for their practical guidance and encouragement, and to Mrs. S. Smith for her patience when typing the script.

Mary E. Jackman

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Introduction

The Census of Population and Housing taken in August 1969 provides the first opportunity for study of internal population movements within Zambia.

During the colonial period regular censuses were taken of non-African population, the latest of which was the 1961 Census of non-Africans and Employees. There was however only one census of the African population, which was taken during May and June of 1963.

When compared with the results of the above censuses the 1969 census makes possible a study of the changes which have occurred in the country's population over a set period of time. In addition to this the 1969 census also asked a direct migration question, which was absent from the 1963 census, thus giving, for the first time, an opportunity to study the pattern of population movement over a one-year period.

Due to the absence of reliable population data very little work of this nature has previously been possible. Some labour migration has however been recorded through various surveys and through labour statistics. The Centre for African Studies (Institute for Social Research; Rhodes-Livingstone Institute) has conducted surveys in various urban centres along the line of rail. These surveys noted, among other things, the home-areas of the urban dwellers and the length of time spent in the towns (Wilson 1941, Mitchell 1954, McCulloch 1956, Kanferer 1966). In addition to this some measure of migration was afforded by labour statistics which noted the number of taxable males absent from their domicile village homes (Kay 1967 and 1971 , Prothero 1968).

As yet very little evaluation has been done of the 1969 census results. The First Report of the 1969 Census (C.S.O. 1970) gives the overall totals of answers to the migration question, but the only evaluation so far produced of migration is by Veitch (1970). His work is based on the provisional figures for the total intercensal changes of each administrative District. By comparing these total changes with the national average increase of population Veitch calculated net in and out-migration for each District

of Zambia. He could not however, from these bare totals, suggest more than the migration standing of each District, or indicate the direction of population movements.

This study is the first to analyse the results of the migration question asked in the census. The study is divided into three main sections plus a conclusion. The first section deals with the population distribution in 1963 and 1969 and with some of the changes which have occurred between those dates. The second section deals with the answers to the question, "Where were you living at this time last year?". It describes the general pattern of migration during the 1968-69 period, characteristics (age, sex and education) of migrants, and deals with some of the factors which may have affected migration. The third section relates the migration trends found in section two to the total intercensal changes described in section one, and attempts to determine whether such trends extended over a six-year period could bring about the changes which are known to have occurred.

Due to lack of data migrations of an international nature cannot be included in this study, though some which are known to have occurred will be mentioned later.

All data used and quoted is from official census returns.

SECTION ONE - POPULATION CHANGES 1963 - 1969

This section examines the changes which have taken place between the June 1963 census and that of August 1969.

These changes, in total numbers, age, and sex structure of the population, give a quantitative indication of intercensal migration which will later be compared with the migration trends indicated by the 1968-69 movement data.

The First Report of the 1969 census (C.S.O. 1970) gives a total population for Zambia of 4 056 995, this is compared with 3 490 000 in 1963 and gives a total population increase of 16.2 per cent during the intervening six years. (The 1963 figure is a composite one, consisting of the total for the 1963 census, which was of Africans only, added to an estimate of the non-African population based on the regular censuses of non-Africans). This 16.2 per cent increase gives an annual average growth rate of 2.5 per cent over the six-year period.

The intercensal increase of population is not, however, evenly spread throughout the country it differs between urban and rural areas, between the line-of-rail and provincial townships. This section will examine the varied growth rates and the evidence of migration which they present, it is divided into four parts: changes in the total numbers living in each district, growth of the towns, changes in rural areas, and changes in the age and sex structure of the population.

Changes in the total numbers living in each District.

Zambia is divided, for administrative purposes, into various Districts, each bearing the name of its major town. At the time of the 1963 and the 1969 census there were forty-three Districts (see Map 1), though that number has since been increased. Both censuses were organized within the District framework, the Districts being sub-divided into census enumeration areas. The enumeration areas were, however, redefined and their number increased during the intercensal period so the Districts remain as the smallest area for which population numbers are totally comparable.

Table 1 shows the population of each District in 1963

and 1969 (the 1963 figure is again an estimate of the non-African population added to the 1963 African population) and indicates the changes which have occurred, as a percentage of the 1963 population. These changes vary widely, ranging from an increase of over eighty per cent in Lusaka District to a decrease of nearly nineteen per cent in Chinsali District. Ten of the forty-three Districts have suffered an actual population decrease during the six-years, while fifteen have increased at above the national average rate of 16.2 per cent, the remainder have increased, but at a lower rate than the country as a whole.

This variation in rates of change gives the first indication of how population is being re-distributed throughout the country. A small number of districts are increasing rapidly while the remainder are barely maintaining or are actually loosing their population. The fifteen Districts increasing at above-average rate include the seven urban Copperbelt Districts, Kabwe Urban District, Lusaka and Livingstone, these are all line-of-rail urban areas (see Map 1). The remaining five includes Kabwe Rural and Ndola Rural which are both line-of-rail rural Districts adjacent to urban areas. From the fifteen Districts growing at above national average rate there remain, therefore only three, Solwezi, Kaoma and Senanga which are rural Districts away from the line-of-rail. The vast majority of rural Districts are increasing relatively slowly or are actually declining. Of the ten Districts which have had a population decline nine lie in the northern and eastern part of the country, only one, Kasempa, lies west of the line of rail. Among the remaining rural Districts which are increasing more slowly than average, those in the west are increasing slightly more quickly than those in the east. These differences in the rates of growth are assumed to be largely due to the movements of people during the intercensal period.

One method of obtaining the net migration into or out of each District is described by Barclay (1966) and by Clarke (1965). In this the total net gain or loss in population of a community as a result of migration is estimated by subtracting the total net natural increase from the total intercensal change. The method assumes that the

natural rate of increase is nearly the same in all parts of the country. The natural rate of increase during the intercensal period in Zambia was 16.2 per cent. The District populations in 1963 have been increased by this amount to give the 'expected' 1969 population, which is then compared to the actual 1969 population to give the difference which is attributable to migration (See Table 2). The percentage change thus due to migration is also calculated. Map 2 shows the percentage change due to migration and also indicates the actual numbers involved. Four major divisions are readily discernible in the map, these are the north and eastern area east of the line of rail, the northern line of rail from Lusaka to the Copperbelt, the southern line of rail from Livingstone to Mazabuka, and the western part of the country.

The north and eastern part of the country has suffered heavy out-migration. Nine of the fifteen Districts included in this area have lost more than fifteen per cent of their population, and one of the Districts has lost less than five per cent. The heaviest out-migration occurs in the centre and east of the area, with slower losses from the peripheral parts round Mbala and Mporokoso in the north and Lundazi, Chipata, Petauke and Mkushi in the south and east. Even in the midst of such heavy losses one District stands out beyond the rest, this is Chinsali. Chinsali has lost thirty per cent of its population in six years. No other District in the country has lost more than twenty-one per cent. The total net loss from the fifteen Districts of this north-eastern area amounts to over two hundred and fifty five thousand people; six per cent of the country's population have moved away from this area during the six intercensal years.

The northern line-of-rail area shows a very different situation to the north-east. It is characterised by rapid in-migration to the urban areas and slower in-migration to the surrounding rural Districts. The largest gain is one of nearly fifty-six per cent in Lusaka District. The picture presented by Map 2 may, however, be rather inaccurate, as Lusaka District contains a large rural area. Evidence

from enumeration area populations suggests that the eastern rural part of the District is not increasing rapidly and that the rapid in-migration to the District is almost entirely focussed on the western part around the city itself. The definition of 'Lusaka Urban' is however not very clear and it has proved safer to treat the District as a whole. The Copperbelt Urban Districts also show heavy in-migration with gains of up to fifty per cent during the six years. Kabwe urban has gained over twenty-five per cent by migration while the rural Districts have gained by up to ten percent. Altogether this area has received over three hundred and thirty thousand in-migrants during the intercensal period.

The southern line-of-rail area differs markedly from that to the north. Its only major urban centre, Livingstone has received migrants less rapidly than most of the northern towns, and the three rural Districts of Kalomo, Choma and Mazabuka, have all suffered out-migration of between eleven and fourteen per cent. The area as a whole has lost over forty thousand people through out-migration.

The area to the west of the line of rail is a little more varied than the others described. Most of the Districts have had only a small change due to migration. Of the twelve Districts in this area three have gained by less than ten per cent, six have lost by less than five per cent, and only three have lost more than five per cent of their population through migration. The total change of this area is a loss of twenty-five thousand people, which is very small when compared to the numbers moving out of the north-east or into the northern line of rail.

The picture then, is one of a massive exodus from the north-east and a massive influx to the northern line of rail, with a comparatively minor losses from the southern line of rail and the west.

The Growth of Towns

In 1969 nearly thirty per cent of Zambia's population were living in the towns, six years previously, in 1963, urban dwellers constituted only twenty per cent of the population. These figures show both the unusually high degree of

urbanization compared to other African countries, and the very rapid growth which is a feature of Zambian towns.

Table 3 gives the population of the major towns in 1963 and 1969, and indicates the increase which has taken place between the two. This percentage increase should be used only as a guide, as in some cases Municipal boundaries were expanded between the censuses.

As Davies (1971) points out Zambia's towns group themselves into two major divisions: a dominant group along the line of rail, and a scatter of tiny settlements in the out-lying 'bush' (See Map 3). Of the line-of-rail towns Lusaka, the capital, is by far the largest. This is followed by the major Copperbelt towns, with Kabwe and Livingstone coming lower down the list. A few smaller centres, Choma, Mazabuka and Monze, exist along the southern line-of-rail, but these are mainly agricultural and service centres and are more comparable with the rural townships than the other line-of-rail urban centres. The Copperbelt itself is the largest grouping of urban centres in Zambia; in 1969 the Copperbelt towns contained sixty-two per cent of the country's urban dwellers and nearly seventeen per cent of the entire national population.

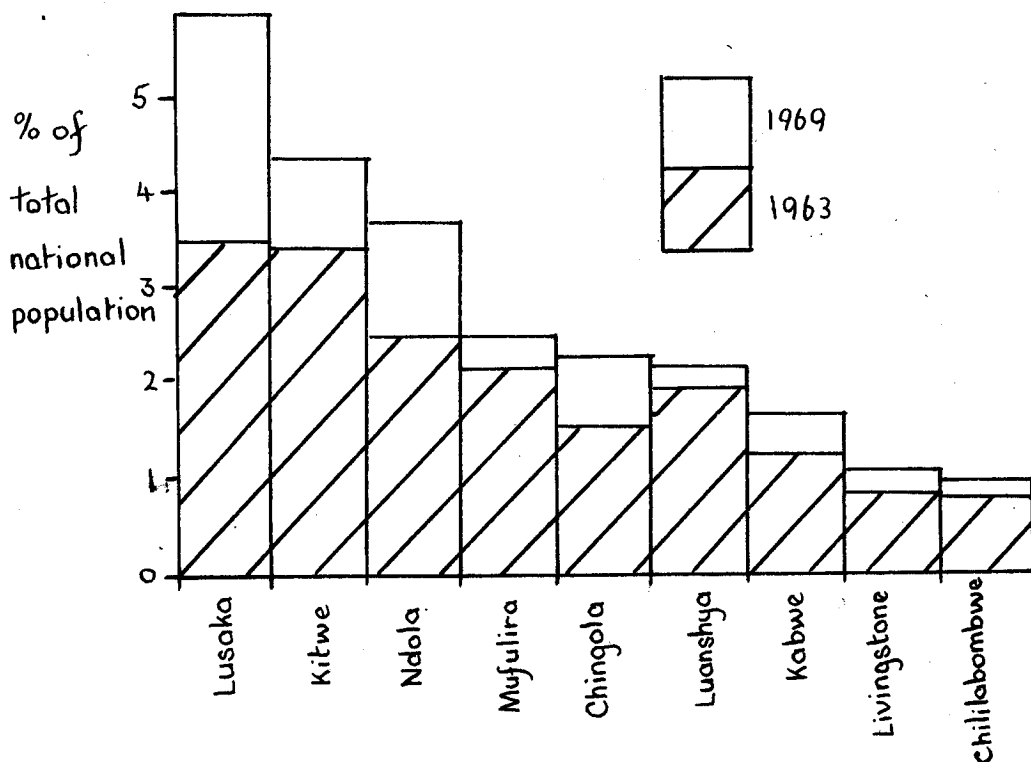


Fig.1. Percentage of the national population living in towns of over 40 000 . 1963 and 1969.

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All the major urban centres are growing rapidly.

Fig.1. shows, for towns of over forty thousand, the percentage of the national population in these towns in 1963 and 1969. All these centres, without exception, have increased their share of the national population during the intercensal period, Lusaka's increase from 3.5 to 5.9 per cent being the largest and greatly exceeding Kitwe which had almost the same population in 1963.

When these figures are compared to the changes by District already described it becomes apparent that though the urban Districts have increased rapidly the greatest part of those increases have been in the towns themselves. Lusaka District gained 126 500 people through in-migration between the two censuses, but the city itself received 104 000 of that gain and much of the remaining 21 500 was probably concentrated in the peri-urban areas not included within the municipal boundaries at that time. (The suburb of Chelston and part of Kalingalinga compound were not included in Lusaka Municipality for the 1969 census).

The major urban centres are therefore expanding rapidly. Though they contain less than thirty per cent of the country's population these line-of-rail towns have absorbed over seventy per cent of the intercensal population increase. They act as a focus for migration, and have absorbed the majority of migrants involved in the massive in-migration to the northern line-of-rail area.

The rural townships are generally very small compared to the line-of-rail urban centres. The largest of them is Chipata with a population of 13.3 thousands. They, like the larger towns, are increasing their population rapidly, the only exception being Mansa which appears to have had an intercensal increase of less than national average rate and therefore net out-migration. The rest have increased their population through in-migration even when they lie within a District which is losing population. Kasama, for example, has had an intercensal increase of 32.8 per cent while Kasama District in which it lies has decreased by 5.1 per cent. Thus Kasama District is losing population quite rapidly while the town itself is growing through in-migration. This means that the effective loss from rural parts of the Districts is even greater than that indicated by the study of District changes, and may be an indication of the role of

rural townships as 'staging-posts' in migration patterns, a point which will be discussed later.

The general picture is then that Zambia's towns, both large and small, are growing rapidly. Along the line of rail the towns themselves absorb most of the migrants to their District, while away from the railway the rural townships are generally expanding, even at the expense of their rural areas. In terms of net migration the vast majority of migrants are apparently moving into the towns.

Changes in Rural Areas

The population distribution in Zambia has been described and mapped for both the 1963 and the 1969 censuses (Kay 1967, Jackman and Davies 1971, Jackman 1971). When the maps of both censuses are compared the most striking fact to emerge is the great similarity between the rural distribution patterns. Although the total number in many areas has changed greatly the pattern of distribution has remained very similar.

Both maps show the wide areas of virtually uninhabited land centering on the Kafue and Luangwa valleys which effectively separate the areas of more dense population in the east and west from the concentrations along the line of rail. Population is scattered evenly though the northerly parts of eastern Zambia, with concentrations along the Luapula river and around lake shores. The eastern areas round Chipata, Petauke and Lundazi have a dense, even scatter of population while in the west the denser population tends to be aligned along the edges of the swamps and the Zambezi flood plain. The southern line of rail shows a fairly even scatter of rural population while in the northern part the rural population decreases and the towns grow larger.

Beneath these great similarities there are, however, ways in which the population distribution has altered between the two censuses. The 1969 map shows an increasing nodality in the distribution when compared to 1963. Evidence of this had already been suggested by the growth of rural townships even when they are in an area of population decrease, and the distribution maps support it with evidence of more distinct concentrations and alignments of population.

Apart from this increasing nodality there are also areas where the 1969 distribution is distinctly different from that of 1963. Some of these areas may almost certainly be due to mapping error, for example the

southern shores of Lake Mweru appear to have lost much population between 1963 and 1969 but this is probably due to a re-definition of enumeration areas which increased in number between the two censuses thus giving the mappers more evidence of actual distribution in 1969 and showing up slight inaccuracies in the 1963 map. There remain, however, some areas where the differences in distribution are real and attributable to specific causes.

In Gwembe District, near the shores of Lake Kariba, there has been a distinct increase of population. This is due to the opening of the Maamba coalfield, which created jobs and hence attracted people to the area. A developing fisheries project at Sinazongwe on the lake shore is also responsible for some of the grouping.

The southern bank of the Kafue Gorge in Mazabuka District has had a large increase of population due to the construction of the dam and power station there. The work on this project was at its height in 1969, with some 10 000 workers living in the construction camp (this number is now rapidly declining as the project nears completion). Also in Mazabuka District, north-east of the town itself, the growth of the Nakambala sugar estate has caused a new concentration of population. The cultivation of sugar cane in the area began in 1964 and by 1969 the project employed some 2230 workers, 1800 of whom were seasonal labourers present on the estate at the time of the census. These workers, with their dependants, live on the estate and form a community which is estimated to be as large as Mazabuka town itself.

In Lusaka District, south of the city, the township of Kafue has grown rapidly between the censuses. On the 1963 map it warrants only a few dots while the 1969 map gives it a town symbol. This change is due to the development of Kafue New Town, with its chemical fertilizer plant and cotton mill, which has greatly increased job opportunities in the area and has thus attracted population.

These examples of rapid growth around new projects in rural areas emphasize the fact that the actual losses from rural parts are probably much higher than they appear from

the study of changes by district, the growth of these centres meaning a consequent additional loss from the rural parts of the District in which they are situated.

The rural population distribution therefore has changed very little in terms of pattern of distribution between the two censuses. It has changed however in terms of the actual numbers of people living in any given locality, an increasing nodality is discernible in the rural distribution pattern, and points of rapid population growth can be seen in areas where new job opportunities have recently been created.

The age and sex-structure of the population

Evidence of the nature of migration can be gained from a study of the age and sex-structure of the population at different localities. Unfortunately the 1963 census only registered age in three broad categories, under 21 years, 21-45 years, and over 45 years, while the 1969 census recorded it by single years. No detailed study of intercensal changes in age-structure is therefore possible, though the 1969 age-structure will later be examined. The proportion of males in the population is, however, known for both 1963 and 1969. This is shown in Table 4.

In 1963 the sex-ratio varied widely throughout the country (See Map 4). As Kay (1971) described the areas with an excess of males lie mainly along the line of rail or very close to it. The urban areas all show a very high proportion of males, up to 141 per 100 females in Chililabombwe, while the adjacent rural areas have a slight excess of males in their population.

Away from the line of rail the proportion of males drops rapidly, with the lowest ratios occurring in the most remote rural Districts. East of the railway the ratio is generally low, falling to 83 per 100 in Chinsali, though Luapula Province is markedly higher than the rest with a ratio of 95 per 100 in Kawambwa, 100 per 100 in Mansa and 106 males per 100 females in Samfya District. West of the line of rail there is a strong division between the very slight deficiency of males in Districts adjacent to the railway and the large deficiencies in more remote areas. Four Districts have less than 85 males

per 100 females, compared to only one with such a low ratio in the eastern area.

Kay explains this distribution in terms of predominantly male migration to the towns. The slight excess of males in Districts adjacent to the urban centres he explains by a greater movement of females from these parts. He states that of the females in urban areas the majority originate from nearby Districts, and that as the distance from urban centres increases the likelihood of women to migrate reduced rapidly. Hence the greatest disparities in sex ratio occur in the most remote areas.

The variation in sex ratio in 1969 (see Map 5) was similar to that of 1963 in that the urban areas still held an excess of males while the rural areas had a deficit, but in detail many changes had taken place. The urban excess was greatly reduced in all cases with the average ratio of Copperbelt Urban Districts declining from 127 to 114 males per 100 females. The urban District with least decline was Lusaka which in 1963 had 126 and in 1969 had 123 males per 100 females. The number of males also declined in the rural line-of-rail Districts and adjacent areas which previously had a slight excess. In Ndola Rural, Kabwe Rural and Mkushi the decline was slight, but in the southern line of rail, and in Luapula Province the decline was more marked and brought about a deficit of males.

In urban areas during the six years there was, therefore, a tendency towards normalisation in the sex-structure of the population. This was most marked in the areas of high net in-migration, and suggests that an increasing number of female migrants had moved to these areas.

East of the line of rail the picture is very different. In 1963 all Districts of Eastern and Northern Provinces had a comparatively low proportion of males in their population, but here there was no tendency to normalise and by 1969 the number of males had fallen still further in all but two Districts. This area is one of massive net out-migration and these changes in sex-ratio suggest that the number of males leaving the area still exceeds the number of females.

West of the railway the situation is again different from that in the east. The changes in sex ratio are more

varied but the general trend is slightly towards normalization, the proportion of males increasing in all but three Districts. Here, however, it is more difficult to compare changes in sex-ratio with migration. The three Districts which had a slight decline in the proportion of males, Kalabo, Sesheke, and Mwinilunga, all registered slight out migration, but the three Districts which registered heavier out-migration, Kasempa, Kabompo and Mongu, have all had a slight increase in the proportion of males. Senanga, which had a migration gain of nearly nine per cent, increased from 81 to 90 males per 100 females, but both Kaoma and Solwezi, which also increased through migration, had no change at all in the sex ratio. The general patterns for the whole of the western region are, however, a slight normalization in sex ratio and a slight loss through migration.

The overall pattern of changes in sex ratio therefore appears to be one of tendencies towards normalization in areas of in-migration and slight out-migration, but of increasing disparity in the number of males to females in areas from which out-migration is heaviest.

Although it is impossible to compare the age-structure of the 1969 population with that in 1963 it is interesting to look at this data and to compare the distribution in different parts of the country.

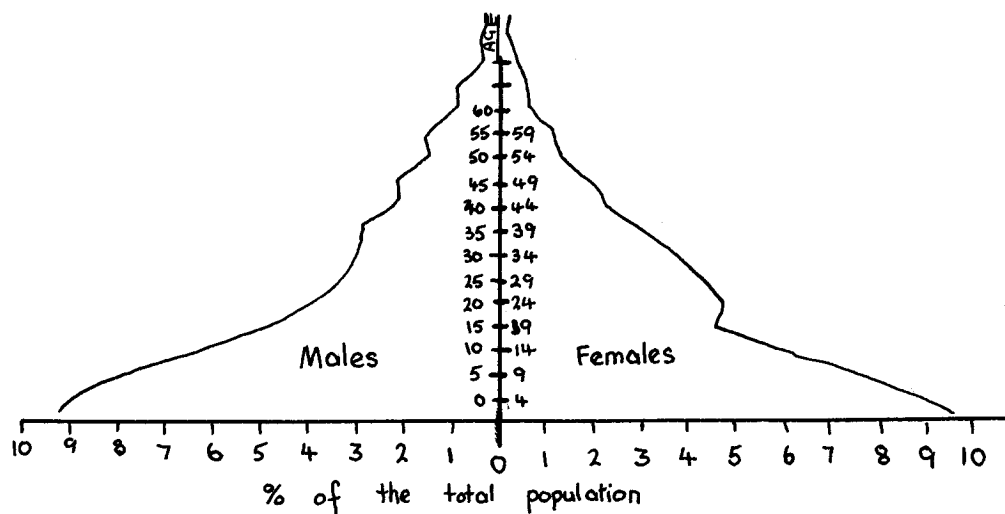


Fig. 2. Zambia total population. Age/Sex structure. 1969

Fig.2. shows the age/sex structure of Zambia's total population in 1969, by five year age-groups. It is drawn directly from unsmoothed data and shows some obvious peculiarities. The First Report of the 1969 census (C.S.O. 1970) describes these:-

'The numbers of women exceeded the men up to the age group 40-44 (except age group 10-14) whereas the number of men exceeded the number of women from the age group 45-49 onwards. It is believed that the ages of women are generally overstated up to 45 while older women understated their ages. On the other hand men up to 40 years showed a tendency to understate their ages and older men revealed an opposite tendency. The resulting pattern of ratio of men to the number of women at various age groups is fairly common in African countries of this region'.

Bearing these peculiarities in mind this total population structure can be compared to the structure of each Districts population.

Age-structure pyramids for the line-of-rail Urban Districts display a striking similarity, Lusaka and Ndola being typical of them (See Figs. 3 and 4).

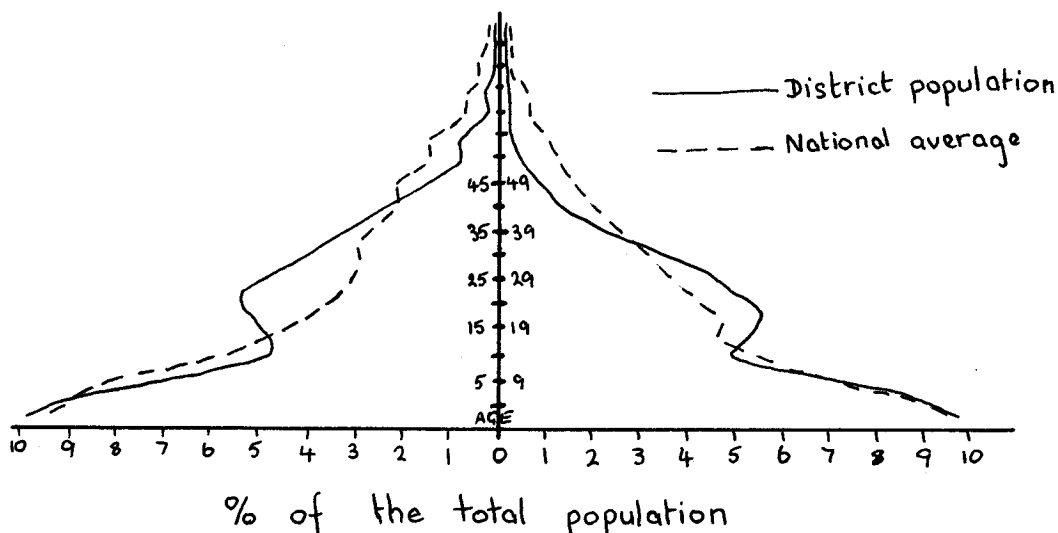


Fig. 3. Lusaka urban. Population age/sex structure 1969.

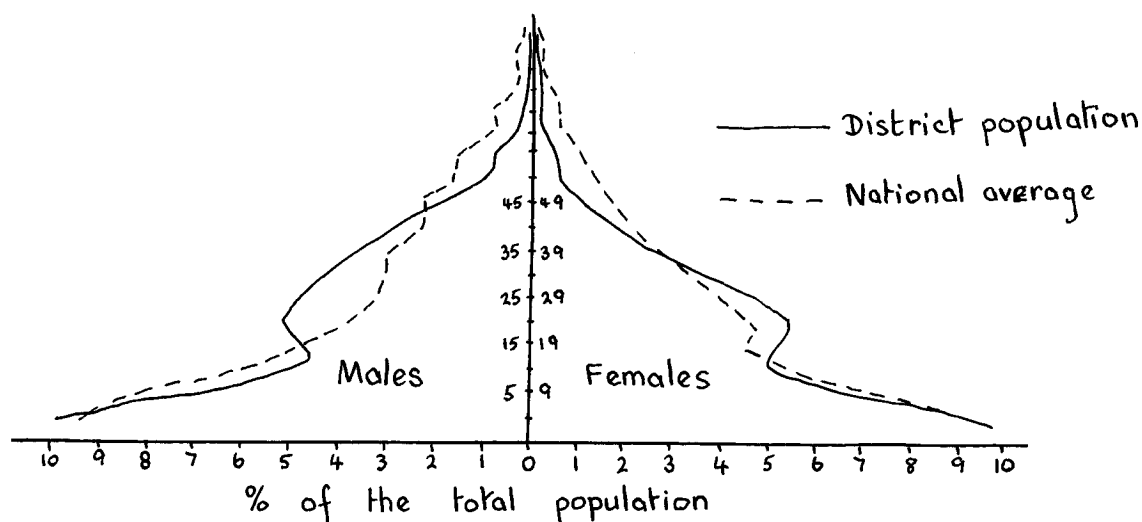


Fig. 4. Ndola urban. Population age/sex structure 1969.

In these Districts there is a high proportion of working-age people, both male and female. The proportion of males exceeds national average from the 15 - 19 to the 45 - 49 age group, after 49 it is lower than average. The proportion of females exceeds average from 15 - 19 to 30 - 34, falling below average after the age of forty. Both males and females show a lack of elderly people but are about average in their proportion of children.

These areas have strong in-migration and show the effects of this in the importance of the 15 - 49 age group in their population. Within this age group the 20 - 24 category is of peak importance for both men and women, but above this the males tend to maintain their importance for longer while the proportion of females drops fairly rapidly.

The rural areas show very different variations in their age/sex distribution. The rural townships have many similarities with the urban centres while the surrounding Districts show below-average proportions of working-age people and above-average proportions of the elderly.

Chinsali shows a distribution typical of the region east of the line of rail (See Fig.5.) with above-average proportions of both old and young but below-average proportions of males between the ages of twenty and fifty-five, and of

females between twenty and forty. This lack of working-age population compares in age-groups to the excess observed in urban centres, with lack of males extending to a greater age than that of females in the same way that the excess of males does in the towns.

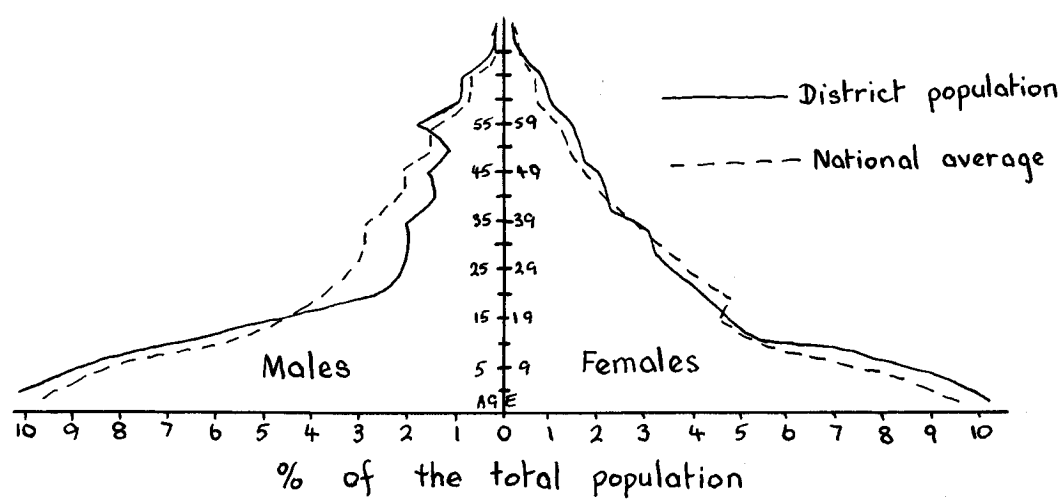


Fig. 5. Chinsali. Population age/sex structure 1969.

The rural townships in the eastern region show a very different distribution to the rural areas. Kasama (See Fig.6.) follows the pattern of the urban centres in that it has above-average numbers of young working-age people in its population.

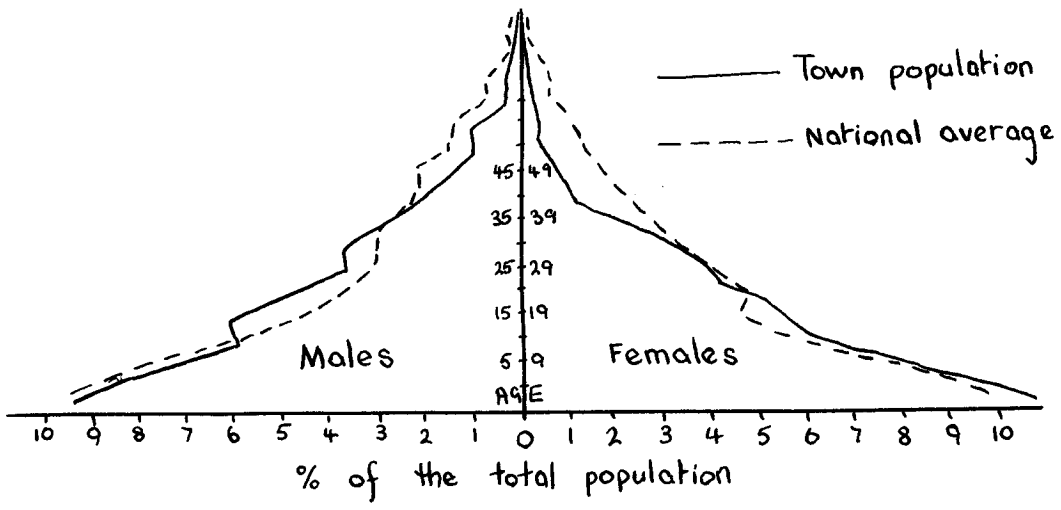


Fig. 6. Kasama township. Population age/sex structure 1969.

The proportion exceeds average in males up to the 35 - 39 age group and in females up to the 20 - 25 age group, above these the proportions are below average. The upper limits of these groupings is lower than that in the major urban centres and suggests that young people seeking work may move first to the nearest provincial township before moving onto the main line-of-rail towns. Evidence of this had already been suggested by the growth of rural townships despite an overall loss of population from the surrounding area.

In the region west of the railway the tendency for a lack of working-age population and an excess of the elderly is more marked than in the east. Zambezi is typical of this (See Fig. 7)

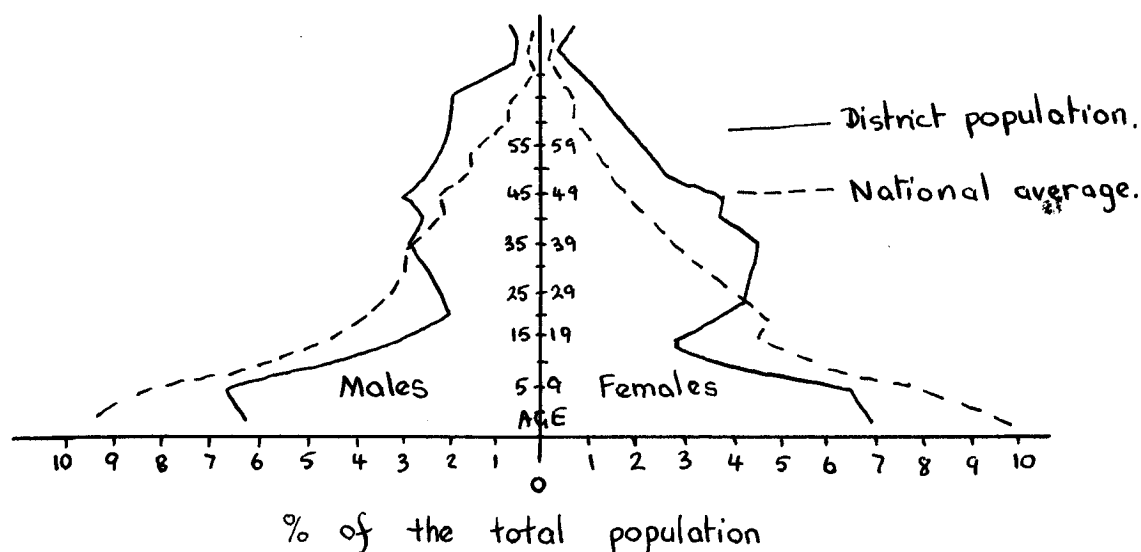


Fig. 7. Zambezi District. Population age/sex structure 1969.

There is a strong lack of young people, the most critical age-group being 20 - 24 for the men and 15 - 19 for the women. After the age of 35 for men and 30 for women the proportions increase to become strongly above average, these ages being much lower than those at which a corresponding change occurs in the eastern region.

These differences between the age/sex structure in eastern and western rural areas may appear inconsistent with the fact that the eastern region is losing population rapidly while the west is doing so comparatively slowly.

A possible explanation is that in the west the young people leave their home area to seek work, but return in middle-age and thereafter remain there. In the east on the other hand the people may tend to remain in the towns until later in life, or possibly never permanently return to their home area at all. Some support for this can be gained from the results of social surveys carried out in various towns.

McCulloch (1956) states that of the people coming to Livingstone from the western areas very few adopt permanently stabilized attitudes to town life, while Mitchell writing on Ndola and Luanshya (Mitchell 1954) notes that these draw a large proportion of their migrants from the north-eastern area and reports a higher proportion of permanently stabilized residents than Livingstone.

The age/sex distribution in all towns shows a high proportion of young and working-age people. This is true even for Mansa which has probably had net out-migration from the township during the intercensal period. The average age of this excess in working-age groups is however lower in rural townships than in the main urban centres and suggests that the rural townships do not hold sufficient opportunities to keep their young migrants, but may act as 'staging-posts' in the movement towards larger towns.

SECTION TWO - POPULATION MOVEMENTS 1968 - 69

This section provides an analysis of census question thirteen, "Where were you living at this time last year?". This question was asked of all responders in urban areas and of all responders in a ten per cent sample of rural enumeration areas. This implies that approximately one third of the population of Zambia answered the question.

The First Report of the 1969 census (C.S.O. 1970) states that twenty-six per cent of the people of Zambia had changed their Districts of residence during the previous twelve months. The report compares this figure to the thirty-three per cent who were no longer living in their District of birth and for which it declares that, "This movement is a very important bond uniting the people of Zambia in one nation. This is a very happy situation in the context of the national motto, 'One Zambia, One Nation' ". If however twenty-six per cent of the population changed their District of residence annually then thirty-three per cent would be a surprisingly low proportion to be living away from their District of birth. There could be three possible explanations of this: that movement is limited to a small section of the population which tends to be highly mobile, that most of the people moving tend to do so between two set points - their home District and one other area, and that the figure of twenty-six per cent is too high. There is probably some truth in each of these.

In spite of the care taken by the census organisers to ensure that each enumerator understood the questions which he had to ask and was capable of explaining them to the people of his area, it is obvious that some confusion occurred in the responses to the movement question.⁽ⁱ⁾

⁽ⁱ⁾ In the "Instructions to Enumerators" (C.S.O. 1969) the Central Statistical Office anticipated some difficulties over this question. The enumerators were told to explain the question as "Where were you living at the end of last winter?", they were also instructed to ascertain the District where a person lived by asking which chief's area he was in, and to distinguish between townships and rural areas by adding a 'T' or an 'R' after the name of the District.

For example in Choma District 13 937 of the people living in the rural area declared that they were living in Choma town one year ago. As Choma town had a population of only 11 300 in 1969 this hardly appears to be a likely situation. It brings out two possible sources of error: the definition by the enumerator of 'Town' and 'Rural', and the basic understanding of the question by the ordinary population. It is quite possible that thirteen thousand people from the rural areas had visited the town during the past year, but not that they were actually resident in it one year ago. Similar tendencies were displayed by other rural Districts with sizeable townships.

The data obtained from this question has therefore to be treated with great care. It cannot be used quantitatively, but it is possible to use it as an indication of the direction of movements and of the type of people moving. To use it in this way several assumptions have to be made:-

- 1) That the actual 1968 movements are contained in the data in addition to movements reported due to misunderstanding of the question.
- 2) That people reporting movements are likely to have made those movements, though not necessarily at the stated time.
- 3) That movements over greater distances are more likely to be correctly reported than local movements between town and rural areas or between adjacent Districts.
- 4) That people who reported movements are more likely to have moved than people who did not.

If these assumptions are taken to be reasonable the data can be used in two ways. It can be used to give an indication of the direction of migration and of the links between certain areas, because people are unlikely to report movements from areas to which they have never actually been, and because if a certain area figures strongly in the responses to the movement question in one District it is likely that that area has strong migration links with the District even though the actual numbers moving may not be as stated. For the study of the direction of movements all Districts which were divided into 'Town' and 'Rural' areas have been re-combined

to give figures for the District as a whole. This reduces the inaccuracies previously pointed out using the example of Choma. The Copperbelt Urban Districts have also been combined since they exhibit similar tendencies.

The data can also be used to give a measure of the characteristics of migrants. If the people who claimed to have moved are those most likely to have done so their characteristics will give a reasonable indication of the type of people moving into each District. Unfortunately with this data it is not possible to combine town and rural areas to give the total District figures as it was with the straight movement data, therefore any area where the in-migrant figure is strongly suspect has been omitted from this study.

The data obtained from the movement question was of an extremely complex nature. It gave the District of residence of each migrant in 1968 and 1969. With forty-three Districts in the country this gives 900 possible combinations of Districts between which people could have moved. As the movement between two Districts could be in either direction this means that 1800 different movements were possible. Such data is far too complex for easy analysis and cartographic portrayal and it was therefore necessary to process it into a more useable form. This was done by mapping the migration links for each District. The maps thus produced enabled the spatial relationships of the various Districts to be compared, and from them certain facts emerged which made it possible to group the Districts which had similar migratory tendencies into 'migration areas'.

This section is divided into two parts. The first deals with the direction and strength of population movements, it groups the Districts with similar migration patterns into 'migration areas' and examines the effect of such factors as distance, ease of transport and proximity to the towns on the reported movements. The second deals with the characteristics of migrants, the age and sex structure of in-migrants to various Districts and the levels of educational attainment found amongst them.

The General Pattern of Migration

The first impression gained from a study of the

migration links of each District is one of the general high mobility of the population. Where two Districts are linked strongly by migration there tends to be movement in both directions, and it is only beneath this heavy interchange that the more permanent trends appear. The pattern of contact is not however evenly spread over the country and each District has certain areas with which it is strongly linked and other areas with which it has very little interaction.

Rural Districts away from the line of rail usually have strong links with other Districts on the same side of the railway and with certain regions of the line of rail itself, but very few links with the other rural areas beyond the railway. This is exemplified by Luwingu in the north-east, where, out of over five thousand people claiming to have left the District during the previous year only four had crossed to west of the line of rail, and by Mankoya in the west from which only forty-one out of over four thousand out-migrants crossed to the east. Some Districts do show slightly stronger links across the line of rail, but these tend to be Districts containing Provincial capitals which suggests that the greater links may be due to the movement of Government and administration personnel rather than the free-choice movement of individuals.

The general tendency is therefore for rural peoples to move as far as the line of rail, but not beyond it. The part of the line of rail to which they move differs with, and is probably dictated by, their home area. Map 7 shows the Districts most strongly linked to various urban centres of the line of rail. The pattern depicted by this map indicates that the areas to the north-east and north-west are most strongly linked to the Copperbelt, Eastern Province and much of the Central, Southern and Western Provinces are most strongly linked to Lusaka and Kabwe, while two Districts, Sesheke and Kalomo have their strongest links with Livingstone. In most of these cases it would appear that migrants to the line of rail tend to go to the area which is nearest and of easiest access to their home area. This is not however entirely true of all Districts. For some Districts of Northern Province the easiest route to

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the line of rail is via the Great North Road (See Map 8). This route meets the line of rail in Kabwe District, and passes through areas which have strong links with Kabwe and Lusaka, but the migrants from the north still tend to go to the Copperbelt. This would suggest that in migration to urban areas the destination is not determined purely by proximity or ease of access but is dictated by the home area, probably due to traditions or family links which have been built up between the two areas in the past.

The line-of-rail Districts themselves tend to show interaction with all other parts of the country, though the different areas of the line of rail show their strongest links with different rural areas. The Copperbelt has comparatively strong links with all areas, the strongest being with the northeast and with other line-of-rail Districts. The central line-of-rail comprising Lusaka and Kabwe also shows links with all other areas but the strongest are with the east and the remainder of the line of rail. The Districts of Mazabuka, Choma, Kalomo and Livingstone in the Southern Province also show some links with most other areas, but these are usually comparatively slight.

The general pattern of internal migration emerging from this indicates that inter-rural movements are confined within certain groups of rural Districts and that very little interaction occurs between the different rural groups, especially those which are separated by the railway. Each rural group is however strongly linked to a specific region of the line of rail and these line-of-rail regions have a very strong interaction with each other.

Migration Areas. A definition of 'migration areas' can be based on the general pattern of migration described above. This is that a 'migration area' is a group of rural Districts which display a similar tendency to interact with a certain region of the line of rail, and with each other, but do not tend to interact with other rural areas outside their group or with different regions of the line of rail. For this definition the line of rail is divided into three regions: the northern region consisting of the Copperbelt Urban Districts

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and Ndola Rural, the central region of Kabwe and Lusaka, and the southern region comprising Mazabuka, Choma, Kalomo and Livingstone.

The rural areas have already been divided into those west of the railway and those to the east of it. For the further sub-division of these two groups an indication of the boundaries of 'migration areas' can be gained from the numbers of people who claimed to have moved across the boundaries between the Districts. The usual pattern is for each District to have strong migration links with Districts adjacent to it. In some areas this is not, however, the case. The three Districts of Eastern Province (Chipata, Lundazi and Petauke) have strong migration links with each other as do Mpika, Serenje, Chinsali and Isoka, the four Districts of Northern Province which are adjacent to them. There are however only comparatively slight links between the two sets of Districts. The probable explanation of this lies in the fact that the boundary between these areas follows the Luangwa river, whose valley is very sparsely populated, much of it being designated game reserve. This sparsely populated land effectively separates the peoples of the two areas and consequently there is very little migration between them. In Districts where the border zone is more heavily populated more cross-migration would be expected.

The Districts of Eastern Province are separated from those of Northern Province both by the comparatively slight migration occurring between the two and by the tendency of the Northern Province peoples to move to northern line-of-rail region while those of Eastern Province have greater links with the central region. Thus the area east of the line of rail can be divided into two parts with respect to migration patterns, even though it had appeared to be a whole from its similarities in net out-migration and characteristics of the populations (See Map 9).

This method of dividing the country into 'migration areas' was also applied to the western part of the country. In this area the boundaries were not as clearly defined as those in the east but the Districts did tend to group

themselves into two fairly distinct regions: the north-west which has strong interaction with the Copperbelt, and the western regions which shows fairly strong links with all parts of the line of rail (See Map 9). This western region has some Districts closely linked to each part of the line of rail, but it is not possible to subdivide it as the inter-migration between all its Districts is high.

In addition to the main areas of the east and west there are some smaller areas adjacent to the line of rail which do not fit into any of the already defined groups. Gwembe is adjacent only to line-of-rail areas and cannot be grouped with any other rural Districts. It has its strongest links with the central and southern regions of the line of rail while having very little interaction with other rural areas. Mumbwa and Namwala lie to the west of but adjacent to the line of rail. They tend to have their strongest links with the central and southern line-of-rail regions but cannot be grouped with Districts further west as they have very little interaction with them. Serenje and Mkushi occupy a similar position to Mumbwa/Namwala, but to the east of the line of rail. They are strongly linked to the northern and central regions of the railway but have comparatively slight interaction with Districts to the east and north.

To check the validity of these areas the proportions of claimed migrants moving outside the area or its specific line-of-rail link region was calculated. In no case does this value exceed twenty-eight per cent, and for most areas it is less than twenty per cent. The areas as defined therefore have a minimum of seventy per cent of their migrants moving within their boundaries or between them and a particular region of the line of rail.

The relationships of the seven defined 'migration areas' (See Map 9) are expressed by Table 5. This gives the total number of reported migrants whose movements relate to Districts in each 'migration area' and the percentage of these moving within the area, between it and the three regions of the line of rail, and between it and the other 'migration areas'. From this table it can be seen that

migration between urban and rural areas plays a very important part.

Of all the people who claimed to have moved from or to a rural District during the 1968-69 period sixty-six per cent had a line-of-rail District at the other end of their movement. Movements to distant rural areas are very slight when compared to this.

The Northwestern Area (Map 10) has very strong links (Fifty per cent of all reported migrants) with the northern line-of-rail region. Internal movement accounts for twenty per cent of migrants and movement with the central and southern areas of the line of rail for another ten per cent. This leaves only twenty per cent of migrants who claimed a link with other rural areas. The majority of the inter-rural movement is with other areas west of the line of rail but a five per cent link does exist with the northern area across the line of rail, the majority of this being generated by Solwezi District. There are two possible explanations of this. Both the northwestern and the northern areas have strong links with the northern line-of-rail region. The people from these areas will therefore meet and get to know each other, thus breaking down some of the social barriers to migration between these rural areas. The other explanation is based on the fact that this study concerns only the internal migration in Zambia and cannot, due to lack of data, include international migrations. Solwezi is separated from the Northern area by a thin strip of land belonging to the Republic of Zaire (Congo Kinshasa). The Zaire pedicle cannot be regarded as an inviolable barrier between the two areas and can be crossed by migrants without undue difficulty.

The northwestern area consists of five Districts four of which suffered out-migration during the intercensal period, including the two losing population most rapidly of all Districts west of the railway. The one District, Solwezi, which has had a slight gain through migration is adjacent to the Copperbelt and migrants of the other northwestern Districts must pass through it when moving between

their home and the Copperbelt.

The Western Area (Map 11) does not display one major link with a particular line-of-rail region but is fairly evenly linked (by from ten to twenty per cent of reported migrants) with each of them. The link of nearly twenty per cent with the southern line of rail is a little surprising as the only main town in this region is Livingstone, which, being comparatively small, does not offer employment opportunities equal to those of the northern towns. Many of the migrants however claimed a link with Mazabuka District which at that time provided employment opportunities both at the sugar estate and at the Kafue Gorge hydro-electric project which contained some 10 000 people, a large proportion of whom came from western Districts. These would probably account for the strong link between the areas.

Migration between western and other rural Districts is slight and mostly concerns other areas west of the railway, only four per cent of the migrants claimed links with eastern areas. The Districts of this area had only small gains and losses through migration over the intercensal period, the overall position being one of very slight loss. This may be associated with the fact that the area has no strong link with any one high-job-potential area.

The West-Central Area (Map 12) is adjacent to both the central and southern line-of-rail regions and has its strongest links with them. Seventy per cent of all reported migrants link the west-central area with these regions, and a further nine per cent link it with the northern line of rail. Less than twenty per cent of migrants claimed links with other rural areas and of these the majority of interaction is with other areas west of the railway and with areas immediately adjacent to the railway in the east. (The west-central area is separated from the south-central and the east-central by one line-of-rail District in each case). There is very little interaction with the more distant northern and eastern areas. This area lies astride the main route from the western area to Lusaka. Both Districts of it had

experienced slight out-migration since the previous census. The South-Central Area (Map 13) consists of only one District, Gwembe, and cannot therefore be treated in the same way as the others as there can be no measure of movement within the area. In the movements outside the area strong links are displayed with the central and southern line-of-rail regions to which the area is adjacent, over eighty per cent of migrants being involved in these links. Only 3.5 per cent of migrants link the area with the northern line of rail. Links with other rural areas involve only twelve per cent of claimed migrants, the strongest of these linking the area with the west-central area. This link crosses the line of rail but the two areas are separated by only one District and migrants from the south-central area are forced to cross line-of-rail Districts in order to reach any other rural area. Slight out-migration took place from this area in the intercensal period.

The East-Central Area (Map 14) is one which suffered fairly heavy out-migration between 1963 and 1969. It is very strongly linked to both the central and northern regions of the line of rail, with over sixty-five per cent of all migrants moving between these areas. Links with other rural areas involved only eighteen per cent of migrants, the strongest being with the northern area. The link with the north probably reflects the fact that the Great North Road passes through these Districts and this road is one of the main routes by which migrants from the northern area move to the line of rail. Very little migration crosses the line of rail except to the west-central area which is immediately adjacent to the line of rail and is separated from the east-central area only by one District.

The Northern Area (Map 15) was one of fairly massive out-migration during the 1963-69 period. It shows heavy internal migration among the Districts within the area and strong links with the northern line-of-rail region. These two patterns account for eighty per cent of all reported migrants. Fourteen per cent of migrants linked the area to the south and central regions of the line of rail, leaving only six per cent who moved between this and other

rural areas. The area is thus well defined with the majority of migrants circulating within the area or moving between it and the Copperbelt. The main routes linking it to the Copperbelt are, in the west the main dirt road from Mansa which crosses the Zaire pedicle, and the Great North Road (See Map 8). This strong link to the Copperbelt no doubt facilitated the migratory loss of the area and contributed to the rapid gain experienced by the northern line of rail.

The Eastern Area (Map 16) is also one of heavy out migration but it is linked more strongly to the Central region (43.9%) than to the northern line-of-rail (28.7%). There is fairly strong interaction between the Districts in the area but only seven per cent of the migrants linked it with other rural Districts. The main routeway from the area runs from Chipata to Lusaka and there are no major roads linking it to the north. It is therefore likely that even the migrants reaching the Copperbelt do so by passing through Lusaka.

The Line of Rail - Northern Region (See Map 17) contains the majority of the country's urban dwellers and was an area of massive in-migration between the two censuses. There is a high job potential, based mainly on the copper mines, in the area. The very presence of the towns creates job-opportunities, the largest category of employees being domestic servants, followed closely by the miners. Forty-five per cent of the migrants claimed movements either within the region or between it and other parts of the line of rail (Table 6), the majority of these links being with urban areas and giving strong evidence for inter-urban migration. The single strongest link is however one of twenty-nine per cent with the northern area. This is the only example in any line-of-rail region where a link with a rural area exceeds the links with adjacent parts of the line of rail, and shows the importance of the northern peoples in the Copperbelt area. No other link between the northern line-of-rail region and a rural area exceeds ten per cent, the eastern and northwestern areas being the strongest linked by 9.6 and 7.9 per cent of migrants respectively. The remaining four rural areas combined are linked

to this region by only eight per cent of claimed migrants. The Line of Rail - Central Region (See Map 18) consists of Lusaka and Kabwe Districts, both with their major towns which have grown rapidly since 1963. The region is linked strongly to both the northern and southern line-of-rail regions and movement within the whole line of rail accounts for over fifty-three per cent of claimed migrants. Of the links with rural areas the most marked are with the eastern (18.3 per cent) and the northern (9.5 per cent) areas, all other areas being linked to it by less than five per cent of migrants. This distribution appears unusual because for northern peoples the Central region was a very secondary line-of-rail link compared to the northern region, while the western, west-central, south-central, and east-central areas all claimed it as one of their major linkages. In terms of the Central region's linkages however these are all secondary to the northern area. The Central region's smallest link is with the northwestern area.

The Line of Rail - Southern Region (See Map 19) consists mainly of rural Districts with small towns, and the one larger urban area of Livingstone. The rural Districts have suffered fairly heavy out-migration during the intercensal period. The strongest link is one with the central line of rail and altogether sixty per cent of migrants moved within the line-of-rail area. The strongest rural links are with the adjacent western, west-central, and south-central areas which together account for a further thirty per cent of migrants. The remaining ten per cent link this region with the other rural areas, most noticeably with the northern and eastern parts.

The links between the line-of-rail regions show that whilst the different regions have strong links with rural areas they also have heavy interchange amongst themselves. McCulloch (1956) has already pointed out the tendency of migrants to move from one town to another, and stated that the survey of Livingstone in 1950 showed that the longer the time period since a person's first visit to a town the more towns he was likely to have visited. Unfortunately the movement data used here relates only to the one year and gives no indication of the original home area of people

moving along the line of rail, it simply allows note of the high degree of inter-urban movements.

Some Factors Affecting Migration

The previous examples of migration areas dealt with the direction of population movements but did not distinguish between the different quantities of migrants generated by the various areas. Two factors which are believed to have a quantitative effect on migration are proximity to an area of high employment opportunity and the existence of intervening opportunities along the route to this area. Clarke (1965) suggests that "the number of persons migrating a given distance is directly proportional to the opportunities at that distance and inversely proportional to the number of intervening opportunities". It has already been noted for Zambia that in migration to the line of rail from rural Districts the major link is usually with the urban area which is nearest and of easiest access to the rural area. Few migrants pass through the nearest town to more distant ones. This can be demonstrated by the example of Kawambwa (See Fig 8). If the movement between Kawambwa and Livingstone is studied the route between the two is clearly defined. Migrants would follow the main road through Mansa and across the Zaire pedicle to the Copperbelt from where they would follow the line of rail through Kabwe and Lusaka to Livingstone.

Although no emphasis can be placed on the actual numbers the pattern which emerges is very clear. The vast majority of migrants moved only to the Copperbelt urban area, with a few (about 2.5 per cent) travelling beyond it. Of this 2.5 per cent the majority stopped at Lusaka and only a very small number (seventeen reported migrants) reached Livingstone. The strong influence of the urban centres can be seen very clearly from this with the numbers of reported migrants dropping rapidly at each town. The influence of the Copperbelt is extremely strong, which is expected for the area containing the majority of urban centres and the country's major industry.

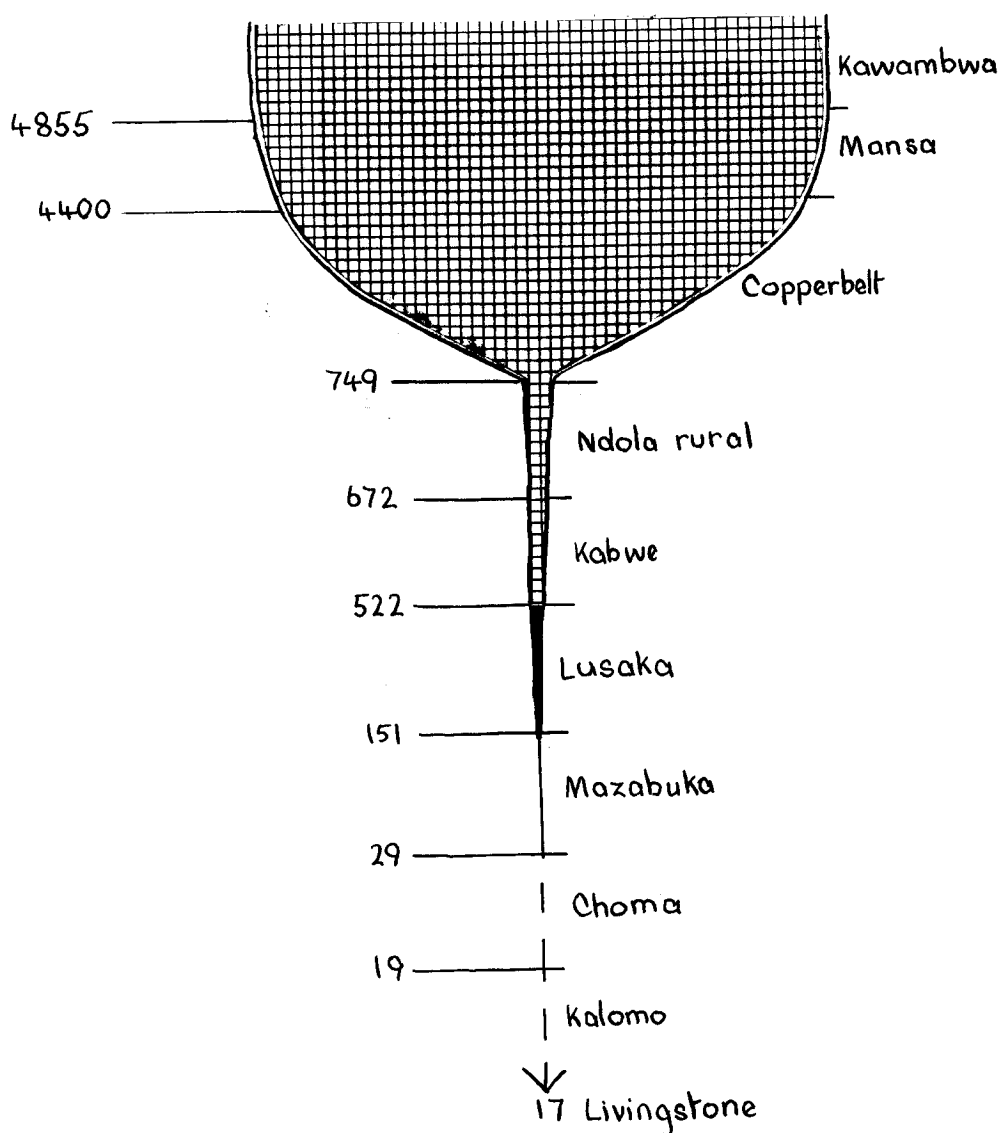


Fig. 8. Number of migrants moving along the route from Kawambwa to Livingstone 1968-1969.

The route from Lundazi in Eastern Province to the Copperbelt is also clearly defined. No major transport routes exist to the north and migrants must move first to Chipata then along the Great East Road to Lusaka and through Kabwe to the Copperbelt. The flow diagram for movement along this route (Fig 9) shows an initial drop in the number of migrants at Chipata and beyond this a very slight fall in numbers at intervening rural Districts but a distinct drop at Lusaka. The greater numbers reaching the Copperbelt through Lusaka no doubt

reflects the strong pull of the economic opportunities present there.

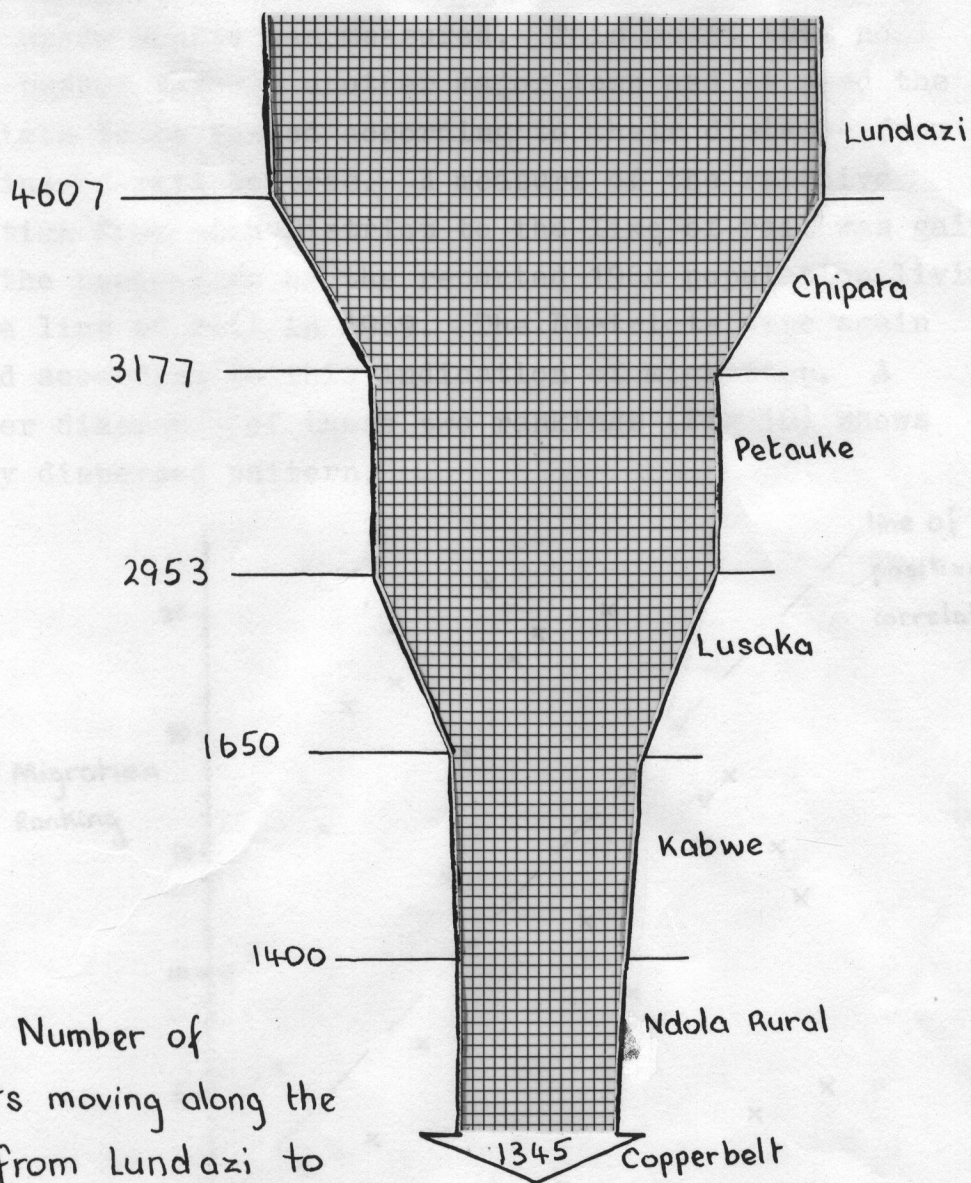


Fig. 9. Number of migrants moving along the route from Lundazi to the Copperbelt 1968-1969.

In both the above examples it is noticeable that Kabwe exerts very little influence over the number of migrants passing through it.

Movement away from any particular District therefore appears to decline at the major urban centres along the route. The examples do not however indicate the effect which distance exerts on migration in the absence of any intervening towns. All major urban centres which are strongly attractive to migrants lie along the line of rail. In order to study the effect of distance on

migration to these major towns the length of the shortest possible route between each rural District and its nearest major urban centre was measured. This meant that no route passed through another major town and allowed the Districts to be ranked according to their distance from the line-of-rail centres. A measure of the relative migration from each District to the line of rail was gained from the percentage of the reported 1968 population living on the line of rail in 1969. The Districts were again ranked according to this indication of migration. A scatter diagram of these two rankings (Fig 10) shows a very dispersed pattern.

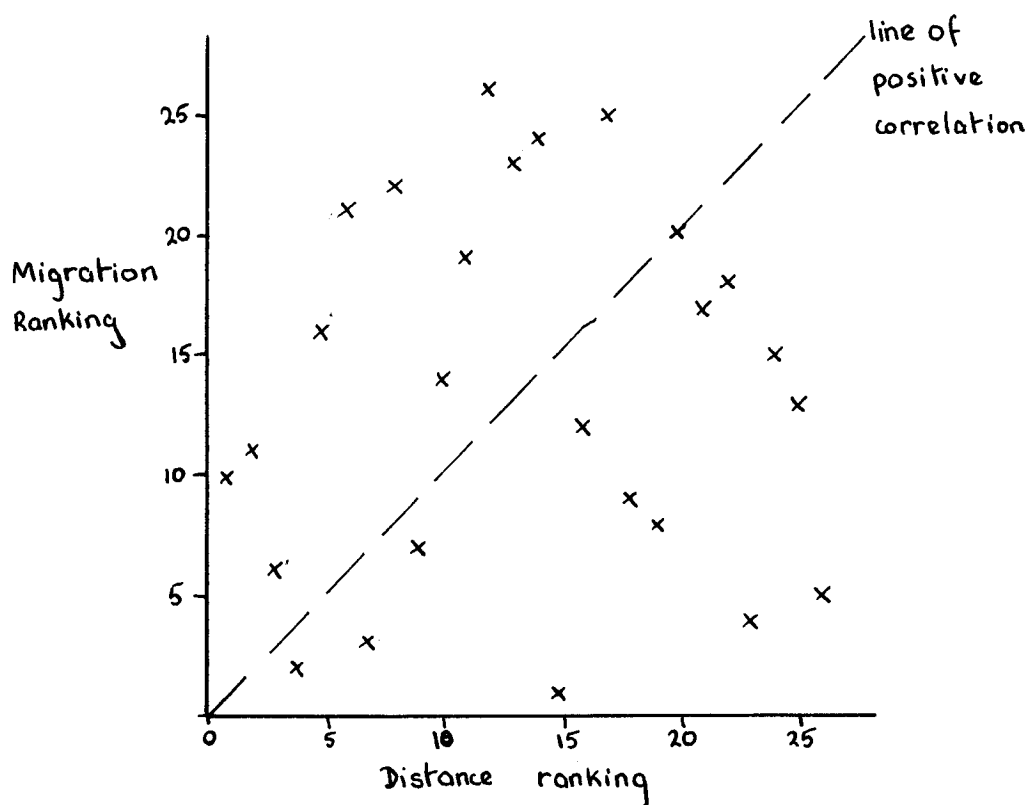


Fig. 10. Scatter diagram of migration/distance correlation by ranking.

Spearman's rank correlation coefficient.

$$P = 1 - \left(\frac{6 \sum d^2}{N(N-1)} \right)$$

where d = difference in rank
 N = sample population

was applied to this data and gave a correlation coefficient for distance and proportion of population migrating of 0.06. This indicates virtually no correlation. It would therefore appear that physical distance alone has no effect on the numbers migrating to the line of rail and that the decision, by a rural-dweller, to move to the town is unlikely to be affected by the distances involved. This finding is in keeping with the definition of rural 'migration areas' which consist of groups of Districts tending to have inter-migration and a similar link to the line of rail despite their distance from it.

The lack of correlation between migration and distance also relies on the fact that the line-of-rail Districts contain all the major towns and most of the major industrial organisations. There are no alternative areas of high employment which can exert a counteracting pull away from the region. Therefore if any individual makes the decision to move away from the rural area in search of paid employment their final destination almost inevitably lies along the line of rail.

The way in which distance can be expected to exert an effect depends on many other factors. Distance alone means very little, but the ease with which a certain distance can be travelled is important. For example the presence of a main tarred road greatly reduces travelling time when compared to the same distance by minor dirt road or through the 'bush'. Distance can also act as a barrier between different social systems and cause lack of familiarity with other areas.

To get a measure of the effect of ease of travel the Districts were re-ranked according to the type of access to them i.e. whether the District was linked primarily by main tarred road, main dirt road or minor dirt road. Ranked in this way the correlation with migration gave a coefficient of 0.40 which, while not high, is a more positive correlation than that with distance alone.

The lack of movement reported between different rural areas may be partially due to distance and difficulty of access (all main roads run to the line of rail and no major road links the north and south of the country on either

side of the railway). The lack of movement may also be due to social factors of different language and custom. Most of the boundaries of 'migration areas' also correlate with the boundaries between peoples of different cultural groups. The towns however have grown rapidly and their populations reflect the culture and language brought to them by migrants rather than those of the peoples originally in the area. In this way many of the social barriers presented by a move to another rural area are not evident in the urban areas. Cultural links are thus built up between various rural and urban areas which are reflected in the major languages used in the towns. Such links also have their effect on the rural areas, as returning migrants are able to tell their friends and relatives about urban life and familiarize them with the town in which they have been living. This can encourage further migration by removing the barrier of ignorance of other areas, and by stimulating the desire to migrate in others.

As well as the effects of social barriers and ease of travel another factor which appears to influence the numbers of migrants is the size of the township in the rural District. Of the five rural Districts with townships of over 4000 people four appear among the eight Districts generating most migrants to the line of rail. The role of the townships has already been questioned because they appear to be growing rapidly at the expense of the surrounding rural areas and because the age and sex structure of their population is very similar to that of urban centres. From this evidence it appears that rural townships may act as 'staging posts' to which people first move, and from which they later travel to the major towns. The fact that the average age of the working-age population in the townships is younger than that of the urban centres along the line of rail tends to support this theory.

Characteristics of Migrants

It is possible to obtain from the census data the age and sex structure and the education levels of people claiming to have moved into each District during the previous year.

The rural Districts where a disproportionately large number of people claimed to have moved from the local township (e.g. Choma as previously stated) have had to be excluded, but for the remaining Districts it is taken that the people who claimed to have moved are likely to have done so recently and are typical of the people moving into that area.

Age and Sex Structure of Migrants . The migrant population as a whole shows an above average proportion of working-age people of both sexes, but the structure alters considerably with in-migrants to different areas. All the towns, both large and small, have a very similar structure of in-migrants. This is exemplified by Ndola (See Fig 11) which shows a fairly average proportion of children under ten years, a marked drop in the 10-14 age-group and then a distinct excess of people over fifteen years. This excess of working-age peoples declines more quickly for the women than the men, in the same way as the total town population and a distinct lack of both sexes is seen in the older age groups.

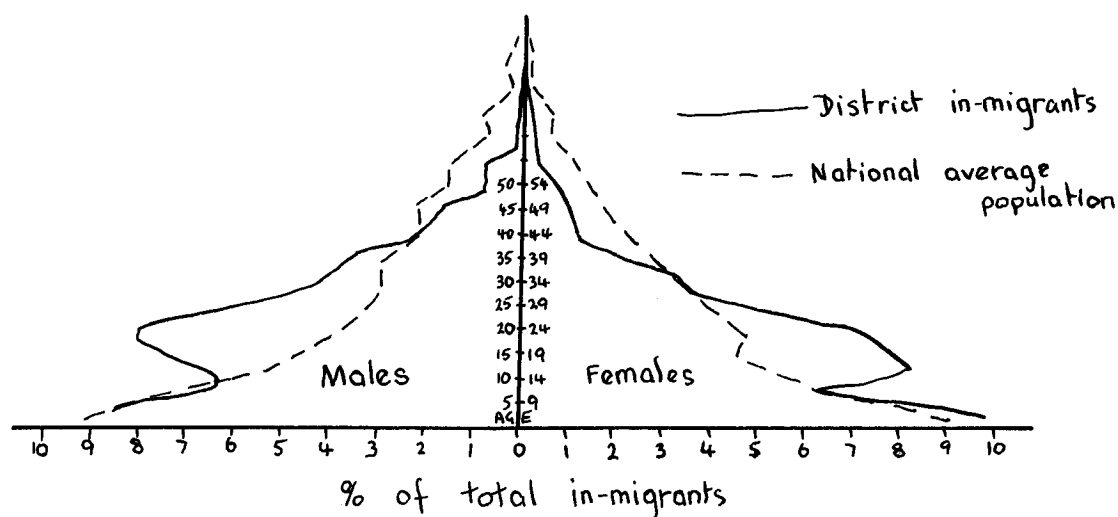


Fig. 11. Ndola urban. Age/sex structure of in-migrants 1968-1969.

There is therefore a definite emphasis on the younger age-groups with about ninety per cent of in-migrants being below the age of forty-five. Both sexes are fairly evenly represented in this. The distinct lack of

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numbers in the 10 - 14 group is very characteristic of in-migrants to the towns. This is probably because the younger children (5 - 9 age groups) travel with their parents who are in the main working-age categories, but the parents of the 10 - 14 year olds will be slightly older and be in categories which are less well represented. Children below fifteen are unlikely to migrate alone and therefore this age-group does not appear strongly among the migrants. Above the age of fifteen migration of * individuals seeking work, rather than as dependants, is more likely, the 15 - 24 age groups being the peak of in-migrant age-structure of towns. For all major urban centres the young working-age groups (15 - 29 years) constitutes between thirty-eight and forty-one per cent of the in-migrants compared to only twenty-four per cent of the national population.

When this structure of in-migrants is compared to the total population structure of the towns it appears as an exaggerated form of the town structure. The excess of working-age people and lack of the elderly is magnified in the in-migrants which indicates how the addition of these people has its effect on the towns. The fact that no great difference appears between the numbers of each sex who claimed to have migrated supports the trend towards normalisation of sex ratio which appears in the study of total intercensal changes.

Migrants to the rural areas exhibit a different age structure to those moving to the towns. In some Districts there tends to be a lack of children under fifteen while others have an excess in the 5 - 9 age-group. It has been suggested (McCulloch 1956) that some urban dwellers send their children to be brought up in the rural areas, believing this to be better for the child and because of the high cost of keeping them in the town. If this is true it would account for some of the excess of in-migrants in the youngest age-groups. The percentages in the working-age groups still exceed those of the national population but do so to a lesser degree than those of in-migrants to the towns, constituting between twenty six and thirty-three per cent of the migrants. The older age-groups are

generally better represented than among migrants to towns. No typical example is possible but Kalabo and Serenje both show some of these points (See Figs 12 and 13).

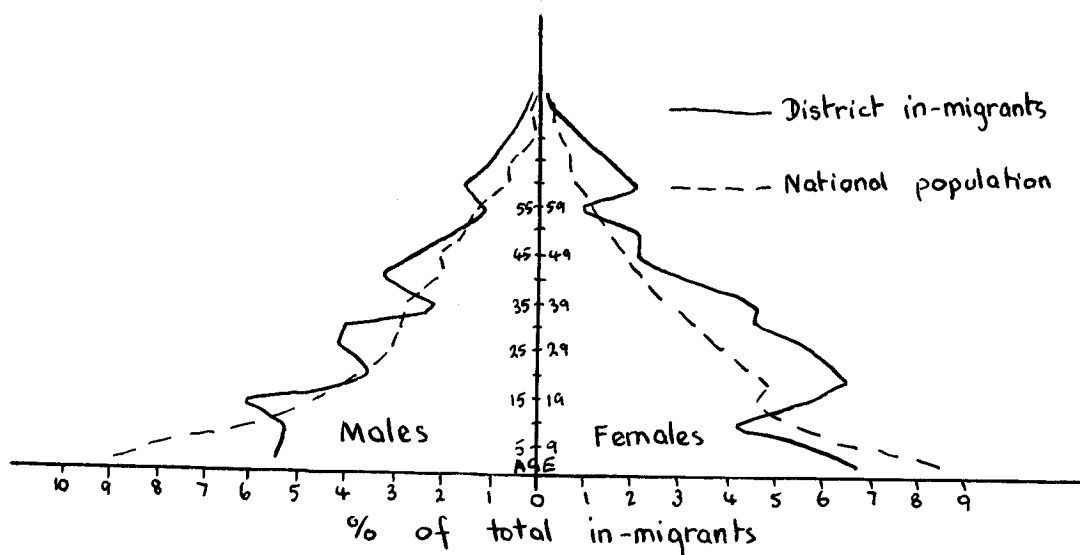


Fig. 12. Kalabo. Age/sex structure of in-migrants 1968-1969

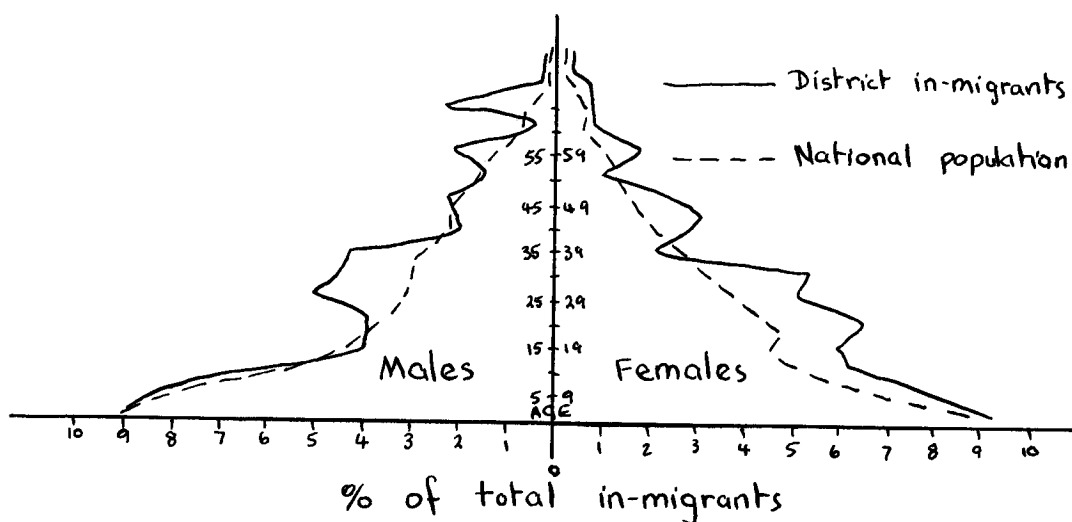


Fig. 13. Serenje. Age/sex structure of in-migrants.

The major difference between migrants to the different areas is therefore that those moving to the towns tend to have a greater proportion of younger people than those going to rural areas, and conversely, the rural areas have a higher proportion of older people. There appears to be very little difference between the numbers of males and females migrating in most age-groups and to most areas.

Educational Attainment. Migrants can be divided, on the basis of their maximum educational attainment, into five categories, those with no schooling, those having lower primary, upper primary, secondary, and technical or higher education. In every case, as is nationally normal, the males have a higher general standard of attainment than the females.

The proportions having achieved each education level vary greatly with the in-migrants to different Districts. Migrants with no education constitute about thirty-five per cent of those entering towns and up to sixty-five per cent of those entering rural areas. The rural districts west of the line of rail appear to have a slightly higher percentage of uneducated in-migrants than those to the east.

Lusaka and Luanshya (See Fig 14) typify the education levels common to migrants entering urban areas.

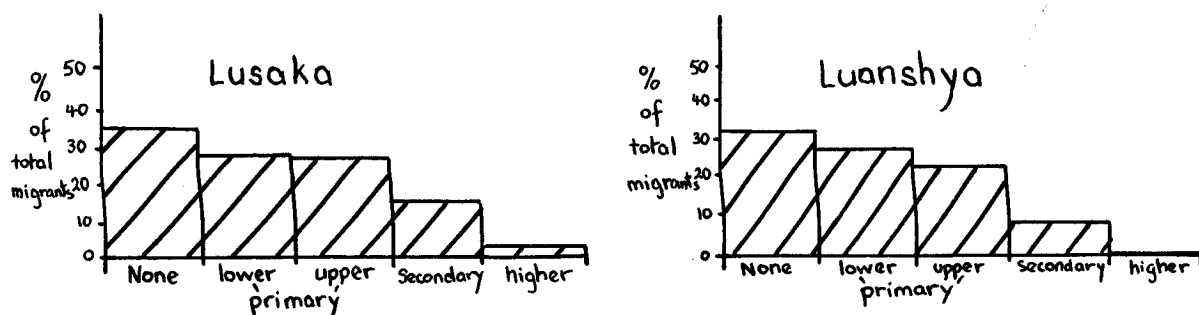


Fig. 14. Educational attainment levels among in-migrants to Lusaka and Luanshya.

The uneducated constitute about thirty-five per cent of migrants with lower and upper primary levels being represented by about 25 - 30 per cent each. Migrants with secondary education constitute about ten per cent of the total, while those with higher education, which is nationally very limited, represent less than one per cent. The in-migrants to rural townships show a very similar education structure to those of urban areas.

For the rural areas the structure is rather different. Solwezi and Kaoma (See Fig 15) typify the education levels among migrants to rural Districts west of the line of rail.

The uneducated constitute more than fifty per cent of the total, lower primary 15-25 per cent, upper primary 6-18 per cent and secondary about five per cent. Those with higher education are very few.

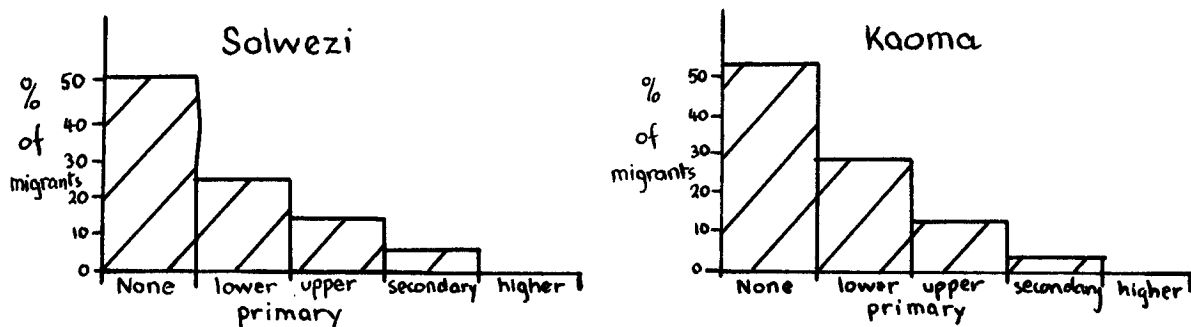


Fig. 15 Educational attainment levels among in-migrants to Solwezi and Kaoma.

East of the railway the structure ^{is} similar but slightly less marked in the proportion of uneducated. Isoka and Mporokoso (See Fig 16) are typical examples with about forty per cent having no schooling.

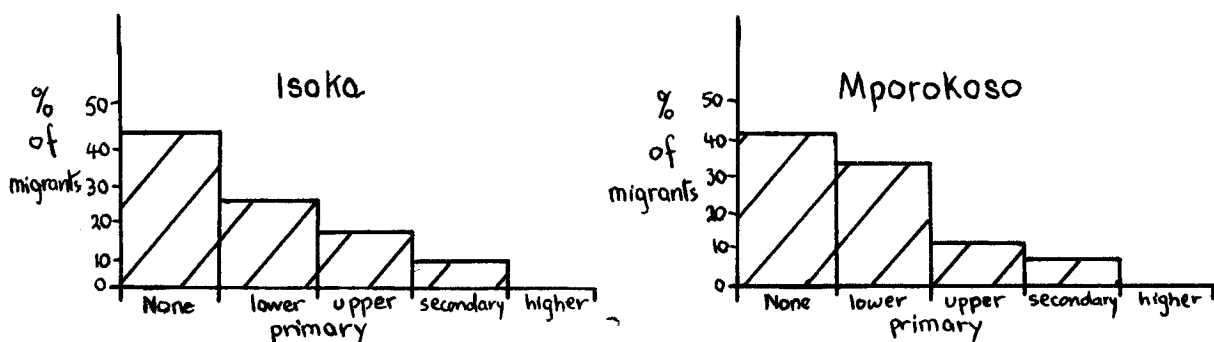


Fig 16. Educational attainment levels among in-migrants to Isoka and Mporokoso.

From this it can be seen that migrants to the towns have a generally higher standard of education than those to rural areas. To some extent this is related to the ages of migrants. Zambia's education system is expanding rapidly and hence the younger a person is the more likely he is to have had some education. The tendency of town migrants to have a greater proportion of young people will

therefore be reflected in the migrant education figures, it is however unlikely to account for all the differences in the proportions of uneducated migrants.

The general trend emerging is that migrants to the towns tend to be younger and to be better educated than those to the rural areas. Some of the problems inherent in this situation have already become apparent in the Zambian society. Certain chief's areas report a lack of able-bodied people to help with the mainly agricultural economy while unemployment is rising in the towns. In the past even a small amount of education enabled a person to find paid employment, but as the general level of education becomes higher the minimum requirement for many jobs is being raised, resulting in a surplus of partially educated people now unable to find employment.

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SECTION THREE - DISCUSSION

The general picture presented by the first section was one of massive gain through migration by the central and northern line of rail and of migratory losses from the rural Districts, the greatest being from areas north and east of the railway. In the second section this picture was supplemented by the pattern of migration which appears to fit well with the overall gains and losses. The areas of the north and east, with their heavy losses, were linked most strongly to the rapidly increasing line-of-rail areas, suggesting that much of the increase in the Copperbelt and Lusaka is derived from Northern, Luapula and Eastern Provinces. The western areas which had only a slight loss were linked in the north to the Copperbelt and in the south rather evenly to all areas of the line of rail. The differences between the separate migration areas and some of the factors which may have contributed to their role in migration will now be discussed.

The Northern Area . The Districts of this area lost nearly 190 000 people through out-migration during the intercensal period. Their strongest migration link is with the Copperbelt area and migrants originating in them must account for the majority of the 185 000 gain experience there, as well as for some of the gains in Kabwe and Lusaka. The reasons behind this very high level of out-migration may partially lie in the history of the link with the Copperbelt. Mitchell (1954) reports that of persons who lived in Ndola and Luanshya in 1951 whose home was not an adjacent District the majority came from Northern Province. Luapula Province also sent many migrants to the area, Kay (1962) reports that of the taxable males whose home area was the Luapula about forty per cent were living in the Copperbelt or other line-of-rail centres. Thus the link between the northern area and the Copperbelt appears to have been established prior to the intercensal period under discussion, and movement between the two areas is a continuing trend.

Links such as this are often built up on a strong social basis. A new migrant will often move firstly to a town

where a close relative is living, and that relative will look after him until he finds a job and a house of his own. More migrants may then come to join their 'brothers' in the town, and in this way a chain-reaction is built up which strengthens the links between the town and the rural area. This can be seen in the major languages of the Copperbelt towns, which are those of the northern rural area. It is very rare for a migrant to go alone to a town where he has no relatives and where his language is not spoken, and this usually only occurs in the case of well-educated persons*.

The north appears to have been the major supplier of Copperbelt labour from very early in the development of mining. This may be because mining areas were established in countries south of the Zambezi before those in Zambia, and these attracted workers from the southern areas of the country. When the Copperbelt began to create jobs the peoples of the southern areas had already formed a tradition of moving south to work and they were not therefore attracted to the newly developing area as much as the peoples of the north who had previously been very remote from areas offering paid employment. The first miners therefore came in from the northern area and began the tradition of movement which is still evident today.

Even taking into account the long-standing tradition of movement between the northern areas and the Copperbelt the actual losses from the north still appear to be very high and additional evidence of the reasons for this may be gained from the sex structure of the various populations. It was noted that between 1963 and 1969 the ratio of men to women in the Copperbelt fell considerably. Before Independence in 1964 there was a tendency for men to move alone in search of work, leaving their wives and families in the rural areas. Although the presence of wives in mine townships was not actively discouraged in the Copperbelt, as it was south of the Zambezi, there were still a disproportionately large number of males on the Copperbelt in 1963. Between 1963 and 1969 this disproportion was markedly reduced, though the numbers of men still

* Information from local sources

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exceed those of women, and no excess of males was evident in the in-migration to these areas. The implications of this are that many more women are now joining their husbands in the town. The Central Statistical Office (1970) infers that this influx of wives has been responsible for the very high rate of increase of the town populations, and goes on to suggest that now the 'backlog' of wives has been made up, a less rapid rate of urban increase can be expected in the future. This can only be proved by subsequent censuses, but it is undoubtedly true that the 'backlog' of wives has been responsible for part of the very rapid growth of the towns.

The northern area therefore can have much of its heavy out-migration attributed to its strong link with the Copperbelt and the increased number of women migrants, but even amongst the general heavy losses the District of Chinsali stands out. This District has lost ten per cent more of its population than any other District of the country, a phenomena which must be a special circumstance and is probably attributable to an incident which happened there in 1964.

The history of this incident goes back to September of 1953 when a woman living in Kasomo village, Chinsali, underwent a religious experience. The woman Alice Lenshina Muxlenga Lubusha stated that she fell dead, and while dead was brought into the presence of God who gave her two books and told her to return to earth and preach against evil. However her experience is interpreted it is a fact that many people believed and followed her, and over the succeeding years she built up a Church, the Lumpa Church, which numbered close to 100 000 people during 1955 - 57. The movement was based on Chinsali District with its temple at Kasomo, the new Zion, but it spread out into the surrounding Districts. Branches were founded in some line-of-rail towns as well, but these were never as strong as the churches in the north, where they soon became a major influence. Lenshina followers in the area began to resent any authority but that of their church and relations with the Government deteriorated rapidly.

On this situation must be superimposed the political climate of the country at that time. Zambia was preparing for Independence and there was intense political feeling in the country, much of it centred on Northern Province where the United National Independence Party (UNIP) was particularly strong. The reasons behind the violence which erupted between the Lumpas and UNIP supporters have never been documented but considerable pressure must have built up on both sides because a comparatively minor incident on 25th July 1964 sparked off a series of attacks and reprisals which quickly developed into an almost full scale war between the Lenshina followers and UNIP and Government forces. During the succeeding five months fighting took place at many points in and around Chinsali District, and comparative peace was finally restored late in October.

The troubles did not however end with a return to the status quo or with an attempt to reconcile the two factions. Plans were made for the rehabilitation of former Lumpas but these could not be effective as many of them had fled the country during the fighting and had not returned even by the time of the 1969 census. The official estimate of those killed during the troubles was 710 (though unofficial estimates by persons living in the area are much higher), the number who left the country has been quoted as 15 000 (Harrison 1970), most of them going to a camp at Mukambo in Zaire, but the 'Times of Zambia' has, on separate occasions, stated that the Mukambo camp contains 19 000 ex-Lumpas and that 44 000 are waiting to return to Zambia. The latter estimate would seem rather high but whichever is accepted it goes a long way towards explaining the exceptionally high out-migration from Chinsali and its surrounding Districts.

The movement away from the north is therefore probably due to a continuance and escalation of the previously established pattern of migration to the Copperbelt and the inclusion of more women among the migrants, with the exceptional losses from Chinsali and its surrounding Districts being the result of the additional losses sustained in 1964.

The Western Area. This area which conforms with the Western Province of Zambia, is a strong contrast to the northern area. It showed very little change through migration during the intercensal period, the overall loss being only about 6 000 people. Also no preference is indicated for any one region of the line of rail in its migration links. It would appear to have maintained its population with very little migration, except for the fact that the age structure of its District populations show the lack of working-age people which is characteristic of out-migration areas. To get some idea of the reasons for this it is again necessary to look at what is known of the history of the area. Past migration links appear to have been southwards. In 1951 very few people from this area were living in Ndola or Luanshya, Mitchell (1954) attributed this to the greater 'pull' exerted on them by centres further south. McCulloch (1956) states that around 1952-53 about 3 000 people per year were recruited from Western Province for work in the Rand mines by the Witwatersrand Native Labour Association of South Africa (WENELA), while many thousands worked in Southern Rhodesia especially in the Wankie coal-mines and Bulawayo.

It was the policy in Southern mines to discourage men from bringing their wives with them when they came to work, which also had the side-effect of encouraging them to go home again when they had finished, and there also appears to have been some social incentive for Western Province men to return, as, even in Livingstone where the presence of wives was not discouraged, a smaller percentage of them developed permanently stabilised attitudes towards town life than men from other areas. With this situation it is probable that in 1963 the western area had a large number of working-age men absent in the South but did not have much absence of women. However, after Independence, these circumstances changed considerably with the cessation of WENELA recruitment and with the change of attitudes towards the south. During the intercensal period many workers must have returned from the south, boosting the

population above the level reported in 1963, but though the traditional link was cut no new link was ready to take its place. During 1968-69 the western area showed no preferential linkage with any one area of the line of rail, the only remnant of its previous movement pattern was the link to Livingstone, which is a relatively small centre and did not generate sufficient employment to meet the needs of the returning workers. The lack of social links with other areas severely inhibited the potential migrants from the west, as only the well educated felt capable of moving to a town where they had no relatives and where the language and customs were strange to them.* The effect of this was temporarily to create 'wandering migrants' who moved to any new project to provide the labour force there. At the Kafue Gorge hydro-electric scheme in Mazabuka District the majority of the 10 000 temporary workers were from Western Province. No special recruiting was done for these workers but the people heard by word-of-mouth that the work entailed tunnelling and thousands flocked to it because they saw an opportunity to use the skills which they had learned as miners.

The overall migration loss from the area is therefore probably greater than it appears from the District totals, because of the returning workers from the South, but even considering this the level of out-migration must still be very low in comparison to the rest of the country. This is probably due to the lack of any strong links to an area of high employment. It is perhaps unfortunate that the Kafue Gorge project was as well organised as it proved to be. The main camp was within 90km. of Lusaka, and less from Kafue town but it provided all the facilities needed by the workers. A hospital, school, food and clothing shops were all present on the site. It was also located in a restricted area into which only persons having official business were allowed. This meant that the workers at the camp had very little contact with the capital, they had little reason to go there and few people from the city came to visit them. When the work at the camp came to an end they still knew very little of the city or its

* Information supplied by the Assistant District Secretary, Kafue Gorge.

people even though they had lived near to it for two or three years, and they still had no inclination to seek work there. Many of them moved on from Kafue to work on a very similar scheme at Siavonga, the Kariba North Bank Scheme, which will again satisfy their short-term need for employment without creating any permanent links with an area offering long-term prospects. It therefore appears that a large number of western province workers are excluded, by primarily social barriers, from moving to the major urban centres. This is a situation fraught with dangers, as one cannot exclude, even by inactivity, one section of the population from the wealth shared by the rest. To deliberately encourage their movement to the towns would however increase many of the problems which already exist and the solution lies perhaps in the hope that the present slight links with line-of-rail areas will be reinforced by the chain-migration of relatives to give the Western Province more labour outlets in the future.

The Eastern Area. This area appeared to be very similar to the north in its overall migration standing, but its Districts were linked more strongly to Lusaka than the Copperbelt. Between the dates of the two censuses this area's three Districts lost a total of nearly 50,000 people through out-migration, many of whom must have had Lusaka as their destination. This strong link is also shown by the fact that the major languages spoken in Lusaka are those of Eastern Province.

Historically the situation in this area falls part-way between that described for the north and that of the west. Eastern province is described (Mitchell 1954) as sending considerable numbers of workers to Southern Rhodesia, though there appears to have also been a link with the Copperbelt, as in 1951 considerably more Eastern Province men were present there than men from western areas. McCulloch (1956) describes the route taken by these workers.

" The main urban centres of employment for Eastern Province men are the Copperbelt and Southern Rhodesia, although they are found working all along the line-of-rail.

Formerly Eastern Province men migrating southwards travelled on foot and by bus into the central and eastern parts of Southern Rhodesia. Today many come by bus to Lusaka and travel southwards by train, returning home by the same route".

The past links of the area were therefore both with the South and the Copperbelt, but the route to the South passed through Lusaka, a fact which may have great implications for the present position. It would not be possible for many migrants to have passed through the town without gaining some familiarity with it. A number may actually have stopped to work there for a time, in the same way that through-migrants often did in Kabwe (Wilson 1941), and some may have stayed there permanently. Thus the basis for a link with Lusaka would be built up even before the city expanded to offer a large number of job opportunities.

With this situation existing the effects of cessation of southward migration would be very different for the Eastern Province peoples than they were for those in the west. Established links existed which could immediately be used by those wishing to find paid employment, and simply by following the first part of their previous route brought the migrants to Lusaka, a town with which many were already familiar. The propensity for migration of a population probably builds up a certain amount of momentum and while in the west this momentum was abruptly halted, with consequent frustrating results, in the east it was channelled into the existing links strengthening and reinforcing them. Thus the out-migration from the area remained at the same high level as in the other areas east of the railway.

Among the Districts of the eastern area however, Lundazi has lost slightly more of its population than the others. This could again be due to the Lumpa disturbances, already described. Lundazi is adjacent to Chinsali District, which was at the centre of the troubles, and some fighting did take place in the District with a number of people fleeing to Malawi. No estimates exist of the



numbers involved in this but those leaving the country were probably sufficient to cause this Districts additional loss of population.

The Northwestern Area. The general picture of this area between the two censuses was one of slight out-migration involving a loss of some 10 000 persons. By far the most important migration link during 1968 - 69 was with the Copperbelt, but the area is losing population very slowly compared to the other areas with major Copperbelt links, the rate of out-migration being only slightly higher than that of the western area. The reason for this situation is not very clear as previous migration routes are not so easily definable as those from other areas. In 1951 Ndola and Luanshya contained a large number of men from the then 'Western Province' (Mitchell 1954), but at that time this Province included the whole of the present Northwestern and Copperbelt Provinces and it is not certain which Districts were the major suppliers. In his description of the home areas of the population Mitchell does not however mention any of the Districts of the present Northwestern Province as being particularly important, implying that the Districts closest to the urban areas were the major suppliers and the more distant western Districts less important. This is supported by McCulloch (1956) who reports that during 1952-53 Livingstone contained men from the western Districts of Kabompo, Kasempa and Zambezi, these men having moved southwards through the Zambezi flood plain. From this it would appear that the western part of the area was in the past an extension of the region from which men were recruited for work in the South, while the eastern Districts being closer to the Copperbelt sent most of their workers there. It is also probable that as these Districts are adjacent to Zaire some of the people previously moved northwards seeking work. If this is correct then this is again an area which has had to change its migration patterns in the recent past. The link with the South has been cut and it is now more difficult than before to move into Zaire for work, which leaves only the easterly link to the Copperbelt which is still in existence. This severance of past links may have

effectively slowed the rate of migration away from the area.

Another factor which may affect the migration from these Districts and from those of the western area, is the nature of the transport link to the line of rail. These areas are served by main dirt roads along which conditions vary greatly between the wet and dry seasons. The northern and eastern areas are both linked to the line of rail by all-weather tarred roads, and the absence of these in the west has always led to the western areas being considered more remote and difficult of access. In the second section it was noted that though distance did not appear to have any effect on migration the type of road access to the Districts did have some effect, and the absence of tarred roads throughout the west may be an inhibiting factor which has contributed to the slow rate of out-migration in these areas.

The East, West and South-Central Areas. These areas are similar in that they all lie adjacent to the line of rail, they have all suffered a loss through out-migration, and they are all most strongly linked to their nearest line-of-rail centres. Together they have lost over 25 000 people through migration, the greatest part of this being from the east-central area which, to this extent, echoes the Districts further east. In the west and south-central areas the loss has been comparatively slight, again resembling the rural Districts which surround them.

The areas are probably typical of Districts adjacent to the major centres. The close proximity has caused the line-of-rail towns to become their major links, and if a previous pattern existed before the growth of these centres it was rapidly changed after their establishment. Mkushi and Serenje have been quoted as major suppliers to both the Copperbelt and Kabwe (McCulloch 1956), a trend which appears to still continue and which probably explains much of their migratory loss, while Gwembe and Namwala were until recently rather difficult of access which may partially explain their lower losses.

The Line of Rail. The changes which have taken place along the line of rail have been extremely rapid and extensive. The Copperbelt has had a massive influx of people mainly from the north while Lusaka has grown rapidly. All the towns along the line of rail have increased their share of the country's population while the adjacent rural areas increased only slightly in the north and declined in the south.

It is interesting to trace the development of this area from the beginning of the century. The railway from Bulawayo reached the Victoria Falls bridge, just south of Livingstone, in 1904 and was extended northwards arriving at Kabwe in 1906 and the Copperbelt and Zaire border in 1909. In 1911 Livingstone was declared the capital of Northern Rhodesia then in 1935 the seat of government moved to Lusaka, a position chosen because of its centrality. With the advance of the railway European farming penetrated into the country from the South, with a sixty-mile wide belt along the railway being alienated to Europeans. The position in 1931 was described by Baker and White (1946) who produced a population dot map of Southeast-Central Africa based on population estimates at the time. It must be remembered that the population was then greatly underestimated but the distribution described was probably based on sound information. The map showed no concentrations along the railway, in fact the northern line of rail appears to have been very sparsely populated. The Copperbelt was taken to warrant only one dot (5 000 people) placed on Ndola, slightly more people were placed around Kabwe but the heavier concentrations were along the southern line-of-rail near Mazabuka and Choma. Lusaka was not even mentioned in the description. Baker and White do however add the corollary that, "Northern Rhodesia with a very sparse native population has developed, mainly since 1931, a small copper-mining area of tremendous importance on the borders of Katanga."

During the thirty years after 1931 the rate of growth of towns along the north of the railway must have

been very rapid to produce the situation which existed in 1963, and the growth during the intercensal period is a continuation of this, but of great import to the rural areas because of the larger numbers of people involved. There was apparently very little rural population in the northern line of rail area in 1931 and that towns established there must have attracted population from further afield in order to achieve their rapid growth. This lack of population is still discernible in the area. The heavier population along the southern rural Districts is also noticeable in the present distribution, though it is an area which is now losing population. An explanation of this loss lies in the historical presence of European farmers in the area. These farmers in the sixty-mile strip alienated to them employed many Africans as labourers on their commercial farms, while many more lived just outside the strip as close as possible to the railway. The departure of many of the large-scale commercial farmers during the intercensal period and the abolition of the former land restrictions must have had a considerable effect on the economy of the area, and the changes which occurred as a result may have created a state of flux among the population with many deciding to leave the lower-paid agricultural work and try to find jobs in the towns. The proximity of Lusaka and the ease of travel along the rail line no doubt contributed to the exodus.

The directional effect of the railway on trade also changed during the 1963-69 period. It was originally very much orientated towards the south, being an extension of the southern influence and the route by which most goods travelled into or out of the country. The Independence of Zambia and then the illegally declared independence in Rhodesia changed this situation drastically. Trade routes were established to the north through Tanzania and the country began to face northwards rather than southwards. Livingstone became more of a terminal town instead of the major port which it was previously and the effects of this change of attitude may have been felt by the people of the southern area, their pattern of migration changing accordingly.

In future it is probable that the well established migration links will continue to be important due to the social conditions on which they are based. The need to be part of the money economy is unlikely to lessen and movement in search of work will consequently continue. The attitude of the average Zambian towards rural life has obviously changed greatly during the last few decades. Many urban dwellers find town life both expensive and arduous, and say that it is possible to live with little money in the villages, but there is no sign of a general return to the rural areas and many who express the above attitudes also state their intention of remaining continuously in the towns. Furthermore, children born in the towns are even less likely to move to live in rural areas.

The percentage of the total population who live in urban areas is very high compared to other African countries and the towns are still growing rapidly. Seventy years ago there were no towns in Zambia while today thirty per cent of the population are urban dwellers. This very fast growth must have affected the attitudes of the people towards urban life, the growth having been too rapid to be easily reduced or the population stabilized. A continuation of the trend must therefore be expected unless something far-reaching is done to redirect the mass of the people.

Much has been said and postulated about the development of the rural areas and the need to create in them the facilities offered by the towns, in order to reduce the outflow of people. Work is in progress in Zambia on the choice of sites suitable for the provision of major services in the hope that such sites will become development centres for the rural community. Whether the object of reducing the loss of people would be achieved by this method is however uncertain. The rural townships provide educational, medical and other services as well as being administrative centres with agricultural extension officers, but they have already been noted to act as 'staging posts' for the population moving to urban areas. Evidence from the age and sex structure of their populations suggested that the young people move to these townships and then move on to

the line of rail, while the evaluation of migration indicated that Districts with large rural townships sent a larger proportion of their population to the line of rail each year than did other rural Districts. All the major rural townships were situated Districts which were loosing population. On the other hand areas with poor service roads and without a major township sent the smallest proportions to the line of rail. From this it would appear that the provision of good access roads and of the major community services are more likely to stimulate rural-urban migration than to reduce it, and that the creation of small rural centres may be the quickest way to do this. One factor which did appear to effect the number of migrants was the size of the rural township, Mansa, which is a relatively small township, took very little toll on the migrants passing through from Kawambwa to the Copperbelt, while Chipata, a much larger town, caused a considerable drop in the number of migrants from Lundazi passing through to Lusaka. This increased effect of the larger townships is probably a direct effect of the larger number of job opportunities present there, and while it suggests that an increase in the numbers of jobs in rural areas would help reduce the flow of migrants it does not help to keep the population in rural agriculture which is the sector suffering most from the present trends.

It was suggested (C.S.O. 1970) that the rapid growth of the towns would naturally slow slightly now that many women had moved to join their husbands in the town and the 'backlog' of wives had been made up. This idea however does not entirely fit with the available evidence on urbanisation. Originally the men were the first to move to the towns in search of employment and after one or two years they returned to their families in the rural areas. However, as the length of contact with the towns increased more permanently stabilized attitudes were adopted towards town life. Kapferer (1966) notes that a greater proportion of the population of Kabwe expressed permanently stabilized attitudes in 1964 than they did in 1953. These attitudes towards urban life appear to have been affected by the presence of wives in the town, as McCulloch (1956) reports

that in Livingstone more single men expressed 'migrant labourer' attitudes than those who had their wife with them. The influx of women during the intercensal period may therefore result in the further stabilization the town populations and the consequent reduction of the number of migrants returning to the rural areas. This would have the effect of stimulating growth of the urban centres as migrants will continue to move into them while lower numbers than before will be moving out.

The tendency for migrants to the towns to have a ~~★~~ better education than those moving into rural areas also has grave implications for the future. Until recently the possession of educational qualifications has been the key to a job in the towns and it has become expected that after some education a person can leave agricultural labour and seek non-manual work. With the rapid expansion of education in the country the towns are already becoming flooded with school-leavers who have completed some primary education but have failed to get a place in higher grades, and come to the towns seeking employment. The exodus of both the young and the better educated from the rural area is limiting rural expansion. The rising general standard of education has probably contributed to the rapid rural-urban migration, and the prevailing attitude must be altered if the drift to the towns is to be checked.

Some of the development projects now planned are certain to have an effect on future population movements and to alter the pattern of migration which has been described here, the construction of the railway to Tanzania probably being of major importance. This railway will run from the present line of rail at Kabwe to the sea-port of Dar es Salaam and its route northwards will pass through the heart of the area which has lost population most rapidly. The effect which it exerts on the population will probably depend greatly on the development projects planned along its route. The influence of the actual railway in the present line of rail is difficult to ascertain and the importance of the region is dependant

on historical factors. The present railway was built to serve the mining areas and most of the major towns along its route are at mining sites. Only Lusaka and Livingstone are not on the site of a primary industry and the growth of Lusaka is probably due to its role as the seat of government while Livingstone, one of the oldest centres, whose economy is now based largely on tourism, is comparatively small and is not growing as rapidly as other towns. The new railway is intended primarily as an import-export route and whether it will be sufficient alone to stimulate the growth of any large centres without primary industries is doubtful. Development can however be foretold at Mpika where the railway-workshops and services are to be situated and at the border where the line enters from Tanzania. It may also stimulate agriculture in the northern area by providing transport to the main urban markets, as at present the distances involved, even along tarred roads, make transport costs prohibitive.

This link will certainly increase the reorientation of the country towards the north rather than the south and could possibly be the agent which decreases the out-migration from Northern Province. If however the political situation in the south eases slightly in the near future the results are more difficult to foretell, though it will almost certainly mean a re-vitalisation of Livingstone. The diversification of transport routes and good relations with neighbouring countries can only be beneficial to a land-locked country such as Zambia.

Conclusion

The general pattern of population movement in Zambia is one of extremely high mobility. There is a very marked circulation of people between the towns and rural areas, and between adjacent rural Districts, and it is only beneath this that more permanent re-distribution of the population takes place. The trends of these more permanent movements appear to depend greatly on past movement patterns based on established social links. Where a migration link has remained undisturbed a very heavy loss of population has taken place in the rural area, but where the established pattern has been disturbed during the recent past the loss of population has been very slight. This suggested that strong migration links can only be built over a period of years and are not easily changed. The movements also appear to build up a momentum which is difficult to check. Because of this rapid growth of the towns during the 1963 - 69 period has been largely due to an influx of people from the north and east. This has resulted in the proportion of these people in the administrative and economic centres increasing rapidly while the representation of the western peoples has in comparison dropped still further, creating a very imbalanced situation.

In spite of receiving their migrants from only one half of the country the towns have all grown very rapidly and have increased their share ^{of} the country's population by about ten per cent in six years. The migrants entering them differ considerably from those moving to the rural areas, having a greater proportion of both the young and the better educated. In consequence of this the rural area populations are declining and their potential for development is being limited by the selective loss of that proportion of the population which would be most useful to them. ↘

Although population density in the rural areas is generally low there are some places where localized population pressures may have caused people to move away. The general trend however appears to be a greater movement away from Districts containing major rural townships. Although the actual townships have in general grown fairly rapidly

the Districts in which they are situated have suffered migratory losses, suggesting that the rural townships may act as 'staging-posts' in migration. The townships appear to attract young migrants who later move on to the major towns. In such townships the people moving in from rural areas will come into contact with some of the services of the towns and with people who have visited them. Schools, hospitals and some shops are present, but there are few of the entertainment or social activities which exist in the larger centres and contact with people who have been to the larger centres and know of the opportunities there probably stimulates migration from rural townships to the towns.

There does not at the moment appear to be any lessening of the trends which have been described here. In fact the growth of the towns may increase its rate in the future, if stronger links are built up between the urban centres and the Western areas of the country, and if the increased number of women in the towns does have a stabilizing effect on their populations. There is no obvious solution to this problem of urban drift, but it is certain that wherever the answer lies it involves a re-education of the ordinary people and a change of their attitudes towards rural life and agricultural work. When it can be demonstrated that small-scale commercial agriculture can provide the cash with which to buy urban goods and can raise the standard of living, then some of the movement towards town may be allayed.

TABLE I
POPULATION CHANGE 1963 - 69 BY DISTRICT

	POPULATION		% CHANGE
	1963	1969	
Central Province			
Lusaka	195 757	353 975	80.8
Mkushi	53 973	56 992	5.6
Mumbwa	53 849	60 138	11.5
Serenje	56 181	52 981	-5.7
Kabwe Urban	58 006	85 437	47.3
Kabwe Rural	87 399	103 107	17.9
Copperbelt Province			
Chililabombwe	34 165	44 862	31.3
Chingola	59 517	103 292	73.5
Kalulushi	21 303	32 272	51.5
Kitwe	123 027	199 798	62.4
Luanshya	75 332	96 282	27.8
Mufulira	80 609	107 802	33.7
Ndola Urban	92 691	159 786	72.4
Ndola Rural	56 821	72 215	27.1
Eastern Province			
Chipata	240 158	261 070	8.7
Lundazi	122 332	123 134	0.7
Petauke	117 376	125 311	6.8
Luapula Province			
Kawambwa	172 333	164 435	-4.6
Mansa	86 556	80 342	-7.2
Samfya	98 129	90 807	-7.5

51.

	POPULATION		
	1963	1969	% CHANGE
Northern Province			
Chinsali	71 282	58 014	-18.6
Isoka	81 852	77 700	-5.1
Kasama	113 614	107 817	-5.1
Luwingu	80 644	79 164	-1.8
Mbala	91 136	95 633	4.9
Mpika	60 263	59 378	-1.5
Mporokoso	65 205	67 390	3.3
Northwestern Province			
Kabompo	32 956	33 376	1.3
Kasempa	33 942	32 656	-3.8
Mwinilunga	45 991	51 398	11.7
Solwezi	44 712	52 979	18.5
Zambezi	53 588	61 324	14.4
Southern Province			
Choma	96 024	97 980	2.0
Gwembe	69 013	76 451	10.8
Kalomo	76 538	76 571	0.0
Livingstone	37 801	49 063	29.8
Mazabuka/Monze	154 177	159 376	3.4
Namwala	32 774	36 600	11.7
Western Province			
Kalabo	95 714	105 893	10.6
Kaoma	46 573	56 450	21.2
Mongu	105 081	110 123	4.8
Senanga	72 357	91 602	26.7
Sesheke	42 755	49 019	14.6

TABLE 2

CHANGES ATTRIBUTABLE TO MIGRATION 1963-69 BY DISTRICT

	'EXPECTED' 1969 POPULATION (1963 POP. PLUS NATURAL INCREASE)	DIFFERENCE BETWEEN 'EXPECTED' AND ACTUAL 1969 POPULATION*	% CHANGE DUE TO MIGRATION
Central Province			
Lusaka	227 470	+126 505	+55.6
Mkushi	62 717	- 5 725	- 9.1
Mumbwa	62 572	- 2 434	- 3.9
Serenje	65 282	- 12 301	-18.9
-Kabwe Urban	67 403	+ 18 034	+26.7
-Kabwe Rural	101 558	+ 1 549	+ 1.5
Copperbelt Province			
Chililabombwe	39 700	+ 5 162	+13.0
Chingola	69 159	+ 34 133	+49.3
Kalulushi	24 754	+ 7 518	+30.4
Kitwe	142 957	+ 56 841	+39.8
Luanshya	87 536	+ 8 746	+10.0
Mufulira	93 668	+ 14 134	+15.1
Ndola Urban	107 707	+ 52 079	+48.3
Ndola Rural	66 026	+ 6 189	+ 9.4
Eastern Province			
Chipata	279 064	- 17 994	- 6.5
Lundazi	142 150	- 19 016	-13.4
Petauke	136 391	- 11 080	- 8.1
Luapula Province			
Kawambwa	200 251	- 35 816	-17.9
Mansa	100 578	- 20 236	-20.0
Samfya	114 026	- 23 219	-20.4

	'EXPECTED' 1969 POPULATION	* DIFFERENCE	% CHANGE DUE TO MIGRATION
Northern Province			
Chinsali	82 830	- 24 816	- 30.0
Isoka	95 112	- 17 412	- 18.3
Kasama	132 019	- 24 202	- 18.3
Luwingu	93 708	- 14 544	- 15.5
Mbala	105 900	- 10 267	- 9.7
Mpika	70 026	- 10 648	- 15.2
Mporokoso	75 768	- 8 378	- 11.1
Northwestern Province			
Kabompo	38 295	- 4 919	- 12.9
Kasempa	39 441	- 6 785	- 17.2
Mwinilunga	53 441	- 2 043	- 3.8
Solwezi	51 955	+ 1 024	+ 2.0
Zambezi	62 269	- 945	- 1.5
Southern Province			
Choma	111 580	- 13 600	- 12.2
Gwembe	80 193	- 3 742	- 4.7
Kalomo	88 937	- 12 366	- 13.9
Livingstone	43 925	+ 5 138	+ 11.7
Mazabuka	179 154	- 19 778	- 11.0
Namwala	38 083	- 1 483	- 3.9
Western Province			
Kalabo	111 220	- 5 327	- 4.8
Kaoma	54 118	+ 2 332	+ 4.3
Mongu	122 104	- 11 981	- 9.8
Senanga	84 079	+ 7 523	+ 8.9
Sesheke	49 681	- 662	- 1.3

* i.e. The total number lost or gained through migration.

TABLE 3

POPULATION OF MAJOR URBAN CENTRES 1963 and 1969

	POPULATION '000		% CHANGE*
	1963	1969	
Lusaka	121.1	238.2	96.7
Kitwe	117.3	179.3	52.9
Ndola	86.1	150.8	75.1
Mufulira	76.1	101.2	33.0
Chingola	56.3	92.8	64.8
Luanshya	71.4	90.4	26.6
Kabwe	45.7	67.2	47.0
Livingstone	32.7	43.0	31.5
Chililabombwe	30.1	39.9	32.6
Kalulushi	13.2	24.3	84.0
Chipata	8.0	13.3	66.2
Choma	6.8	11.3	66.2
Mongu	5.0	10.7	114.0
Mazabuka	5.1	9.4	84.3
Kasama	6.7	8.9	32.8
Kafue	2.2	6.0	172.7
Mansa	5.4	5.7	5.5
Mbala	3.7	5.2	40.5
Chambishi	0.0	5.0	-
Monze	3.1	4.3	38.7

* Growth is not entirely comparable due to the expansion of municipal boundaries in some cases.

TABLE 4

SEX STRUCTURE OF THE POPULATION BY DISTRICT 1963 and 1969

	MALES PER 100 FEMALES 1963	1969
Central Province		
Kabwe Urban	127	110
Kabwe Rural	107	102
Lusaka Urban	126	123
Lusaka Rural	102	83
Mkushi	105	102
Mumbwa	95	97
Serenje	92	93
Copperbelt Province		
Chililabombwe	141	114
Chingola	128	110
Kalulushi	126	112
Kitwe	134	112
Luanshya	119	108
Mufulira	118	110
Ndola Urban	125	112
Ndola Rural	103	100
Eastern Province		
Chipata	89	87
Lundazi	83	80
Petauke	86	84
Iuapula Province		
Kawambwa	95	92
Mansa	100	93
Samfya	106	92

	MALES PER 100 FEMALES	
	1963	1969
Northern Province		
Chinsali	93	90
Isoka	94	86
Kasama	93	89
Luwingu	90	86
Mbala	93	88
Mpika	86	87
Mporokoso	89	94
Northwestern Province		
Kabompo	83	88
Kasempa	92	94
Mwinilunga	92	89
Solwezi	96	96
Zambezi	85	87
Southern Province		
Choma	100	94
Gwembe	85	86
Kalomo	106	98
Livingstone	138	122
Mazabuka	99	99
Namwala	93	94
Western Province		
Kalabo	86	84
Kaoma	84	84
Mongu	81	85
Senanga	81	90
Sesheke	98	96

TABLE 5. Links between migration areas, shown as a percentage of the reported migrants of each area.

	Northern Railway Region	Central Railway Region	Southern Railway Region	NW	W	WC	SC	EC	N	E
Northwestern	50.2	7.7	3.3	19.7	10.2	2.0	0.6	0.2	5.3	0.7
Western	11.7	15.7	19.1	6.5	39.8	2.9	0.2	0.2	2.0	1.9
West-Central	9.0	31.8	38.1	2.8	6.4	1.7	4.6	3.5	1.6	0.5
South-Central	3.5	35.2	48.9	1.3	0.6	7.2		0.3	2.2	0.7
East-Central	34.6	31.6	3.0	0.3	0.4	3.3	0.2	13.1	11.1	2.5
Northern	42.4	11.1	2.8	1.2	0.7	0.3	0.2	2.0	37.8	1.5
Eastern	28.7	43.9	5.2	0.3	2.3	0.2	0.2	0.9	3.1	15.3

TABLE 6. Links between line-of-rail and rural areas, as a percentage of the reported migrants

	Northern Railway Region	Central Railway Region	Southern Railway Region	NW	W	WC	SC	EC	N	E
Northern Railway Region	19.2	20.9	4.9	7.9	2.9	1.0	0.2	4.2	29.0	9.6
Central Railway Region	26.1	8.7	18.6	1.5	4.9	4.4	3.2	4.8	9.5	18.3
Southern Railway Region	11.4	34.5	14.6	1.2	11.0	9.9	8.2	0.8	4.4	4.0

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