

STATUS OF WOMEN AND FERTILITY IN MACHAKOS AND MERU  
DISTRICTS OF EASTERN PROVINCE

BY

*Mwithiga, Margaret Muthoni*

This project paper is submitted in partial fulfilment of the requirements for the Diploma in Population Studies,  
University of Nairobi.

1993

DECLARATION

This project is my original work and to the best of my knowledge has not been presented for a degree or diploma in the University of Nairobi or any other University.

Signature \_\_\_\_\_

The work has been submitted for examination with our approval.

Signature



18/2/94

Dr. Zibeon Muganzi

Signature \_\_\_\_\_

Ms. Monica Magadi

Population Studies and Research Institute  
University of Nairobi  
P.O. Box 30197  
NAIROBI

## DEDICATION

To my parents E.K. M'Ikirima and J. M'Ikirima for their decision more than two decades ago, that I should go to school.

## ACKNOWLEDGEMENT

I would like to thank the Population Studies and Research Institute, University of Nairobi for granting me the opportunity to pursue this course.

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I would also like to convey my thanks to all the lecturers of PSRI, who during the course of my studies helped me understand issues of population better.

Last but not least I thank my colleagues with whom we had very fruitful discussions. Particularly I wish to thank Mary K. Kiome for her very useful pieces of advice every now and then.

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# Location Of District



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Source: District Development Plan 1989/93





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## CHAPTER 1

### STATUS OF WOMEN AND FERTILITY IN MACHAKOS AND MERU DISTRICTS OF EASTERN PROVINCE

#### GENERAL INTRODUCTION

Modernisation has received a great deal of attention in recent years as regards fertility performance. Among the indicators of it that have been used to analyse the impact it has had on fertility is status of women in society. This is an important indicator of modernisation which may affect fertility performance.

Despite improved socio-economic development the majority of women in Kenya still have very low status. The Population Crisis Committee (PCC) (1988) ranks countries according to the status of women using five indicators namely: health, marriage and children, education, employment and social equality in a ranking which ranged from excellent, very good, good, fair to poor status of women. Kenya ranked as a country with very poor status of women. Given that fertility is very high in Kenya it is important to study the association between status of women and fertility performance.

#### 1.1 Background to the Study Area

The study covers two districts in Eastern Province namely: Machakos and Meru.

## **Machakos District**

Machakos District lies within the foreland plateau between the Eastern Rift Valley and the Nyika Plateau. It borders Kajiado District to the West, Taita Taveta District to the South East, Kitui to the East and Embu to the North East, Murang'a and Kiambu and Nairobi to the North-West.

It has an area of approximately 14,250 sq. km. and a population of 1,022,512 as per 1979 National Census and is estimated to have reached 1,447,352 by mid 1987. The 42% increase is equivalent to an average growth rate of 3.9% per year. On the basis of the 1979 census and an assumption of slightly declining fertility and mortality rates the population was estimated to be 1,505,539 by 1988.

The Machakos District projected population by administrative units is given in table 1.1 below.

Table 1.1 Machakos District projected Population by Administrative Boundaries

Division	Residential Area (Sq.km)	1979	1988	1989	1990
Central	727	82,272	121,136	125,715	130,575
Kathiani	1,069	74,415	109,567	113,709	118,105
Kilome	1,323	152,428	224,432	232,719	241,920
Mbooni	535	92,666	136,439	141,598	147,071
Makueni	2,005	125,974	185,481	192,494	199,935
Kibwezi	3,400	98,980	145,736	151,246	157,092
Yatta	2,459	137,258	202,096	209,736	217,843
Kangundo	598	133,012	195,844	203,248	211,105
Mwala	1,332	125,517	184,808	191,796	199,210
TOTAL	13,448	1022,522	1505,539	1562,459	1622,856

Source: District Development Plan for Machakos District (1989 - 1993).

### Meru District

This district lies to the East of Mt. Kenya. It shares borders with Embu to the South, Laikipia to the west, Nyeri and Kirinyaga to the South-West. It also borders Kitui and Isiolo the drier districts of Eastern Province. Meru straddles the equator lying within less than 1 degree on either side of it. The district covers an area of 9,922 sq. km. and as per 1979 census had a population of 830,506. The population showed an intercensal increase of 3.36% per annum based on the 1969

National census. The population of Meru was projected to be 1,214,950 in 1988 based on the assumption that whereas the level of mortality of Kenya was expected to continue on a downward trend, the fertility level would remain constant over the period 1980-90.

Population projection by administrative units (divisions) is shown in table 1.2 below.

Table 1.2 Population Projection by Administrative Units for Meru District

Census Division	Census 1979	Estimate 1988	Projections	
			1989	1990
Nithi	142,288	205,590	213,149	220,957
S. Imenti	103,543	149,608	155,109	160,776
Tharaka	50,277	72,644	75,316	78,068
C. Imenti	91,038	131,539	136,376	141,359
N. Imenti	107,396	155,174	160,881	166,759
Timau	23,389	33,795	35,037	36,317
Ntonyiri	80,790	116,732	121,024	125,447
Igembe	90,807	131,205	136,030	141,000
Tigania	140,651	203,224	210,697	218,396

Source: District Development Plan (1989-1993) for Meru District.

## 1.2 Problem Statement

Traditionally, in Kenya, women have very low status. This is status as measured in terms of education, participation in the labour force, economic independence, religion and level of

decision making particularly about family size.

Low education of women leads to low age at marriage which consequently leads to high fertility and high infant and child mortality through lack of knowledge about hygiene and nutrition. Low or no education leads also to low contraceptive use due to lack of economic ability to acquire the methods. It has been found that the more educated women are the better they are economically.

Participation in the labour force for women in Machakos and Meru and indeed Kenya as a whole is low. This means that more time is spent on child care. Although women in Kenya do participate in agricultural activities they do so simultaneously with childrearing as they do not put into consideration working hours and they do not have to work far away from home.

Due to lack of economic independence, women bear many children for a source of labour in agricultural activities and production in general.

Decisions about family size are made not by the women who bear children, but by husbands. Women have very little say as far as the number of children they should have is concerned. Many children imply high social status for the husbands, family and clan as a whole. Also preference for sons or daughters in certain traditions may lead to large family sizes as women try to bear children of the preferred sex.

Religion is also a factor that is likely to affect the fertility performance in women because certain religious beliefs

and practices may place women at low status. Some religions also discourage the use of contraceptives (catholicism is well known for this) which may result in high fertility to women in those religions. Christianity and Islam alike emphasize the wife's obedience to her husband and for this reason a woman may not question a decision by her husband to have many children. Okoth-Ogendo (1987) points out that Christian families oppose family planning on the grounds that it violates the biblical injunction of "Go yee into the world and multiply".

### 1.3 Justification of the Study

Like the rest of Kenya, Meru and Machakos Districts are experiencing high fertility. Land and other resources have continued to diminish because of everincreasing numbers of people because women in these districts have low status and as a result have high parities and Total Fertility Rates. Most of these women are engaged in small-scale agricultural activities which they can handle at the same time with childrearing. As mentioned earlier, women view children as a source of labour on the farms and as a symbol of social status and this has precipitated a high demand for children in the two Districts as it has in the rest of Kenya. Thus, an investigation into the association between the status of women and fertility performance may be an important contribution in the analysis of the determinants of fertility. Rapid population growth due to high fertility leads to a high dependency ratio in a country. The results of this study may

help the government and others, such as planners and NGOs to view population problems in a more realistic way in future. For example policy makers and planners could lay more emphasis on factors such as education, women's employment, etc. which elevate women's status in society. In short the results of this study could serve as an eye-opener to policy makers and planners as regards women of Meru and Machakos Districts and fertility.

#### 1.4 Objectives of the Study

##### Broad

The broad objective of this study is to examine how status of women relates to fertility performance in Meru and Machakos districts of Eastern Province.

##### Specific

Specifically the study intends to:

1. ascertain whether there are differentials in fertility performance by women's status as measured by educational level.
2. ascertain whether there are any differentials in fertility by women's status as measured by work status.
3. determine whether there are differentials in fertility by women's religion.



### 1.5 Scope and Limitations of the Data

This study utilizes secondary data from the Kenya Demographic and Health Survey (KDHS) of 1989.

Due to limited funds and time, the study cannot use primary data. This in itself is a limitation as the KDHS data was collected several years ago and might not bring out the situation as it is at present. Also, the KDHS data on women does not include a breakdown by type of occupation and this narrows the scope of the study. Another limitation is the small size of the sample which means that only a general picture of the real situation can be revealed by this study.

## CHAPTER 2

### 2.1 Literature Review

Various studies have focused on the negative relationship between female education and employment on fertility.

Berta et al. (1985) studied female labour force participation and fertility in Hungary using data from population censuses for the period 1949 to 1980. They found that in recent decades, the greatly increased economic activity of women has played an important role in the general reduction of fertility. They also found that the number of children of married women both at the time of study and in previous decades, is negatively related to higher educational levels.

The UN (1987) using evidence from a world fertility survey found that within the economic and social Commission for Asia and the Pacific (ESCAP) region, total marital fertility rates were inversely related to education in all the countries with the exception of Indonesia and Sri Lanka.

Kobayashi (1979) studied fertility differentials by women's work status in Japan using data from a fertility survey. He compared the mean number of surviving children between categories as follows:

1. Housekeeping
2. Family Workers
3. Salary Workers

The results revealed that family size was biggest for family workers, followed by those engaged in housekeeping only, while

salary earners had the smallest family size.

Ghahil (1977) in an analysis of womens work and fertility in India, using evidence from national sample survey of 1962, found that the total number of children born alive to a woman was inversely related to her level of education. He however, found that the negative relationship between employment and fertility does not hold true in the case of India. He attributed this to the fact that the occupation available to women in India are in those types of industries such as agricultural and cottage industries where it is readily possible to combine the roles of worker and mother.

According to Casterline (1980) who studied fertility differentials in Pakistan, using the 1975 Pakistan fertility survey, women educational attainment is associated with lower cumulative and recent fertility. The negative effect is greater for those who proceed beyond primary school. However, female employment experience seems to bear no distinct relationship with, neither cumulative nor recent fertility.

In Puerto Rico Jaffe and Azumi (1960) found that the fertility of women employed in cottage industries was about the same as that of non-employed women but that women employed outside the home in modern industry had smaller family sizes.

"If employment is to induce African women to restrict their fertility, then it would be expected that the trend would start among professional women. Pursuit of a professional career is physically and mentally demanding. It offers the maximum of

alternative satisfactions to childrearing and in an African context it can rarely be carried out at home. Most studies of professional women in Africa have been confined to biographical, accounts of their triumphs often emphasizing their success in combining prolific motherhood with outstanding careers, without any examination of the relationship between the two spheres". The above are sentiments of Little (1973). From an African point of view, this is only reasonable for by definition a woman who does not produce children cannot be a success. A childless high court judge for example has made most of her life given the circumstances, but neither she nor the public at large would consider her life to have been a success. The question then remains: Do professional women desire to limit their births?

Taha and Ghary (1980) studied socio-economic fertility differentials in Egypt using the 1976 census data. They found that fertility in Egypt was inversely related to the educational status for ever married women in all duration of marriages with few exceptions.

Ware (1979) in her paper "women work and fertility in Africa", states that "if there were any inherent incompatibility between female labour force participation and high fertility levels then Africa should have fertility levels appreciably lower than the rest of the developing world where women play a much less important role in the total labour force". Tropical Africa is a region where both fertility and rate of female workforce participation are among the highest in the world. All this goes

into emphasising the fact that fertility can only be affected inversely by increased education which enables women to participate in the types of employment which are outside the home.

Opping and Abu (1984) studied the changing maternal roles of Ghanaian women. Their findings supported the contention that education, employment and migration had an impact on women's various roles and consequently upon motherhood and fertility.

Kenya has also received some attention with regard to fertility determinants.

Muinde and Mukras (1979) studied some aspects of fertility determinants in five selected districts in Kenya namely: Kilifi, Kiambu, Nairobi, Kisumu and Kakamega. They found an inverse relationship between educational level and number of children ever born to a woman during her childbearing period. The results of their study also indicated that female employment has a negative relationship with fertility.

Henin (1979) revealed that women with primary education had higher fertility than women with no education at all, due to the fact that they become more conscious of the importance of hygiene and other basic requirements that prevent pregnancy and wastage. Beyond seven or eight years of education fertility tends to decline. "Thus it is probably the prerequisite for a woman to change her attitude towards family size".

Henin and Mwobobia (1982) in a cross-regional study in Kenya, found negative correlation between female employment and

total fertility rate. This relationship appeared to be mainly due to the influence of urbanisation and contraception.

## 2.2 Conceptual Framework

Oppong (1982) introduced a frame work to explain the roles of women. According to her the impact of children is traced through their impact on each of the roles she plays in her life;

1. as a mother
2. as a wife
3. as a member of household
4. as a worker
5. as a kinswoman
6. as a member of the community
7. and as an individual

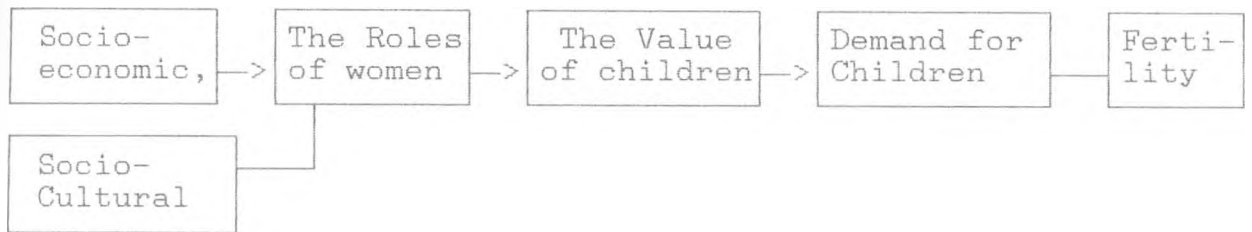
Children provide various economic, social and psychical rewards but women may have alternative sources of satisfaction available to them. On the other hand children also impose opportunity costs and create role conflict.

Lee and Bulatao (1982) argued that modernization radically alters the demand for children. First, childrens' economic contributions fall off considerably as education gains in importance, as the tasks children do become obsolete or unnecessary due to labour force shifts from agriculture, as children are replaced by other institutions providing security against risks of old age and as greater social mobility and weaker family ties reduce dependency on them. Cost of children also rises in monetary terms although incomes are also rising. Time costs also on the other hand become heavier. With modernisation, substitutes for parental care become more costly,

jobs become less compatible with childrearing, and the value of parental time rises. Finally tastes may change against children and in favour of new material goods including those necessary for better child quality. There are such factors as ethnic differences which may remain largely unaffected.

The conceptual framework for this study may be represented by the following model.

### Conceptual Framework

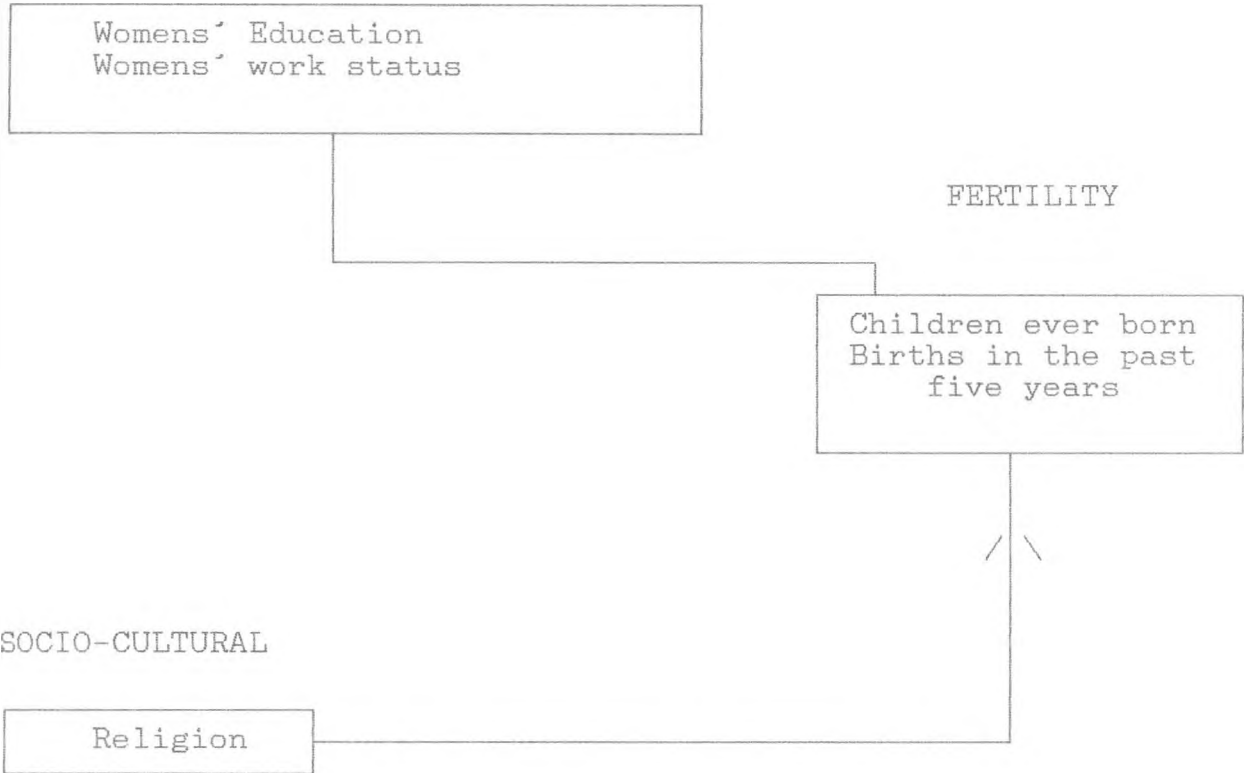


Here, socio-economic and socio-cultural factors are the independent variables and are represented by womens' education, womens' work status and religion. The dependent variable is demand for children and is represented by (1) CED (Children ever born) (2) Births in the past five years as shown in the operational framework below.



# Operational Framework

## SOCIO-ECONOMIC



High educational status and work status leads to role incompatibility and may thus create role conflict. This in turn changes the attitude towards value of children and cost of children. The effect is enhanced by background factors for example religion and place of residence.

### 2.3 Operational Hypothesis

The specific hypothesis to be tested in this study are:

- (i) Total children ever born varies inversely with womens' educational attainment.
- (ii) Total children ever born varies inversely with women's work status.
- (iii) Total children ever born varies according to women religious affiliation. The stricter faiths are expected to be associated with higher fertility rates.

### 2.4 Methodology

The data utilized in this study is from the Kenya Demographic and Health Survey (1989). The KDHS was a national survey that was carried out by the National Council for Population and Development (NCPD) in collaboration with the Central Bureau of Statistics (CBS) and the Institute of Resource and Development (IRD).

The sample for the KDHS is based on the National Sample Survey and Evaluation Programme (NASSEP) master sample. It is a two stage design stratified by urban rural residence and within rural stratum by individual districts. The sample size for this study is 1222 cases which covered Meru and Machakos districts of Eastern Province. The KDHS covered only these two districts in Eastern Province and as such this study can be taken to represent

the whole of Eastern Province.

The specific information derived from the data is:

- (i) children ever born by mother's education, religion and work status.
  
- (ii) Births in the past five years by mother's education, religion and work status.

## 2.5 Quality of Data

Like in other developing countries the data in Kenya suffers various errors. The KDHS is no exception. The most common of these errors is age misreporting which occurs due to respondents' preference for ages ending in certain digits. It may also be due to the tendency of respondents to declare themselves younger or older than their actual age. Other possible errors include faulty interpretation of questions by the interviewer and respondents lack of cooperation during the interview. Errors might also result due to the fact that some respondents do not know their birth dates and consequently do not know what ages they are.

## 2.6 Method of Data Analysis

Cross-tabulation has been used in this study to determine the relationship between the socio-economic and socio-cultural variables and fertility. Education, Religion and work status are the independent variables while fertility in terms of children ever born and births in the past five years are the dependent variables.

Contingency tables have been used to analyse the relationship between the dependent and the independent variables. In these tables percentages are used to show the relationships.

## CHAPTER THREE

### 3. RESULTS AND DISCUSSIONS

This chapter deals with the presentation and analytical interpretation of how the status of women as measured by women's educational level, work status and religion relates to fertility performance.

The tables earlier mentioned in Chapter two will be presented below and discussed. In each table, comparisons are made in terms of percentages.

#### 3.1 Education Level and Fertility

Table 3.1.1 Percent distribution of Educational level by Total Number of Children Ever Born

Level of Education	Total Number of Children Ever Born		
	0 - 4	4+	Row Total
No Education	26.3	73.7	286 23.4
Primary	70.4	29.6	748 61.2
Secondary	88.7	11.3	189 15.4
Column Percentage	770 63.0	452 37.0	1222 100

Table 3.1.1 shows that Total Children ever born to women with no education are more than those ever born to women with primary and secondary education. 73.7% of women with no education had over 4 children while only 26.3% had less than 4 children ever born. For women with primary education 70.4 had no

more than 4 children born to them. 88.7% of women with secondary education had no more than 4 children. This is a clear indication that women with primary and higher education who have 4+ children ever born are very few.

One may then conclude that womens' fertility in Machakos and Meru Districts is universally related to higher education. Higher status of women in terms of education can reduce fertility in terms of total number of children ever born.

Table 3.2.2 Percent distribution of educational level by births in the past five years

Level of Education	Births in the past five years					
	0	1	2	3	4	Row Total
No education	40.9	24.7	27.9	6.5	-	286 23.4
Primary	38.9	28.6	27.3	5.1	0.1	748 61.2
Secondary	35.5	38.3	23.3	2.9	-	189 15.4
Column Total	475 38.9	357 38.9	327 26.8	62 5.1	1 0.1	1222 100.0

In Table 3.2.2 it is further confirmed that women with no education have more children in the past five years as it is indicated by 6.5% of the women having 3 children whereas only 5.1% of women with primary education and only 2.9% of those with secondary education had more than 2 children. The percentages further confirm that women without education have shorter birth intervals. For a woman to have 3 births within a period of five

years it means that the children were born very close to each other.

### 3.2 Religion and Fertility

Table 3.3.1: Percent distribution of Religion by Total children Ever Born

Religion	Children Ever Born		
	0 - 4	4+	Row Total
Catholic	63.6	36.4	476 39.0
Protestant	51.3	48.7	721 59.0
Islam	61.9	38.1	4 0.4
Others	88.8	11.2	11 0.9
No Religion	43.5	56.5	9 0.7
Column Total	767 62.8	454 37.2	1221 100

In the percentage distribution above women with 'no religion' have the largest family size, that is 4+ children. 56.5% of them had 4+ children whereas the stricter faiths such as Catholic and Muslims had only 36.4% and 38.1% of the women interviewed with 4+ children. Also Protestants who allow artificial contraceptives are shown to have more women with 4+ children than the Catholics and Muslims. This is quite unexpected but can be attributed to the fact that the natural family planning advocated by the Catholic religion is succeeding among Catholic women. As for Muslim women, it is likely that

their status has changed i.e. they have been exposed to factors such as education and working outside the home which traditionally has not been happening within Islam. If this is the case then, their fertility may have been adversely affected by these socio-economic factors which were traditionally not present within Islam. Another factor that would lead to Muslim women having fewer children ever born than other religions is the prevalence of polygynous unions within Islam. Polygyny has been found to be inversely related to fertility Ocholla-Ayayo (1991) argued that the impact of polygyny on fertility by the end of the child-bearing period is negative. It should however be noted that the number of cases (n = 4) for Muslims is too small for conclusive remarks.

Table 3.3.2: Percent Distribution of Religion by Births in the Past Five Years

Religion	Births in the Past Five Years					Row Total
	0	1	2	3	4	
Catholic	34.7	32.0	27.8	5.4	-	476 39.0
Protestant	4.8	27.3	25.7	5.0	.1	721 59.0
Muslim	85.4	14.6	-	-	-	4 0.4
Others	29.6	11.1	59.3	-	-	11 0.9
No Religion	13.3	48.6	38.1	-	-	9 0.7
Column Total	475 38.9	355 29.1	327 26.8	62 5.1	1 .1	1221 100



In table 3.3.2 more women in other religions than Catholic, Protestant, Islam display higher fertility in terms of births in the past five years. 59.3% of women in other religions who were interviewed had 2 children in the past five years. women with no religion have also displayed higher fertility with 38.1% of those interviewed having 2 children while those in Catholic were 27.8% with up to 2 children, in Protestant 25.7% and none in Islam had 2 children in the past five years. Indeed Muslim women displayed the lowest fertility with 85.4% of those interviewed having 0 births in the past five years and 14.6% having just one birth. The reason for this result could be the small sample size of the Muslim women interviewed during the KDHS. Only 4 Muslim women were interviewed and this can hardly be representative of Muslim women in both Machakos and Meru.

### 3.3 Work Status and Fertility

Table 3.4.1 Percent Distribution of "Work Status" as used in the KDHS by total Children Ever Born

Work Status	Total Children Ever Born		
	0 - 4	4+	Row Total
Not Working	61.4	38.6	1136 93.5
Working	82.8	17.2	79 6.5
Column Total	762 62.7	460 37.3	1222 100

Table 3.4.1 above shows that 82.8% of working women have 0-4 children whereas those not working who have 0-4 children are less

by 21.4%. This clearly indicates that there is a negative relationship between the number of children ever born and employment or higher work status. 38.6% of not working women have more than 4 children ever born. In this particular case 0-4 children are taken to be a small family size and 4+ children is fairly large size.

Table 3.4.2: Percent Distribution of Work Status as used in the KDHS, by Births in the Past Five Years

Work Status	No of Births in the Past Five Years					
	0	1	2	3	4	Row Total
Not Working	38.6	28.2	27.6	5.5	0.1	1136 93.5
Working	36.2	45.3	18.5	-	-	79 6.5
Column Total	467 3.4	357 29.4	328 27.0	62 5.1	1 0.1	1215 100

Although the percentage of not working women who have zero births and one births in the past five years is slightly higher than that of working women, table 3.4.2 indicates that non working women had more than 2 births in the past five years. This shows that high work status is negatively related to fertility as the working women appear to have limited births as opposed to the non working women. Among the not working women who were interviewed 5.5 of them already had 3 births in the past five years which is indicative of high frequency of births within as short a period as five years.

## CHAPTER FOUR

### 4.1 Summary, Conclusions and Recommendations

The objective of this study has been to determine whether there are any differentials in fertility performance by women's education, religion and work status as presented in the Kenya Demographic and Health Survey (KDHS, 1989).

The findings of the research have revealed the following:

- (i) That fertility is inversely related to higher education levels.
  
- (ii) That working women have lower fertility in terms of children ever born and, births in the last 5 years year as per the Kenya Demographic and Health Survey 1989.
  
- (iii) However, religion has not been seen to play a major role as far as fertility differentials are concerned. It has been found that muslims and catholics do not manifest any higher fertility than protestants and other religions. If there are any differences they are very minor and highly inconsistent.

## 4.2 CONCLUSIONS

From the foregoing chapters, it can be concluded that women with low status in terms of educational level, and work status have much higher fertility than those with a higher status.

### Education

Although the study has discussed education work status and religion in relation to fertility, the most important of these variables appears to be education. Education is the key factor if the status of women in Kenya or elsewhere is to be elevated.

A general inverse relationship between fertility and educational level appears to have existed in the developed countries of Europe and North America since the late 19th century. An increase in literacy has always taken place, simultaneously with reduction in fertility. Education of women has frequently been mentioned as an important contributing factor to the changing attitude among women to their traditional roles as home makers and bearer of children, and related to this changing attitude is the greater degree of participation of women in gainful employment, believed by some writers to be an alternative for women to the bearing and rearing of children. At least three intermediate variables are involved in the relationship between educational attainment and fertility. These are:

- (i) age at marriage
- (ii) frequency of marriage and
- (iii) use of contraception

### **Employment of Women**

Numerous studies have shown an inverse relationship between family size and the extent of female participation in the labour force i.e. women who are gainfully employed generally have fewer children than other women. It is the women who work for wages, rather than the self-employed or unpaid family workers who have significantly lower fertility than non-working women. Employment of women should be emphasized in high fertility areas such as Machakos and Meru.

Efforts to assess the possible effects of female labour force participation on fertility are complicated by the intervention of other variables such as socio-economic status, education etc. all of which are interrelated. Thus a woman's entry into labour force may be influenced by her education which in turn depends on other socio-economic factors.

### **Religion**

The fact that religion as an independent variable in this study has not been seen to affect fertility might mean that there has been a change within the stricter religions such as Catholics

and Muslims in the way family planning and contraception in general is handled in these religions. There is a likelihood that although Catholics are opposed to artificial family planning, they have had some degree of success in practicing natural family planning. On the part of Muslims, polygyny which is believed to be inversely related to fertility, particularly in terms of TFR, might play a very important role in controlling fertility. Ocholla-Ayayo (1991) argued that "there is no significance difference in fertility between Catholics and Protestants". He however pointed out a big difference in fertility between Christians and Muslims.

#### 4.3 Recommendations for Policy Makers

This study has the following policy implications and recommendations.

- (1) Girls' education has to be given priority as the ~~agreement~~ <sup>wishes to</sup> reduce the current high fertility rate. Access to education for girls has to be achieved. <sup>As many girls as</sup> possible should be enrolled into schools. If the enrolment into schools for girls is increased, then it means that most of them will spend part of their reproductive period in school and hence start childbearing late which is a big step towards reducing fertility in Kenya. Also, the girls if educated will be in better positions to understand that they do not have to bear many children to work on the farms.

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Education gives girls better chances for employment. It also changes the attitudes towards family size and family planning.

- (2) Women's employment opportunities should also be given priority. Women should be given job opportunities so that they do not have to bear many children for a source of labour and social security. It would also be appropriate for policy makers to address themselves to the problems faced by women seeking credit facilities so as to be self-reliant. If given the necessary support by NGOs, the government and others. Women would occupy themselves with other activities apart from childrearing and small scale farming which all lead to high levels of fertility in Kenya.

#### 4.4 Recommendations for further Research

The limited time and funds assigned to this study have not enabled it to exhaust all facts of the association between fertility and "status of women". Hence the following are recommended areas for further research on this topic.

- (1) The scope of the problem needs to be expanded in order to analyse the relationship between fertility and status of women in the whole of Kenya. This might reveal a clearer picture.



- (2) Detailed statistical tests can be used to test the strength of the relationship and thus enable researchers to achieve more concrete results.
- (3) Other indicators of status of women may be used to test the relationship between them and fertility e.g. the Health status of women.
- (4) A breakdown of work status by type of occupation can be another area for further research. It would enable a more detailed analysis of differentials in fertility performance by type of occupation. This last point is of utmost importance as it is known African women and in Kenya particularly women are involved in the labour force in one sector or another. In most cases especially in the rural areas women are the bread winners of their families. Therefore, when we talk of labour force participation it is very important to differentiate the type of employments that are engaged in.

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Okoth-Ogendo: The Law of Family Planning 1987; A paper for meetings of resource persons concerned by media association of Kenya 18 - 20th September 1987

Rodriguez and Creland: Fertility Behaviour in the context of Development - Evidence from WFS. UN Department of International Economic and Social Affairs - 1987.

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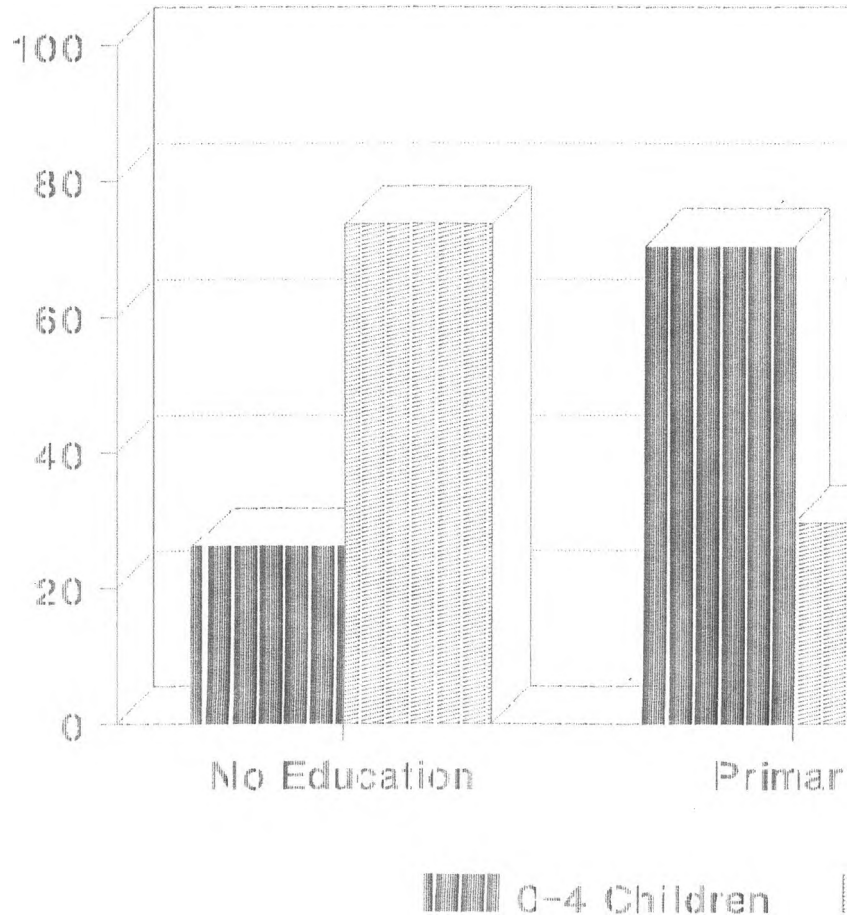
Taha and Abdel Ghany: The Determinants of fertility in some African and Asian countries - Cairo Demographic Centre - 1980.

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## APPENDICES 1

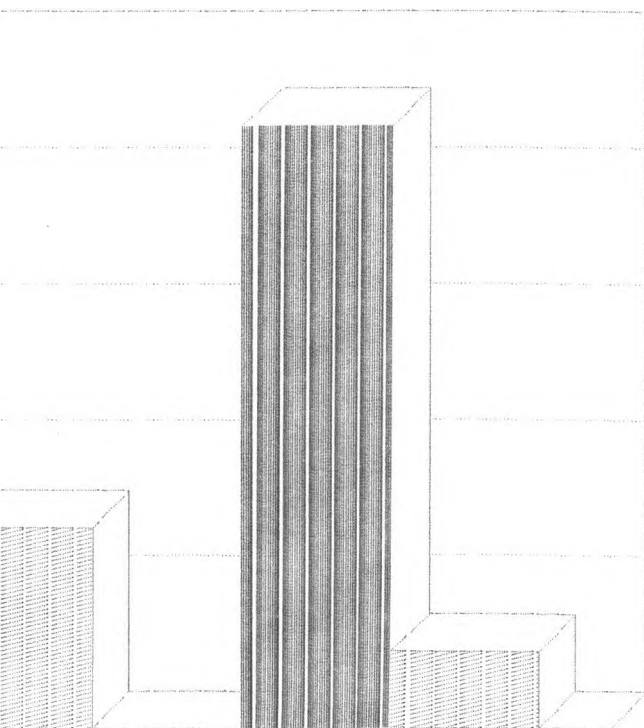
# Percentage Distribution of Education Level by Total No. of Children



35

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# ion of Educational Children Ever Born

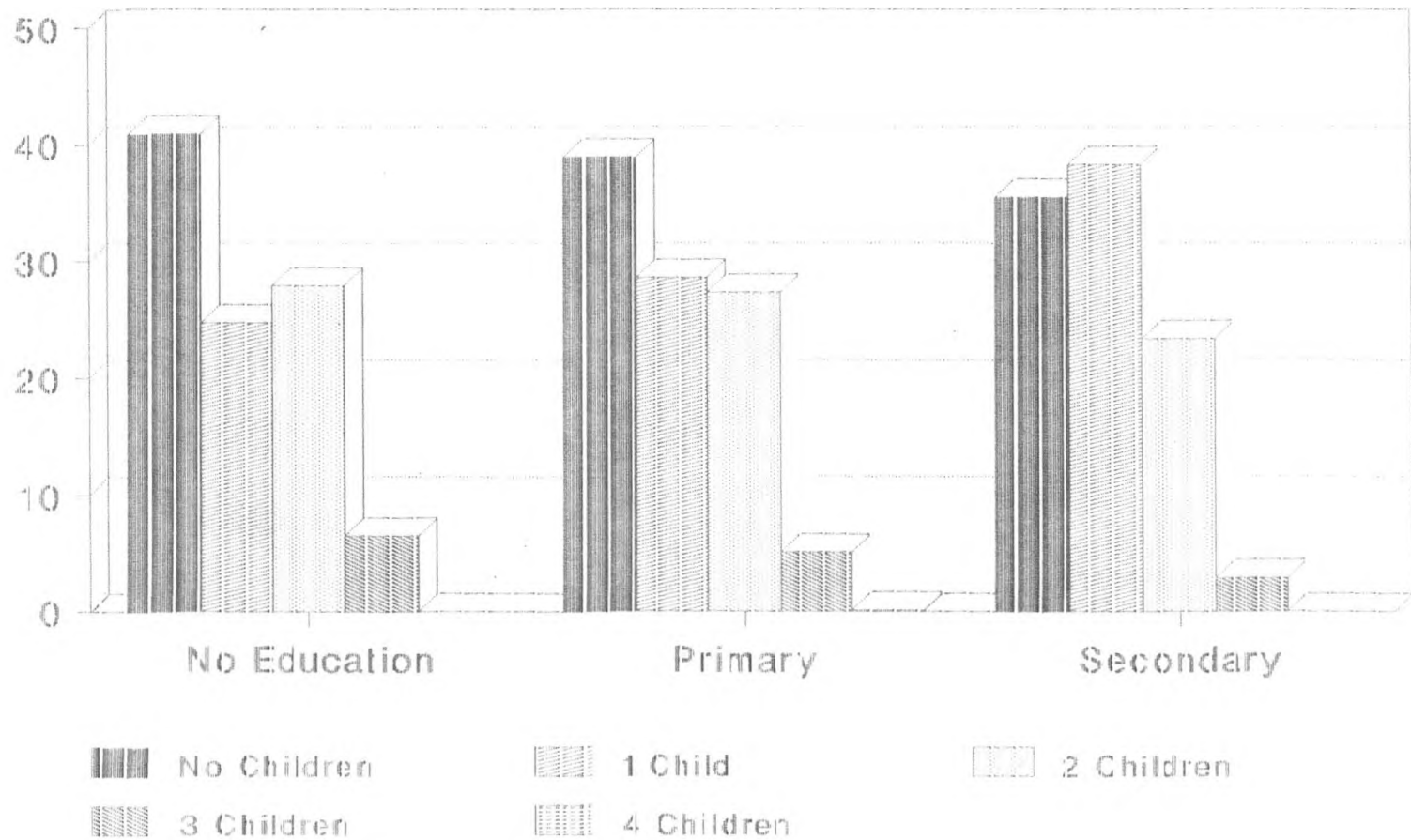


y Secondary

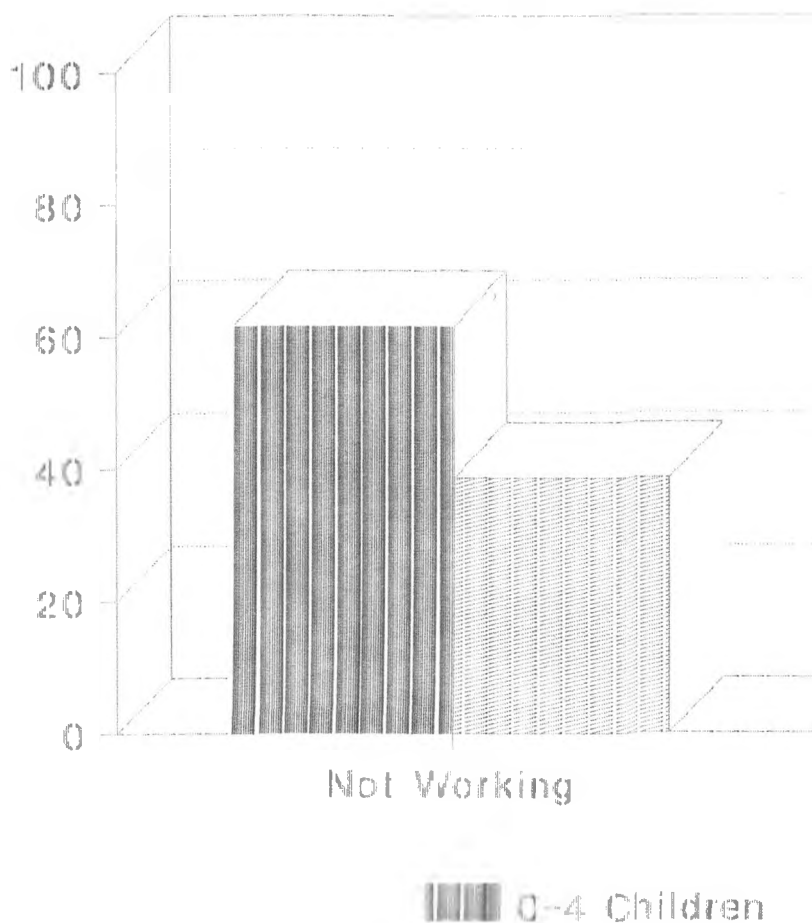
4+ Children

# Percentage Distribution of Educational Level by Births in the Past Five Years

36

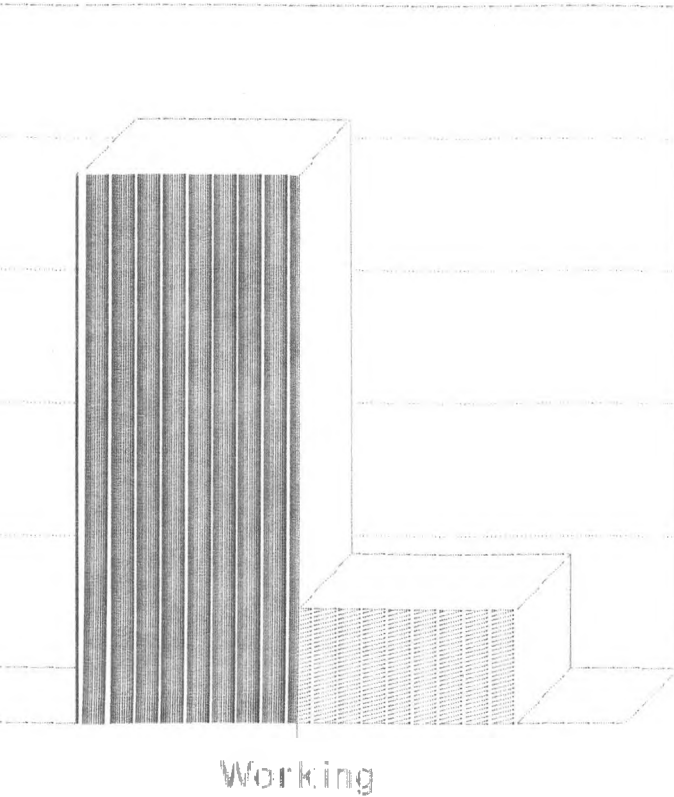


# Percentage Distribution by Total Child





# Proportion of Work Status Children Ever Born

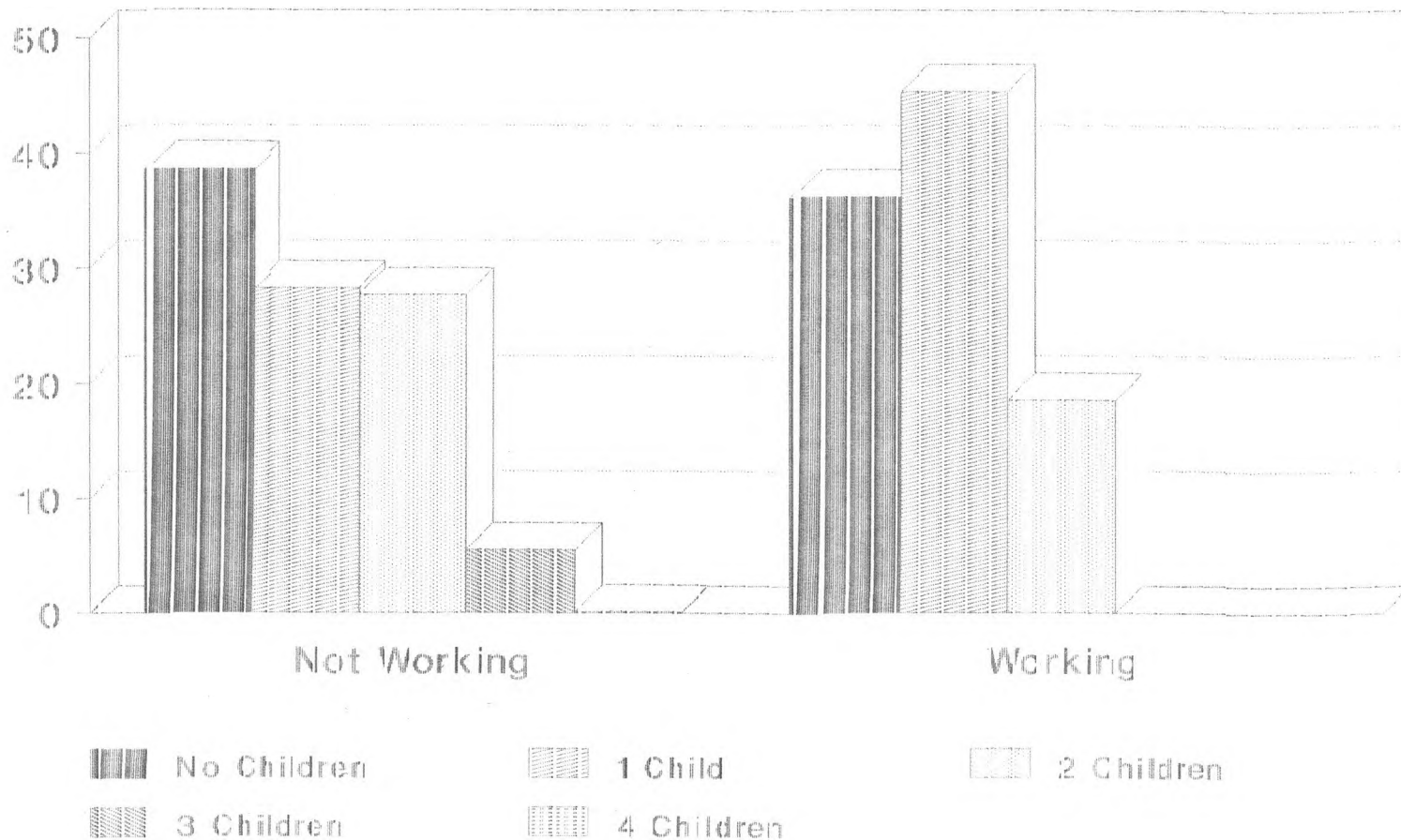


Working

4+ Children

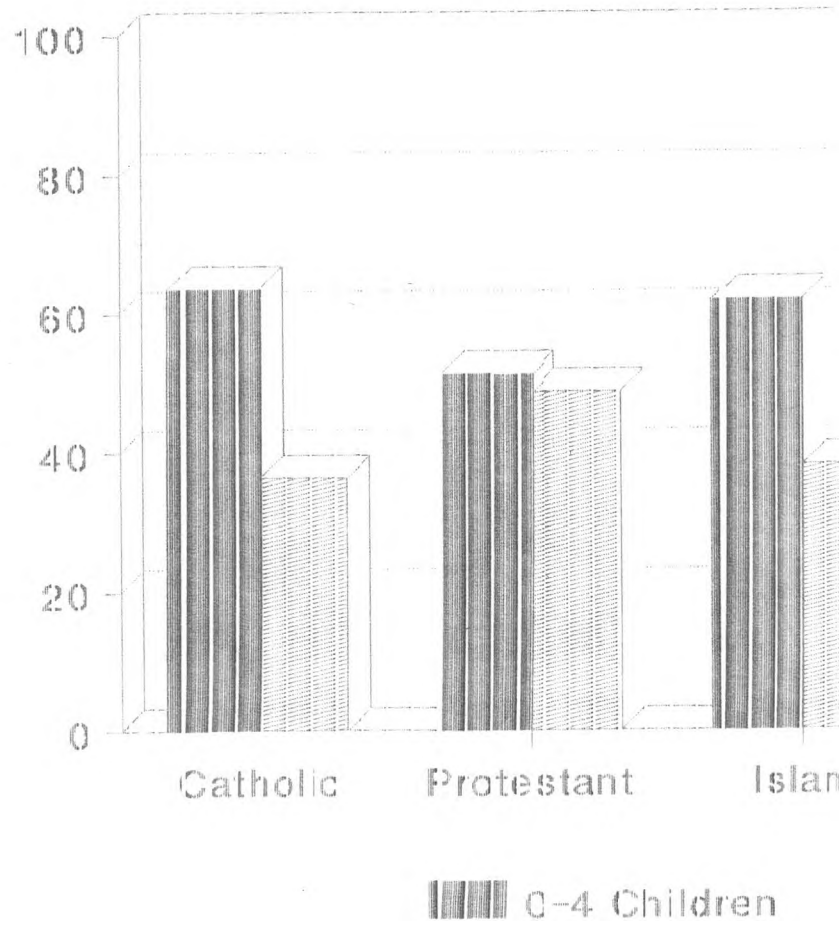
# Percentage Distribution of Work Status by Births in the Past Five Years

38

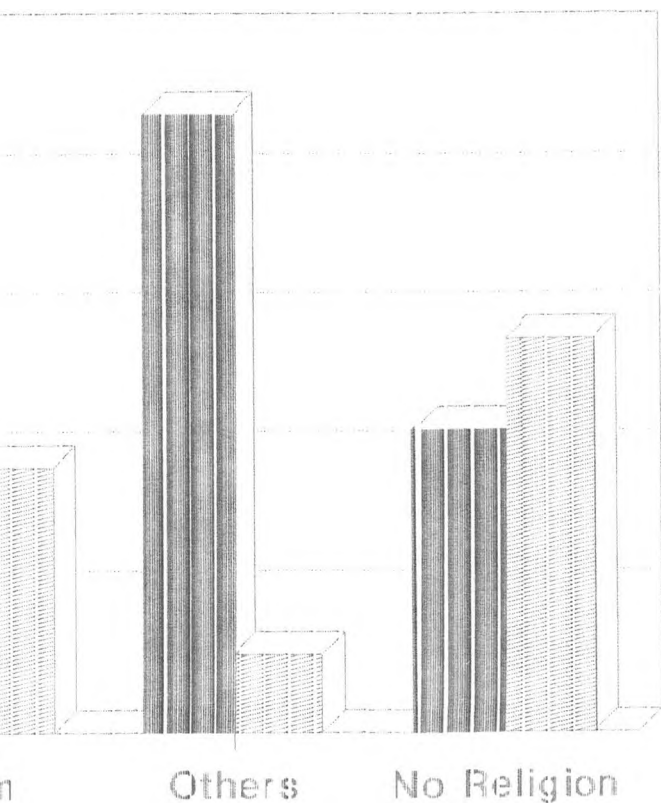


# Percentage Distribution Total No. of Children

39

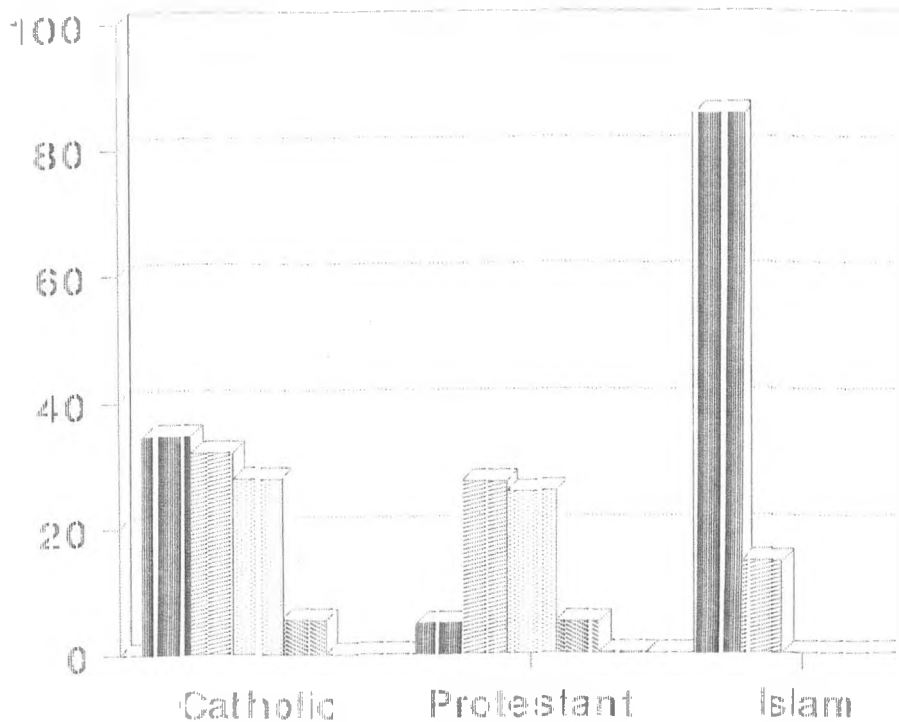


# tion of Religion by dren Ever Born



4+ Children

# Percentage Distribution of Births in the Past



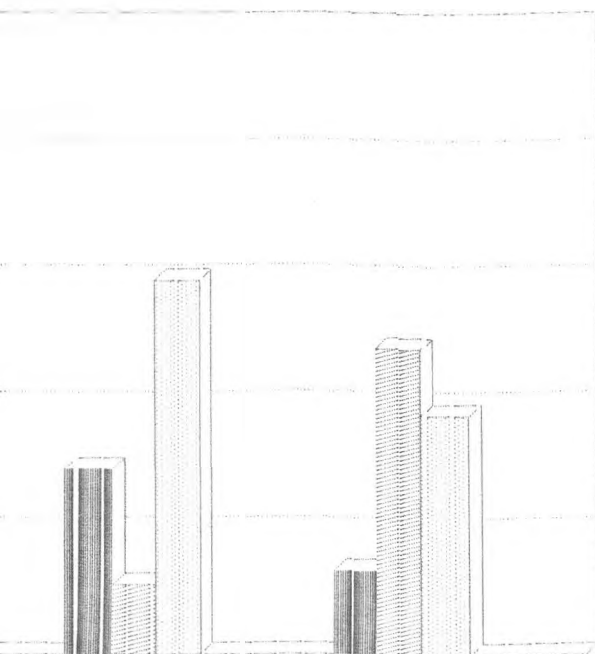
■ No Children

▨ 1 Child

▩ 3 Children

⋯ 4 Children

# on of Religion by Five Years



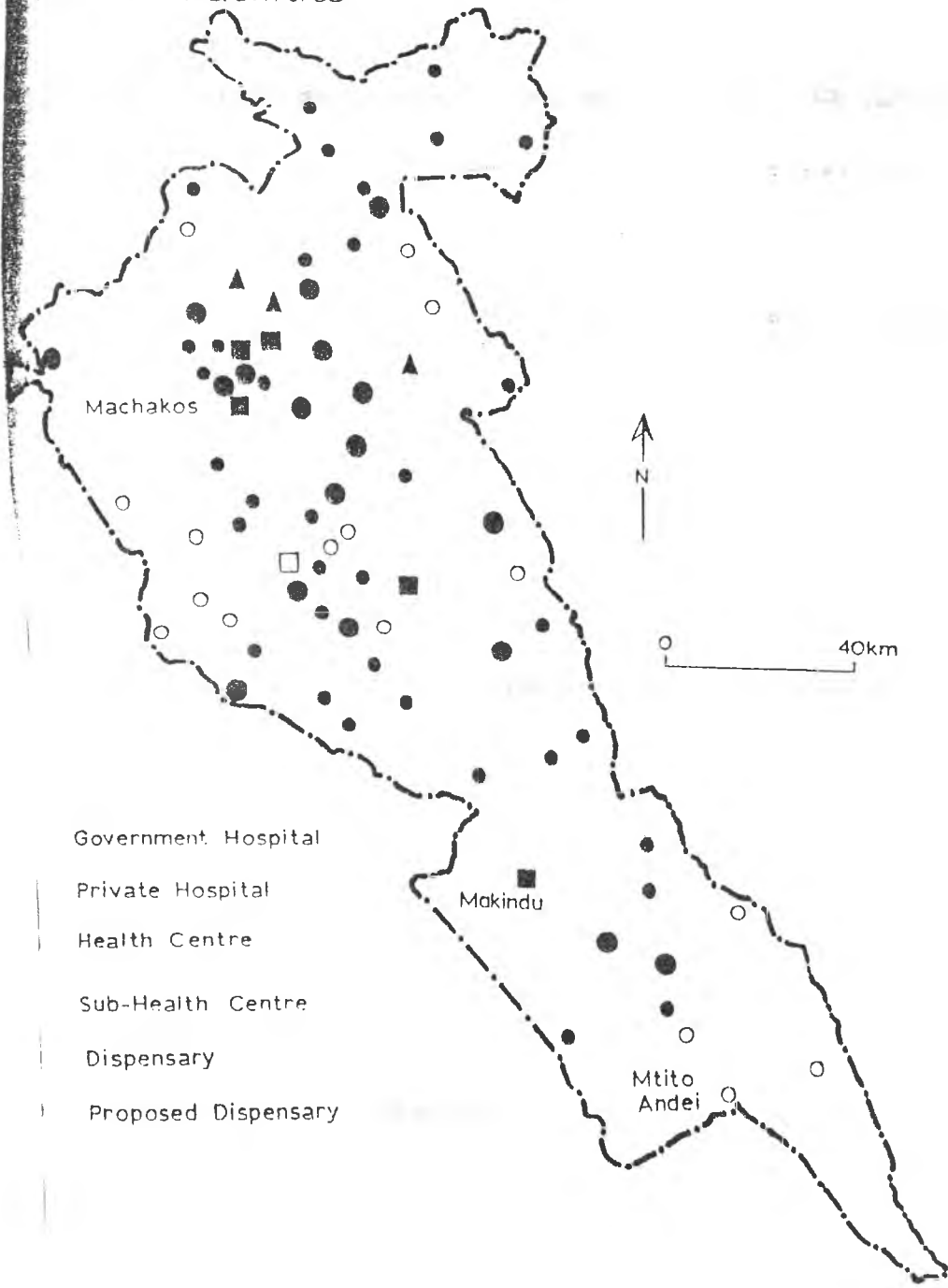
Others

No Religion

2 Childrer

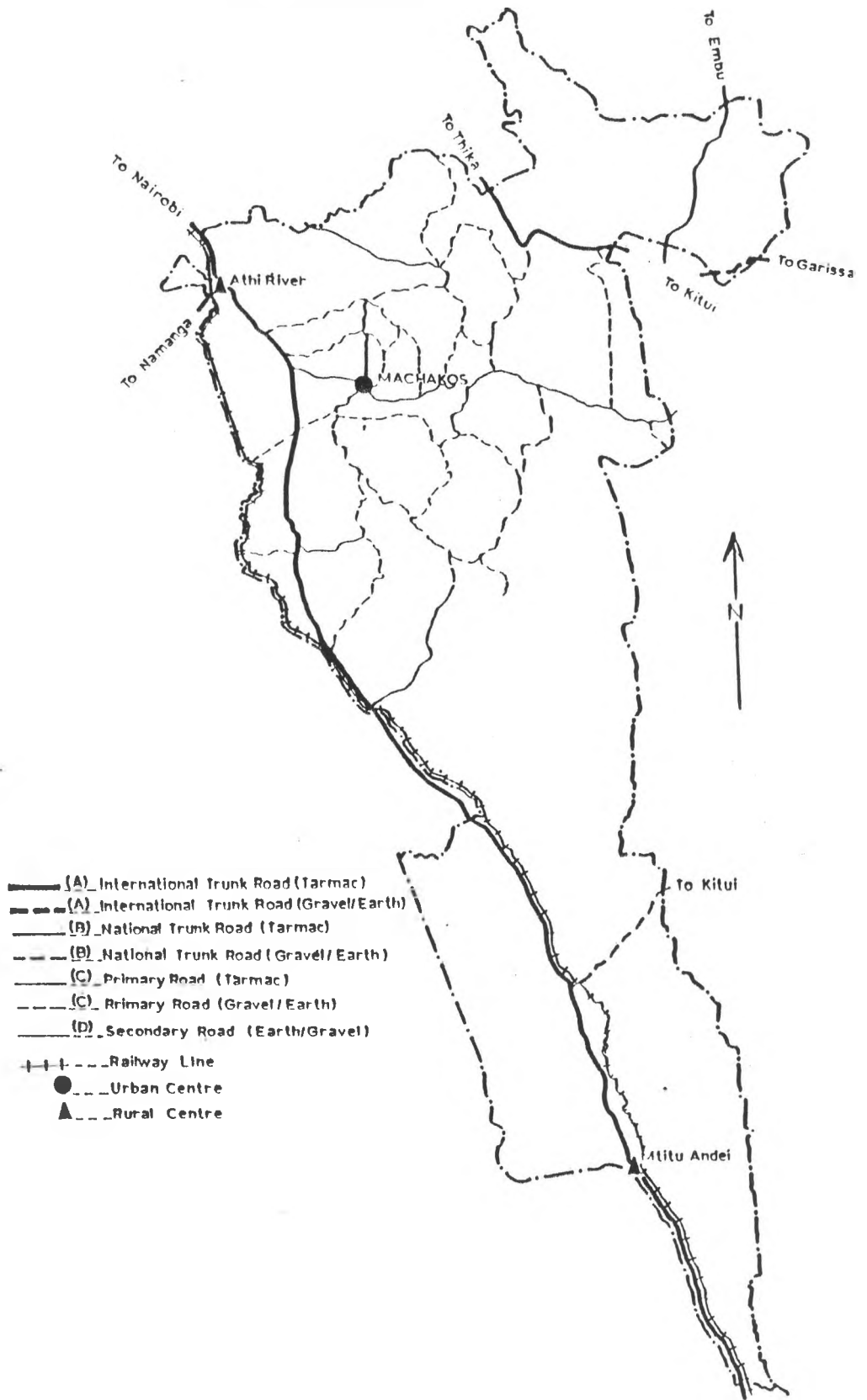
# Machakos District Health Facilities

APPENDIX II



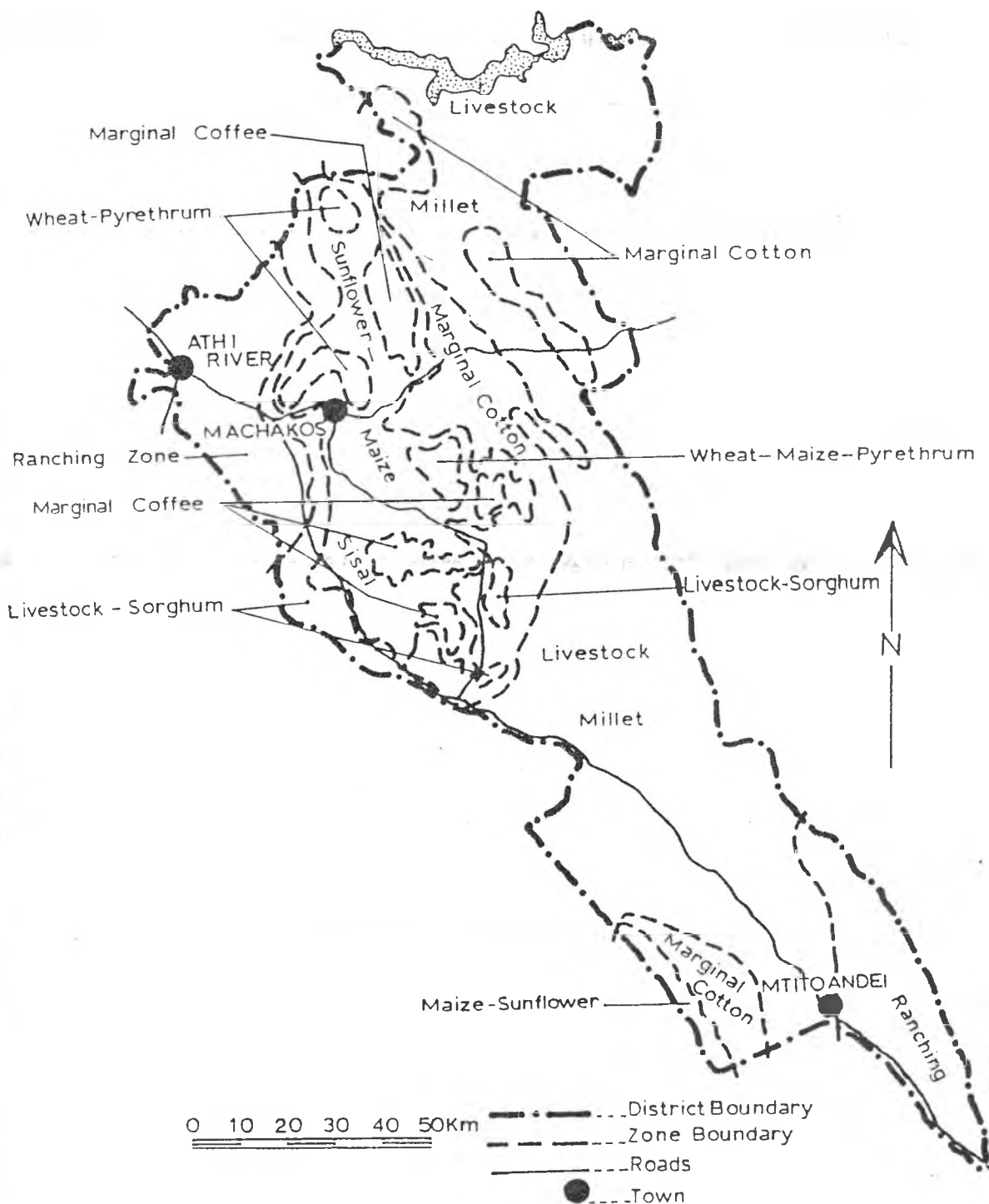
- Government Hospital
- Private Hospital
- Health Centre
- Sub-Health Centre
- Dispensary
- Proposed Dispensary

# Machakos District Communications



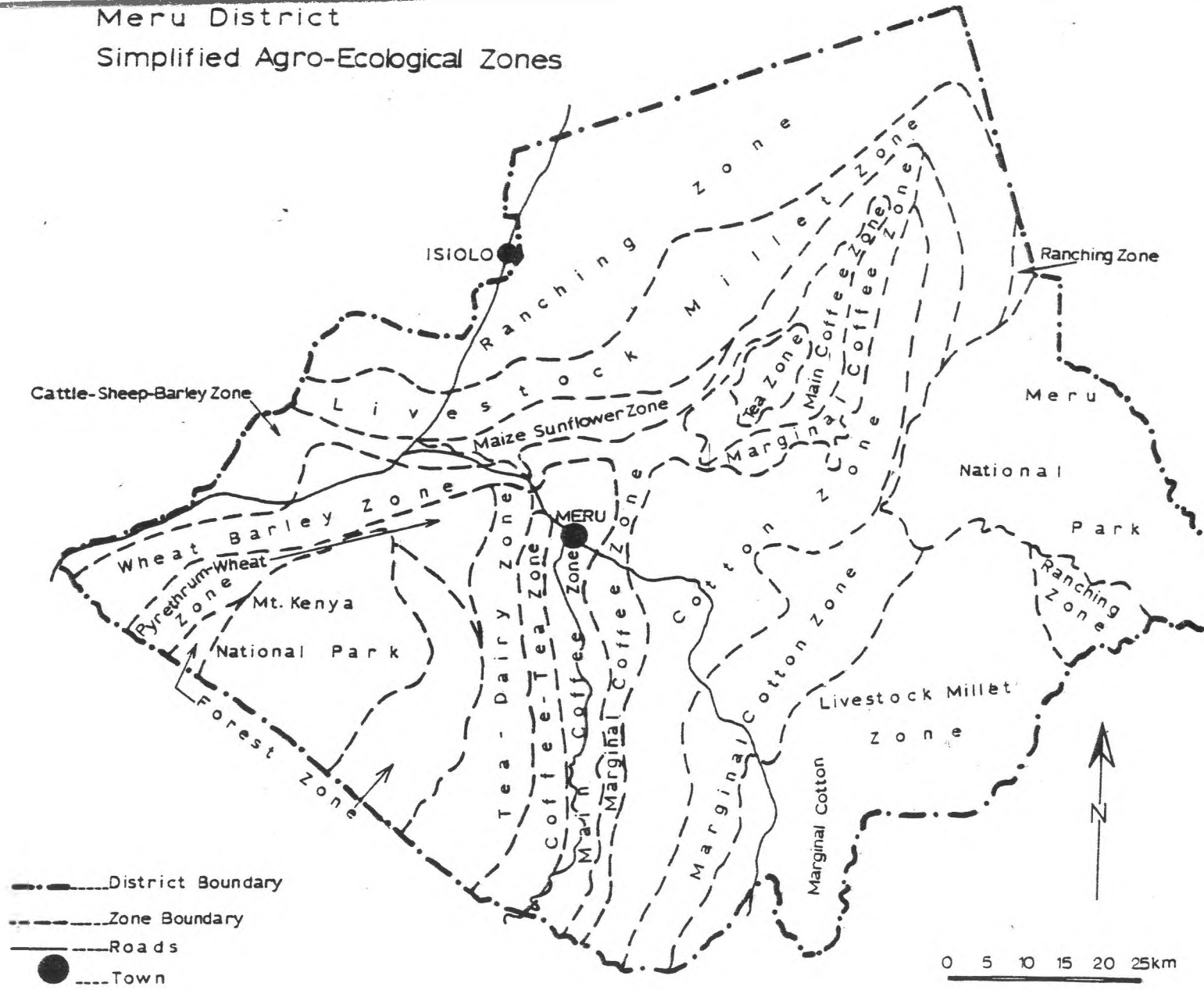


# Machakos District Simplified Agro-Ecological Zones

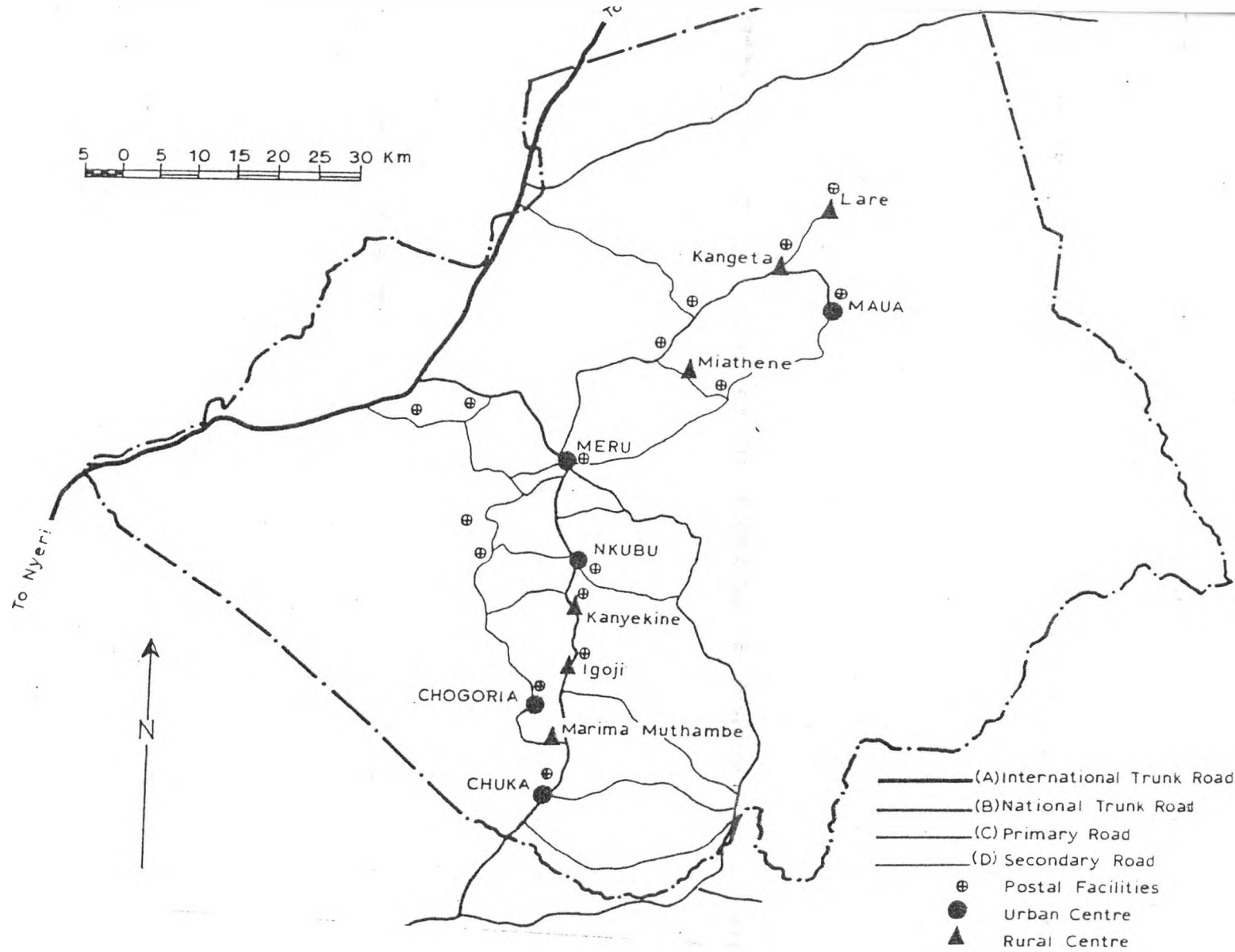


From Farm Management Handbook Of Kenya 1982

# Meru District Simplified Agro-Ecological Zones

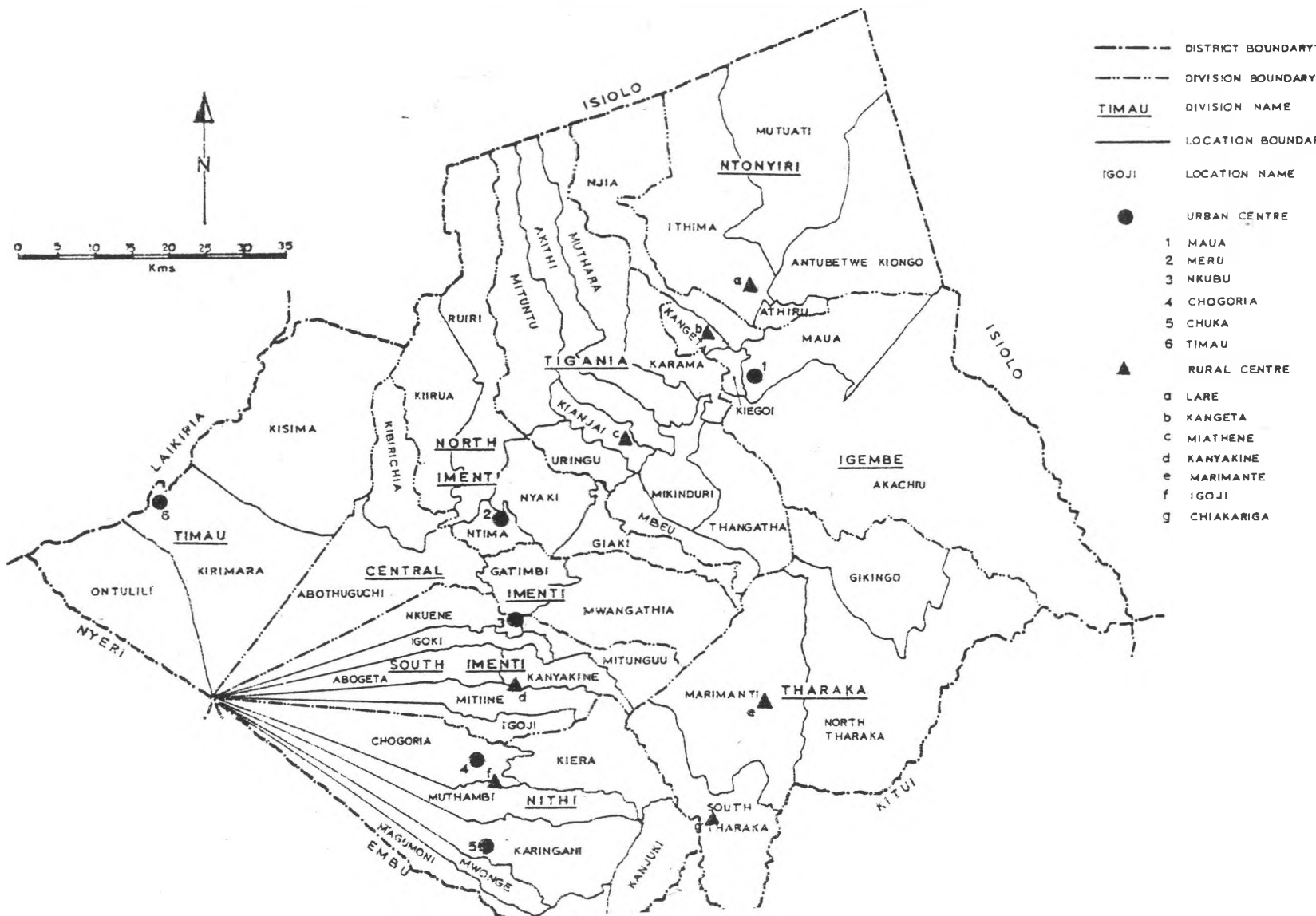


Source: District Development Plan 1989/93



Source: District Development Plan 1989/93

# MERU DISTRICT ADMINISTRATIVE BOUNDARIES



Source: District Development Plan 1989/93