

RURAL TO RURAL MIGRATION AND EMPLOYMENT:
A CASE STUDY IN A SELECTED AREA OF KENYA

by

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ABSTRACT

This study sets out to probe into the question of why people migrate from one rural area to another in Machakos District. It also deals with the question of who migrates and how he migrates.

The findings of the study were that rural migrants are landless or near landless, they produce very little or no subsistence crops before migrating. They are under 50 years of age and have very little or no education. The migrants usually migrate with their families to the areas of destination for the majority of them are married. They also prefer migrating out to the areas where their kinsmen have gone to settle at.

Another factor that influences migration is the environmental one. Hence drought, famine and soil unproductivity (infertility) do in some cases cause people to migrate for the environmental problems - calamities - reduce the capacity of a given piece of land to produce enough subsistence for the family.

The migrants therefore decide to migrate to areas where they can get land or larger pieces of land. They are interested primarily with self-

employment in agriculture at subsistence level. But later on they begin to establish business enterprises.

Several implications arise from these research findings and are discussed in Chapter 7 where possible solutions to the problems of rural to rural migration are suggested.

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CHAPTER 1INTRODUCTIONTHE PROBLEM:

This thesis - Study - addresses itself to several aspects of rural to rural migration and employment in Machakos District. The first aspect deals with the question of who is the rural to rural migrant. And because the question of who migrates cannot be separated from the reasons why these people migrate the second aspect of this thesis deals with why the rural migrant decides to migrate. These two aspects of migration are therefore concerned with the selective nature of migration.

The third aspect of this migration attempts to identify the 'pattern' it takes. Several variables of this pattern which are isolated here include geographical distance and social relationships.

The central emphasis of this thesis is mainly the second aspect of migration. And here several variables comprising the land, the economic (brought about by land hunger) the social and physical environmental problems are discussed. And hence part of the

¹ Rempel, H.: "An Analysis of the Information of Inter-District Migration in the 1969 Kenya Census." I.D.S. Working Paper No. 142, 1974, p. 3.

purpose of this study is to show how these variables interact to influence an individual to migrate.

Thus in this study an attempt has been made to bear out what Cohen¹ and Isajiw² noted that phenomena have bearing upon one another and that these phenomena together influence the course of action.

Rural to rural migration has been studied because, first, students of migration tend to concentrate on rural to urban migration (Rempel 1970, Ominde 1968, Elkan 1967, Mitchell 1961, Todaro 1973, Caldwell 1969 etc.). Therefore very little in comparison has been done in rural migration. Rural migration, however, cannot be ignored because the volume of this migration is almost the same as that of the Urbanward flow³ if not more. Caldwell⁴, says that rural to rural migration "is still the dominant form of migration in Tropical Africa". In Kenya, for example, the population movement in rural areas has gained great significance since 1963 (Independence time).

¹ Cohen, S.P. : Modern Social Theory - Chapter 4. "The Action Approach" London, 1968, pp. 69-94.

² Isajiw, W.W. : Causation and Functionalism in Sociology, Routledge and Kegan Paul, London, 1968, p. 26.

³ Rempel, H. : "An Analysis of the Information of Inter-District Migration in the 1969 Kenya Census". IDS Working Paper No. 142, 1974, p. 31.

⁴ Caldwell, J.C. : "Introduction to Part I". In Caldwell and Okonjo (Eds.), The Population of Tropical Africa, Columbia University Press, New York, 1968, p. 3.

In the 1962 Population Census only 77% of the population enumerated were not living in their districts of birth.¹ But in 1969 12.8% of the people enumerated in the districts were born elsewhere in Kenya.² Also since independence, another uncontrolled migration flow into the former Crown Land areas has occurred. In some districts this migration has drawn out a lot of people. For example, Rempel³ in assessing this out migration from Machakos District according to the population movement data in 1969 shows that 46% of the people from the district was enumerated as living outside while only 7.7% moved into the district. For Machakos this out-flow was directed to Kwale District, Kajiado, Nakuru, Kiambu, Nyeri and Murang'a. However, although the movement from Machakos District is quite high, this study aims at focusing on the internal movements only.

1 Hance, W.A. : Population, Migration and Urbanization in Africa, Columbia University Press, New York, 1970, p. 155.

2 Mbithi, P.M. : "A Developmental Approach to Drought and Famine in Kenya" University of Nairobi, 1974.

3 Rempel, H. : Op.cit.pp. 29-31.

The other aspect of rural migration in Kenya is concerned with the squatters. These were formerly living on European farms. Many of these farms have been bought by Africans either individually or in cooperatives. The problem which then arises is where these squatters are to be moved out to, since many of them do not have land elsewhere. This point is discussed in detail in Chapter 3.

The second reason for focusing on rural to rural migration was to try and see whether the land potential of a given area has any influence on migration.

The third and general reason for studying rural migration arose from the fact that since 90% of Kenya's population lives in the rural areas, some contribution however slight, to the knowledge of the problems of this population would be of definite assistance to the planners of social change. Hence if the planners know the "whos" and "whys" of rural migration, it is believed, they would try to alleviate the problems leading to out migration. Or they would plan to cope with the problems that increased numbers in areas of destination create. There is therefore a need to understand migration and forecast it accurately in formulating social policy. For as Ralph B. Ginsberg (1971) has observed. Migration influences both the

Objectives

"size" and "composition" of the population.¹

Finally migration in rural areas of Kenya is an important political issue. And hence knowledge of the nature of this migration may help to tone down both political and tribal feelings. At present the migrants to the Coast Province form 60% of the total population in Kilifi and Malindi coastal strip.² Of course the tribes of the Coast Province (Miji Kenda) feel that they are being deprived of their land by the migrants. In the Rift Valley Province, the Kalenjins have felt that other tribes are "stealing" their land, and the magnitude of this problem can be grasped even better by realising that the Machakos and Kitui Akamba have had tribal clashes at the Machakos-Kitui District border. The people of the same tribe have accused one another of acquiring land illegally. The Kitui people feel that the Machakos people are alienating their land. Hence at the time of field research (December 1973) the Provincial Commissioner and District Officers of the area involved had authorised removal of the Machakos people from the Kitui border.

¹ Ginsberg, R.B. : Two papers on the Use and Interpretation of Probabilistic Models: with application to the Analysis of Migration. Centre for Environmental Studies. Working Papers. CES WP73, London 1971, p. 12.

² Mbithi & Barnes: "The Spontaneous Settlement Problem in the Context of Rural Development in Kenya". IDS 1972, p. 20.

Migration then may cause serious conflicts unless measures are taken to alleviate the situation - hence even where there is much unused land tribal jealousies and restrictions create difficulties of resettlement. According to J.C. de Wilde this has come about largely,

"because of past population movements, which meant that tribes and even clans and lineage groups within tribes have been able to establish paramount claims to land, and this tends to perpetuate large disparities in the amount and quality of land available." (1)

Theoretical Dimensions of the Problem:

Various authors in the study of migration have found it difficult to formulate a theory of migration or appropriate migration models. However, attempts have been made to this effect which still leave the reader with the feeling that migration is a complex issue, whose causes are many. For as Clifford Jansen has pointed out migration is a demographic, economic, political, psychological and sociological problem.² These aspects of migration may be present in one single movement of people or one of the aspects may predominate.

¹ John C. de Wilde, "The Man Power and Employment Aspects of Selected Experiences of Agricultural Development in Tropical Africa". In I.L.O., Employment in Africa : Some Critical Issues. Geneva, 1972, p. 75.

² Jansen, C. : "Some Sociological Aspects of Migration" in Jackson, J.A. (Ed.) Migration, London Cambridge University Press, 1969, p. 60.

Hence, by and large, no single factor can explain the reason for migration.

Students of migration have also attempted to make typologies of population movements. Prothero for example, lists three types. These are:

- a. Movements that took place in the past but which have now ceased to exist. These may be characterised by the slave trade traffic.

- b. Movements that have continued from the past into the present. Here the pastoralists are good examples.

- c. Movements that have developed in recent times. These include pilgrimages and downhill movements of people from remote and inaccessible highland area. The downhill movements

"have resulted in important local redistributions of population and have often initiated the development of various social and economic problems". (1)

¹ Prothero, R.M. : Migration in Tropical Africa". In Barbour K.M. and R.M. Prothero (Ed.) Essays on African Population. Routledge and Kegan Paul, London, 1961, pp. 250-253. See also Prothero "Migration in Tropical Africa" in Caldwell and Okonjo, 1965, pp. 250-262.

This typology identifies historical movements. And M.B. Gleave has followed this typology in his study, "Hill Settlements and their Abandonment in Tropical Africa".¹ Gleave traces the historical reasons for the settlement and shows how population increase has contributed to land shortage and environmental calamities hence leading to downhill population movements. This study however does not emphasize the historical aspect of migration for it aims at studying current migration.

Prothero also seems to be taking a very 'loose' meaning of migration. For to him pilgrimages are classified as migrations. Pilgrimages are however religious trips and are of such short duration that they cannot in any strict sense be migrations. Pilgrims are therefore, in my view, not migrants.

Two other typologists, Hance² and Southall³ identify three historical movements in Africa and East Africa.

¹ Gleave, *ibid.* pp. 39-49. In Transactions No. 40, December 1966, Institute of British Geographers, London.

² Lance, W.A. *op.cit.* pp. 129-138.

³ Southall, A.W. "Population Movements in East Africa" in Prothero and Barbour, *op.cit.* pp. 168-173.

1. Pre-colonial migration - which include tribal movements from the dispersal centre at Shungwaya on Somali coast in the 16th century.

2. Migration in the colonial period, these being economically motivated and in some areas forced.

3. Post colonial migration which for Hance are characterised by the "exodus of European settlers" and an increase in the number of refugees. Therefore, Hance sees these migrations as both politically and economically motivated. He chooses however to emphasize the "exodus" of a few thousands of Europeans and ignores to mention the many Africans who moved and are moving into the areas where the settlers had moved from, for basically the same reasons. Southall, however, sees these migrations in the context of the economy of the home area basically. He divides them into four groups, hence: .

a. Areas of lowemigration and primitive subsistence economy.

b. Areas of heavy emigration which lack cash crops or in which there is land shortage.

c. Areas of low emigration and highly developed cash cropping.

d. Areas of high economic and educational advancement with emigration at the professional level.¹

Although we do not emphasize the historical aspects of migration in this research, we however take note of Southall's classification of post colonial migrations here. And following this classification, an attempt is made here to show how migration is related to cash cropping and land shortage. Since rural Kenya is not literate, the case of academically and professionally geared migration from one rural area to another does not arise here.

Another author, Ominde,² however limits these classifications of migration by source and destination areas to two main classes -

1. The International and the
2. The Internal movements for Kenya.

¹ Southall, A.W. : Op.cit pp. 170-173.

² Ominde, S.H. : Land and Population Movements in Kenya, Heinman, New York, 1968, pp. 109-183.

Ominde chooses to emphasize the internal one for Kenya and identifies its two important aspects, that is Rural to Urban and Rural to Rural migrations. For him the economic disparity between geographical areas led to these migrations especially to plantations.

Therefore one can see that migrations can be classified in different ways to show different causes or motivations. But as Mitchell¹ says single factor explanations of migration (e.g. historical) are totally inadequate and that the listing of all possible motivations (e.g. economic) is not also very helpful. For the centrifugal (push) and centripetal (pull) factors or causes must be linked together in a logical framework. Thus Mitchell here supports what Cohen and Isajiw have pointed out already that phenomena have influence on each other. We shall therefore in the following pages isolate the migration models, some of which will be related later to the study at hand.

1. Migration Theory and Employment Model

Migration due to economic disparity has been

¹ Mitchell, J. Clyde : "The Causes of Labour Migration", pp. 259-280 - In the Sixth Inter-African Labour Conference, Migrant Labour in Africa South of the Sahara, Abidjan 1961, p. 263.

exhaustively studied. Beijer¹ has observed that economic disaster in Ireland in the 1840's after the failure of the potato crop led to mass out migration to the United States of America (U.S.A.). Studying migrants in Europe, Rose² found out that the economic factor was the most important stimulator inducing migration and that other reasons were accessory factors to it. Also that the mass migration movements from the countries of northern and western Europe to America and other parts of the world in the late 18th and 19th centuries were predominantly economically based, especially as there was a labour surplus in these countries. I.L.O. studies have also stressed the economic motivation. In 1953 the Report stated that, "an improvement of living conditions or employment would probably slow down and limit migration".³ Another Report in 1960 stressed that "economic pressures in agriculture give rise to outward migration".⁴ Internationally then migrants in search of economic opportunities in jobs or farming have been identified. However,

¹ Beijer, G. : "Modern Patterns of International Migratory Movements", in Jackson, op.cit. p. 14

² Rose Arnold : Migrants in Europe; Problems of Acceptance and Adjustment, Minneapolis 1969, pp. 7-9.

³ I.L.O. Report V(1) Migrant Workers in Underdeveloped Countries, Geneva 1953, p. 6.

⁴ I.L.O. Why Labour Leaves the Land : A Comparative Study of the Movement of Labour out of Agriculture, Geneva, 1960, p. 134.

in industrialised countries the economic goals are directed to wage employment in factories and offices.

Here, in Africa, the economic factor has generally been identified with colonisation. The argument here being that new needs and wants were created for which cash was required. Hence the target workers¹, who in the past went to towns to earn money for taxes only. However the single most important pattern of this mass movement has been associated with labour migration to ~~the plantations and mines~~. In Kenya both Ominde² and Rempel³ identify the three most important migration directions. These are the Rift Valley migration stream, Nairobi Extra Provincial District Stream and the Coast Province Stream. Migrants were attracted to these areas because of the plantation estates of coffee and other crops. Gulliver⁴ argues too that the Ngoni and Ndendeuli of Southern Tanganyika went to the sisal plantations to earn

¹ Eckan W. : "Circular Migration and the Growth of Towns in East Africa" pp. 581-589 - In International Labour Review, Vol. 96, July-December 1967, Geneva p. 585.

² Ominde, S.H. : op.cit, pp. 122-135

³ Rempel, H. : op.cit. p. 7

⁴ Gulliver, P.H. : Labour Migration in a Rural Economy: A Study of the Ngoni and Ndendeuli of Southern Tanganyika. East African Institute of Social Research, Kampala, 1955, p. 16.

money. For as he says "without question the overwhelming reason why Ngoni leave their homes and their country to seek work abroad is economic".¹

The economic factors in labour migration to the mines of Southern Africa and Zambia have been pointed out by Mitchell,² Philip Mayer,³ and Van Velsen.⁴ These people migrate from Malawi, Rhodesia, Zambia and other countries around the Republic of South Africa, sometimes covering long journeys. And therefore, this short summary of labour migration seems to bear out quite clearly too what Gugler has observed that,

"The predominant cause of labour migration in sub-saharan Africa has been economic". (5)

Gugler here summarises what others have said as we have seen already.

¹ Gulliver, P.H. : Labour Migration in a Rural Economy. A Study of the Ngoni and Ndendeuli of Southern Tanganyika. East African Institute of Social Research, Kampala, 1955, p. 16.

² Mitchell : op.cit. p. 264.

³ Philip Mayer: "Migrancy and the Study of Africans in Towns" in Van Den Berghe (Ed) Africa: Social Problems of Change and Conflict, pp. 305-324

⁴ J. Van Velsen: "Labour Migration in Tonga Tribal Society" In Southall (Ed) Social Change in Modern Africa. 1961, pp. 230-241.

⁵ Gugler, J. : "The Theory of Labour Migration" p. 4. Makerere Institute of Social Research Conference Papers, 1968.

In this study the economic motivation in migration has been clearly identified and Chapter 4 shows what economic needs the migrants had. The economic motivation has however not been the only one although it predominates. Therefore the study has tried to use a combination of migration models in order to widen the scope of understanding the factors that lead to rural migration. The employment in this context is slightly different for the migrant here is self-employed as opposed to those who go to plantations or mines.

Cash cropping has been given as a major pull factor in migration (e.g. Southall op.cit. p. 170). Therefore where there is cash cropping out migration is low. This has in this research been confirmed for Kangundo where respondents with coffee farms do not want to migrate.

2. Migration Theory and the Land Model

This model seeks to isolate the factor of demographic pressure on the land and the environmental endowments of the land (i.e. soils, etc.) that lead to migration. The demographic pressure and

environmental problems come under Lee's¹ classification of factors associated with the area of origin that he feels must be considered in any theory or study of migration. Two sub-sections discussing each model follow here.

(a) The Demographic Pressure and Migration:

Hance has said that -

"among settled farmers increasing pressure on the land may lead to the gradual expansion of tilled areas to a hiving off of communities to settle elsewhere". (2)

Gleave³ affirms this in hill settlement in West Africa and in the I.L.O. Report of 1972 it was reported that in Kenya a problem has been created by:

"migrant families forced out by demographic pressures on the land into areas exposed to a permanent risk of drought and of crop failure". (4)

Mbithi and Wisner show that the population growth of some parts of Machakos (highland) is more than 5% per annum - which is above that of the national

¹ Everett S. Lee: "A Theory of Migration" in Jackson (Ed) op.cit, p. 285.

² Hance, W.A. : op.cit, p. 172

³ Gleave, M.B. : Population and Settlement in Tropical Africa, Hicks Snuta and Sons Ltd., Wellington 1971, p. 22.

⁴ I.L.O.: Employment, Incomes and Inequality, 1972 Geneva, p. 71.

average of 3.3%.¹ This high population is undergoing a downhill movement to lowland parts of Machakos. And in this research the major cause of the economic problem and land shortage has been traced to the demographic pressure (a factor of population growth). This pressure has led to the uneconomic fragmentation of land and to landlessness for some people. Hence out migration has resulted. This confirms Gugler's observation that in a few areas the shortage is such that the size of holdings sub-divided in inheritance becomes insignificant and with growing pressure on the land some members are made² landless.

Another author, Henry Rempel (1970) in his study of rural to urban migration found out that landlessness caused by either demographic pressure or alienation of land was one of the major causes of migration. Hence out of 1097 interviews, only one third of the men had land to farm on as the following quotation shows:

¹ Mbithi & Wisner: Drought and Famine in Kenya Magnitude and Attempted Solutions, IDS Discussion Paper No. 144, p. 10 (revised paper).

² Gugler, J. : op.cit. p. 13.

"Therefore the majority of the migrants are landless and almost one half of the men without land have no prospects of obtaining land unless they can earn sufficient money to purchase it." (1)

Land Alienation:

Land shortage in Kenya is always traced back to the early colonial era. Sorrenson writing about land reform points out that "as early as 1902, Sir Charles Eliot began plans to establish the white highlands and thereafter land was appropriated and alienated from the Kikuyu and later other tribes".² The results of this alienation of land were disastrous especially in areas where over population resulted. In Machakos district some areas were alienated - the good geographical land in Mua, Kiu and Doinyo Sabuk highlands. Other parts for example Yatta were declared special ^{crown} areas. Only a few migrants in this research however reported that they were rendered landless through this act. Majority of them seemed to have come to accept the situation. And reasoned that since "father had many children" they were bound to have little or no land.

¹ Rempel, H. : Labour Migration into Urban Centres and Urban Unemployment in Kenya, U.S.A. 1970, p. 39.

² Sorrenson, M.P.K. : Land Reform in Kikuyu Country: A Study in Government Policy, OUP, Nairobi 1967, pp. 15-16.

✓ In their category of reasons for migration Mbithi and Barnes¹ also identify the shortage of land both for cultivation and grazing as one major reason. This research has confirmed that this is "the reason" for migrating to the areas where more land can be acquired for these farming opportunities.

Demographic pressure on the land has also been said to cause tensions - family quarrels² and neighbourhood tensions³ which may, as the last straw factors,⁴ lead to out migration. Cases of out migration stemming from these last straw factors were identified in this research.

Land Consolidation:

Landlessness in Kenya has also been traced to the land tenure system which has created, recently, individual ownership. Traditionally land was communally owned and as such every member of the community had some rights of land use.⁵ Therefore every one was

¹ Mbithi & Barnes, "The Spontaneous Settlement Problem in the Context of Rural Development in Kenya", IDS, p. 90.

² Mbithi & Barnes: op.cit. p. 90.

³ Baum Eckhard, "Land Use and Labour Productivity under Growing Land Shortage".

⁴ Gulliver, P.h. : Op.cit, pp. 28-29.

⁵ See Mbithi & Barnes: op.cit, pp. 20-22.

assured of security of tenure.¹ But now the land consolidation and adjudication policy has created a landless class of people. According to Sorrenson, the policy followed by the colonial government in consolidating land in Kikuyu areas, quite clearly reveals this for he says:

"Land consolidation was to complete the work of the emergency; to stabilize a conservative middle class based on the loyalists, and as confiscated land was to be thrown into the common land pool during consolidation, it was to confirm the landlessness of the rebels".(2)

The same system of reward and punishment in consolidating land was affirmed by Swynnerton who stated that:

"In future...able, energetic or rich Africans will be able to acquire more land and bad or poor farmers less, creating a landed and a landless class". (3)

Thus a landless class was officially created. And although emphasis at present is different the acceptance of individual land ownership due to an open economic

¹ Gershenberg, I. : "Customary Land Tenure as a Constraint on Agricultural Development : A Re-Evaluation". East African Journal of Rural Development, Vol. 4, No. 1 1971, p. 54.

² Sorrenson, M.P.K. : op.cit, p. 18.

³ Swynnerton, R.J.M. : A Plan to Intensify the Development of African Agriculture in Kenya: Government Printer 1955, p. 10.

system and population pressure has led to situations, where through land litigation, people have lost land.¹ In this research it was found out that land adjudication has caused some landlessness and hence out migration.

This land and migration model is especially applied in Chapter 3 where the land factor is discussed.

(b) Migration and the Environmental Conditions Model

Hance has in a general way summed up the type of migration likely to be found in Africa in the following quotation:

"Man in Africa often remains in very close symbiosis with his physical environment therefore many migrations are caused or motivated by needs to adjust to this environment". (2)

This quotation refers particularly to rural migration because as we have seen labour migration to towns and plantation areas has been quite popular. The needs that lead to this migration have been given as -

¹ Church, H.R.J. : Environment and Policies in West Africa; D. Van Nostrand Company, Inc., Princeton 1963, pp. 103-104.

² Hance, W.A. : op.cit, p. 166

- (1) The search for adequate grazing
- (2) Soil exhaustion and erosion
- (3) Drought or flooding¹

Hance lists these types of environmental problems and argues that they cause migration because he bases his argument on the undependability of rainfall in Tropical Africa, infertility of the soils here and the soil erosion which he observes has reached immense proportions in many regions".² Southall³, has affirmed too that among the Karamojong the methods of exploiting the environment are usually such that deterioration of soil and vegetation is so serious that it causes population movements.

Another study in Machakos District has come to the conclusion that -

"The failure to meet adequately the basic land requirements partly as a result of uneconomic land/man ratio, and partly as a result of unstable environmental conditions, has led to recurrent movement of population both internally and externally". (4)

¹ Hance, W.A. : op.cit. pp. 166-170

² Hance, W.A. : African Economic Development; Frederick A. Praeger, New York, 1967, pp. 8-11.

³ Southall, : op.cit., p. 170

⁴ Owako, F.N. . The Machakos Problem: A Study of Some Aspects of the Agrarian Problems of Machakos District of Kenya. (Unpublished Ph.D. Thesis) 1969, p. 158.

These unstable environmental conditions were identified as basically drought due to inadequate or no rainfall. The failure of rainfall means that crops do not yield as much as they would or fail all together. This then creates famine or starvation problems. Hence, Mbithi and Wisner argue that - this drought is quite regular, for,

"the local drought probably occurs every year somewhere in Kenya, especially in the marginal agricultural zones of the eastern plateau foreland (Machakos, Lower Embu, Lower Meru, Kitui, etc.)"¹

And that this drought frequency (and other factors e.g. land) have led to migration from these areas to especially Kwale District.²

For this research migration due to famine and drought and other environmental calamities has been shown to occur in Machakos District. In fact famine here seems to be recurring every year as this table giving the regularity of famines since 1943, in Machakos District shows.

This model is used particularly in Chapter 5.

1 Mbithi and Wisner : op.cit, p. 9

2 Mbithi and Wisner : op.cit, p. 10

Table 1: Regularity of Famines - 1943-1965

Year	No. of Bags Imported	Remarks
1943	62,464 maize 20,949 cassava flour	In addition to these given as famine relief there were large imports of food.
1944	234,739	Famine Relief
1945	188,000	Famine Relief
1946	247,983	Famine Relief
1947	31,558 (Jan.-March)	Large amounts of maize exported after March 1947.
1948		Small export.
1949	81,823 maize 10,000 cereals & other	Both rains failed-famine relief
1950	226,793 maize 9,800 wheat 5,111 beans	Severe drought Famine relief
1951	74,457	Famine relief till August 1951. Thereafter good harvest
1952		Rains failed but good harvest of 1951 saved the situation
1953	118,728	Famine Conditions
1954	103,000	Famine conditions
1955	79,893	Famine conditions
1956	55,485 maize 1,230 maize meal	Famine condition for part of the year, later between 4430-20,000 bags were exported.
1957	13,469 maize 3,970 maize meal	Good year, 69,371 bags exported

/continued

Year	No. of Bags imported	Remarks
1958	11,314 maize meal	Good year
1959	53,793 maize and maize meal	Famine conditions from September 1959
1960		Famine conditions
1961	376,930	Famine relief (147,292 bags)
1962		Famine stopped in February 1962, Good year from February onwards.
1963		Good year
1964		Famine conditions
1965	Data unreliable	Famine relief

Source: District Agricultural Gazetteer 1958 and Annual Reports Reproduced from Owako, G.N., op.cit, page 231.

3. Migration and Distance Model

Sociological theories by Jansen¹, Beijer², and Lee³ point out that distance is a variable in migration. And in a study to Ghana's towns, Caldwell came out with the result that -

"as distance rises, the number of long term absentees fall steeply".(4)

These absentees are people away from home. The number falls because unless transport is paid for, travelling gets very expensive.

However, in general this does not seem to be a very important variable here in Kenya, the migrants have been known to travel from western Kenya to the Coast Province in search of work.⁵

For this study, though, a breakdown of migrants home areas and where they chose to migrate to shows that distance influences no matter how slightly or unconsciously one's choice of destination.

¹ Jansen, C. : op.cit, p. 60

² Beijer : op.cit, p. 12

³ Lee : op.cit, p. 287

⁴ Caldwell, J.C. : African Rural-Urban Migration The Movement to Ghana's Towns, Canberra 1969, p. 57

⁵ Ominde, S.H. : op.cit, p. 127

4. The Differential Migration Model

This model tries to discover what distinguishes a person who migrates from one who does not.¹ It especially tries to identify the personal factors or characteristics of migrants. Under this model one's marital and economic status, age and sex, and the educational level factors are shown. And every study of migration has to include it because even if the emphasis is directed to just one variable, the author has to show how that variable distinguishes the migrant from the non-migrant. Hence this model tries to point out what Byerlee² (1972) says that,

Migration is a selective process in the sense that migrants generally have demographic, educational and economic characteristics which distinguish them from their population of origin. (2)

This model calls therefore for a control group.

¹ Jansen, C. : op.cit., p. 63

² Byerlee, D. : "Research on Migration in Africa: Past, Present and Future" African Rural Employment Study : Rural Employment Paper No. 2, Michigan, p. 5.

Migration and the Political, Cultural, and Religious
Models

Othwonh Dak, says that:

"Migration temporary or permanent has been, and still remains one of the most effective means of solving a political, economic, social, religious, cultural problems". (1)

We have already discussed the economic and social aspects of migration. So we now turn to the political, cultural and religious aspects.

Political Explanation

Dak, here was specifically talking of the Sudanese who had fled their homes to Uganda for political reasons. Some refugees are political migrants and every country has some of these. Political ideologies like the ones of East and West Germany can be responsible for migration.

Arnold Rose² shows that East Germany lost about 3,095,600 people to West Germany between 1950-1961 before it built the wall in 1961. Also political

¹ Dak, O. A Geographical Analysis of the Distribution of Migrants in Uganda. (An unpublished Ph.D. Thesis) 1968, p. 32.

² Rose, Arnold, op.cit, p. 7

boundaries may mean that some people have to move from one part of territory to another, as it happened in the "Scramble for Africa" historically. Political differences may lead to war and hence to migration of people.

b. Cultural Explanation

Wilber Zelinsky¹ has postulated too, that the cultural background is largely responsible for the general migration propensities of a group, for example, the nomads; even though the volume and destination of this migration may be shaped by immediate economic factors. Prothero² agrees too that pastoralists are the main group which form the continuing migration movements. Culturally, the pastoralists and nomads may be termed migrants. But I do not agree that there may be any other group of people who are migrants by culture; inspite of the literature³ which isolates migration as part of an initiation rite. For the economic factor underlies all this.

¹ Zelinsky, W. A Prologue to Population Geography. Prentice-Hall International Inc. London. 1970. p. 43.

² Prothero "Migration in Tropical Africa". In Caldwell and Okonjo (Eds) The Population of Tropical Africa, Longmans. London. 1968. p. 251.

³ See for example Mitchell op.cit. p. 259-280.

c. Religious Explanation

Where the ideological values of a country do not favour a certain religion - for example Christianity, religious refugees flee the country. Dak quoted the religious conflict in Southern Sudan to show this. Currently Christians are fleeing Chad¹ where persecution of Christians is evident. The pilgrims to Mecca or Jerusalem, every year are categorised as migrants by Prothero² too. Also the Puritans who migrated to America were in some cases religiously motivated to go.

This research, however, does not include the political, cultural and religious causes of migration in its study. For these aspects of migration do not seem to have relevance to the rural to rural migration in Machakos District. Also this study ignores disease given, for example, by Hance³ as a cause of migration because no cases of river blindness or sleeping sickness in the areas of out migration have been known to exist there. Out of the various models of migration discussed here, the author had to formulate an appropriate approach to the study of migration in this

¹ Information received through Christians who have been to Chad.

² Prothero. op.cit. p. 251

³ Hance, W.A. op.cit. pp. 166-174.

research. The push and pull comparative approach was preferred to any other.

The Push and Pull Approach

The push and pull approach suggests that migration is due to socio-economic imbalances between regions.¹ Certain factors hence push persons away from the area of origin and others pull them to the area of destination. It shows too how these factors bear upon one another to influence migration. And although this approach to the study of migration creates the particular problem of distinction between push and pull factors,² it however combines the purely mono-migration models of economic, demographic, landlessness, environmental, distance and differential characteristics together.

The differential model (combined in the push and pull approach) helps to show the differences between the personal characteristics of the control group (non-migrant) and the migrants. The research had hoped to clearly illustrate these differences. However,

¹ Jansen, C. : op.cit. p. 65

² Taylor, R.C. : "Migration and Motivation: A Study of Determinants and Types". In Jackson, op.cit. p. 99.

since the research was confined to rural migration, some of the personal migrant characteristics for example, educational level attained, were not found to differ from those of non-migrants.

Through the use of the push and pull approach both the environmental and population conditions that lead to migration in Machakos district are hence effectively studied. And this approach is the appropriate one for this type of migration whose analysis must take into account factors in the areas of origin and destination. Although a clear distinction of the push and pull factors is impossible, an attempt at distinguishing them has been made here.

The Push Factors here are:

1. Demographic Pressure
2. Little Land
3. No Land
4. Environmental factors (drought, famine soil exhaustion and soil erosion).
5. Social factors (family and neighbourhood tensions).

The Pull Factors are:

1. Abundant land - for cultivation and grazing
2. Environmental endowments

3. Distance
4. Availability of relatives and friends at the place of destination
5. Business and wage employment opportunities
6. Self employment (dependent on land size)

A Summary of the Major Explanations of Migration

The major explanations of migration discussed here are first the economic factor, which for this research is slightly different from that of urban ward migrations or industrialised countries because it is dependent on self-employment.

The second explanation centres on land and connected to this the demographic pressure on the land (social aspects) and the environmental endowments of it have been discussed .

The third explanation deals with distance travelled and kinship ties. While the fourth explanation is "loosely" covered by the migrant differential characteristics approach.

The other explanations of migration are lumped together here as political, religious and cultural. But these aspects of migration are not studied in this research.

THE HYPOTHESES

Following the push and pull model four hypotheses were formulated. These are:

1. That at the individual level rural to rural migration is related to landlessness. The independent variable here is landlessness.

2. That rural to rural migration is related to the perceived and actual subsistence and other income earning opportunities in the area of destination.

This hypothesis seeks to show that migrants see actual or perceived opportunities at the areas of destination which are not available or plenteous at the areas of origin. The economic variable in migration dominates here and it is the independent variable.

3. That within a given rural community people will tend to migrate because of environmental and social factors which reduce the capacity to generate satisfactory subsistence for the families.

Thus, here the physical terrain (hilly land, etc.) and the natural endowments (rainfall, soils, etc.) of a given geographical area are isolated as

factors in migration. The variables that are important here are: drought, famine and soil infertility.

The social factors isolated in this hypothesis are a result of demographic increases on the physical environment. These social factors in turn reduce the capacity of a given family to produce satisfactory subsistence. The independent variables here are: large families, family tensions and neighbourhood tensions.

4. That rural to rural migration at the individual level is related to distance, kinship ties, and other migrant's differential factors. This hypothesis will not be taken in this research. ✓

This hypothesis seeks to identify the importance of distance in migration and also the importance of kinship ties especially in connection with where one settles. The differential factors of age, sex and education are considered too. Hence, the independent variables are distance, kinship ties, and the differential factors.

Operational Definitions

1. Migration: by definition migration is the movement from one place, the origin, to another place, the destination. It is generally a movement of a person

or persons. These movements can be of a seasonal, semi-permanent and permanent nature. And in some cases the process of migration can involve step-migration, where a person going to the "destination" at point C from A, will for a time stop at point B.

The movements can originate from the rural areas, and end in urban areas - hence being classified as Rural to Urban migration. But if they originate from rural areas and end in another rural area, they are classified as rural to rural. Either rural to urban or rural to rural migration can be of an inter and an intra territorial nature.

The kind of migration studied here is Rural to Rural, and for this migration the intervening activities such as step-migration have been ignored. This is because the author believes that for a rural migrant who has a family to cater for, his desire is to move and settle permanently in the area of his choice unless unforeseen calamities such as land alienation by the authorities of State happen.

Rural: Malinowski's warning in The Dynamics of Culture Change (1934) and Redfield's faults in presenting the Folk Society (1947) would put caution on the conceptual use of "rural areas". But the

concept - 'rural' in this study will mean places in Machakos District which are not urban in nature. And they are differentiated from the rural market centres. The rural areas to be included here are Yatta, Makueni, Mwala, Masii and Kangundo.

Rural Market Centres: These are centres of less than 2,000 people and therefore not classified as towns according to the Kenya Population Census, 1969.

Rural Employment: Will be defined to mean any gainful activity. That is both wage and non-wage employment in rural areas. Employment here will be largely agricultural.

Landlessness: This will be taken to mean the state of having no land. Or the state of having such little land that one can only build a house on it. And therefore having no land to farm on for subsistence food supply.

Drought: This will mean the agricultural drought which is the lack of rainfall and crop production failure, for either one or two seasons. Drought can be caused by "increased run-off due to over grazing and bad vegetation cover, decreased cloud cover, dry hot winds which accompany reduced precipitation, lowered water table and increased salinity".¹

¹ Mbithi & Barnes, Op.cit. p. 114

Famine: This is a byproduct of drought or landlessness and will mean the state of having no food to eat either because of diminished reserves or lack of finances to buy it. Famine here will be seen also as an evaluation of a given geographical environment.

Kinship Ties: These will include relatives and such close kin as mother, father, brother or sister.

RESEARCH DESIGN

Units of Study

a. Migrants: These are individuals in the communities of migration destination who migrated in the last 10 years (1963 - 1973). They are adults of 20 years and over who are heads of families or living on their own. Migrants are adults of either sex. Children of migrants have been excluded from this research design because they follow their parents and have no choice in the matter of deciding to migrate. Adults it is believed are able to give reasonable answers concerning their decision to migrate. The time limit of 10 years is used to control for the influence of history. Factors that made people move in the preindependence (up to 1963) period may be different from the ones that caused migration after 1963. The author hopes too that the period of 10 years ago is

still within the migrants memorable past, and that this time limit will eliminate many aspects of conjecture. Intra-locational migrants are not included here because migrants here are meant to be people who have moved for comparatively long distances for example from Kangundo to Makueni (that is approximately 100 miles). And also because the aim of this research was to study Inter-locational migration.

b. Non-Migrants: These are people from the areas of out migration; who are the control group.

Areas of Study:

These are rural communities in Machakos District. Machakos District was selected because as it has already been pointed out, rural to rural migration is prevalent there. Also the push-pull model of migration would be fully tested here because of the variety of environmental endowments which has led to unfair distribution of both natural resources and population densities.

Machakos district was also selected to minimize the language difficulties in interviewing as the interviewer could communicate clearly in the Kikamba language.

Areas of Destination (in-migration):

These are Yatta and Makueni. Both Makueni and Yatta areas are recently opened up lands in Machakos District because these were designated as Crown lands and some parts of Yatta were under white settlement. After the Second World War the Colonial Government began to interest people to go to Makueni. Some of the African soldiers were to be given land here as a reward. However many of the Akamba feared going there for various reasons. And it was not until the very late 1950's and early 1960's that great numbers of people migrated out there. As such these areas of in-migration are relatively fertile lands and in some places the virgin forests have not been cut down.

Areas of Out-Migration:

Migrants in this study were from various locations of Machakos District. And because this research was interested in finding out why people from different land potential areas migrate, it is fitting to show here the locations from which these people migrated. These locations were classified either as high, medium or low potential areas. Potentiality here is measured by the amount of rainfall 'expected' although (as it is explained later in the discussion on rainfall) this may vary from year to year.

Table 2

Total Number of Out-Migration Locations

High Potential	Medium Potential	Low Potential
Kangundo	Masii	Mwala
Matungulu	Kiteta	Mbiuni
Mitaboni	Kisau	Wamūyu
Mua	Mbitini	Muthetheni
Iveti	Ukia	Kibauni
Mbooni	Kalama	Muputi
Mukaa		
Kilungu		
8	6	6 = 20

* For actual totals of migrants from each location see Table 30. To locate each location see map on Machakos District : Administrative Units.

There were however 59 migrants from high potential areas, 22 from medium potential areas and 39 migrants came from low potential areas. However, because of the impracticability of covering all these locations in a research of this small scale, only three out migration locations were chosen. These study areas Mwala, Masii and Kangundo are stratified for comparison purposes on potential levels. Mwala is a low potential area while Masii is medium and Kangundo is a very high potential areas. The idea behind this

type of design is that there should be a difference between the reasons migrants give for migrating from dry areas as opposed to those who come from wetter and cooler areas (Kangundo). The three study areas here are taken as a representative sample for the type of locations the migrants came from.

Sample Survey

A purposive sample survey of the areas of study was carried out, because first the geographical potential of the areas of out migration had to be considered. Secondly, the internal migration in rural Machakos is channelled to either Makueni or Yatta. Thirdly for the purpose of employment opportunities (other than purely farming ones) the rural market centres in the areas of in-migration had to be included.

The Sample Size

A sample of 240 people, of whom 120 were the non-migrants and 120 were migrants, was taken. The non-migrants were the control group necessary in measuring the reliability and validity of reasons given by migrants for influencing their decision to move. This control group was useful too in assessing the magnitude of migration outflow. However, this control group only fulfils the requirements of a

quasi-experimental design and should only be assessed as such.

METHODOLOGY

A Random Sample: From the communities identified above, (purposively sampled) a random sample was drawn. The procedure described here was by and large the same in all areas. A sampling frame was first drawn with the help of the assistant chief for the particular sub-location (e.g. Mavindini in Makueni) or in consultation with one of the villagers - usually the head of the village (Mutumia wa Utui). Then out of the sampling frames, random samples were drawn.

For the in-migration areas, out of 300 names, every tenth name was chosen because 60 respondents were interviewed in 2 places in each area - that is at Makueni 30 respondents were interviewed near and around Wote while the other 30 were interviewed at Mavindini (which is in Lower Makueni). For Yatta 30 respondents were interviewed near and around Kithimani and 30 from Kauthulini.

The reason for choosing to interview migrants in the two different places of each in migration area,

was simply so I could get migrants who were spread over the 10^{year} period I had delimited. This I found was necessary because migrants who moved in together usually cluster in one area.

At each area of out migration 40 respondents were interviewed. So from a sampling frame of 300 names every seventh name was chosen, because one could not choose every 7.25 name!

A random sample was preferred here because it gives an equal chance of selection for every unit (migrant).

Data Collection: This was done by means of structured interview schedules. The interview schedules were structured so as to eliminate as far as possible the interviewer bias. Some of the questions were precoded although the majority of them were open ended. The interview schedules were translated from English into Kikamba.

Secondary sources of data collection (mainly files on land sizes and books on migration in Machakos) were used, largely as check points on some of the information the respondents gave. Some useful information, too, was obtained through the author's interaction with some respondents. The author participated in some communal activities for example, cultivating with women.

Data Processing and Analysis: After 2½ months of field work, the 240 interview schedules had to be coded. Coding was done manually by the author through the use of relevant categories. But the data was processed by the use of desk calculators. Simple statistical computations including the mean, the median, the mode, the standard deviation, the mu and the Chi Square were done. The percentage scales for tables were also computed.

The Analysis: The method of analysis followed in this research study is mainly what Taylor¹ suggests. Therefore a three level analysis approach has been attempted.

1. An Objective Level: here a description of the characteristics of the places of origin and destination is given. Therefore Chapters 2, 3, 4 and 6 largely fulfill this criterion. Of course this objective level of analysis is evident in other chapters too. The use of statistics and tables in the research study also helps to make the analysis objective.

¹ Taylor, R.C. : "Migration and Motivation" A Study of Determinants and Types". In Jackson: Migration, Cambridge University Press, London, 1969 p. 100.

2. A Normative Level of Analysis: On this level a description of the way in which the community (both migrant and non-migrant) perceived and evaluated migration as an alternative is given - Chapter 5 especially shows this.

3. Psycho-Social Level of Analysis: Migration decision is never completely rational¹ and therefore in every decision to migrate certain psycho-social determinants influence the propensity to migrate. This level of analysis is especially applied in Chapters 5 and 6.

Lastly various inferences are drawn from the data analysed.

¹ Lee, E. : op.cit, p. 280.

CHAPTER 2

THE BACKGROUND ON MACHAKOS DISTRICT

Position

Machakos District lies within the foreland plateau between the Eastern Rift Highlands and the Nyika Plateau of Kenya. The country runs from the Athi Plains in the North West to the Tsavo-Athi rivers confluence in the south east (see map 1). It is in the Eastern Province and is bordered by two other Eastern Province districts of Embu and Kitui, also by Thika, Nairobi, Kajiado and Taita districts. It covers an area of 14156 square kilometres.¹ Machakos and Kitui Districts together constitute the Ukambani area.

Population

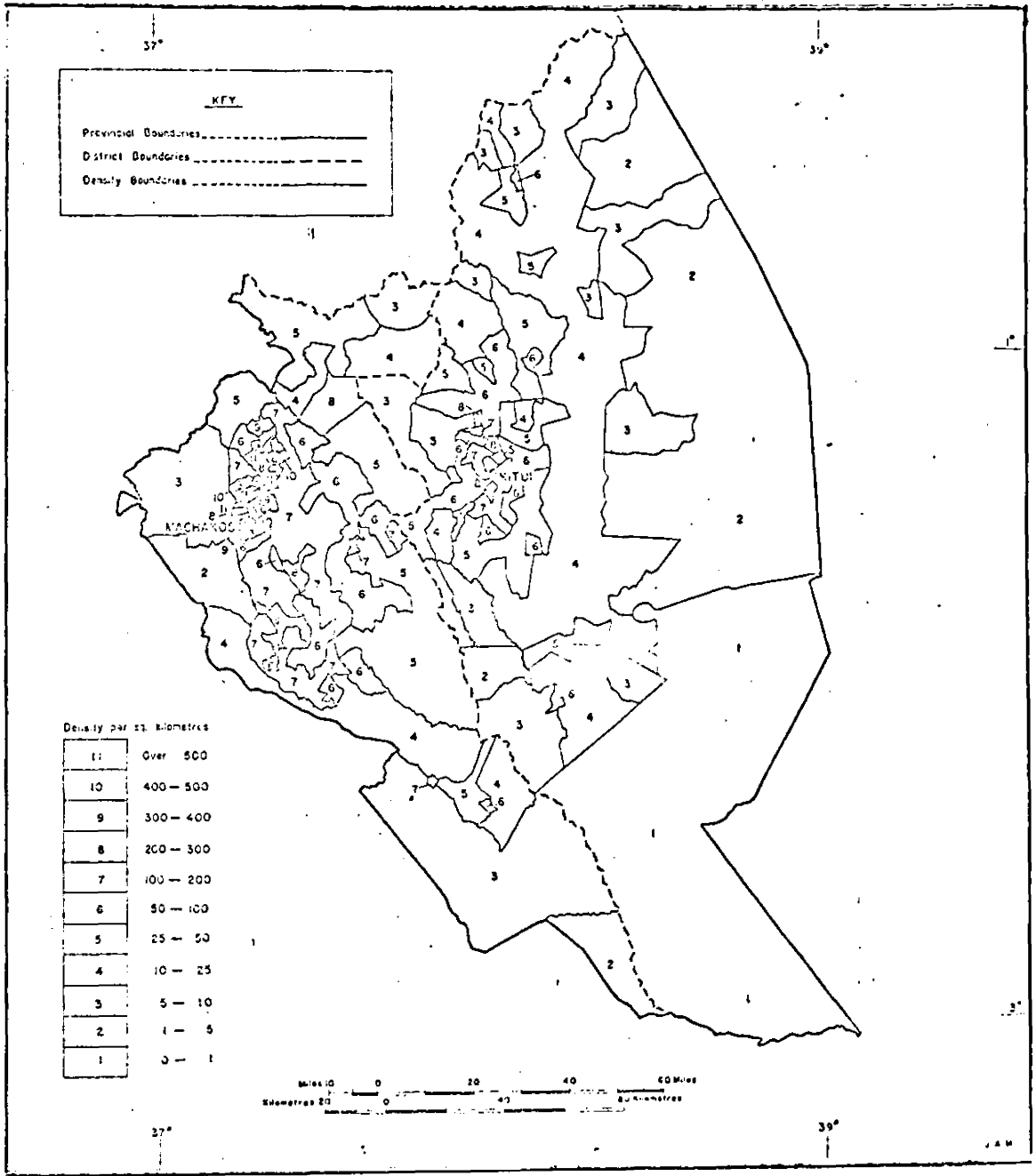
The population of this district is 707,214.² The population density as a whole is 50 persons per square kilometre. But the density in the northern highlands of Machakos is 500-700 persons per square kilometre - in some parts it is 800 persons (Mutituni)³.

¹ Kenya Population Census of 1969: Vol.III, p. 20

² Ibid p. 20

³ Kenya Population Census 1969, Vol.I, p. 33

UKHAMBANI
DENSITY OF POPULATION 1969 CENSUS



Department of Geomatics

MAP I

The population density map drawn according to 1969 Census gives this information. Population distribution is also an important aspect of this study and will be referred to later.

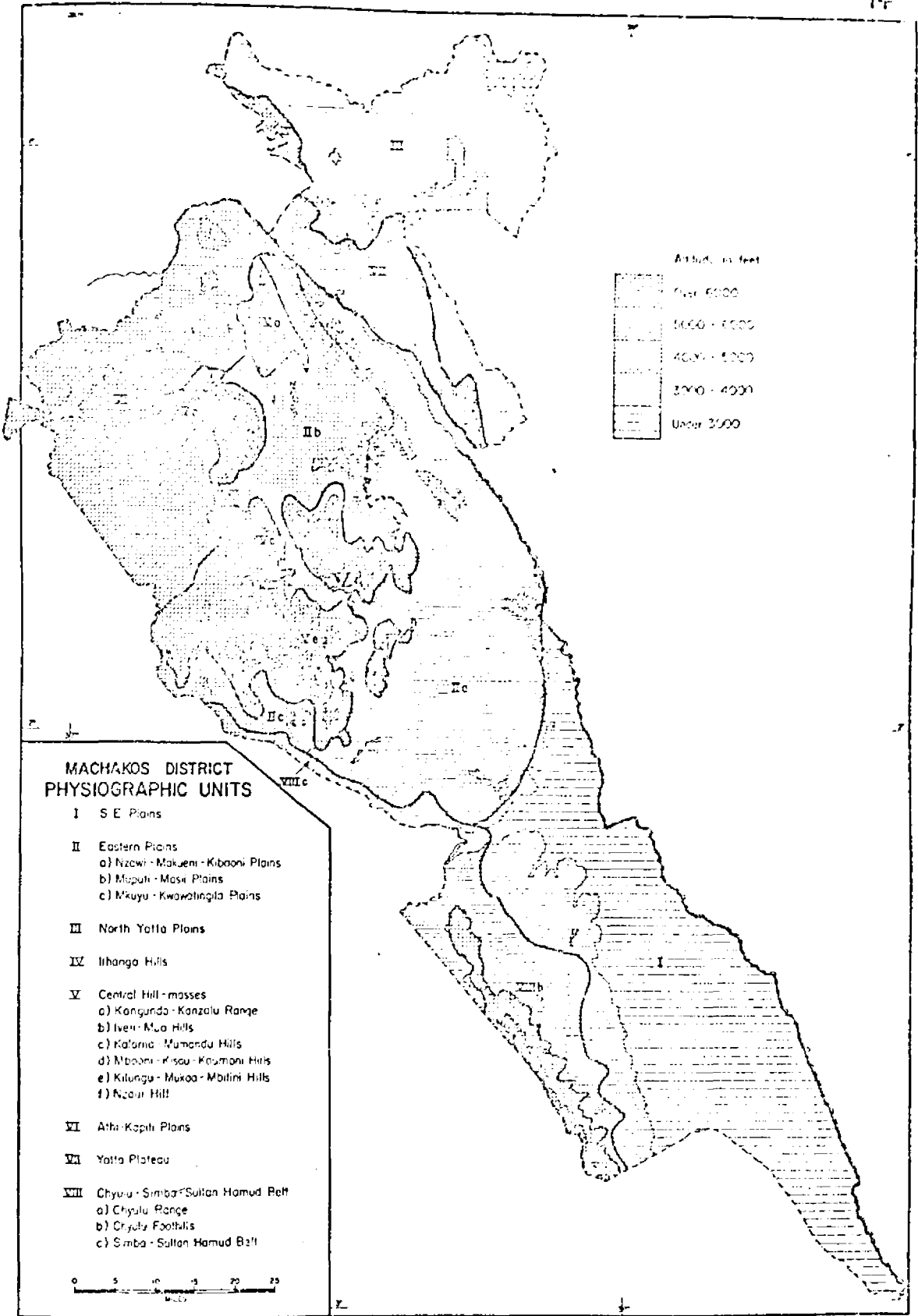
The Physical Features and Environment

Because of a lot of discussion in this study will be centred on the environmental endowment of the district, a somewhat detailed description of the physical features will be given here.

According to Owako¹, the relief of Machakos district may be described under eight major physiographic units. As shown on the map these are:

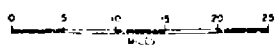
1. The South-Eastern Plains (Kikumbulyu Plains)
2. The Eastern Plains - including Makueni to Masii Areas
3. North Yatta Plains
4. Ithanga Hills
5. The Central Hill Masses -
 - a. Kangundo-Kanzalu Range
 - b. Iveti-Mua Hills
 - c. Kalama-Muumandu Hills
 - d. Mbooni-Kisau-Kaumoni Hills
 - e. Kilungu-Mukaa-Mbitini Hills
 - f. Nzau Hill

¹ Owako, F.N. The Machakos Problem: A Study of Some Aspects of the Agrarian Problems of Machakos District of Kenya: Ph.D. Thesis (Unpublished) May 1969, pp. 11-16



**MACHAKOS DISTRICT
PHYSIOGRAPHIC UNITS**

- I S E Plains
- II Eastern Plains
 - a) Nzawi - Makuani - Kibaoni Plains
 - b) Mapuh - Masi Plains
 - c) M'kuyu - Kwawalingia Plains
- III North Yatta Plains
- IV Ithanga Hills
- V Central Hill-masses
 - a) Kangunda - Kanzalu Range
 - b) Iveni - Maa Hills
 - c) Kal'ania - Mumandu Hills
 - d) M'baoni - K'isu - Kaumani Hills
 - e) Kilungu - Mukoa - Mbitini Hills
 - f) Nzauri Hill
- VI Athi-Kapiti Plains
- VII Yatta Plateau
- VIII Chyu-u - Simba-Sultan Hamud Belt
 - a) Chyulu Range
 - b) Chyulu Foothills
 - c) Simba - Sultan Hamud Belt



MAP II

The South-Eastern Plains (Kikumbulyu area)

These extend from the Athi-Thwake Rivers confluence to the Athi-Tsavo rivers confluence in the South East. This is an area of low relief, semi-arid conditions and bush vegetation, mainly the acacia type. Inselberges break the monotony of this area.

The soils here are reddish brown and sandy. The soils here are hence a problem to agriculture because they are first drained by the seasonal Athi River tributaries and secondly they have a low capacity to retain moisture.¹ However despite its aridity this area is important for relieving population pressure from hill-land Machakos for it is also thinly populated.

The Eastern Plains: These stretch from Nzaui and Makueni in the south to Masii-Mbiuni-Mwala locations in the north. For purposes of this study we shall divide this area into two regions.

¹ Owako, op.cit, p. 16 (see also R.M. Scott "The Soils of East Africa" in E.W. Russel The Natural Resources of East Africa, pp. 67-71.

a. Nzaui-Makueni Plains: These lie between 3000 ft. in the east to about 3900 ft. in the west. A number of seasonal streams dissect these plains bringing their waters to the Kikumini, Thwake and Athi Rivers. There are a number of inselberges here. Soils are similar to those of the South-Eastern Plains (red, sandy loams). The area here is very sparsely populated compared to the highlands and has been a major source of population distribution, especially Makueni, for the purposes of this study.

b. Muputi-Masii-Mwala Plains: This area differs from (a) above in altitude. Much of the land here rises from 4000 feet to 4600 feet above sea level. This region forms a basin between Iveti hills in the west, Mbooni hills in the south and Kangundo-Kanzalu in the north.

Numerous seasonal streams and rivers dissect the plains. The most important river here being Thwake and its tributaries. This part of the Eastern Plains has been a major supply of migrants to Makueni and Yatta areas because of land and other economic and general environmental factors. These shall be discussed in Chapters Three - Five.

North Yatta Plains:¹ These are separated from the Eastern Plains by the Yatta Plateau. But they form a lowland comparable to the Nzaui-Makueni Plains. To the north the plains are drained by the Tana River tributaries. Again population pressure in other areas has caused people to migrate to these Yatta Plains.

Ithanga Hills (5702 feet):² These were formerly not part of Yatta. But now out migration to these parts is in progress although the farms here have been bought by Co-operatives. The climate here is much more favourable than on the plains or the Yatta Plateau.

The Yatta Plateau:³ This area stretches for 180 miles from Ol Doinyo Sabuk to Galana Valley near the Athi-Tsavo confluence. It raises from 2000 feet in the south east to about 4200 feet above sea level in the northern part. The average width is 2 miles. There are seasonal streams flowing from the eastern scarp to Mwita Syana River. However, because of the relatively low rainfall, there is a lot of aridity here. However the water limitation has not stopped in-migration both to the plateau region and to the north Yatta plains and for the purposes of this study, Kithimani

¹ Owako, F.N. : op.cit. p. 19

² Ibid, p. 20

³ Ibid, p. 26

area.

The Central Hill Masses:¹ These hills rise to above 6000 feet. There are steep sided escarpments (e.g. Kiima Kimwe and Kanzalu range) which Morgan (1972)² has attributed to differential erosion. The hills have contributed to population and economic problems in Machakos District, because the availability of water and good red loam soils have encouraged overcrowdedness here, therefore leading to land shortage and landlessness. Because of their geographical, social and economic importance we shall discuss them under sub-units.

a. Kangundo-Kanzalu Range: This area lies to the north of the central hill masses and rises to 6115 feet above sea level. On the western side of this range there are gentle slopes which are very heavily populated and extensively cultivated (Kangundo). This is one of the most important agricultural areas in the district and also one of the major sources of out migration. Reasons for this will be elaborated later.

¹ Owako, F.N. : op.cit. pp. 20-24

² Morgan, W.T.W. : Nairobi City and Regions, p. 14.

b. Iveti-Mua Hills: These are separated from (a) above by River Thwake and its tributaries. These hills rise abruptly from the surrounding plains and are the highest of the Central hill masses. Mua 6800 feet and Iveti 6970 feet. There is a dense population on the western side of Iveti hills (Ngelani Slopes) where comparatively soil erosion has not occurred as much as on the eastern (Kaseve) side. This dense population is redistributing itself on the drier plain areas.

c. Mua Hills and Ngelani Slopes: These were formerly under European cultivation but this area is now under settlement schemes to which some of these over-crowded hill populations have gone.

d. Kalama-Muumandu-Mbooni, Kisau-Kilungu Mukaa-Mbitini Hills: These hills are highly dissected by the drainage system which isolates one hill group from the other. Of the streams and rivers that have cut deep and broad valleys on these hills Kaiti is the most important river. These hills are very rugged and much eroded hence causing agricultural problems. Soil exhaustion is also an important aspect here.

The Athi-Kapiti Plains: These plains run from south of Ol Doinyo Sabuk (Kyanzavi or Kilimambogo) to around Konza. The undulating plains lie between 4800 feet in the north to 5200-5400 feet in the south. There are several hills here such as Koma Rock (5261 feet) and Lukenya (6028 feet). To the north much of the plains are drained by the Athi River. But east of Konza the Lomungush River drains them southwards. The soils here are mainly the black cotton soils.

In this area European cattle ranching farms have dominated. But many of these farms have now been bought by Wananchi. These farmers (Europeans and now Africans) have pushed people away from their "homelands". Many of these people turned to squatting on the land or migrated to other parts of rural Machakos (Makueni and Yatta) or to the Coastal Province.

The Kyulu-Simba Sultan Hamud Volcanics:¹ The Kyulu range (6827 feet) is built of volcanic eruptions and this highland extends for 50 miles. The area is dry although foothill springs come out in various areas. Because of its aridity the area has a low population density and also it has been until recently under Tsavo national game reserve. Tsetse fly infestation

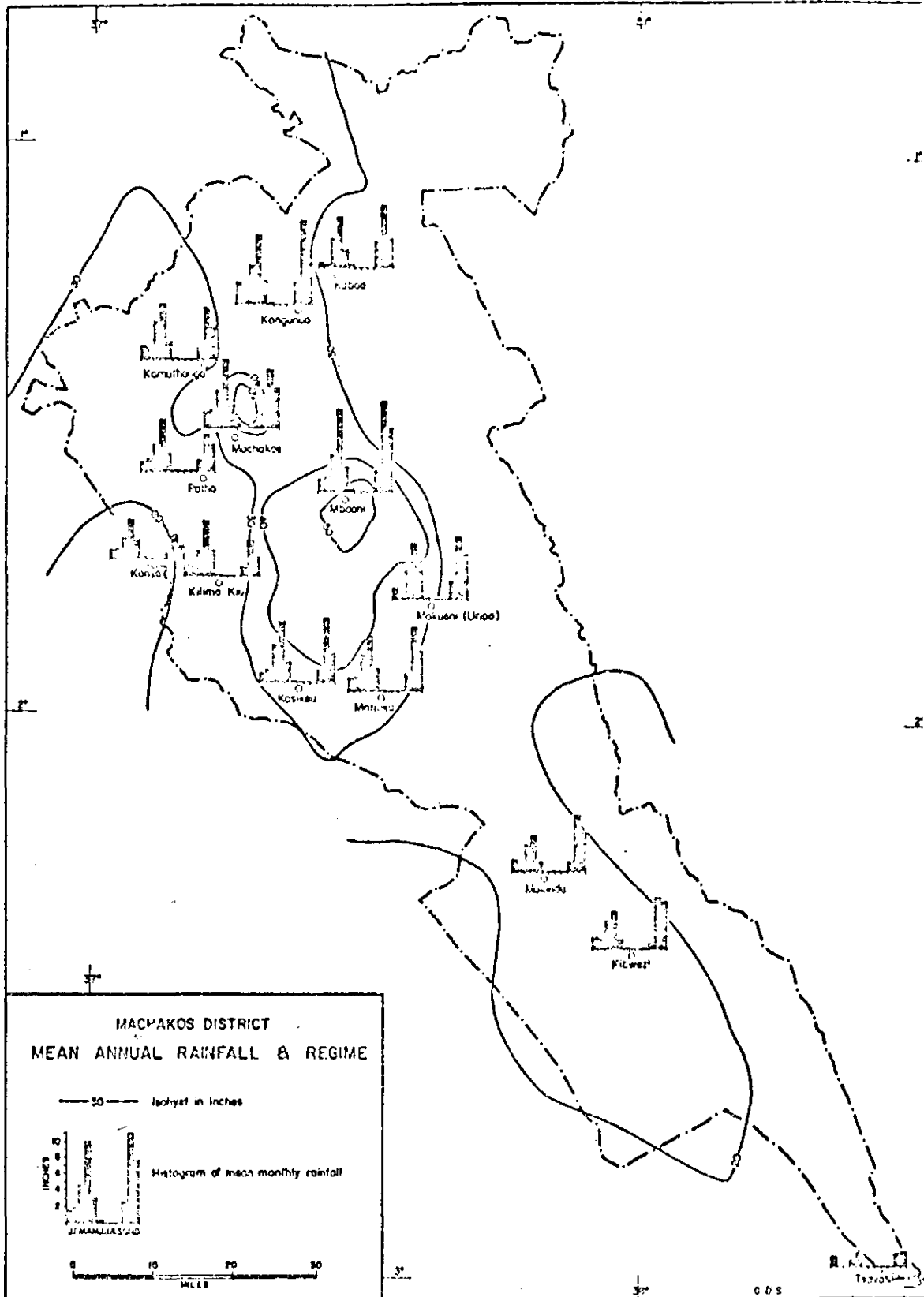
¹ Owako, op.cit. p. 28

also has helped to keep people and domestic animals away from the area.

Rainfall:¹ (see map): The most important environmental factor in agriculture apart from perhaps land formation or physical features is rainfall. And so we centre our discussion here on rainfall distribution in the district. From the map it can be seen that much of Machakos (2/3) is arid because it receives about 20-30 inches a year. And because, too, altitude and other topographical factors influence rainfall distribution in the district, four main rainfall belts can be identified here. These follow closely the physical relief divisions and are:

1. The South-Eastern Plains and the Eastern Plains including the Yatta Plateau: The range here is from below 20 inches to less than 30 inches over much of the Eastern Plains. But towards the central hill masses the rainfall increases.
2. The Athi-Kapiti Plains: The rainfall here varies from 28 inches near Mua Hills at Kamuthanga, in the northern area, to 18 inches at Konza in the southern part. The best form of farming here is ranching although maize is also grown.

¹ Owako, F.N. : op.cit. p. 30



MAP III

3. The Central Hill Masses: This receives rainfall ranging from 30 to about 54 inches yearly. However variations on the stations here occur even within short distances. Iveti Forest Station (6200 feet) receives 52.64 inches on average, while Machakos township (5400 feet) receives 35.96 inches and it is within a walking distance from Iveti Forest Station.

4. Kyulu Hills: It is estimated that at the top of these hills about 55 inches a year are possible, (no accurate data exists for this area).

In general then this is the rainfall regime of Machakos District. But these rainfall averages are deceptive because extreme variations occur. And as Dr. Owako observes:

"For instance, Makindu with a mean annual rainfall of 24.29 inches (61 years) in the South Eastern Plains has experienced variations from 2.65 to 77 inches, while Syathani (in Mwala) and Matiliku on the Eastern Plains, have experienced variations from 16 to 52 inches (20 years) respectively. Nunguni (Kilungu) on the Central Hill Masses on the other hand has experienced variations from 19 to 80 inches in a period of 18 years. While Machakos Township has had variations from 15 to 62 inches in 57 years". (1)

¹ Owako, F.N. : op.cit, p. 36

Hence the rainfall variation causes crop failure and often drought results especially in the more marginal rainfall areas on the lowland. The effects of drought and crop failure (famine) on out migration will be discussed later in this study.

The rainfall regime of Machakos district follows a two rainfall season pattern. The long rains begin in March and end in June and the short rains begin in October and last through December. January and February being hot months. The agricultural activities of the Akamba people therefore follow these seasonal rainfall patterns.

Agriculture

The chief form of agriculture in Machakos District is cultivation of crops. The food crops that are grown are maize, beans, grains, peas (cow, pigeon and green peas), millet, bulrush, potatoes and pumpkins and cassava.

Cash Crops

A variety of cash crops can be grown. Those that are grown on highland Machakos are coffee, Macadamia nuts and wattle trees. Kangundo and Mbooni areas are the chief coffee growers in the district. Tomatoes are economically

grown in Mbooni where piped water irrigation has meant that the farmers here can grow tomatoes when no other location can grow them (after the rain-grown ones are finished) therefore selling them at a high price. Other vegetables that are grown for cash are cabbages mainly on Iveti hills where Machakos Township provides a ready market. Wattle trees are grown on the higher altitudes not suited to coffee and (Mukaa,) Kilungu and Mitaboni locations are the main growers. However as a cash crop these have not done very well.

Lowland Machakos could grow such cash crops as sisal, cotton, castor oil plants, robusta coffee and such fruits as pawpaws and mangoes. But cash cropping here is very poorly developed as we shall see later.

Fruits

Because of the Kenya Orchards Limited (KOL) factory at Mua Hills in Machakos District, where fruit tinning and jam, marmalade and jellies are made, fruit growing has been encouraged on the hills. But because they are dependent on the rains the economic value is not very high. Moreover, they all ripen at the same time hence leading to low prices. The fruits that are grown in highland Machakos and sold to (KOL) or to other markets are passion fruit - sold at Thika and Nairobi, citrus fruits, .

guavas, bananas, apples (Iveti hills), straw berries, goose berries, plums and mangoes.

On lowland Muchakos only pawpaws and mangoes and miserable looking lemon and orange trees can survive.

Livestock

Cattle, goats, and sheep are more important mainly on the lowlands but each family strives to keep some. Poultry is kept almost by all. The economic and sociological importance of livestock is discussed at a later stage.

How Farming is Done

Farming has little progress beyond the hoe and panga. But a few progressive farmers for example in Kangundo are attempting to grow different crops separately. Also the knowledge of manuring is quite high in the district as a whole for the people strive to get the best from the land, much of which as we have seen, has poorly leached and exhausted soils.

Harvesting

Yields are carried by the family to the graneries (barns) except where hand or oxen drawn carts can be available.

Communications

Most parts of Machakos District are accessible by road except the newly settled areas where buses cannot yet go. Some of the roads are tarmaced (Kangundo to Nairobi, Machakos to Nairobi, Machakos to Nunguni and part of the Machakos to Kangundo road) but others are occasionally maintained by the Machakos County Council, while in some areas the villagers band together to dig a road or maintain it. The roads under the maintenance of the County Council have been covered and levelled with murram to help in rainy seasons.

Machakos Township (Population 6312)¹

This is the District headquarters and has all the administrative and civil service activities there. The Provincial General Hospital is also there.

The township is rapidly growing because of the in migration activities. And according to Rempel² the migrants to this town have also come from as far as the Central Province especially the Districts of Murang'a and Kiambu. The local people have also moved

¹ Kenya Population 1969 Census, Vol. III, p. 20

² Rempel, H. : "An Analysis of the Information on Inter-District Migration Provided in the 1969 Kenya Census". IDS Working Paper No. 142, March 1974, p. 32.

into the township as traders and shopkeepers. Formerly much of the trading and shopkeeping has been managed by Asians. This is no longer the case.

Machakos township, being the only town of note (followed by may be Athi River township) is connected to the other parts of Machakos District by bus and lorry routes. These routes lead to urban centres in the villages and locations.

Kangundo, Masii and Mwala Locations

Although in the general physical features description of Machakos District, these locations were included for the purposes of this Study, and because these are the selected areas of out migration, we shall describe and discuss them in more detail here. Reference to the administrative map of Machakos District suffices to indicate their location.

Kangundo Location

Kangundo location is bordered by Mitaboni, Matungulu, Mbiuni and Mwala locations (see Administrative map). It is in the central hill masses and hence some of its highest hills Muisuni and Misyani plus Matetani are above 6000 feet high. Because these hills have gentle slopes, they are all cultivated to the forest reserve demarcation line. It has an area of 148 sq.

kilometres and a population of 39,998 people with a density of 374 persons per sq. kilometre.¹

Rainfall

The annual rainfall of the location is 30 inches and above. And its red loam and clay soils, enriched by the good rainfall offer reasonable agricultural returns.

Agriculture

Kangundo is a very good coffee growing area. It also grows sugar cane, vegetables and fruits. Food crops include maize, beans, cow and pigeon peas, grains, potatoes, millets, cassava and arrow roots.

The Cash Crops

The most important cash crop for Kangundo is coffee. Coffee gains for some farmers can be as much as 39,000/- per season.² The fruits, Macadamia nuts and some of the vegetables are also sold as cash crops. Because of the returns from these cash crops, the people of Kangundo

¹ Kenya Population 1969 Census, Vol. 1, p. 32

² F.M. Mburu, "Geographical Facilitation and Incapacitation: A Stimulus for Rural Inter-Regional Social Stratification", E.A. University Social Science Council December 1972, Nairobi, p. 12.

boast of their progress and usually look down on people from poorer areas. Progress here is measured by housing standards and good farming.

Communication

Kangundo Urban Centre with a population of 1540 persons (1969 census) is very centrally situated as far as communication with other areas goes. A newly opened government built road runs from Kangundo to Nairobi. Another half-way tarmaced and all weather road links it to Machakos township, Mwala and Masii. Travelling to Kangundo Urban Centre is therefore easy. Buses and taxis run all day on these roads. Thika is linked to Kangundo too by an all weather road passing through Ol Doinyo Sabuk area. Since travelling is easy the agricultural produce is marketed without much delay and can be sold at Thika (passion fruit), Machakos, and Nairobi (coffee and fruits plus vegetables).

Facilities

Kangundo is on the main electric line as a result of which a bakery has been opened. There is a telephone exchange and a good post office. It has a large government hospital which serves the needs of the neighbouring locations as well. At the Urban Centre there is a bank. All these facilities plus a number of primary and secondary schools, (Kangundo Boys School being the most important) serve

to enhance the superiority element of the location when it compares itself with others.

Out Migration

In spite of all this that Kangundo boasts of - there are people in this well endowed location who choose to migrate to locations where the climatical conditions are incomparable to that of Kangundo. The 40 respondents interviewed in Kangundo enumerated 317 people (friends and neighbours) known to them who had migrated from here since 1963. And all in all there were 20 migrants who had migrated from here. Kangundo has hence the highest number of migrants from any one location in our study (see Table 22).

The reasons for this migration from Kangundo were basically social and economic ones. We shall discuss them at length later. However migrants from here felt that there was famine (lack of food) in Kangundo because much of the good subsistence crop land had been planted with coffee. Again that land pressure due to a high population density has caused out-migration. Other social problems like family and neighbourhood tensions were also traced to land pressure.

Mwala Location

Next to Kangundo location is Mwala location. It has a population of 17,533, a density of 99 and an area of 177 sq. kilometres.¹

Rainfall

The rainfall is low here about 20 inches a year (see map) and because of its uncertainty, localised droughts occur. Much of the year, (except in the rainy seasons) the dry river beds are choked with sand and drinking water is scooped from numerous holes dug in the beds. This water is hard and very salty. However at these dry periods water selling becomes a profitable business because there are people who live far from these river beds and obtain water from the sellers who draw it by means of donkeys.

Agriculture

Because of the poor rainfall and poor sandy soils tinged here and there with reddish clay loams, there is very little subsistence crop surplus unless the year has been exceptionally good. The people here therefore eke out a livelihood from the land, crop failures occur roughly once in every four years. This area is hence marginal for agriculture as Judith Heyer²

¹ Kenya Population Census 1969 Vol. 1, p. 32

² J. Heyer, "Alternative Development Strategies for Lowland Machakos Farms" Univ. of E.A. Social Science Conference, 1966, p. 1.

has observed as well.

The crops that are grown here are maize, beans, cow and pigeon peas, sweet potatoes, cassava, pumpkins and millets.

Cash Crops

A few people have attempted to grow cotton but have had such difficulties (discussed later) that they have stopped growing it. Some fruits are grown and sold locally or transported to Nairobi and Machakos. The most important of them being the mangoes and pawpaws.

Livestock

Ideally this location should be a grazing area but crop farming is very important and the land is not sufficient for the people to effectively do cattle ranching. However cows, goats and sheep that used to be let loose to wander around in the dry periods are kept. But the wandering practice has now stopped because all the land is adjudicated, hence individuals do not entertain having stray animals on their land.

Communications

Buses leave Mwala early in the morning and return in the late afternoons. These travel on the dusty-dry weather roads to Masii and hence to Machakos and Nairobi; also through Kangundo to Nairobi or Thika. A bus route joins Mwala to Yatta (Kithimani). Individually owned taxis supplement the buses and supply the needed services after the buses depart.

Facilities

There are a few facilities at Syathani Urban Centre, where the chief's camp is. Here a dispensary serves the location. An Harambee Secondary School is run and maintained by a local school committee and the teachers.

Shops

A number of shops at this Urban Centre are well stocked but a majority of the shops are either closed or have very few goods displayed on the shelves - most of these being consumer goods. On the verandahs of these shops women sell maize porridge from gourds. Only on Wednesdays - the big market day - are there many people in this urban centre. 48%¹ of the commodities

¹ R.M. Ngumuta, et.al, "Inter-Locational Trade" Economics Internship Programme: University of Nairobi, 1973, p. 3.

sold at this centre on market days come from highland Machakos with Kangundo producing 42% alone.

Out-Migration

In Mwala the respondents there enumerated 444 migrants from their village who had migrated either to Yatta or Makueni. In Yatta there were 14 migrants out of the 60 interviewed here who had migrated from Mwala. The environmental calamities isolated as influential factors in this out-migration were drought, famine, soil erosion and poor soils. These calamities obviously then reduce the capacity to generate satisfactory subsistence for the families living on such land. Land pressure on such a poorly geographically endowed areas leads to tensions both in the families and neighbourhood. However discussion on the reasons for this out-migration will follow later.

Masii Location

Masii location is bordered to the west by Mwala and to the east by Wamunyu locations. It is on the lowlands parts of Machakos (see physical features map). In comparison with Mwala it is quite raised land. The population of Masii according to 1969¹ census

¹ Kenya Population Census 1969 Vol. 1, p. 32

is 18,369 with a density of 112 persons per square kilometre. The area of Masii location is 163 sq. kilometres.

Rainfall

The location is in the medium rainfall zone and receives an annual rainfall of at least 25-28 inches a year. But since (as already indicated elsewhere) this rainfall is not reliable - there are quite serious famines when it is low.

Judith Heyer¹ postulates that this happens once every five years. Also rivers here are seasonal although some hardly ever dry up completely due to marshes on the river beds that help to trap much of the water. River Thwake is the only one of relative importance here.

Vegetation

Similar to that of Mwala although the acacias and thorn trees are taller here due to the slight improvement on the rainfall. Grass grows during the rainy seasons but since much of the land is cleared for arable farming, only the unusable areas are left for grazing purposes.

¹ J. Heyer, op.cit, p. 1

On such terrain sheet and gully erosions are common features. The soils here are sandy clay loams.

Agriculture

Arable farming is the most important, and the staple food crops grown are the same as those grown in Mwala. And although in 1966, Heyer¹ observed that cotton was being grown after it had been reintroduced there; no one was growing cotton there in 1973. There seems to have been plenty of cotton growing in Masii at the time of her research because she says that:

"Cotton was grown in Masii in 1962, for the first time since the war, and there has been a rapid extension of cotton growing in Masii since". (2)

Clearly then something has happened to stop this "rapid extension".

Livestock farming is difficult in such an area where available land is kept for arable farming. But on an average every home has some type of livestock and there is a lot of struggle to feed them and look after

¹ J. Heyer, op.cit. p. 1

² Ibid, "The Economics of Small-Scale Farming in Lowland Machakos", IDS Occasional Paper No. 1, 1967, p. 3.

them so that they do not go to the other people's land. Maize stalks and pigeon peas leaves (after the peas are harvested) are fed to the animals. (This is also done in the other two areas described here already). Surprisingly (because of poor grass) the animals, except during serious drought spells, are healthy and strong.

Communications

Masii is served by dry weather roads to Machakos town - which is 18 miles west of Masii. (This road is currently under construction and will be an all weather road all the way to Kitui District via Masii, Wamunyu, etc.). Another dry weather road joins Masii to Makueni through Kiteta, Kisau and Ukia locations. Buses and lorries are the chief means of transport on these roads although the individually owned taxis ferry people to Machakos long after the morning buses have left.

Facilities

At the Urban Centre of Masii there is a big dispensary where a maternity ward has been built. The town has an electric generator which supplies power to the dispensary and the welfare centre operates a television set for the people.

A few yards from the chief's camp there is Masii Secondary School, a well built government day school. Accommodation for the boys is provided by the shopkeepers who have built many small rooms at the back of their shops for this market.

Shops

Masii Urban Centre is well supplied with shops some of which are very well stocked (general distributors, etc.). But others sell only a few consumer goods. The Urban Centre is usually a busy place especially in the afternoons when housewives and others come to buy from the shops. On market days the Centre is overcrowded and people from the hills (Iveti and Mitaboni) bring vegetables and arrow roots to sell. In a research, on Inter-Locational trade, Ngumuta,¹ found that 36% of the commodities sold here during market days comes from these Iveti and Mitaboni locations, areas of highland Machakos.

Out-migration

The respondents at Masii enumerated 538 migrants whom they had known who had left the area for either Makueni or Yatta. In the overall sample only 7 migrants

¹ R.M. Ngumuta, et.al: "Inter-Locational Trade" Economics Internship Programme, University of Nairobi, 1973, p. 10.

had come from Masii (the small number does not reflect on low out-migration figure but is rather the result of the particular areas in Makueni or Yatta where the research was conducted. In these particular areas only a few people from Masii were interviewed. Environmental influences on out-migration from Masii were given as hilly land, poor soils, drought, etc. These are discussed elsewhere. However there were obvious indicators of dissatisfaction with the economic or subsistence production of such land.

Hence with this background on the general aspects of Machakos District and especially to the three selected areas of out-migration, we shall now turn to the analysis of data concerning the environment, economic and social problems that lead to out-migration.

CHAPTER 3

THE LAND FACTOR IN MIGRATION

Land the landlessness have been mentioned already in this discussion. But in this chapter we shall attempt to isolate them as far as they relate to migration in Machakos District. The question of land availability will also in this chapter, be closely linked to the density problem as far as population density is a factor in landlessness. Thus we shall discuss hypothesis one which states that at the individual level rural to rural migration is related to landlessness. This hypothesis will be tested in Chapter 7.

The Population Density

Land shortage in Kenya has been associated with increased population. As early as 1964 Meek¹ observed:-

.....There are clear signs that population under the influence of new economic conditions is fast out-growing available land.

¹ Meek, C.K. 1946, Land Law and Custom in the Colonies, p. 76.

This population increase has continued since then to 3.3% a year, in 1969. The population increase issue has even got government support. Hence the Kenya Family Planning Association. To some extent too, the population increase issue, has led to the settlement schemes policy current in Kenya. The settlement schemes policy has however been called a temporary check by Wilson¹. And, also Caldwell² (1968) in commenting about these schemes had this to say:-

....If the population of these countries continue to grow at the rates they have been for the past decade there will not be time for these adjustments and redistributions.

The reason Caldwell felt this way is that if population is unchecked and if the land is limited there will be a time when the extra population will have no land to be settled on. This then would bring the dilemma of what happens when population outgrows the usable land.

¹ IDS Staff Paper No. 91, February 1971, "The Economic Implications of Land Registration in Kenya's Smallholder Areas".

² Caldwell, J.C. & Okonjo, C. (eds) 1968, "The Population of Tropical Africa", Heinman, London, 1968, p. 3.

These examples indicate and suggest the need for a controlled population growth. As such then, this topic is outside the scope of this research. However, no discussion on land and landlessness in Kenya can ignore the population density aspect. Because the density causes what Ominde¹ calls "environmental pressures" which in turn cause migration.

Population Density in Machakos

According to the Kenya Population 1969 Census the overall density for Kenya was 19 persons per sq. kilometre, but that of Machakos District was 50 persons per sq. kilometre. However, according to the same census the density of highland Machakos was 500-700 persons per kilometre². The resources available then become too meagre to support such a population density. Because of this density, a state of 'little or no land' for the people has occurred. And as already pointed out in Chapter 1, this demographic pressure on the land has led to migration.²

¹ Ominde, S.H., op.cit, p. 184

² I.L.O. 1972, op.cit, p. 71

Little Land and Migration

For this little land issue a cross comparison of tables 3, 4, and 5 and 6 will be useful here in showing what non-migrants have in their home locations and what they gain when they migrate out.

In Table 3, the land sizes for non-migrants in Kangundo are smaller than those of either Masii or Mwala non-migrants. The modal land size in Kangundo is 0.5 acres as the class 0.10-0.9 acres had 22 cases out of 40 cases. We can then see that some people in this location have just enough land to build their houses and may be have a patch of it left to plant some crop when it rains. The situation is even more aggravated here by the fact that Kangundo being a very well geographically endowed area on the Central Hill Masses has very high density. In this location also more than half of the respondents had less than 0.10 acres of land.

At Mwala the modal land size is 2.95 acres since the class 2-3.9 acres had 12 cases. Now this amount of land, in a poorly geographically endowed area as Mwala, on the dry plains, is very little. This is because for a family to be able to exist 'comfortably'

here according to land potential calculations 50 hectares¹ of land are necessary.

Masii location emerges as the only one among the three with more land per person. The mod²1 land size here is 10.95 acres since the class 10-11.9 had 7 cases. This amount of land in an area like Kangundo would be ample for a family, but at Masii where again the geographical endowment is poor (though Masii is classified in the medium land potential zone) the basic acreage necessary for subsistence farming is 15 hectares.²

In comparison with what migrants get when they leave either Kangundo, Masii or Mwala the land acreages shown on table 1 are very small.

Tables 4.1 and 4.2 show the land distribution for migrants in Makueni and Yatta after migrating. Notice that in Makueni 47 persons had land holdings of 25 acres and above and in Yatta 34 persons had land holdings of 20 acres and above.

¹ Mbithi and Barnes, op.cit, p. 46 - 1 hectare = 2.5 acres

² Ibid, p. 46

Table 3:

Average Distribution of Land in Out-Migration Locations

Acres of Land	Kangundo	Masii	Mwala
	(40) H.P.	(40) M.P.	(40) L.P.
0.10 - 0.9	22	0	2
1 - 1.9	6	1	4
2 - 3.9	4	1	12
4 - 5.9	2	5	4
6 - 7.9	2	4	6
8 - 9.9	2	3	1
10 - 11.9	1	7	4
12 - 13.9	0	3	3
14 - 15.9	0	3	0
16 - 17.9	0	1	1
18 - 19.9	0	1	2
20 - 21.9	1	3	0
22 - 23.9		0	0
24 - 25.9		2	1
26 - 27.9		0	0
28 - 29.9		1	0
30 - 31.9		1	0
32 - 33.9		2	0
34 - 35.9		2	0
No. of cases			
Modal land size	40	40	40 = 120
	0.5	10.95	2.95

H.P. = High Potential
M.P. = Medium Potential
L.P. = Low Potential

Table 4.1:

Land Acreages for Migrants in Makueni

Acres	f	%
5 - 14	3	5
15 - 24	10	16.666
25 - 34	26	43.333
35 - 44	8	13.33
45 - 54	8	13.33
55 - 64	2	3.333
65 - 74	0	0
75 - 84	1	1.666
85 - 94	0	0
95 - 104	2	3.333
N	60	100
-		
X	33.0166	
S	21.2	
Modal land size	29.5 acres	

Table 4.2:

Land Acreages for Migrants in Yatta

Acres	f	%
0 - 9	26*	43.333
10 - 19	0	0
20 - 29	20	33.333
30 - 39	8	13.333
40 - 49	0	0
50 - 49	4	6.666
60 - 69	0	0
70 - 79	1	1.666
80 - 89	0	0
90 -100	1	1.666
N	60	100
-		
X	21.175	
S	18.97	
Modal land size	24.5 acres	

* Since there were 9 people who said they did not have land in Yatta, the class 0-9 had 17 people who owned land ranging from 5-7 acres. Migrants to this area get smaller plots of land than those who go to Makueni. The reason for this can be due to the fact that Yatta's land is all taken up now while in Makueni there are still patches of land where one could get land.

(However the need for land in Makueni is rising and soon there will not be any left). The economic productivity of plots of land in Yatta is also very questionable when migrants get smaller plots in an area where extensive agriculture is better suited to it. This is because climatically Yatta is a drier area than Makueni and ideally it should be a low density settlement scheme, and according to Mbithi and Barnes¹ it is in the category of:

"Medium quality soils with 20"-25" rainfall per annum: (and) unless irrigated, this zone is strictly for good quality ranching. Subsistence....may be gained from 50 hectares, under good management".

From tables 4.1 and 4.2 we see then that Makueni migrants have a mean average of 33.0166 acres of land a modal land size of 29.5 acres. Yatta migrants have a mean average of 21.175 acres of land and a modal land size of 24.5. It is obvious then that these figures are extremely high compared to the figures computed from the land the non-migrants had.

The land holdings for migrants at their original home areas were also very much smaller than their new pieces of land. According to Table 5, 109 (90%) migrants

¹ Mbithi & Barnes: The Spontaneous Settlement Problem in the Context of Rural Development in Kenya: 1973, IDS, p. 46.

had 0-5 acres of land and had therefore experienced a case of "little or no land".

Table 5: Land Distribution for Migrants
Before Migrating

Land	f	%
0	63	52.5
0.5 - 1	33	27.5
2 - 3	9	7.5
4 - 5	4	3.33
6 - 7	1	0.833
8 - 9	0	0
10 - 11	1	0.833
12 - 13	1	0.833
14 - 15	1	0.833
16 - 17	0	0
18 - 19	1	0.833
25 - 26	2	1.666
40 - 50	4	3.333
N	120	100
X	3.425	
S	7.385	

Although it was difficult to assess accurately the amount of land these migrants had at home, because land had not been adjudicated in some areas, when the migrants left home, the above figures do indicate a fair distribution. The figures compare favourably to those of non-migrants on Table 3. Only 10 migrants had

land holdings of more than 10 acres. And those with land ranging from 25-50 acres (6 in all) had migrated for other reasons and not landlessness or shortage of land. These were especially keen on business expansion. The migrants said that these little pieces of land they had they left them to their relatives who are still on the original family land. However in some cases the land so left is held as security by the migrant. At least one migrant admitted that he might go back home and hence he should keep the land. Others hold the land for their children who may go back there some day.

From this information above, we can infer here, then that people who see that their land is small migrate to get bigger pieces of land where such land is available. The figures on Table 6 back up this inference as well as the comparison of tables 4 and 5 does. From Table 6 then we notice that 36 of the non-migrants aspired to migrate while 84 non-migrants did not wish to do so.

The aspiring migrants on this table are people with the least amount of land in each location (according to the land size of the location). Thus the 9 aspiring migrants from Kangundo have land size of 0-1.9 acres. Absolute holdings for these aspiring

Table 6:

Average Distribution of Land in Out-Migration Locations
for Non-migrants and Aspiring Migrants

Acres of Land	Non-Migrants In			Aspiring Migrants In		
	Kangundo H.P.	Masii M.P.	Nwala L.P.	Kangundo	Masii	Nwala
0 - 1.9	19	0	0	9	1	6
2 - 4.9	6	0	4	0	3	9
5 - 7.9	2	1	8	0	6	1
8 -10.9	2	6	3	0	1	0
11 -13.9	1	6	5	0	0	0
14 -16.9	0	4	1	0	0	0
17 -19.9	0	1	2	0	0	0
20 -22.9	1	3	0	0	0	0
23 -25.9	0	2	1	0	0	0
26 -28.9	0	1	0	0	0	0
29 -31.9	0	1	0	0	0	0
32 -34.9	0	4	0	0	0	0
35 -37.9	0	0	0	0	0	0
No. of cases	31	29	24	9	11	16=120
Modal land size	0.85	9.45	6.45	0.85	6.45	3.45

H.P. = High Potential
M.P. = Medium Potential
L.P. = Low Potential

migrants range from 0.10-0.68 acres, with a median of 0.16 acres. Obviously then for these 9 aspiring migrants land shortage is clearly a factor in their wish to migrate.

For Masii the 11 aspiring migrants have less land than those who do not wish to migrate at any time. And for Mwala the 16 aspiring migrants were people with less than 5 acres of land.

To stress still further the importance of land shortage in migration table 6b, showing the theoretical land carrying capacity for Machakos District has been compiled from the Statistical Abstract, 1972. Notice that the areas of high potential correspond to Kangundo location, medium potential to Masii and low potential correspond to Mwala. The acreages of land in high potential areas, necessary for an income of £100 plus subsistence for a family of six are 10 acres. For medium potential 17.5 acres and for low potential areas 62.5 acres. Therefore it is clearly seen that in comparison with tables 3 and 6 the theoretical land sizes in this table are well above those held by non-migrants. And this then highlights further the real existence of land shortage. The situation in Machakos is worsened by the fact that some of the high and medium potential areas are under large mixed

Table 6b:

Theoretical and Actual Carrying Capacity
Machakos District

Zone	Land Sq.km.	Hectares* needed for income of £100 p.a. plus sub- sistence	Maximum Farming popu- lation on this acreage (assumed current techno- logy	Total Farming Popu- lation 1969
High Poten- tial	125,000	(10 acres)	187,500	66,996
Medium Poten- tial	771,000	(17.5 acres)	660,857	401,976
Low Poten- tial	454,000	(62.5 acres)	108,960	238,208
TOTAL	1,350,000	-	957,317	692,409

* 1 hectare = 2.5 acres

Source:

Land Potential - Statistical Abstract 1972,
Table 73, Farming Population 1969 - calculated
from Population Census 1969, Vol. 1

or large scale farms, formerly owned by Europeans. Hence a large portion of people cluster on the low potential lands.¹

As already pointed out earlier on table 2, there were migrants who came from other locations apart from Kangundo (high potential), Masii (low potential) and Mwala (low potential) locations. And therefore for further clarification on land shortage and migration tables 7 to 9 were compiled. These tables stress the land need in each of the high, medium and low potential areas. However, because several locations were grouped together under each particular potential level area (see table 2), the mean average acres of land held by migrants before migrating (tables 7 - 9) is slightly higher than that shown on table 6 for aspiring migrants. These averages all however very much below the theoretical land sizes shown on table 6b. Notice that the land shortage is most acute in high potential areas.

Table 7, below, shows that the mean average number of acres of land a migrant could possibly have was 4.5 acres before migrating. (40 of the 59

¹ Mbithi, P.M. : "A Developmental Approach to Drought and Famine in Kenya", May 1974, p. 11.

migrants from these high potential areas had no land before). On the same table however, the average number of acres for migrants from high potential areas was 28.567 acres. This is more than 5 times the amount of land a migrant had before migrating.

Table 7:

Land Size for Migrants from High Potential
Areas

Land	Before Migrating		Land	After Migrating	
	F	%		F	%
0 - 9*	59	100	0 - 9	4	6.8
10 - 19	0		10 - 19	5	8.5
20 - 29	0		20 - 29	27	45.9
30 - 39	0		30 - 39	14	23.8
40 - 49	0		40 - 49	6	10.2
50 - 59	0		50 - 59	1	1.69
60 - 69	0		60 - 69	2	3.4
70 - 79	0		70 - 79	0	0
80 - 89	0		80 - 89	0	0
90 - 99	0		90 - 99	0	0
100-109	0		100 -109	0	0
N	59	100	N	59	100
\bar{X}	4.50		\bar{X}	28.567	
S	0		S	12.37	

* The largest size of land here was 2 acres and 40 of the 59 migrants from high potential areas had no land. 19 migrants had a range of 0.5 - 2 acres of land.

On table 8 the 22 migrants from medium potential areas had an average land size of 7.227 acres each before migrating. The average land size after migrating was 39.5 acres. This is again more than 5 times the amount of land a given migrant from the medium potential areas had before he migrated.

Table 8:

Land Size for Migrants from Medium Potential Areas

<u>Before Migrating</u>			<u>After Migrating</u>		
Land Size	F	%	Land Size	F	%
0 - 9	19	86.40	0 - 9	2	9.10
10 - 19	0	0	10 - 19	1	4.55
20 - 29	3	13.60	20 - 29	7	31.85
30 - 39	0	0	30 - 39	3	13.6
40 - 49	0	0	40 - 49	3	13.6
50 - 59	0	0	50 - 59	2	9.10
60 - 69	0	0	60 - 69	1	4.55
70 - 79	0	0	70 - 79	1	4.55
80 - 89	0	0	80 - 89	0	0
90 - 99	0	0	90 - 99	2	9.10
100 - 109	0	0	100 - 109	0	0
N	22	100	N	22	100
\bar{X}	7.227		\bar{X}	39.5	
S	6.863		S	45.65	

And the information on table 9 shows that while the average size of land per migrant was 8.333 acres before migrating the average after migrating was 25.0128 acres, which is 3 times the size of land a migrant had before migrating. See table 9.

Table 9:

Land Size for Migrants from Low Potential
Areas

Land	Before Migrating		Land	After Migrating	
	F	%		F	%
0 - 9	32	82.048	0 - 9	20	51.280
10 - 19	4	10.256	10 - 19	1	2.564
20 - 29	1	2.564	20 - 29	3	7.692
30 - 39	0	0	30 - 39	5	12.820
40 - 49	1	2.564	40 - 49	2	5.128
50 - 59	1	2.564	50 - 59	4	10.256
60 - 69	0	0	60 - 69	1	2.564
70 - 79	0	0	70 - 79	2	5.128
80 - 89	0	0	80 - 89	0	0
90 - 99	0	0	90 - 99	0	0
100-109	0	0	100 -109	1	2.564
N	39	100	N	39	100
\bar{X}	8.333		\bar{X}	25.0128	
S	10.54		S	32.99	

However, although migrants have been shown to have had little or no land before migrating, we can see from table 6 that there were people among the non-migrant group who had the same acres of land as the

aspiring migrants or the migrants (see table 7-9). But these people would not wish to migrate. Some had family responsibilities, for example, having children in school. Others were too old to migrate. The other reasons preventing their decision to migrate out had to do with their evaluation of the geographical endowments of the areas. And so although a non-migrant would wish to go and get a large piece of land, the benefits of a good rainfall and having water on or near his land do in some cases deter out migration. But from table 10 we note still that the land size issue is very significant as to whether or not one wishes to migrate, for many non-migrants felt that the primary reason why they hadn't migrated was because "we have enough land". Enough land here should be seen purely on the quantitative rather than on the qualitative evaluation. The reasons given were computed from the responses of the 84 non-migrants who indicated that they would not migrate.

Table 10:

Why Don't you Want to Migrate?

Responses	Total	%
I have enough land	60	71.4
I am too old to go	12	14.3
I have water on my land*	9	10.7
My children are in school	6	7.41
There is good rainfall here*	4	4.7
There is a lot of progress here	3	3.5
No. of Responses	94	111.7
N		84

* The aspects of environmental endowments in out-migration are discussed in detail in Chapter 5. Suffice it to point out here that the availability of these is of vital importance in both areas of in or out-migration. From this table 60 responses out of 94 indicate that people who have "enough land" do not desire to migrate. Therefore only those who have genuine cases of little land and who have no family responsibilities hindering them in this case migrate.

The little land situation in parts of Machakos distr has been caused by the land adjudication policy already discussed in Chapter One. This is because adjudicating land in reality means that in a given family an individual male can hold only so many pieces of land because everyone has to have equal shares. Therefore those who traditional had farmed large areas before, have to cut down so as to come to the same level as their kinsmen - their siblings in most cases. Reduction of family land holdings have also been cited as causes of urban-ward migration, in India, Pakistan and Venezuela.¹ In rural Machakos, the reduction has led to out-migration where fathers want to secure land for themselves and their children.

¹ ILO, op.cit. (1960) pp. 124, 134 and 157.

The situation of having little land is very closely linked to landlessness as far as migration goes. Therefore we shall now turn our discussion on landlessness as a cause of out-migration.

Landlessness as a Factor in Migration

Data collected on the issue of landlessness in this research show that 63 (52.5%) persons had migrated because they had no land. The landless claimed that relatives took away their land, as was the case of these 9 migrants who said "my uncle chased me away from the land". Another 24 migrants said "my father was given rights of use of land but the land was not his" (i.e. father was Mutuwa - adopted son). For another 7 they were landless "because father sold all the land" and 8 said that they had no land "because all the land was father's". And there were six women who had been divorced and therefore landless. These women were landless because a woman holds rights of land use only through marriage. And hence she is virtually landless if divorced. These reasons are tabled here below in Table 11.

The reasons given here are basically social ones and except the last one, they are oriented to the problems of land adjudication. Land adjudication leads to individual ownership and since this aspect is discussed

Table 11:

Reasons Given for Landlessness by Migrants*

Reasons	Total	%
Father was <u>Mutuw'a</u>	24	38.10
Land was taken by relatives	9	14.29
Father sold the land	9	14.29
The land was father's	8	12.90
Land taken away through court	7	11.11
I divorced	6	9.52
No. of Landless	63	100

* These reasons were given only by people who migrated because of landlessness. Hence the total is 63 and not 120.

elsewhere in this Chapter we shall ignore it here. Suffice it to point out here, however that the reasons indicate a serious breakdown of traditional attitude on land. Where an adopted son (Mutuw'a) had rights of land use, individualization of land had meant that he has to relinquish them. The land in this case reverting to the rightful owner.

Squatting

The other factor that contributed to landlessness and hence to migration in Machakos district is squatting. The squatters had left their home areas in the early 1940's or before then. And therefore when they went back home either by choice or because

they were 'chased' from the farms they were squatting on, they found themselves landless.

The landlessness among the former squatters here was due first to the alienation of land in Machakos District to European settlers and also land for forest reserves and other governmental services such as veterinary services, schools and hospitals. Secondly, the former squatters were rendered landless through their own families. The situation here (see Table 11) is a little complex because all sorts of reasons were given by the family members as to why the returned squatters should have no land. The arguments were both social and economic. But the economic emerged as the most important. The relatives argued that they had been taking care of the land and especially where Court and Clan based land cases were involved. They therefore indicated that the 'squatter' has lost his share of land because if they (relatives) had not defended their land cases in court and paid substantial amounts of money for this they would have lost the land. In some cases the squatters were asked to return part of the money spent and those able to do so were then given some land but others who either could not repay this money or who were not given the opportunity to do it had to migrate.

The other social element in this squatter and landlessness problem was connected with the duration of the squatters stay away from home. For some they had been born and had grown up on the farms and therefore did not even know their relatives or where they came from. And so when they stopped being squatters the alternative open to them was to migrate to the uninhabited or sparsely inhabited parts of Machakos.

As we have discussed already, the availability of land for the migrants in areas of in-migration was an important pull factor. And to measure this importance and obvious attachment to land, the migrants were asked to state the hazards that confronted them initially at their new home areas. The results showed that land to these migrants was so important that at the initial stages of settling down, they endured great risks to their personal health and the welfare of the family so as to keep the land. These people must have had a real land need in their decision to migrate to have endured the conditions they faced. Indeed many initial migrants returned home to their 'little land' or went to other places due to the hardships that were there. For some migrants it was a case of losing all the children - in one family at Yatta all 5 children died - yet mother and father remained on this land. For others the malaria and pneumonia were

hazards so greatly stressed against migrating to these areas that divorce occurred for some husbands who forced their wives to migrate with them. The rumour too, that "women would become a barren" if they migrated especially to Makueni was very discouraging to would be migrants. But in spite of all this people determined to go and get land to settle on. Some of the hazards that migrants faced and which caused some of them to return are given here in Table 12.

Table 12:

Hazards that Confronted the Migrants Initially
at their "New Home Areas"

Responses	Total	%
Famine*	49	40.8
No water near	43	35.8
Dangerous wild animals	35	29.6
Illness of (malaria, pneumonia, dysentery, etc.)	32	26.6
Financial	24	20.0
Drought	10	8.3
No. of Responses	193	161.3
N	120	

* This was as a result of not having farmed there before migrating and also because of the drought that followed for some migrants as it appeared came during the bad years. Water in Yatta and Makueni continues to be a problem but it was more acute at the initial stages before water tanks and dams could be built. Migrants gave the answers in this combination but famine, lack of water and illness were the most frequently given combination of answers.

There was a problem of finance because migrants had nothing to sell as yet. For it is not until the first crop after migrating is harvested that one can have enough food both to eat and sell. The money the migrants had initially was spent on food and other necessities till as they said they had none left. The wild animals were both a menace to the crops and to the people. They killed people and villagers had to move in groups even when going to fetch water during the day for fear of them. The wild animals were many due to the bush conditions (forest) of the land and it was not until much more land was cleared that these could be effectively chased off or killed. Some like monkeys and the antelopes still remain a menace to crops.

Land Ownership

As well as the push factors of 'no land', and 'little land', migrants had the intrinsic desire to own land. This is a complete reverse of the traditional land ownership system where individuals were not absolute owners but stewards for the land was owned by the community. Maini,¹ Land Law in East Africa, 1967 adds that although every tribe had a different customary land law, at least it was understood that the elders had ultimate control.

¹ Maini, Land Law in East Africa, OUP, Nairobi p. 10.

The individuals who migrated to "own land" gave the reason that land belonged to many people and one could never say it was his. They felt that even father's land was not theirs although traditionally each son would inherit part of his mother's land given to her through marriage. These people said that if they migrated they would get land title deeds and no one would question their ownership since no member of the extended family would be involved. At least 37 people out of 120 gave this as a reason for migrating. These then confirmed what Maini (1967)¹ said concerning land registration that:

It declares simply and unequivocally that it is the register which proves title. The register entitles a person to exclusive occupation of land.

That the "exclusive occupation of land" should be a factor in migration is not difficult to grasp in the light of the evidence brought out in this thesis. Tensions and quarrels in families and neighbourhoods many a time stem from collective ownership of land and population pressure on it. Writing on Land Use and Labour Productivity under Growing Land Shortage,

¹ Maini, op.cit, p. 10

Echard Baum¹ points out too that:

"Increasing land shortage which is almost inevitably linked with a growing population is a constant cause of strains".

Personal ownership of land enables a person to escape these 'pressures' and 'strains' and is therefore an important factor for the migrant to consider in migration.

Individual ownership of land has been used in the past to argue the case for development in cash crops growing and in general better methods of farming. It was especially stressed in the Swynnerton Report of 1955.² But in this research no respondent stated that the individual ownership of land was going to be beneficial to him in this sense. The reasons given were more social than economic. The respondents tended to stress that owning land was a status symbol. Certainly a man would have more say on land that was personally his than he would have in the case where brothers and father and possibly uncles claimed an equal say in it as himself.

¹ IDS Paper "Land Use and Labour Productivity Under Growing Land Shortage".

² A Plan to Intensify the Development of African Agriculture in Kenya by Swynnerton 1955 - Government Printer.

It did not appear to me too that the migrants who had acquired individual plots of land farmed any better than their counterparts in other areas where land adjudication has not taken place. They used the same old methods of ploughing (because tractors are few and cost much to hire) and planted crops mixed together. The results being that "a riot of vegetation - grasses, cassava, and maize shoot up together and pumpkin vines trail across the path" to quote Hunter.¹ These migrants too were not using as much manure if any at all as the other respondents used. Therefore they were and are in the process of causing soil exhaustion.

Hence the only purpose that individual land ownership seems to have accomplished for the migrants is non-fragmentation of plots. This purpose however is already being threatened for grown up and married sons are being allotted plots on fathers' land. This will then bring a similar case of fragmentation as at the home areas unless this partible inheritance system changes to impartible inheritance.² The hopes of this change however are very dim at present when the land is seen as an asset because it gives "the peasant a sense of security and stability".³

¹ Guy Hunter: The Societies of Tropical Africa, A Selective Study, 1962, p. 97.

² E.R. Wolf: Peasants, Prentice Hall, Inc. New Jersey, 1966, p. 75.

³ ILO: Why Labour Leaves the Land: A Comparative Study of Movement of Labour out of Agriculture, Geneva, 1960, p. 157.

From the foregoing discussion a few points emerge. The first is that since little land and landlessness contribute to low subsistence food production per family, it follows that land is seen as an investment against food shortages. As long as there is available land in Machakos, then migration directed to this cause will continue. But the future prospects of migration as an obvious bridge over landlessness and land shortage are very questionable. What is to happen to rural Machakos when no more new lands can be available for resettlement. This dilemma is already setting in because at present unless one has a lot of money one cannot get land in some areas of Makueni where a piece of 25 acres of land is currently selling for 18,000/- (information obtained verbatim). It used to be that a migrant just "acquired" as much land as possible when he arrived at his destination. Out of 120 migrants 102 (85.9%) "just acquired land", 9 (7.49%) were without land and 8 (6.666%) bought it. Those who "acquired" got for themselves lands up to 100 acres which they have now either decided to reduce by selling some off or are keeping them in custody for their sons. (To acquire land an individual consulted the earlier migrants who only showed him the boundary of the claimed land).

Secondly, there is almost no land now to migrate out to, in rural Machakos. Hence the other alternative open for the people there is to migrate in future to other

districts. Already some Machakos Akamba are buying land in Mwingi, Kitui District. The worry here is whether or not the same troubles that have occurred at the borders of the two districts will reccur. At the time of this field research (November 1973) there were camps at Ndalani (Yatta) of Machakos Akamba migrants, who had been evicted forcefully from the supposedly Kitui District area. The Akamba from Machakos have gone and are going to other districts even when they feel that troubles may arise because these districts are not part of the Akamba tribal land. From the 1969 Kenya Census data, Rempel¹ has compiled information on Inter-district migration. And data on out-migration in Machakos District indicate that:

"From Machakos District the majority moved to Kwale District with almost an equal number of males and females".(2)

He notes too that:

"there is some movement from Machakos to Kajiado and Nakuru Districts". (3)

Also that of the out-migration from Eastern Province to Central Province:

¹ Rempel, H.: I.D.S. Working Paper No. 142, March 1974, pp. 27-32

² Ibid, p. 29

³ Ibid, p. 31

"the largest numbers come from Machakos".¹

All this analysis points out to the acute land hunger in Machakos District. Migrants then are being pushed away from their home areas and pulled to other areas where they can acquire land. Land shortage is prevalent in all out-migration areas whether they are on the high, medium or low potential zones. However, the shortage is more acute on the high and low potential areas as tables 3, 7, 8 and 9 show.

When migrants were asked to state why they wanted this land, the most important factor given was "so as to make a living". Therefore in the next chapter we shall isolate and discuss the occupational opportunities at the areas of destination. These opportunities can be both actual and perceived.

¹ Rempel, H. : *ibid*, p. 31

CHAPTER 4THE ECONOMIC FACTOR

In this chapter, we hope to isolate the occupational opportunities in the area of destination that act as economic pull factors. For hypothesis two, which will be tested in Chapter 7, states that "rural to rural migration is related to actual and perceived subsistence and income earning opportunities in the areas of destination". These occupational opportunities will be compared to those in the original home areas. In doing this therefore we hope that the "economic characteristics" of migrants, will be highlighted. It should be noted here too that according to the operational definitions of this research - the economic characteristics of the migrants will be understood to denote self-employment, mainly, although wage employment is also considered. Self-employment is an important aspect of this chapter because in the rural areas of Machakos where research was done, there is very little employment in what Mbithi and Barnes term the "formal sector in rural areas".¹ (The formal sector includes employment on large scale farms in various forms of industry, commerce and services. It also includes employment in government and parastatal

¹ Mbithi & Barnes: The Squatter Problem in the Context of Rural Development in Kenya.

organisations). Self-employment however in the rural context is almost exclusively related to farming and therefore to land. This is supported by the fact that out of the 51,000 rural non-farm small scale businesses, 75% were owned on part-time basis by farmers.¹

Focus on the economic value of land will be important in this chapter because as we have already noted occupational opportunities at the areas of rural in-migration - destination - have land as their economic base. Non-farm activities also use farming as an economic base. Even the persons involved in these non-farm activities are seldomly "fully engaged in rural non-agricultural activities as their sole occupation."² And because self-employment and occupational opportunities in the areas of in-migration are very closely connected to farming the largest proportion of people thus employed are farmers.³ This is so because farming in Machakos is still seen as a means of subsistence livelihood for as yet "much of Africa's labour is self-employed in subsistence production" to quote Migot Adholla.⁴

¹ Mbithi & Chege: "Linkages between Agriculture and Rural Small-Scale Enterprises", IDS Conference on Small Scale Enterprises, Masai Lodge, 1972, Occasional Paper No. 6, pp. 36-37.

² Mbithi & Barnes: op.cit, p. 63

³ Ibid, p. 64

⁴ Migot Adholla, "Rural to Rural Migration: Relationships to Employment", November 1973, p. 2, IDS.

Wage Employment

In this research wage employment in rural areas was very insignificant among the migrants. There were even very few teachers interviewed because in these in-migration areas there were very few primary schools compared to the number of schools found in out-migration areas. In Mbaani sub-location of Masii, for example, there were four primary schools within a radius of 5 miles or less from the Masii Urban Centre. While in the Kithimani sub-location only one primary school was located to serve the area. It had however been expected that many teachers would be found among the migrants, as teaching is an important aspect of rural wage employment. Out of 120 migrants the numbers shown on table 13 were in wage employment.

Table 13:

Migrants in Regular Wage Employment

	Total	%
Teachers	3	30
Enrolled Nurse	2	20
Assistant Chiefs	3	30
Administrative Police	1	10
Market Master	1	10
N	10	100

Only 10 migrants (8% of 120) were in regular wage employment. And all of these people were engaged

in farming either by doing most of the work on weekends, off-duty hours or through their spouses and/or hired labour. Those who employed or hired labour had larger land holdings and other means of income outside agriculture as indicated in table 13. (For land holdings see tables 4:1 and 4:2, this includes those with 50 acres and above).

From this table it can be seen that formal or regular wage employment in rural in-migration areas of Machakos District is not as significant as self-employment will be shown to be here. One reason for this lack of formal employment here is concerned with agricultural staff. The migrants reporting on why there is evident soil erosion in some parts of Makueni Location (Mavindini) said:

"we have very few agricultural assistants who can come and survey (kuthima) the land so that we can dig trenches to arrest the water. And the few that there are are so rude that they expect you to go for them several times before they come".

Leaving out the inefficient aspects of these agricultural assistants, we see here that there is a need for more staff in this field. (There were 5 agricultural assistants to serve a population of 54,595¹ most of

¹ Kenya Population Census, op.cit, p. 31

which is farming). And as well as improving the agricultural activities of the area (through advice and practical assistance like surveying the land so the people can dig the trenches), increasing the agricultural assistant staff, would also increase the number of those in wage employment in rural Machakos.

There were only 2 enrolled nurses interviewed as migrants in these areas. This in a small way reflects on the poor distribution of hospital or health services in these areas. In Yatta, Kithimani is the only health centre for the whole area of 2748 sq. kilometres and a total population of 76,348. And in Makueni an area of 1300 sq. kilometres with a total population of 54,595¹ people Wote[?] is the only one, although there are small clinics which operate here and there. And so the migrants referring to this need said:

"we are in a very big need for more hospitals here and especially here in Yatta, where if you have to be admitted into hospital you have to go all the way to Thika".

In these areas, then, there is a need for increased health services, and increased services would lead to employment of more staff. In suggesting this possible

¹ Kenya Population Census 1969, op.cit, pp. 30-31.

action we do not minimize the competition from other sectors of economy which militate against such factors.

For as Veitch has observed:

"in a country where national income per capita is low and resources limited, there will be pressures against increasing expenditure on health. This is particularly in countries.....which are experiencing rapid population growth and in which a stated aim of the Government is to raise national income per capita by means of economic planning".(1)

But even with all this "pressure", there should be positive action taken to alleviate this need.

In rural Machakos, now, there are not many large scale farms which would supply employment on the formal sector. There were none in the Yatta and Makueni areas, Kangundo, Mwala and Masii locations. This lack of employment on large scale farms would also explain why there was such a small group of wage employed migrants. And the general conclusion here is that wage employment is not a pull factor in rural to rural migration in Machakos District.

This conclusion is supported again by the fact that the migrants in wage employment, indicated that

¹ M.D. Veitch: "Population Growth and the Health Services", pp. 309-310 in Ominde & Ejiogu: Population Growth and Economic Development in Africa", New York 1972, pp. 304-312.

(apart from the two enrolled nurses) they had come to Makueni and Yatta with other occupational opportunities in mind. So these were not the jobs they had hoped to come and do. This state of affairs leads us to agree basically with Migot-Adholla who observes:

"Apart from migration to other rural areas for wage employment, there is a long tradition of relatively permanent settlement for purposes of agricultural cultivation....Migrants in this category may be attracted by the "pull" of land availability in the place of destination".(1)

Therefore we shall concentrate on land and agriculture in discussing the self-employment occupational activities in the areas of in-migration.

Self-Employment

The agricultural activities that were important aspects of self-employment among the migrants included herding of livestock and cultivation of crops. The information on the table below illustrates this.

Cultivation

The Akamba people as it has already been referred to in Chapter 2, are basically agriculturalists and the opportunity to practise food crop farming in the areas of in-migration, given the availability of land was a strong pull factor to these areas. Notice that 107 (89%)

¹ Migot-Adholla, op.cit. p. 5

Table 14:

Occupational Opportunities Given
by Migrants for Migrating to

Occupational Opportunity	Makueni	Choice of Place Yatta	Total	%
Cultivation)*	56	51	107	89.1
Herding)	55	26	81	67.5
Business	2	3	5	4.1
Government Services	2	1	3	2.5
No. of Responses	-	-	196	163.2
N			120	

* These number more than 120 (no. of migrants) because there were migrants who came to do cultivation and grazing while a few had come to do cultivation only. For purposes of analysis we shall discuss each of these occupational opportunities separately.

migrants had come to cultivate crops.

Food crop farming is especially oriented to subsistence production of maize, beans and various types of millets. But maize is considered a "superior" crop because even if a Mukamba peasant farmer produced a lot of beans or millet he still considers himself badly off if he has no or very little maize. Therefore this crop has been used here to evaluate the agricultural output of the migrants. The basic idea being here that migrants would desire to migrate to an area where they could do better agriculturally than they had done at the original home. A comparison of maize crops for migrants before and after migrating indicated that they had higher harvests of maize after migrating. This information is shown in Table 15.1.

Table 15.1

Average Bags of Maize Harvested by
Migrants in Makueni before and after
Migrating

Before Migrating			After Migrating		
Bags	F	%	Bags	F	%
0	34	56.66	4	1	1.666
1	4	6.666	5	3	5
2	5	8.333	6	1	1.666
3	4	6.666	8	1	1.666
4	3	5	10	6	10
5	3	5	15	1	1.666
6	1	1.666	16	1	1.666
8	1	1.666	18	1	1.666
12	2	3.333	20	15	25.00
20	1	1.666	24	2	3.333
40	1	1.666	25	1	1.666
60	1	1.666	26	1	1.666
			30	15	25.00
			40	4	6.666
			50	2	3.333
			55	1	1.666
			60	1	1.666
			83	1	1.666
			90	1	1.666
			240	1	1.666
N	60	100	N	60	100
\bar{X}	3.561		\bar{X}	31.316	
S	9.51		S	30.64	
Median	5.5		Median	24.5	
Mode	0		Mode	20.30	

Table 15.2:

Average Bags of Maize Harvested by Migrants
in Yatta Before and After Migrating

Before Migrating			After Migrating		
Bags	F	%	Bags	F	%
0	34	56.66	0	9*	15
1	5	8.333	1	1	1.666
2	4	6.666	2	3	5
3	4	6.666	6	4	6.666
4	2	3.333	8	3	5
5	3	5	10	11	18.333
6	1	1.666	12	2	3.333
7	2	3.333	13	2	3.333
8	1	1.666	14	3	5
10	2	3.333	15	5	8.333
15	1	1.666	16	1	1.666
20	1	1.666	18	2	3.333
			20	6	10
			25	3	5
			30	2	3.333
			35	1	1.666
			70	1	1.666
			100	1	1.666
<u>N</u>	60	100	<u>N</u>	60	100
X	2.1833		X	16.549	
S	3.873		S	10.06	
Median	5.5		Median	14	
Mode	0		Mode	10	

* These 9 had just come and had had no land so they could not have produced any maize. These are not included in the average. Looking at the two tables 15.1 and 15.2 we note that the production level of maize bags per season has greatly improved because in Yatta before migrating the highest yields were 20 bags but after migrating the highest yields are 100 bags. As a whole the mean average has increased to 16.549 from 2.1833, before migrating the median rose from 5.5 to 14 bags. In Yatta also there were 34 people who had produced no maize per season before migrating. But only 9 people who had just come to Yatta and who had no land then reported zero harvests of maize.

In Makueni the highest bags of maize harvested per season before migrating was 60 bags. (This particular person had migrated primarily to go and graze his herds on better grass). But after migrating yields of 240 bags of maize have been realized. Notice too that while 34 people had not harvested any maize before migrating, none reported zero harvests after migrating.

From these tables too we notice that the migrants in Makueni have done better farming-wise than those in Yatta. The physical geography of Yatta explains this difference. Yatta as it has already been pointed out is a drier place than Makueni and this should contribute a lot to what yields are possible. Also plots of land in Yatta are smaller than those in Makueni and according to land potentiality data Yatta which has a rainfall of 20" per annum should strictly be a ranching area.¹ This low productivity of maize in Yatta is a very serious economic drawback because maize continues to be the chief source of income, for many families there. This is because there are no cash crops grown here; although 12 migrants in Yatta were growing vegetables for sale, locally. (These happened to have been allocated plots of land on the irrigation scheme area along the Mutau-Yatta Furrow). Therefore although the maize

¹ Mbithi & Barnes, op.cit, p. 46

yields for migrants have gone up here there is still a potential famine situation. And this echoes very closely the warning of I.L.O. 1972¹ that the movement of population from good land due to land shortage, "to the marginal farming areas of Kenya is creating a potentially serious famine situation".

For Yatta area then, the implication here is that irrigation schemes are necessary if the migrants are going to farm economically and even produce enough crops for subsistence needs. The migrants with the plots of land on the experimental irrigation scheme have already shown that vegetables (tomatoes, cabbages, onions and carrots) and maize and beans can be produced in quantities all the year through irrigation.

Again, information diffused from tables 15.1 and 15.2 lead us to infer that migrants were people who on the average produced very little or no maize and therefore migrated to go and do better farming. This inference is closely supported by the fact that on average non-migrants produced per season more bags of maize than the migrants had done before migrating. In Mwala nobody reported zero harvests although in Kangundo and Masii 5 non-migrants had reported no maize. Significantly, these were among the 36 non-migrants who indicated

¹ ILO: Employment, Incomes and Equality: A Strategy for Increasing Productive Employment in Kenya, 1972, p. 163

that they might migrate later (see table 6). Tables 16.1 to 16.3 have been compiled to show the amount of maize non-migrants harvested. The maize these people harvested is more than the migrants had before migrating (see tables 15.1 and 15.2; 16.1 to 16.3).

Later on in this chapter, tables 16.1 to 16.3 will be discussed further in comparison with maize yields realised by migrants from each of the high medium and low potential areas.

Table 16.1

Maize Yields in Kangundo (Bags)

Bags	F	%
0 - 4	10	25
5 - 9	10	25
10 - 14	10	25
15 - 19	2	5
20 - 24	5	12.5
25 - 29	0	0
30 - 34	3	7.5
N	40	100
\bar{X}	10.30	
S	8.125	
Range	0 - 30	

Table 16.2:

Maize Yields in Masii (Bags)

Bags	f	%
1 - 9	11	27.5
10 - 19	15	37.5
20 - 29	6	15
30 - 39	5	12.5
40 - 49	0	0
50 - 59	1	2.5
60 - 69	2	5
70 - 79	0	0
80 - 89	0	0
N	40	100
\bar{X}	17.425	
S	14.11	
Range	0 - 60	

Table 16.3

Maize Yields in Mwala (Bags)

Bags	f	%
1 - 9	13	32.5
10 - 19	12	30
20 - 29	7	17.5
30 - 39	5	12.5
40 - 49	1	2.5
50 - 59	0	0
60 - 69	1	2.5
70 - 79	0	0
80 - 89	1	2.5
<hr/>		
N	40	100
\bar{X}	18*	
S	15.81	
Range	3.80	

* The figures are high here (i.e. \bar{X}) because of the classes 60-69 and 80-89. It was basically assumed that Mwala which is drier than Masii would have lower yields.

Looking at tables 16.1 to 16.3 we note that the non-migrants in Kangundo on an average produced 10:30 bags of maize. Table 17 below shows that migrants from high potential areas (including those from Kangundo) before migrating produced only 4.669 bags of maize on average. This is obviously below the estimated average per season in Kangundo and therefore we can see here that people who produced this little maize would be pulled to migrate to an area where the average production of maize per season is 26.703 bags of maize for the migrants from high potential areas.

Table 17:

Maize Yields for Migrants from
High Potential Areas

Before Migrating			After Migrating		
Bags	F	%	Bags	F	%
0 - 9	58	98.3	0 - 9	4	6.8
10 -19	1	1.69	10 -19	19	32.3
20 -29	0		20 -29	20	34
30 -39	0		30 -39	9	15.3
40 -49	0		40 -49	3	5
50 -59	0		50 -59	0	0
60 -69	0		60 -69	1	1.69
70 -79	0		70 -79	0	0
80 -89	0		80 -89	1	1.69
90 -99	0		90 -99	1	1.69
100-109	0		100-109	1	1.69
N	59	100	N	59	100
\bar{X}	4.669		\bar{X}	26.703	
S	1.296		S	19.24	

Looking at table 16.2 we note that the harvest in Masii per season was 17.425 bags of maize. But the migrants from medium potential areas of which Masii is one, produced 9.0454 bags of maize per season before migrating (see table 18). This is about half of the maize non-migrants at Masii produced. And therefore a migrant who had such little maize would be encouraged to migrate to an area where he would harvest an average of 25.8636 bags per season. The non-migrant here would also be pulled to such an area where better yields are possible especially because maize in the medium potential areas (Masii for example) is used both for consumption and financial needs. Table 18 below gives the information on how much maize migrants from medium potential areas produced before and after migrating.

Table 18:

Maize Yields for Migrants from Medium
Potential Areas

Before Migrating			After Migrating		
Bags	F	%	Bags	F	%
0 - 9	18	81.81	0 - 9	3	13.63
10 -19	2	9.09	10 -19	7	31.85
20 -29	0	0	20 -29	7	31.85
30 -39	1	4.55	30 -39	3	13.65
40 -49	0	0	40 -49	0	0
50 -59	1	4.55	50 -59	1	4.55
60 -69	0	0	60 -69	0	0
70 -79	0	0	70 -79	0	0
80 -89	0	0	80 -89	0	0
90 -99	0	0	90 -99	0	0
100 -109	0	0	100 -109	0	0
110 -119	0	0	109 -119	0	0
120 -129	0	0	120 -129+	1	4.55
N	22	100	N	22	100
\bar{X}	9.0454		\bar{X}	25.8636	
S	11.96		S	24.36	

Table 16.3 shows that on an average people in Mwala produced 18 bags of maize per season. While table 19 below shows that migrants from low potential areas including Mwala, produced 6.0384 bags of maize, on an average before migrating. Therefore migrants from low potential areas produced only, one third of what non-migrants in Mwala produced. However, at their new areas the same migrants produced 17,064 bags of maize. Thus approximately almost what their counterparts at the home areas produced. And although these migrants from low potential areas do not seem to produce more maize than their counterparts at their original home, they nevertheless have improved their personal maize production almost three times. Hence the fact that the situation of the migrants improved for the better (subsistence wise) indicates that other people in the same category would be encouraged to migrate.

Table 19:

Maize Yields for Migrants from Low Potential Areas

Before Migrating			After Migrating		
Bags	F	%	Bags	F	%
0 - 9	35	89.74	0 - 9	19	48.716
10 -19	2	5.128	10 -19	9	23.076
20 -29	2	5.128	20 -29	2	5.128
30 -39	0	0	30 -39	5	12.820
40 -49	0	0	40 -49	1	2.564
50 -59	0	0	50 -59	2	5.128
60 -69	0	0	60 -69	0	0
70 -79	0	0	70 -79	1	2.564
80 -89	0	0	80 -89	0	0
90 -99	0	0	90 -99	0	0
100 -109	0	0	100 -109	0	0
<hr/>			<hr/>		
N	39	100	N	39	100
\bar{X}	6.0384		\bar{X}	17.0641	
S	1.389		S	17.21	

Cash Crops

Although cultivation of food crops in the areas of in-migration is a very important aspect of land and farming opportunities the lack of cash crops in these areas, acts as a deterrent for some people, who would have otherwise migrated out there.

In Yatta there was no cash crop farming at all. In Makueni only 19 people had grown cotton prior to 1973, but they had given it up due to the amount of farm labour cotton requires and also because transporting it to Machakos was an expensive affair.

Cash crops have a definite pull factor effect, as Owako¹ found out in Machakos. And hence non-migrants in Kangundo who from the data on land holdings had very little land indicated that they would not migrate from their farms because they had cash crops. Of the 40 non-migrants in Kangundo only 7 did not grow coffee as a cash crop. 18 respondents here also grew fruits which they sold as a cash crop (for example passion fruits, oranges and lemons). The macadamia nuts were also grown as a cash crop. For these non-migrants the self-employment returns they get from coffee are far more than the maize. Yield returns in the areas of in-migration. Coffee returns for some respondents per

¹ Owako, op.cit, pp. 240-271, 1969.

season were reported as 7,000/-, 5,000/- and the least reported amount was 2,000/-. Returns from maize sales are not so high because at the time of this research the highest price for a bag of maize was 30/- (K.F.A.) and a migrant cannot sell all the maize because it is also the food for his family.

This then leads us to conclude that migrants are people who have a low income in their areas of origin, especially where there is a lack of cash crops. This ties in with what Caldwell found out in Ghana's rural areas with cash farming. He reports that, villagers stayed back:

"Because they have jobs there and farms from which they get substantial income which is able to maintain them". (1)

Certainly for Kangundo this statement is true because even though maize harvests were low - 10.30 bags of maize - and also the land acreages - almost half of the people interviewed here had less than 1 acre of land, the respondents refused to migrate because of their coffee. The implications for more research into the type and marketing of cash crops that can be grown in these areas of in and out migration are obvious. The need is even greater when we note that there is a dire need for creating alternative ways of raising an income in these areas other than through maize sales for the majority of the migrants.

¹ J.C. Caldwell: African Rural-Urban Migration: The Movement to Ghana's Towns, Canberra, 1969, p. 92.

Owako¹ has made a few observations in Machakos District concerning cash crops which are valuable. On lowland Machakos cash crops that could be grown there include cotton, sisal, tobacco and castor seed. Sisal is a basically plantation crop and its farming can only be encouraged on commercial lines. However cotton growing can be improved. And although it competes with maize in terms of time for planting, labour and immediate cash value, if the price of cotton is raised farmers can be given an incentive to grow it. A farmer will not go into all the labour cotton entails if the highest he can get for it is 50 cents per pound.

There has never been encouragement to grow tobacco in Makueni even though it is geographically well suited to it. And even though the B.A.T. company is not many miles away from this area. Snuff taking is also a very popular habit in Machakos and people would find a ready market for their tobacco.

Castor seed growing would be highly suited to the dry conditions on the lowlands but peasants have never taken it seriously. However, given encouragement they might do so.

¹ Owako: op.cit, pp. 264-265.

Livestock Farming

Livestock is and has always been an important aspect of Akamba culture. It was the only means of accumulating wealth in the past and hence one's social and economic status was closely linked to how much wealth, in livestock, he had. With a lot of livestock one could "buy" oneself several wives because he could afford the bride price payments. Livestock too, has had a high religious value for it was the chief means of transacting all religious rituals. Again cattle are and have been a means of subsistence capital investment especially against bad years and other unexpected tragedies.

This brief summary agrees to a very great extent with what Peter Rigby has observed among East African societies. He says:

"It would be broadly true to say, despite a few exceptions that in East African societies livestock provided the main units of value and the only way in which wealth could be accumulated. They thus constituted the most important heritable property apart from land, and land was not considered heritable property in large parts of East Africa. Livestock not only represented wealth, it also had symbolic value". (1)

¹ Peter Rigby: "Pastoralism and Prejudice: Ideology and Rural Development in East Africa" 1968, p. 3. A paper given at the Sociology and Development Workshop, Kampala.

The Akamba have kept large herds and despite campaigns by the colonial government to destock because of soil conservation and other agricultural issues Joy Adamson, writing in 1967, commented that:

"The Akamba are agriculturalists but also keep large herds which erode the country very badly". (1)

It is therefore against this background of emotions, values and symbols attached to livestock that the occupational opportunity of grazing as a pull factor for the Akamba migrants to Yatta and also to Makueni is to be understood. Yatta as it has been already pointed out is a low rainfall area and the Akamba have for years associated it with grazing of livestock, and before it was declared a Crown Land the Akamba had been herding cattle there in keeping with the pastoralists grazing habits of moving herds from place to place in search of pasture.

And although the biggest economic asset for the migrants was land to cultivate on, there were 81 migrants who had acquired the land for grazing purposes as well (see table 14). However, something very unusual seems to have occurred concerning the herd size or the perceived

¹ Joy Adamson: The Peoples of Kenya, London, 1967 p. 237

opportunity to graze. There is a marked difference between the mean averages of herds the migrants had before and after migrating. See the table below which compares the mean average number of herds for the migrants.

Table 20:

A Comparison of the Mean Average Number
of Herds of the Migrants Before and
After Migrating

Type of Herd	Makueni Migrants		Yatta Migrants	
	Before	After	Before	After
Cows	13.06	11.4	10.433	2.983
Sheep	9.66	6.15	5.483	4.266
Goats	12.45	15.433	7.50	7.10

In all these figures except for goats in Makueni where an increase of 3 above the original mean is noted, the mean averages have a marked drop. The reasons for this are worth studying further. But the migrants argued that their herds were lost during the long trek to these areas (some people had travelled all the way from Kangundo or Mwala to Makueni) and because there were tsetse flies in some of the areas the migrants settled on, they argued that these attacked the herds on arrival and hence reduced them. Again for those migrants from highland Machakos the climatical change affected the herds. With this loss of herds, then it is easy to understand why many migrants who had set out to do grazing and cultivation have ended up doing cultivation only.

The Akamba traditional farming balance between crops and livestock has therefore faced a serious set back in these areas. This is especially so because local seasonal droughts at times occur in these areas of in-migration. In fact Mbithi and Wisner¹ point out they probably occur every year on the marginal lands (Yatta included). When these droughts occur, crop failure also occurs. Therefore if a family has depended only on crops the situation can be very serious for it. This is reflected by the answers of these 57 respondents concerning why they liked mixed farming when they said:

"I can sell animals to buy food from others when the rains fall".

Others felt that herds were "an important aspect of Akamba culture". And even that the herds had more value than the food crops, for example, maize, "Because 1 cow = 3 bags of maize". Herds then are significant economic assets and to the Akamba complimentary to crop farming. Livestock manure is also used for agriculture and the farmer who lacks livestock and the money to buy artificial fertilizers cannot hope for very big yields.

The other economic value of livestock is connected with milk and the fat (ghee) that are sold for money or

¹ Mbithi & Wisner: Famine and Drought, 1972
p. 9, IDS Discussion paper No. 142

are exchanged for food. Migrants with much cows quoted the sales from both fresh and sour milk to point out the importance of keeping cows. Some migrants supplied milk to the local hotels (where tea is sold) and even at the price of 70 cents per bottle, some got 50/- a month from the milk. Sour milk is sold at the market places and in many cases it is used as a supplement to vegetable or meat stews. In these areas where vegetables are hard to come by (dry conditions) milk then gets a high value - both for the selling family and those who buy it.

Because herds have such high values attached to them, the non-migrants whose land was not as big as that of the migrants also kept herds. Out of 120 non-migrants only 10 (8%) did not keep cows and 24 (20%) did not keep goats. Sheep are not very commonly kept in Mwala, Kangundo and Masii because 67 non-migrants out of 120 did not have any. The table below illustrates how many herds on the average each non-migrant had.

Table 21:

Number and Mean Average of Herds
kept by Non-migrants - 120

Type of Herds	Place of Out-Migration		
	Kangundo	Masii	Mwala
Cows No.	236	343	360
Mean	3.9	8.67	9.0
Goats No.	233	294	557
Mean	2.8	7.4	13.0
Sheep No.	81	169	67
Mean	2.0	4.2	1.7

This table needs very little explanation. But it stresses again the value accorded to livestock and the fact that they are "an important aspect of Akamba culture". This is stated here because even where there is an acute land shortage (Kangundo) people still raise up one to 5 cows which are tethered to a tree or stall fed. The table also shows that Mwala location has more cows and goats than either Masii and Kangundo. And that Masii has more livestock than Kangundo. This leads us to observe the statement made earlier that animals were/are kept as an investment. Masii and Mwala are drier than Kangundo is

and have no cash crops. Therefore it is even more important for people here to keep more animals to supplement their financial needs either in drought and famine conditions or at peak financial crisis periods for example at school fees paying times. (There are people who specialize in animal selling and buying business and who at such peak financial periods make a lot of profit.

Looking at table 14, we see that herding in Yatta was given as an occupational opportunity by only 26 of the 81 migrants who had intended to go and graze. Also that in tables 20 and 21 the non-migrants in either Kangundo, Masii and Mwala kept more cows than those migrants in Yatta. This then is an anomaly which is hard to account for since Yatta is more suited to grazing than any other area in this study. Therefore, this leads us to see that there is an obvious lack of knowledge of the economic potential at Yatta and hence more 'education' on this aspect is needed if the migrants here are to benefit at all.

On the other hand, because livestock is also kept as a security for bad years and maize harvests are low here (16.549 bags per season - see table 15.2) - it may be that migrants have sold many of their livestock - and not having had a large maize surplus to sell in order to buy livestock, they have not added on to their dwindling herds.

Businesses

According to table 14 only 5 migrants indicated that they had migrated to either Yatta or Makueni to start business. But there must have been opportunities for doing business there because 46 respondents were engaged in some type of business in Makueni and Yatta. Most of this business was conducted in the urban centres of Wote, Mavindini and Kithimani. Women were mostly engaged in the business of selling food stuff (maize, beans, bananas, millet and vegetables), while the men were shopkeeping, tailoring, brewing and selling of native beer, animal selling and others, included charcoal burning and bicycle repair. This information is tabled below:

Table 22:

A Breakdown of Business Held by the Migrants

Type of Business	Total	%
Shopkeeping	12	26.1
Foodstuff selling (by women)	12	26.1
Native Beer Brewing & Selling	8	17.4
Animal Selling	5	10.9
Charcoal Burning	4	8.7
Tailoring	3	6.5
Bicycle Repair	1	2.2
Spray Painting	1	2.2
No. of Cases	46	100

Except for charcoal burning, all these other business categories are urban centred. The fact that these business opportunities exist there means that people will be attracted to these areas to establish enterprises. Also that 46 migrants had non-agricultural activities indicates that migrants had somewhat improved in their economic status. The implication here is that other non-migrants seeing or hearing of the prosperity of their otherwise counterparts would want to migrate. This situation is generally supported by Gleave,¹ who writing on hill settlement in West Africa observes that the migrants were led to leave the hills for the plains among other reasons because they desired to earn money. Gulliver² too, although dealing with labour migration isolated the economic factor as the overwhelming reason in migration.

The discussion points us to the conclusion that rural to rural migration in Machakos District is related to the agricultural occupational opportunities in the areas of in-migration. These opportunities available have been isolated as mainly self-employment in farming and in businesses which are closely linked to farming activities. Hence the economic motivation in migration has been shown to be an essential factor to consider.

¹ M.B. Gleave: "Hill Settlements and their Abandonment in Tropical Africa", pp.39-49, Inst.of Br. Geog. Transactions No. 40, December 1966, London.

² P.H. Gulliver: Labour Migration in a Rural Economy: A Study of the Ngoni and Ndendeuli of Southern Tanganyika, 1955, p. 16.

It has also been shown that the people from high potential areas who have cash crops do not aspire to migrate.

The opportunities in the destination areas are in a way a reflection of what home conditions have been for the migrants. And we shall in Chapter 5 focus our discussion on the environmental and social calamities (problems - crises) at the areas of origin that have led to out migration. These calamities are closely linked to the economic factor in migration.

CHAPTER 5

ENVIRONMENTAL AND SOCIAL FACTORS
IN MIGRATION

The third hypothesis in this study (which will be tested in Chapter 7), states that within a given rural community people will tend to migrate because of drought or other environmental and social factors. These factors reduce the capacity to generate satisfactory subsistence for the families. This hypothesis is therefore seeking to isolate cases of migrants who moved because of these factors. From previous discussion it has been established that Machakos District has a long history of these environmental factors (see table 2 on the regularity of famine). The factors include famine, caused either by drought in lowland Machakos, or by uneconomically small areas of land. Soil erosion and soil exhaustion are not uncommon there and in fact they have a long history for the destocking campaign of 1938 was to try and combat them.

Environmental Factors

In the three locations of out migration studied that is Kangundo, Masii and Mwala, the most outstanding aspects of environmental factors (crisis) enumerated were drought, famine, poor soils and soil erosion. A table of these factors is given on the next page,

and is to be discussed along with the information on table 24.

Table 23:

Perception of Environmental Factors
Influencing Migration by Non-Migrants

Indices of Crisis or Potential Crisis	Kangundo (40) H.P.	Masii (40) M.P.	Mwala (40) L.P.	Total (120)	%
Drought	0	35	21	56	26.6
Poor Soils*	15	4	25	44	36.6
Famine	13	7	22	42	35.0
Soil Erosion	4	7	17	28	23.3
No. of Responses N	32	53	85	170	141.5
				120	

H.P. = High Potential
M.P. = Medium Potential
L.P. = Low Potential

* Poor soils in Kangundo was given to mean hilly and stony. Perhaps this is also a good point at which to state that much of the data in this chapter is subjective and analysis will be closely restricted to how the community perceived and evaluated migration as an alternative. Wherever possible the objective information presented on the background chapter will be used to affirm or negate the data.

Table 24:

*Environmental Factors Influencing Migration Given by Migrants at

Factor at Home Area	Makueni	Yatta	Total	%
Famine	54	9	63	52.5
Drought	14	2	16	13.3
Poor Soils	9	4	13	10.8
Soil Erosion	0	1	1	0.8
No. of Responses	77	16	93	74.4
N			120	

* Not all gave environmental factors but rather social factors influencing migration. See Table 25, page 148.

Drought

As it can be clearly seen from table 23, drought is a very important environmental calamity in the drier parts of Machakos. Here there were 56 (46%) out of 120 responses, given by 120 respondents, which indicated that drought is a factor in out migration. Kangundo which is a wetter area had no response for this calamity. When a drought occurs there are either crop failures or very poor harvests. And as these droughts increase (see table 2 showing the frequency of drought and famine) people are tempted to migrate out especially when the droughts combine with other environmental factors.

Masii which is a geographically medium potential area had more (35) responses given for drought influencing

migration there than Mwala (21) which is a low potential area. The only explanation which we can offer here is that since Masii people are used to having better rainfall than Mwala people (Masii rainfall is 25-28" annually while that of Mwala is 20 inches) they are more sensitive to its shortage and failure more than the people in Mwala. Hence what looks a normal year at Mwala would be a bad year at Masii. There was a drought (October 1973) when field work was carried out at Masii and Mwala and this could have influenced the perception of Masii respondents on drought and migration.

However, on table 24, there were 16 (13.3%) migrants who indicated that drought conditions at home had influenced their decision to migrate. The large group 52.5% of those who migrated due to famines, by inference, indicate also that drought conditions so much prevalent in two areas of out-migration (Mwala and Masii - low and medium potential areas), could have led to these famines and hence migration.

Poor Soils

In total poor soils received 44 (36) of the responses shown on table 23. In Kangundo there were 15 responses indicating that poor soils influence migration. Poor soils here include hilly and stony pieces of land. It was rather unexpected that Kangundo people would think

of poor soils more than those of Masii where only 4 responses were recorded. The explanation which can be attempted here is that due to the small sizes of land in this area the sensitivity to soil conditions would be high because a given family would be keen to utilize the land to the limit. Hence any slight disadvantage like the terrain of the land would be noted, while at Masii people have more land in comparison and therefore only those who have land with really poor soil would see it as a cause for migration. The other alternative is that since Masii has poor soils anyway, people are not so sensitive to them. However this last alternative is a very weak one because Mwala with still poorer soils than Masii gave 25 responses out of the 44 given for influencing migration. Therefore one can only conclude that Masii people are probably not aware that they have poor soils which reduce the fertility of the land and as such migration from this location is influenced by other environmental factors and not poor soils. The results in this table indicate that people in Mwala are very sensitive to their soil condition and that 62.5% (of 40) people here felt that poor soils influence migration.

Among the migrants (table 24), 13 (10.8%) of them had been influenced by poor soils in their decision to migrate. In areas of destination the soils are relatively fertile since the lands have been uninhabited for a long time.

Famine

Famine was given 13 responses at Kangundo as an influential factor in out migration. In this area however famine is more acute than the responses here indicate. The rainfall (30") and soils here are quite good and one would expect a lot of food to be grown here. But there is such a high population density and hence such small pieces of land that subsistence food production would be inadequate. The other problem here at Kangundo is that much of the land that would have been good for crop farming is under cash crop farming therefore leaving little or no land to do subsistence farming. Therefore maize (the staple food crop in Machakos District) is not produced in sufficient quantities here. The average number of bags produced here as already mentioned in chapter four is 10 bags per season. The migrants from Kangundo always qualified that "we migrated from Kangundo because it is a famine area and so we came here to get rid of famine too".

Mwala with its poor rainfall and soils and high frequency of drought reported 22 cases of famine influencing out migration. Although it has been shown already (in Chapter 4) that Mwala respondents harvested 18 bags of maize per season, this maize is not enough when lack of cash crops leads to the sale of this maize for family needs. All in all famine received

35% (42) of the total responses given as environmental factors in out-migration.

Famine has been shown to be present in Machakos district, and according to table 24 it got 63 (52.5) of the 93 responses given by migrants concerning environmental factors influencing migration. It shows therefore that more than half of the migrants had experienced famine and famine conditions at home before migrating. The reasons for this famine are closely related to the delicate balance between man and his environment - caused by low rainfall (drought), land and population density, soil erosion activities also add to the low productivity of the land and hence famine results.

Soil Erosion

Soil erosion has been shown to be a menace to agriculture in both high and lowland areas of Machakos. And although the rainfall is low over much of this district, as Scott¹ observes "in low drier areas where there is poor vegetative cover" soil erosion occurs. Soil erosion as an influence on migration received 28 (23) responses from non-migrants. Notice that Mwala and Masii with drier, poorer soils and almost no vegetation left

¹ R.M. Scott, "The Soils of East Africa", p. 68 in E.W. Russell, The Natural Resources of East Africa, East African Literature Bureau, Nairobi, 1972, pp. 67-71.

(originally acacia type) have more cases of soil erosion reported than in Kangundo. However among the migrants soil erosion does not have significant responses as an influence on migration. Only 1 (1.08%) migrant indicated that he had problems with soil erosion at the home area.

From the foregoing then we note that the most serious environmental problems in areas of out migration are related to the unproductivity of the land and land size especially in Kangundo, and that these environmental problems combined (an aggregate) have a serious effect on how much one can produce from a given piece of land in such an environment. Therefore a person who, as is the case in this research, has a little land which is in turn subjected to these environmental calamities has to migrate so as to find satisfactory means of earning a livelihood.

Again the factor of land unproductivity and migration has been stressed by Eicher¹ who observes that "ecological constraints" reduce land productivity. Also Mbithi and Barnes² found out that migration among the squatters was related to their "qualitative evaluation of low land productivity" and among some of the phrases used by squatters

¹ Eicher, et.al: Employment Generation in African Agriculture: Michigan State University, 1970, p. 16.

² Mbithi & Barnes, op.cit, pp. 89-90.

to denote the low land productivity and authors give "stony hills, steep hillsides, exhausted soils, diminishing rainfall and being over crowded".

Being over crowded is a social factor and one that leads to over taxing of the environment and tensions among the population. We shall therefore turn to the social factors that influenced out migration.

Social Factors

In this study the social factors that influenced migration were large families, family tensions, (quarrels) neighbourhood tensions, divorce and witchcraft. These are shown on table 25.

Table 25:

Social Factors Given by Migrants for Influencing their Choice to Migrate to

Factor at Home Area	Makueni	Yatta	Total	%
Land (problems of)	60	60	120	100.0
Too many in the family	60	50	110	91.6
Family quarrels	20	15	35	29.1
Neighbourhood tensions	13	7	20	16.6
Divorce	0	6	6	5.0
Witchcraft	0	4	4	3.3
No. of Responses	153	142	295	245.6
N			120	

This information on this table will be discussed together with the information non-migrants gave concerning social factors, and so a table for these has been compiled (Table 26).

Table 26:

Perception of Social Factors Influencing
Migration by Non-Migrants

Indices of Potential Factor	Kangundo (40) H.P.	Masii (40) M.P.	Mwala (40) L.P.	Total 120	%
Land (problems of)	35	38	32	105	58.983
Too many in the family	17	10	21	48	26.966
Problems leading to sale of land	5	8	8	21	11.797
Witchcraft	0	0	4	4	2.247

H.P. = High potential
M.P. = Medium Potential
L.P. = Low potential

The land problem has already been discussed in Chapter 3. So we will not go into details here but only refer to it. We shall discuss each factor separately.

Too many in the Family

Large families caused or influenced migration because in table 25, 110 (37.288%) responses were given for this social factor. In Machakos district, it has already been shown that population densities are high, and hence population redistribution. Large families are either as a result of fathers marrying too many wives or lack of birth control. Migrants indicated that their fathers had had many children and hence large families. Fertility among the Akamba and for that matter Kenyans, has been uncontrolled and due to relatively low mortality (as a result of improved living conditions, and preventive as well as curative medicine) in the recent past, many children have survived. Also where a man has more than one wife the aggregate number of children for the wives is usually more than that of one wife, and hence respondents from polygynous families indicated that they moved because they were too many as "father had 16 wives" or for "father had 9 wives". The land in such families is sub-divided till it becomes too uneconomical to survive on. Non-migrants gave 48 (26.966%) responses on large families influencing out migration.

Family Quarrels

This is closely linked to land shortage. This is because families live close together and as a result find much to quarrel about including the land. Among the migrants 35 (11.864%) responses were given for family quarrels influencing migration.

Many of the family quarrels included such aspects as wives of brothers quarreling over children's fights or co-wives quarreling over lack of favours from the husband to each other. And in general this respondent (migrant) summed up what happens with co-wives when he said that "wives often quarrel in large families" and giving it as a reason for migration. There were 21 (out of 35) cases given where the husbands, along with other factors, had to migrate with one wife so as to separate her from the other one. The other alternative for such husbands is to migrate with both or more wives and settle each wife in a different area where she and her own sons make a household.¹

Widows

Another aspect of family quarrels that could lead and in this case led to out migration is in connection with the state of widows. By Akamba custom such women

¹ Information received verbally.

were taken care of by their husbands' living brothers or kinsmen. But in some cases now, as this female migrant reports the following happens; "after my husband died land was taken away from me and I was told to go away with my small children". In some other cases it is even the father who directs bitterness at his son. This woman migrant put it this way - "my husband (now dead) was an illegitimate child and when his mother died his step father and brothers chased us away".

That this kind of thing can happen to a Mukamba family is of significant note of the degree to which traditional norms have broken. It used to be that women with children were very much in demand especially if they had sons because the sons would help to expand the family. Children were and still are seen as a means of wealth.

Divorce

There were six women who had migrated because they were divorced. Some were divorced because they could not have children. For the Akamba, the traditional role of the woman was first and foremost to have children. Hence a woman had/has very little value if she has no children (large family results!!). All the six divorced women gave their reasons for migrating as follows:

"I migrated because I could not go back to my father's home". And those with children added that they came to "look for some means of supporting their children". A situation like this arises because a divorced woman has no rights of land use, formerly hers through marriage. It seems now that such a woman is no longer able to fall back on her father's or relatives' support as is the case of these quoted above.

Although the category of those who migrated because they were divorced is small, literature isolating divorce as a cause of migration, mostly rural-urban migration, gives it significance. Papers by Gachuhi¹ and Nici Nelson² indicate this.

Neighbourhood Tensions

These tensions are closely connected with land shortage. Neighbours live so very closely together that as migrants said "you can't even keep hens because the land is so small, that they may go to your neighbour's land hence causing trouble".

Land court cases also spark off neighbourhood tensions. Land pressure in areas of out migration leads to a situation where some neighbours want to deprive

¹ J.M. Gachuhi: "Anatomy of Prostitutes and Prostitution in Kenya". IDS Working Paper No. 113, July 1973, p. 9.

² Nici Nelson: "Buzaa Brewing in Mathare Valley" 1973 Department of Sociology, Nairobi University, p. 8.

others off their land. At least 9 (11%) migrants reported that their land was alienated this way and they had to migrate. Other social problems leading to land alienation were discussed in Chapter 3.

Hence in this chapter the argument leads us to see that population pressure has sparked off family and other social tensions. The pressure on the environment combined with these social pressures have led to out migration. The out migration has been directed to the goal of finding better means of livelihood and a satisfactory production from the environment - land.

There were other social factors that a migrant had to consider before migrating and hence in Chapter 6 we will focus our discussion on these and other personal characteristics of migrants.

CHAPTER 6

GENERAL AND OTHER SOCIAL FACTORS
IN MIGRATION

The process of migration decision has so far been focused on landlessness or near landlessness conditions and the economic factors. In this chapter attention will be drawn to the general considerations a migrant has to make - one of these is the network of social relationships. Distance to be covered is another one. And also we shall try to point out here what influence the dramatizational effects of the migrants have on the would be migrant in the rural context. We shall therefore be more concerned here with the 'how' and 'who' of migration than the 'why' of it. We shall here be discussing the hypothesis that migration at the individual level is related to distance, kinship and other migrant's differential factors. Some of the data presented here is limited by subjectivity and therefore not rational or objective. However this limitation needs not suggest that the data is necessarily unreliable for as Jackson observes:

"The rational element in the decision to migrate is only partial and depends on the variations of personality, information, emotion and independence of the individual". (1)

¹ J.A. Jackson: Migration, Cambridge University Press London, 1969, p. 7.

We shall begin here by analysing the information the migrants had that helped them to decide. The following table gives the general picture of this information and other relevant data in this section.

Table 27:

General Factors in Migration Decision

Indices	Total	%
People talked of large harvests	57	47.5
It is near home	34	28.3
People talked of much land	33	27.5
My relatives were here	32	26.5
I had been here before	29	24.2
People talked of good herds*	19	15.8
No. of Responses	204	169.8

* This was especially the case where herds did not die or where the would be migrant did not know exactly what the actual situation was.

Information

These migrants obtained this information from their friends who had either migrated or had been to these destination areas. They hence trusted them and decided to migrate. The friend-trusting migrants were as we can see economically influenced even though they had never been to the areas where these large harvests were

(although as we shall see later these in migration areas are relatively near the areas of out-migration). Another set of information was available to at least 29 (24) migrants who had been to the areas and psychologically and rationally been influenced to migrate by what they saw. Relatives would also give information and effectively dramatize to their kinsmen the effects of migration. Therefore it was easy for the migrants to make up their minds on migration. Non-migrants, too, seemed to have been very favourably impressed by the well doing of the migrants they had known at their home areas.

Hence when the non-migrants were asked to rate their friends who had migrated, as having done better, worse or same, 85 (70.83%) of 120 respondents indicated that the migrants had improved in their conditions 20 (16.66%) were said to have done worse, (4.166%) same, and 10 (8.33%) did not know. The reasons the 85 respondents gave for rating the non-migrants so are given in the following table.

Table 28:

Reasons for Rating Migrants as Having
Done Better

n = 86

Reason	Total	%	
They have property (houses and business)	65	33.163	76%
Have enough food (maize, etc.)	40	20.468	47%
Have big land	39	19.897	46%
Have big herds	22	11.224	26%
Have not returned	20	10.204	23%
Are healthy	5	2.551	6%
Have many children	5	2.551	6%
<hr/>			
No. of Responses	196	100	

In chapter 4, we discussed the importance of crop and animal farming to the Akamba. And also noted that the crop yields per season for the migrants were higher than their counterparts had at home. Also that these same migrants had generally very little crop harvests before migrating. Again it was shown earlier (chapter 3) that these migrants had now either acquired or bought larger plots of land. This table here then corresponds to this assessment and shows that non-migrants have a fairly good picture of what achievements the migrants have made. Hence the economic improvement dramatization was apparent to the non-migrants. We

can, infer here then that since non-migrants were so very much aware of the improved conditions of their migrant friends, and since the migrants indicated that their friends had talked to them about conditions in the places of destination, the information a person receives influences his decision to move (although of course not all the people move). This information however may not tally with what the person experiences after migration. And that is why 20 (16.66%) friends of the non-migrants, who had migrated returned home - and were then rated as having done worse than those who had not returned or migrated at all.

Social Considerations

It is obvious that migrants decided to migrate to the places where there was land to farm on. But along with this primary choice, the social relationships played an important role. These social relationships were characterised by family ties. Migrants were asked to indicate with whom they migrated and these findings are shown and discussed below in table 29.

Table 29

Figures Computed from Responses of
Migrants indicating with whom they
Migrated

Response	Total	%
Migrated with family	102	85.11
Migrated alone	9	7.5)
Migrated with relatives	8	6.66)*
Migrated with friends	1	0.833)
No. of Cases	120	100

* These were not married at the time of out migration.

The Family

On this table migrants who travelled or migrated with their nuclear family were 102 (85.11%). Migrants reasoned that one had to migrate with his family "because one does not leave his family behind if one means to go and settle permanently". Significantly too, the non-migrants did not think that someone had completely migrated if he left his family behind except in the cases where one wife and her children had been left behind on the original land.

Byerlee¹ states that women and children migrate with their head of family, and this was found to be the case in this research. Migration to these areas has of necessity to be one of families. This is especially due to the work connected with clearing the bush, digging the land, planting, harvesting and shooing both birds and animals from the farms. Shooing was necessary some years ago because there were many wild animals and migrants had to guard their gardens against them if they (migrants) were to harvest anything at all. There were 35 (29%) migrants who reported that animals had been a real threat to them at first. (Now there are hardly any big game animals because much of the bush has been cleared).

Thus the head of family needs plenty of manpower to do any appreciable amount of work or to grow enough food crops for subsistence needs. This is so because we know that the amount of farm labour is determined by the size of the family or its developmental cycle in peasant agriculture.² And since the migrants got bigger pieces of land than they had had at the original areas (see tables 3&4) the whole family had to be brought along for this work.

¹ Byerlee: op.cit, p. 3.

² Forbes Watt, Arthur Lewis et.al: "Rural Labour"
A Class Handout by Dr. Mbithi.

Relatives and Migration

On table 27 showing general factors in migration decision there were 32 (15.7%) responses which indicated that migrants were influenced to go to a certain area "because my relatives were there." It was important to migrate out to the areas where ones kinsmen had gone to, for they were the people one stayed with initially before building a house. In times of crisis and for food supply in the early period of settlement, the kinsmen would be the people to fall back on. Kinsmen had also influenced them because in many cases they were the closest people to them to dramatize migration benefits. The kind of relatives the migrants were keen to follow were mother, father, brother and uncle. The 8 (6.66%) migrants on table 29 were grown up men when they migrated and had followed such relatives. And they stayed with these kinsmen till they could set up a home. 9 (7.5%) of the migrants on this table too migrated with their friends and only one migrated alone.

We see then that social contact among migrants was high since families, friends and relatives migrated together. This may be one reason why as we shall see in the discussion on distance below, people from one home area tended to migrate to the same area of destination.

Distance

Migration is a costly affair, both in transportation and at the initial stages of settlement. Hence it would follow that migrants would include distance to their other decisions leading to migration. One of the obvious advantages of being near home is that relatives would give support to them before they could grow their own food. And since also many of the migrants (50% of 120 migrants) sent material support to their relatives, being nearer them would be helpful in terms of social communication. It also means that one has a fairer idea as to what type of place one is migrating out to if it is near where one comes from. And therefore in this section we will base our discussion on whether or not our data show any relationship between distance and places of migration origin and destination. The data on the areas of origin and destination are shown on this table.

Table 30:

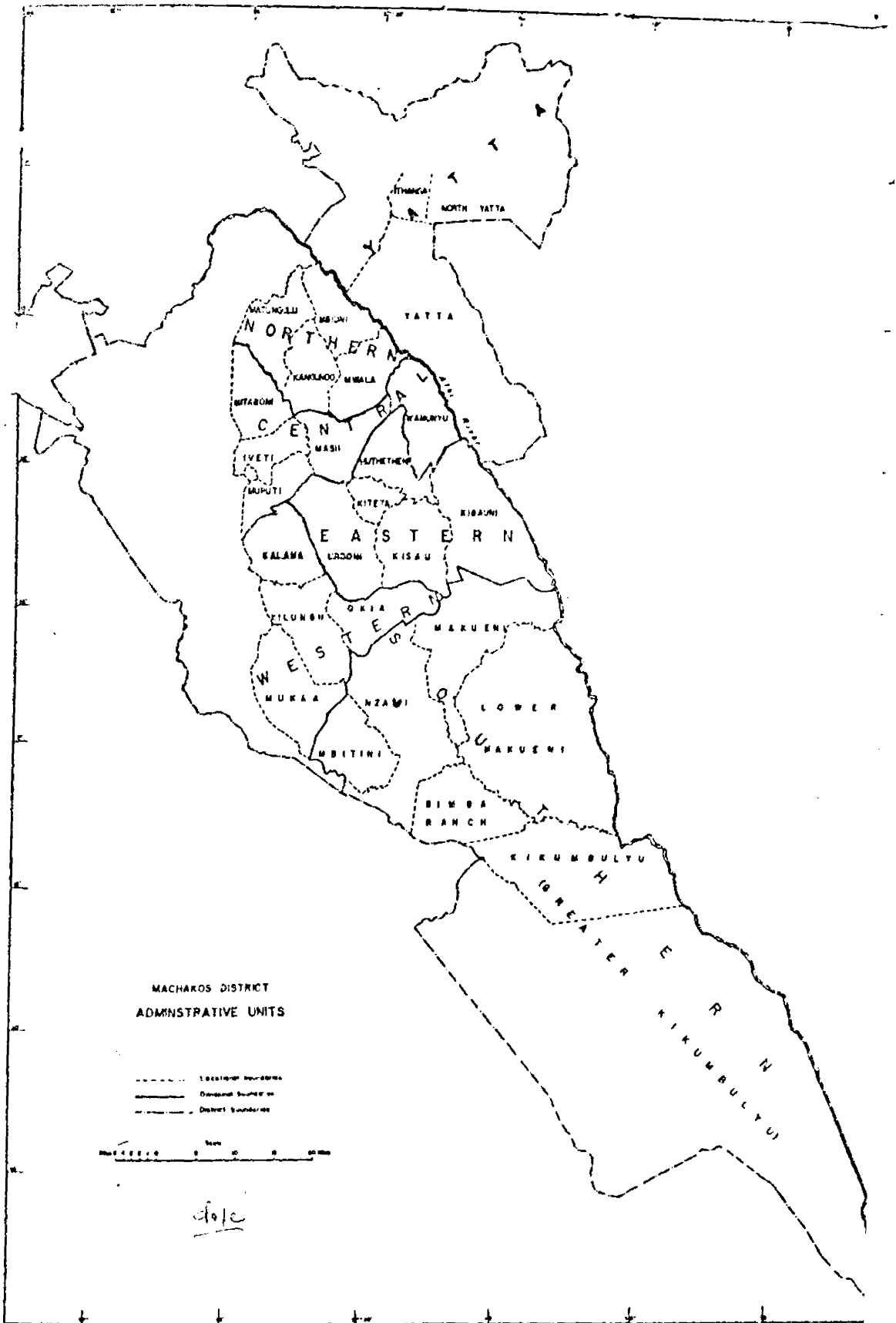
The Place of In-Migration is Related to
The Distance away from Home (Place of
Out-Migration)

Place of Out-Migration	Place of In-Migration			%
	Makueni	Yatta	Total	
<u>Closest to Yatta:*</u>				
Kangundo	7	13	20	16.6
Matungulu	4	3	7	5.8
Masii	5	2	7	5.8
Mwala	2	12	14	11.6
Mbiuni	0	14	14	11.6
Mitaboni	0	4	4	3.3
Wamuyu	0	3	3	2.5
Muthetheni	1	0	1	0.9
<u>Closest to Makueni:</u>				
Kilungu	8	0	8	6.6
Kiteta	7	0	7	5.8
Mbooni	6	0	6	5.0
Kibauni	4	0	4	3.3
Kalama	3	1	4	3.3
Ukia	2	0	2	1.6
Kisau	2	0	2	1.6
Mbitini	1	0	1	0.9
<u>Approximately Equal Distance to Yatta & Makueni</u>				
Iveti	4	6	10	8.3
Muputi	2	2	4	2.2
Mua	2	0	2	1.6
<hr/>				
No. of Cases	60	60	120	100

* This categorization is based on the map on page
165 b.

For discussion of this table we need to look at the administrative map of Machakos District on the next page. It will be seen that the migrants places of origin and destination on this table corresponds very closely to the distance between the two areas. Notice for example that of the 20 (16.66% of 120) migrants from Kangundo 13 migrants (65%) went to Yatta and only 7 (35%) went to Makueni. Yatta as shown on this map is separated from Kangundo by only one location (Mbiuni) and one can board a bus directly to Yatta from Kangundo. On the other hand a migrant from Kangundo who goes to Makueni has to travel a long way (about 100 miles or more) and has to change buses at least twice or thrice depending on which part of Makueni he goes to.

Another example which very clearly illustrates this distance and migration relationship is that of migrants from Kilungu. 8 (6.66% of 120) migrants came from Kilungu. And all of them migrated to Makueni. There is only one location (Ukia) separating Kilungu from Makueni. We could go on pointing out numerous examples from this table to illustrate this but these two will suffice. The only location on this table that does not fit into this simple relationship is Muputi where 2 (50%) of the 4 migrants from this location go to Yatta and the other half to Makueni. Muputi is nearer Machakos township (next to it) and hence on the direct bus routes to either



MAP IV

Makueni or Yatta. Thus this availability of transport to either area of destination is the only feasible explanation we can offer here.

The emphasis on distance was also very clearly indicated by non-migrants when they were asked to rank their preferences for a place they would wish to migrate out to if they did. Their choices are given on table 31. Among other reasons for preferring to migrate out to certain areas the factor of their proximity to home was important.

The areas of destination on this table include others apart from the ones that are already familiar (Yatta and Makueni). This is because some non-migrants would wish to go to other areas where "rainfall and climate are better than those of Yatta or Makueni" as they said.

Again looking at the administrative map and this table, we can see that the majority of the non-migrants felt that if they were ever to migrate they would go to areas, nearer home. Half (20 i.e. 50%) of the respondents at Kangundo would choose to migrate out to Yatta as compared to the 4 (10% of 40) from there who would go to Makueni. 24 (60% of 40) of those at Mwala would also choose to migrate to Yatta which is next to Mwala, while 3 (7.5%) out of 40 would choose to go to Makueni from Mwala. The

Table 31:

Assessment of the Importance of Distance
in Migration by Non-Migrants

Areas of Destination	Areas of Origin			Total	%
	Kangundo	Masii	Mwala		
Yatta	20	13	24	57	47.5
Makueni	4	23	3	30	25.0
Rift Valley	1	1	0	2	1.66
Ngong	2	0	0	2	1.66
Mwea	2	0	4	6	5.00
Kilimambogo	6	0	4	10	8.33
Koma Rock	2	0	1	3	2.50
Ngwata	0	0	1	1	0.833
Kisau	1	0	0	1	0.833
Don't Know	2	3	3	8	6.66
No. of people	40	40	40	120	100

situation however, reverses for Masii where 24 (60% of 40) would choose to migrate out to Makueni which is farther from Masii than Yatta is to it. Only 13 (32.5%) respondents from here would choose to migrate out to Yatta. And although the route to Yatta from Masii by bus is more direct than that of Makueni to Masii, non-migrants at Masii felt that Makueni was their ancestral home and they would rather migrate out there.

Notice that the further the area of destination is from the area of origin the fewer the choices to go out there. See for example how only 1.66% of 120 non-migrants would desire to go to either Mwea (in Embu district) or to Ngong (in Kajiado district).

From the analysis of data on migration and distance we conclude here, therefore, that along with other considerations for migrating (e.g. to go to the ancestral home), the distance between the area of origin and the area of destination generally influences the migrants' choice. This finding from the data here, affirms what Spengler, J.J. (1952)¹ said, that:

"the volume of migration is conditioned by interregional differences in the availability of economic opportunity and by distance".

¹ Spengler, J.J. "Population Theory", A Survey of Contemporary Economics, 1(1952), from Migration by J.A. Jackson, London, 1969, p. 12.

Another sociologist Everett Lee¹ observes also that distance is an obstacle to migration, because the further the distance the more costly transport becomes. And Hirst² found out that migration into Bukoba declined with distance from Bukoba because among other things migrants counted the cost of travelling.

Some Personal Characteristics of Migrants

The personal characteristics of migrants (household heads) include age, education, economic and marital status. The economic and marital status have been discussed already. Migrants were predominantly married people with families, whose sizes did not differ from the size of families in the areas of origin. So in this section of Chapter 6 we will discuss the age and educational level of migrants.

The Age of Migrants

Unlike that of rural to urban migrants who are young (15-19³ years in Ghana and 20-25⁴ years in Kenya) the rural migrants in Machakos district are predominantly in the age group 20 to below 50 years of age. After 50 years of age people begin to think they are too old

¹ Lee, E.: "A Theory of Migration". In Migration by Jackson, op.cit., p. 287.

² Hirst, M.A.: "A Migration Survey in Bukoba Town, Tanzania". Occasional Paper No. 44, Department of Geography Makerere University, Kampala, 1971, p. 61.

³ Caldwell, J.C.: op.cit. p. 58 (1969)

⁴ Rempel, H.: op.cit. p. (1970)

to migrate. The ages of the migrants are computed in table 32.

Table 32:

The Age Distribution of Migrants*

Age	f	%
20 - 24	32	26.66
25 - 29	17	14.166
30 - 34	19	15.833
35 - 39	13	10.833
40 - 44	20	16.666
45 - 49	7	5.833
50 - 54	12	10.00
N	120	100

* There was some difficulty in computing the ages because many migrants, although they remembered and knew which year they migrated to Makueni and Yatta they did not always know when they were born. Rough estimates of their ages were either based on the ages of their first born or according to which well known phenomenon, for example, famine, they associated their birth periods with. Hence for many migrants these ages are not in absolute figures. However the young migrants from this table have a higher propensity to migrate. The group of migrants 50 years and over was mainly made up of mothers who had migrated with their married sons and who were members of large polygynous families. These findings are supported by Ominde(1) who found out that rural migrants ranged from 15-54 years of age.

¹ Ominde, op.cit., pp. 135 - 136.

Education

The educational level of rural to rural migrants is very low, and this is not surprising in the context of Africa or Kenya because literacy is very low, G.W. Jones, commenting on Africa's educational level says that:

"Africa has still a long way to go.....
it lags well behind Asia and Latin
America". (1)

And therefore the majority of ruralites in Kenya are uneducated. In this thesis the migrants' level of education was found to be low generally as shown in table 33.

Table 33.

Educational Levels of Migrants

Educational Level	Makueni	Yatta	Total	%
None	25	32	57	47.5
Standards 1-3	10	8	18	15.0
Standards 4-8*	21	18	39	32.5
Form 1-4	2	2	4	3.3
B. Arts	2	0	2	1.7
N	60	60	120	100

* Primary education before 1962 went up to standard 8 in Kenya.

¹ G.W. Jones, "Educational Goals in Tropical Africa" p.291. In Population Growth and Economic Development in Africa - Ominde and Ejiogu, New York, 1972, pp. 291-303.

The figures here in this table compare very closely to the ones of non-migrants educational levels compiled on Table 34, except for the two graduates shown on table 33. Exactly 62.5% in each table had less than 4 years of education.

Table 34:

Educational Levels of Non-Migrants

Levels of Education	No. of People	%
None	64	53.3
Standards 1-3	11	9.2
Standards 4-8	42	35.0
Forms 1-4	3	2.5
N	120	100

There is therefore no difference between the educational level of the rural to rural migrants and the non-migrants in the rural areas as tables 33 and 34 show.

The educational level of the migrants in Makueni (see table 33) is higher than that of Yatta migrants for all levels reached except forms 1-4 where each has 2 people. There are two University level educated migrants in Makueni. Also the non-literate migrant group in Makueni is lower than that of Yatta. Although

migrants were quite happy to give information concerning the educational levels attained many were quite embarrassed to appear so lowly educated. They qualified it with a statement like "my father ate my fees" (Nau niwandiie viisi) or that "I went to look after the herds while others went to school."

CHAPTER 7

CONCLUSION

At the beginning of this research study, several aspects of rural to rural migration and employment in Machakos District were set out. In this chapter we want to show whether or not the question of who is the rural to rural migrant was answered. Also whether or not the study has established why the rural migrant decides to migrate and what pattern this migration takes. In order to answer these questions several variables looked into here are discussed below.

The Land Factor

This study has attempted to show that a rural to rural migrant in Machakos District is a person with very little or no land. The study shows too that rural migrants from the high potential areas are much worse off before migrating than many migrants from either medium or low potential areas in terms of land size or ownership. This is because migrants from high potential areas are literally landless, and/or if they have any land at all, it is so small that a family cannot subsist on it (see table 7B).

Migrants from medium and low potential areas are mostly in the category of "having had little land" before migrating rather than "having been landless". However the land sizes of these migrants are much more below those of the non-migrants in the particular potential area.

The study has also shown that land shortage in these areas is aggravated by the environmental conditions which make it difficult for a given family with a given piece of land to grow enough subsistence foodcrops.

Therefore we conclude here that the rural migrant who is landless or near landless migrates so as to go and get much more land where he can at least grow enough food crops to feed his family. And this conclusion is strongly supported by the mu-test of the hypothesis number one, in chapter (that at the individual level the rural to rural migration is related to landlessness) which rejects the Null hypothesis at the 5% significance level.

The Economic Factor

The rural to rural migrant as well as having little or no land before migrating is also characterised by having little or no subsistence food (maize) crops. In all cases (whether from high, medium or low potential areas) migrants were people who had produced less maize before migrating than the non-migrants in the respective original home areas (compare tables 16.1 to 16.3 with tables 17-19). However this study has shown that migrants produce more maize in their new home areas than what they had produced before migrating. So we then can see here that they have improved their subsistence food supply at the individual level at least.

The study has shown too that migrants have improved in business enterprises since only 5 had gone out to do business originally but 46 of them were engaged in one type of business or the other at the time of research.

However, these businesses were shown to be dependent on agriculture and therefore we conclude here that the occupational opportunity that pulled people into the areas of destination was self-employment in agriculture. However this occupational opportunity can only be realised in cases where land is available

and thus a few (9) migrants had no income at all since they had not obtained land at the time of research. It has also been shown that a rural migrant decides to go to a particular area either because others have talked to him concerning the large harvests there or because he has been there and seen for himself.

In chapter 7 the hypothesis number two, that rural to rural migration is related to perceived and actual subsistence and income earning opportunities in the area of destination was tested. And since the opportunities at the areas of destination were mainly agricultural the test strongly supports this hypothesis. So we conclude here that people who produce very little or no food crops (maize) due to landlessness will aspire to migrate to other areas where they can produce more (maize) foodcrops. This research has also shown that there is a strong relationship between the amount of land one has and the amount of crop he can produce. Thus migrants who had little or no land were found to produce little or no maize - compare at least tables 7 and 17 showing respectively land size and maize yields for migrants from high potential areas.

The Environmental Factor

The environmental factors that were found to be significant in influencing migration were drought, famine and poor soil conditions. These environmental factors reduce the productivity of the land. Therefore although a person for example in Mwala (low potential area) may have more land than a person in Kangundo (high potential area) he is 'forced' to migrate because the productivity of his land is too low to cater for his family's subsistence needs.

The Social Factor

This research has also sought to establish whether or not the social factors or problems that have mainly sprung up because of land shortage, land adjudication and its consequences have any relationship to migration. The results on the social aspects of migration do very strongly indicate that some people who have been made landless through the adjudication process or through the appropriation of land by relatives have migrated. The appropriation of land by relatives does also indicate a serious breaking up its traditional values and social norms, in families and communities in rural Machakos. The social problems that lead to migration also stem from population growth that exacts pressure on the land. Thus tensions

are created between people who live very closely together.

The chi-square results which were used to test the hypothesis number three at the 5% significance level in chapter 7, have rejected the Null hypothesis. Thus for this research we have shown that environmental and social factors do influence migration.

Other Factors

This research has shown too that a rural migrant is a person between 20-50 years of age and one who usually has little or no education. Such a person is likely to be married for 85% of 120 migrants were already married before migrating.

From the foregoing then we have shown that the questions of who migrates and why he migrates have been answered in this research study. And now we shall make our conclusion concerning the pattern this migration takes.

From evidence in chapter 6, we know and can conclude that a rural migrant moves with his nuclear family and tries to settle where his kinsmen have gone to. He also tries to go to the area nearest his home but the distance travelled is secondary to the land or occupational needs for some migrants travel

Summary of the Research Findings

In brief, the major findings of this research are:

- (a) That migration in the out-migration areas of rural Machakos is related to landlessness.
- (b) Landlessness is in part caused by population increase. The land adjudication policy is the other cause of it.
- (c) Environmental factors such as drought, famine and soil infertility influence migration.
- (d) Although a person in areas, for example Mwala, which are dry may have more land than a person in areas, for example Kangundo has, he is 'forced' to migrate because the productivity of his land is too low to cater for his family's subsistence needs.
- (e) The economic motivation for migration is directed to farming opportunities initially but business facilities open up to the migrant. These businesses are backed up by agriculture.

(f) The lack of cash crops in out-migration areas encourage migration to areas where there is more land.

(g) The breaking up of traditional values and social norms in families and communities in rural Machakos has led to migration for some people.

(h) Migrants in Yatta are getting less acres of land than the viably estimated 50 (62.5) acres per family head.

(i) Some migrants still keep small pieces of land at their original home areas, some of which are 'donated' to relatives.

The Implications of Some of these Findings

The Land Issue

Since migrants are pushed away from their home areas by landlessness, it logically follows that as long as there is available land in rural Machakos rural migration will continue. But the future prospects of this obvious bridge over landlessness can be questioned here. What is to happen to rural Machakos when no more new lands can be available for resettlement. This dilemma is already setting in.

Again even if at present there is enough land, will there be enough for the future generation? This question is raised because landlessness is a factor of population growth. The temporary check on landlessness through migration does not hide the fact if the present population growth is left to continue, the serious fragmentation of land which has occurred in areas of out migration will be repeated, in the areas of destination. Hence a serious check on family size is urged here.

The idea of 'leaving' land to immediate kinsmen by some migrants, raises some problems as far as traditional land tenure connotations go. This is because the Akamba land tenure system provides for family members to have a share in ancestral lands either for religious or social values. It is usual then for family members to go under great pains to secure their share of this land. Thus the issue at stake here is whether or not the children of such fathers "who have left the land to their kinsmen" will not want to go back home and claim these lands. If this happens then, local and court land litigation cases may increase in the future especially in areas where land adjudication has not been carried out yet.

Since land adjudication is causing loss of land for some people, the officers adjudicating land need

to be conversant with the Akamba land practices, so as to be able to assist the victims. Allegations of unfair dealings in land on the part of these officers were often made.

The fact that migrants at Yatta, a dry area, are getting ~~an~~ uneconomically small farms suggests that migration at least to this area does not seem to solve any long term economic needs for the families. All the family in this area can do is produce the equivalent of the average family at the areas of out migration (compare maize yields for non-migrants from low potential areas with the maize yields for migrants from low potential areas on tables 16.3 and 19). And considering that cash crops are not grown in Yatta at all, it is very obvious that the economic needs of the migrant families here are quite acute inspite of the fact that the production at subsistence level per family has improved.

The Environmental Problem

The obvious needs in the dry areas of Machakos would be irrigation. But because this is a long term plan issue, the short term solutions could be:

(a) More intensified research on dry land farming especially to help the farmer who has little land.

(b) An increase of properly, trained agricultural assistants who can advise the people on the benefits of early planting so that they can catch the rains.

(c) Since soils on the whole are exhausted education on the use of fertilisers is essential - soil conservation education to be stepped up in all areas.

(d) Maize yields in highland Machakos could be increased by the introduction of hybrid maize especially suited to high altitudes.

(e) The suitable cash crops in areas where none exists should be urgently introduced. Farmers should be given every assistance in this. This would enable them to cater for the food and financial needs of the family.

The Social and Traditional Values

Since these are breaking and causing migration - a serious research in to why this is happening should be done. A suggestion from the findings of this research is that individualization of land is responsible for this. However this may well lie in some other factors, for example, the lack of education on traditional values by parents to their children could be one.

Possible Future Research Areas

This study has by no means exhausted the personal factors in migration and this could be a fruitful research area.

Migration due to socio-psychological factors was touched on in Chapter 6 where the family was discussed. But a host of other factors, for example, the role of crime in Migration were left out. It would be stimulating to see what findings, would emerge in a research on the socio-psychological factors of rural migration in Kenya.

The step migration hypothesis although ignored in this research could yield valuable information and findings on the whole question of the "pattern" that rural migration or rural-urban migration takes in Kenya.

Finally, this research study did not test hypothesis number four, which includes such variables as the distance travelled and the information available to the migrant. And although research outside Kenya has tested this hypothesis, it would be interesting to see what findings come from a test of these aspects of migration in Kenya.

BIBLIOGRAPHY

1. Adamson, J. The Peoples of Kenya. Collins and Harvill P. London, 1967.
2. Beijer, G. "Modern Patterns of International Migratory Movements". In Jackson, J.A. (ed.) Migration, Cambridge University Press, London, 1969.
3. Blalock, M. Jr., Social Statistics, McGraw-Hill Book Company, New York, 1972.
4. Caldwell, J.C. African Rural-Urban Migration: The Movement to Ghana's Towns, Australian National University Press, Canberra, 1969.
5. Caldwell, J.C. "Introduction to Part I". In Caldwell J.C. & Okonjo, C. The Population of Tropical Africa, Columbia University Press, New York, 1968.
6. Church, H.R.J., Environment and Policies in West Africa, D. Van Nostrand Company Inc. Princeton, 1963.
7. Cohen, S.P. Modern Social Theory, Heinemann, London, 1968.
8. Deutsch, K.W. The Nerves of Government: Models of Political Communication. The Free Press, New York, 1966.
9. De Wilde, J. "The Manpower and Employment Aspects of Selected Experiences of Agricultural Development in Tropical Africa". In I.L.O. Employment in Africa: Some Critical Issues, Geneva, 1972.
10. Ginsberg, R.B. Two Papers on the Use and Interpretation of Probabilistic Models: With Application to the Analysis of Migration: Centre for Environmental Studies, w, p. 73, London, 1971.

11. Gleave, M.B. Population and Settlement in Tropical Africa: Hicks Smta and Sons Ltd., Wellington, 1971.
12. Government Printer, Kenya Population 1969 Census Volumes I-III.
13. Government Printer, Statistical Abstract, 1972
14. Gulliver, P.H. Labour Migration in a Rural Economy: A Study of the Ngoni and Ndendeuli of Southern Tanganyika. East African Institute of Social Research, Kampala, 1955.
15. Gulliver, P.H. "Incentives in Labour Migration". In Van Den Berghe (ed.) Africa: Social Problems of Change and Conflict. Chandler Publishing Company, San Francisco 1965.
16. Hance, W.A. Population, Migration and Urbanisation in Africa, Columbia University Press, New York, 1970.
17. Hance, W.A. African Economic Development, Frederick A. Praeger, New York, 1971.
18. Hunter, G. The Societies of Tropical Africa: A Selective Study. Oxford University Press, London, 1962.
19. I.L.O. Report V(1) Migrant Workers in Underdeveloped Countries, Geneva, 1953.
20. Why Labour Leaves the Land: A Comparative Study of the Movement of Labour out of Agriculture: Geneva, 1960.
21. I.L.O. Employment, Incomes and Inequality: A Strategy for Increasing Productive Employment in Kenya. Geneva, 1972.

22. Isajiw, W.W. Causation and Functionalism in Sociology. Routledge and Kegan Paul, London 1968.
23. Jansen, C. "Some Sociological Aspects of Migration" In Jackson, J.A. (ed.) Migration. Cambridge University Press, London, 1969.
24. Jones, G.W. "Educational Goals in Tropical Africa" In Ominde & Ejiogu, Population Growth and Economic Development in Africa. Heinemann, New York, 1972.
25. Kerlinger N. Fred., Foundations of Behavioural Research. Holt, Rinehart & Winston, Inc., New York, 1947.
26. Lee, E. "A Theory of Migration". In Jackson, J.A. (ed.) Migration, Cambridge University Press, London, 1969.
27. Madge, J. The Tools of Social Science, Longmans London, 1953.
28. Maini, K. Land Law in East Africa, Oxford University Press, Nairobi, 1971.
29. Malinowski, B. The Dynamics of Culture Change. Yale University Press, Yale, 1961.
30. Mayer, P. "Migrancy and the Study of Africans in Towns". In Van Den Berghe (ed.) Africa: Social Problems of Change and Conflict. Chandler Publishing Company, San Francisco, 1965.
31. McNemar, Q. Psychologic Statistics, John Willey & Sons, Inc., New York, 1957.
32. Meek, C.K. Land Law and Custom in the Colonies, Cass Library of African Studies, No. 75, London, 1949.

33. Mitchell, J.C. "The Causes of Labour Migration". In The Sixth Inter-African Labour Conference: Migrant Labour in Africa South of the Sahara, Abidjan, 1961.
34. Morgan, W.T.W. Nairobi City and Region, Oxford University Press, Nairobi, 1967.
35. Mueller et.al., Statistical Reasoning in Sociology, Mifflin Company, Boston, 1970.
36. Ominde, S.H. Land and Population Movements in Kenya. Heinemann, New York, 1968.
37. Ominde & Ejiogu, Population Growth and Economic Development in Africa, Heinemann, New York, 1972.
38. Peatmann, J.G. Descriptive and Sampling Statistics, Harper & Brothers Publishers, New York, 1947.
39. Prothero, R.M. "Migration in Tropical Africa". In Barbour K.M. & Prothero R.M. (eds). Essays on African Population. Routledge and Kegan Paul, London, 1961.
40. Reichmann, W.J. Use and Abuse of Statistics. Penguin Books Ltd., Harmondsworth, 1964.
41. Rempel, H. Labour Migration into Urban Centers and Urban Employment in Kenya. U.S.A. 1970
42. Rose, A. Migrants in Europe: Problems of Acceptance and Adjustment. The University of Minnesota Press, Minneapolis, 1969.
43. Scott, R.M. "The Soils of East Africa". In Russell E.W. The Natural Resources of East Africa. East African Literature Bureau, Nairobi, 1972.

44. Selltitz, C. et.al, Research Methods in Social Relations, Holt, Rinehart & Winston, New York, 1959.
45. Sorenson, M.P.K. Land Reform in Kikuyu Country: A Study of Government Policy. Oxford University Press, Nairobi, 1967.
46. Southall, A.W. "Population Movements in East Africa" In Barbour & Prothero (eds.) Essays on African Population: Routledge & Kegan Paul, London, 1961.
47. Spengler, J.J. "Population Theory: A Survey of Contemporary Economics, 1(1952). In Jackson, J.A. Migration. Cambridge University Press, London, 1969.
48. Spiegel, M.R. Theory and Problems of Statistics: Schaum's Outline Series. McGraw Hill Book Company, New York, 1961.
49. Swynnerton, R.J.M. A Plan to Intensify the Development of African Agriculture in Kenya. Government Printer, 1955.
50. Taylor, R.C. "Migration and Motivation: A Study of Determinants and Types". In Jackson, J.A. (ed.) Migration, Cambridge University Press, London, 1969.
51. Van Velsen, "Labour Migration in Tonga Tribal Society". In Southall A.W. (ed.) Social Change in Modern Africa. Oxford University Press, London, 1961.
52. Veitch, M.D. "Population Growth and the Health Services". In Ominde & Ejiogu, Population Growth Economic Development in Africa. Heinemann, New York, 1972.
53. Wolf, E.R. Peasants, Prentice Hall, New Jersey, 1966.

- 54. Yeomans, K.A. Statistics for the Social Scientist,
Volumes 1 & 2. Applied Statistics, Penguin Books
Ltd., Harmondsworth, 1968.

- 55. Zelinsky, W.A. Prologue to Population Geography.
Prentice Hall International, Inc. London 1970.

Journals and Published Papers

1. Byerlee, D. "Research on Migration in Africa: Past, Present and Future". African Rural Employment Paper, No. 2, Michigan State University, Michigan, 1972.
2. Eckan, W. "Circular Migration and the Growth of Towns in East Africa". In International Labour Review. Vol. 96, July-December 1967, Geneva.
3. Eicher, et.al., Employment Generation in African Agriculture, Institute of International African College of Agriculture and Natural Resources. Research Report No. 9, Michigan State University Michigan, 1970.
4. Gershenberg, I. "Customary Land Tenure as a Constraint on Agricultural Development: A Re-evaluation". East African Journal of Rural Development, Vol. 4, No. 1, 1971.
5. Gleave, M.B. "Hill Settlements and their Abandonment in Tropical Africa. In Transactions No. 40, December 1966. Institute of British Geographers, London.
6. Gugler, J. "The Theory of Labour Migration". Makerere Institute of Social Research Conference Papers, 1968.
7. Heyer, J. "The Economics of Small Scale Farming in Lowland Machakos". Institute for Development Studies, Occasional Paper, Nairobi University No. 1, 1967.
8. Hirst, M.A. "Migration Survey in Bukoba, Tanzania". Occasional Paper No. 44, Department of Geography, Makerere University, Kampala, 1971.

9. Mbithi & Barnes, "The Spontaneous Settlement Problem in the Context of Rural Development in Kenya". Institute for Development Studies, University of Nairobi, 1972.
10. Mbithi & Chege, "Linkages between Rural Agriculture and Rural Small Scale Enterprises". Institute for Development Studies Conference on Small Scale Enterprises. Occasional Paper No. 6, Masai Lodge, 1972.
11. Mbithi & Wisner, "Drought and Famine in Kenya: Magnitude and Attempted Solutions". Institute for Development Studies, Discussion Paper No. 144 1972.
12. Redfield, R. "The Folk Society". In American Journal of Sociology, Vol. LII. January 1947.
13. Wilson, R.J.A. "The Economic Implications of Land Registration in Kenya's Small Holder Areas". Institute for Development Studies, Staff Paper No. 91, 1970. Nairobi University.

Unpublished Material

1. Baum, E. "Land Use and Labour Productivity under Growing Land Shortage". Department of Agricultural Economics, Nairobi University, 1972.
2. Dak, O. A Geographical Analysis of the Distribution of Migrants in Uganda. (Unpublished Ph.D. Thesis,) Makerere University, 1968.
3. Gachuhi, J.M. "Anatomy of Prostitutes and Prostitution in Kenya". Institute for Development Studies, Working Paper No. 113, Nairobi University 1973.
4. Heyer, J. "Alternative Development Strategies for Lowland Machakos Farms". Universities of Eastern Africa Social Science Conference, 1966.
5. Mbithi, P.M. "A Developmental Approach to Drought and Famine in Kenya". University of Nairobi, 1974.
6. Mbula, J. Penetration of Christianity into the Akamba Traditional Family. Unpublished M.A. Thesis), University of Nairobi, 1974.
7. Mburu, F. "Geographical Facilitation and Incapacitation: A Stimulus for Rural Interregional Social Stratification". East African Universities Social Science Council, December 1972, Nairobi.
8. Migot Adholla, "Rural to Rural Migration: Relationships to Employment". Institute for Development Studies, Paper 1973.
9. Nelson, N. "Buzaa Brewing in Mathare Valley", Department of Sociology, Nairobi University, 1973.
10. Ngumuta, R. et.al. "Inter-locational Trade". Economics Internship Programme, University of Nairobi, 1973.

11. Owako, F.N. The Machakos Problem: A Study of Some Aspects of the Agrarian Problems of Machakos District of Kenya. (Unpublished Ph.D. Thesis) Cambridge University, 1969.
12. Rempel, H. "An Analysis of the Information of Inter-District Migration in the 1969 Kenya Population Census". Institute for Development Studies, Working Paper No. 142, 1974. Nairobi University.
13. Rigby, P. "Pastoralism and Prejudice: Ideology and Rural Development in East Africa. Sociology and Development Workshop. Kampala, 1968.

INTERVIEW SCHEDULE

RURAL TO RURAL MIGRATION AND EMPLOYMENT
A CASE STUDY IN A SELECTED AREA IN KENYA

Interviewer:

Good-day. I am a student at the University of Nairobi and I am interested in finding out problems related to migration in this area. I would appreciate any information you can give in this connection.

Respondent's No.:Age:.....Sex:.....Single/Married:.....
Educational Level:Location:.....Village:.....

1. Where were you born at:

Yatta	Makueni	Masii	Mwala	Kangundo	Specify
1	2	3	4	5	6

2. For how long have you lived here?

Less than 6 months	6-12 months	1-2 yrs	3-4 yrs	5-6 yrs	7-8 yrs	9-10 yrs	11+ yrs
1	2	3	4	5	6	7	8

b. Where did you live before you moved into this area?.....

c. When did you come here?

3. Why did you migrate from your original home area?

- a. e.
- b. f.
- c. g.
- d. h.

4. State which of the following reasons was important in your moving

- 1. Drought
- 2. Famine
- 3. Witchcraft
- 4. Landless
- 5. Ill health
- 6. Family moved
- 7. Separating wives
- 8. Divorce
- 9. Other (specify)

Most important	More Important	Important	Least Important	Not Important
1	2	3	4	5

5. Why did you migrate to this particular area?

6. Specify which of the listed suggestions influenced you in moving to this area?

- a. Better land
- b. More rainfall
- c. Work opportunities
- d. Had relatives living here
- e. Nearer my original home
- f. Posted here by government
- g. Other specify

Most influential	More Influential	Influential	Least Influential	Not Influential
1	2	3	4	5

7. What did you think would be the advantage of moving to this area?

.....
.....

8. Did you migrate alone or with your family?

.....
.....

9. If abne, why did not the other members of the family move?

.....

a. Are they still in your original home area?

.....

b. If not, where are they?

.....

c. Do you support them?
.....

d. How do you support them?
.....

e. How are they related to you?
.....
.....
.....

10. Can you mention any of your neighbours in your original home area who also migrated?

No: Yes: Dont know:

If no, why do you think they did not?
.....

If yes, how many?

Why do you think they did?
.....

11. How did you know about conditions in this area so as to migrate?

.....
.....

12. Have you informed anyone about this area?

Yes(1) No.....(2)

If yes,

i. Whom?

ii. When?

iii. Where from?

If no, why?

c. Has any of the people you informed moved?

Yes.....(1) No.....(2)

If yes:

i. Where to?

ii. When?

iii. With family?

iv. Without family?

If no, why haven't they moved:

.....
.....
.....

12. Are you planning to stay here permanently?

If not Why

If yesWhy?

13. Before migrating how did you earn your living?

.....
.....

b. Were you satisfied with it? Give reasons?

.....

c. How did your spouse earn his/her living?

.....
.....

14. If a Farmer skip to Question 17

a. How do you earn your living now?

.....

b. Does your spouse work? Yes No

c. What kind of work?

.....

.....

15. Did you expect to earn your living differently?

No Yes

If no, why Why

If yes, Why

16. How profitable is your business now?

.....

17 If a Farmer

a. How much land do you have now?acres

and how did you acquire it?

.....

b. How much do/did you have in your original home area?

.....acres

c. Did you sell it? Yes No

If no, why

If yes, why

To whom

d. What type of farming do you do?

.....

e. Do you do grazing? YesNo.....How many.....

Cattle ()

Sheep ()

Goats ()

Other, specify ()

f. Do you cultivate? Yes No

What crops?

g. Did you graze/cultivate before migrating?

How many cattle ()

Sheep ()

Goats ()

Other, specify ()

h. Did you employ labourers before?

No Yes

Number of

Do you employ labourers now? No Yes

Number of

i. How many bags of maize/beans do you get from your farm

.....

j. How many bags maize/beans did you get from your farm

before migrating

.....

k. Do you sell any of the food? No Yes

If yes, where

Why

If no, why

18. What were your chief problems concerning farming before migrating?

.....
.....

b. What were the chief problems you encountered when you first moved here?

.....
.....

c. Do you have any problems now? No Yes

If yes, what are they?

If no, how did you solve them

d. Would you think these problems can be overcome?

.....

At your original home area? Yes No

At your new home area? Yes No

How

19. For those from Kangundo

Kangundo is said to be a good agricultural area, why did you move from there to here?

.....
.....
.....

20. Would you say any of the reasons listed here were significant in your moving?

1. Lost land in consolidation ()
2. Work opportunities ()
3. Had a large family ()
4. Sold land to get money ()
5. Had just a little land ()
6. Thought this was better land ()
7. Religious disputes ()
8. Wanted to separate wives ()
9. Didn't have cash crop ()
10. Other specify

Most Significant	More Significant	Significant	Least Significant	Not at all Significant
1	2	3	4	5

For those born in Masii, Mwala and Kangundo who did not Migrate

21. How many of your neighbours migrated?

b. How many of your neighbours migrated with:

with family

without family

.....

.....

22. Why do you think they migrated?

.....

23. Have you ever thought of migrating? Yes No

If yes, where to for what reasons

.....

If no, why

.....

If answer to 21(a) is Positive

24. Are your friends and neighbours who migrated doing better same worse than they were before migrating?

b. Why do you think so?

.....

c. If better

What has made it difficult for you to seek similar situations? /.....

Give reasons

.....

25. If you had the opportunity to migrate, where would you go to:

Makueni

Yatta

Other specify

.....

.....

.....

Give reasons

.....

.....

26. What do you do for your livelihood?

.....

b. Are you satisfied with it? No Yes

Give reasons

.....

.....

27. What type of farming do you do?

.....

b. What crops do you grow?

.....

c. How many cattle () Sheep () Goats ()

do you have?

d. How many bags of maize do you get from your farm

No

Do you sell any? No Yes

If no, why

If yes, why

Where

28. What are the main problems that you face as a farmer

.....

.....

.....

Give reasons

.....

.....