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**Monitoring Population Growth in Arusha Region:
Population Data Collection Systems
and Suggestions for Improvement**

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MONITORING POPULATION GROWTH IN ARUSHA REGION:

POPULATION DATA COLLECTION SYSTEMS AND SUGGESTIONS FOR IMPROVEMENT

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SUMMARY

In the formulation of long-term development strategies for Arusha Region rapid population growth has been identified as one of the serious constraints to development. The design of a system for providing accurate information on population size and the components of population growth has been seen therefore to be crucial for planning purposes. This study and report was designed to assist the Regional Planning Office in the development of a village level data collection and reporting system; to assess currently available data and provide District-specific estimates of the components of population growth (fertility, mortality, and migration); and to assess the prospects for developing a pilot vital statistics collection system.

Field work for the report was undertaken in Arusha Region during three weeks in September and October, 1981. Available data from censuses and surveys were reviewed, and visits were made to Regional and District CCM Party and Government offices and to a sample of village and ward offices. The following is a summary of the work done on each of the main tasks.

1. Development of the Present Village Level Collection and Reporting System for Population and Migration Data.

Presently there are two existing systems of data collection at the village level: the national census (approximately every ten years) and the CCM Party village reporting system. Apart from these sources of data there have been several one-time surveys: the 1973 National Demographic Survey and the 1979/80 APVDP Village Profile Survey.

The national census system provides the best data because it is scientifically managed. However the CCM Party village reporting system has the potential to provide more accurate data and a better collection system than even the national census because the Party has representatives down to the grass-roots level (the ten cell leaders). Currently the data from the village reporting system is unreliable. Several causes for this have been identified including lack of education of the ten cell leaders and the lack of specific reporting forms and instructions for the ten cell leaders and village secretaries.

This report recommends improvement of the village reporting system through the provision of reporting forms for the ten cell leaders and village secretaries to accurately record population and migration information. These forms could also be expanded to include other information needed for improved planning at the village level. It would not be useful or necessary to collect all the population data for each monthly village report. It is suggested that an enumeration be carried out once a year, but that births and deaths be reported by the ten cell leaders to the village secretaries as they occur.

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2. Current Estimates of Population Growth in Arusha Region and Districts.

From available data and impressions from discussions with Party and Government officials the best possible current estimates were made of the components of population growth for Arusha Region and for each of the seven Districts. An overall population growth rate of 2.8 per cent per year was estimated for Arusha Region. The rate of natural increase was the predominant factor in the pericultural districts while in-migration was also a significant factor for the pastoral Districts. By any standards these are rapid rates of population growth particularly when comparison is made between the time it will take the population to double (about 19 years) and the economic capability of moulding the resources of the region into goods that satisfy human needs. The Regional and District estimates of fertility, mortality, migration and population growth are given in the table below:

ESTIMATES OF COMPONENTS OF CURRENT POPULATION GROWTH
IN ARUSHA REGION

DISTRICT	CER (PER 1000 POPULATION)	CDR (PER 1000 POPULATION)	RNI %	NMR %	POPULATION GROWTH RATE %
Arumeru	50	12	3.8	-0.5	3.3
Hannang	49	14	3.5	+0.6	4.1
Mbulu	49	14	3.5	0.0	3.5
Monduli	42	16	2.6	+2.0	4.6
Ngorongoro	42	16	2.6	0.0	2.6
Kiteto	42	16	2.6	+1.8	4.4
Arusha (Urban)	40	12.2	2.8	+2.2	5.0
REGION:	47	14	3.3	+0.5	2.8

KFY: CER = Crude Birth Rate
CDR = Crude Death Rate
RNI = Rate of Natural Increase
NMR = Net Migration Rate (In-migration - Out-migration)

The report noted that if this rate of population growth persists the population of Arusha Region will double in 19 years. Using these estimates of population growth the population of Arusha Region was projected to grow from a current (mid-1981) size of 1,035,761 to a population of 1,256,036 by mid-1986, giving an increase of a quarter of a million people during the current five year plan period. The projected increases for each of the Districts were as follows:

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DISTRICT	POPULATION AT 1978 CENSUS AUGUST 26, 1978	CURRENT POPULATION JUNE 30, 1981	PROJECTED POPULATION JUNE 30, 1986
Arusha	228,020	261,462	308,367
Banane	231,292	259,924	319,064
Mbulu	193,775	214,975	255,016
Monduli	71,725	91,760	102,903
Ngorongoro	47,031	50,644	57,675
Pitso	59,790	67,763	84,444
Arusha (Urban)	86,845	100,128	128,567

2. Development of Vital Statistics: Collection of Data on

Birth and Deaths.

A review was made of the evolution of vital registration (of births and deaths) in Tanzania. Up to now vital registration is compulsory only in gazetted townships. Even in these areas there is gross under-reporting of events. For example, in Arusha Town in 1980, the latest period for which data are available, only 31 per cent of births and 1.7 per cent of deaths were registered.

At present this under-reporting can be attributed to the general lack of education of the public regarding the importance of registering such events.

However, better co-ordination between the place of occurrence of these events, i.e. hospitals and health centers, and the registrar's office could raise the level of registration dramatically. In the villages the infrastructure is not yet adequate for compulsory registration. Therefore it is recommended that formal registration at the village level be delayed. However, under the village reporting system described above the ten cell leaders should be asked to report counts of births and deaths to the village secretaries as they occur.

INTRODUCTION:

In the formulation of long term development strategies and priorities for Arusha Region, Regional and District officials have identified rapid non-urban growth, with a projected doubling of the non-urban population over the next twenty years, as a major constraint to development in the region. In addition it has been noted that the process of designating areas for land use for livestock and agriculture as part of the land use planning program will require technical assistance to the Districts in assessing non-urban growth and carrying capacities of the land and in developing the District and village procedures and capabilities for monitoring non-urban growth and land pressures.

The terms of reference for this study were:

1. Assist the Regional Planning Office in development of the present village level collection and reporting system for population and migration data.
2. Assess and analyze currently available information, including census data, to provide District - specific estimates of fertility, mortality, migration, and population growth.
3. Assist in planning the development of a Pilot Vital Statistics Collection project in selected Wards in conjunction with the regional program.

Field work in Arusha Region was undertaken during three weeks from September, 13th to October 3rd, 1991. During this time four districts were visited:

Arumeru, Hanang, Mbulu and Monduli. Mr Alan Johnston (ARUPP Rural Dev. Planning Advisor), Professor Wilfred Wily (studied migration) and myself met with Government and CCM Party Officials at the regional down to village level. We had useful discussions with them and are very grateful to them for devoting their time to us. (The list of the officials met is shown in Appendix A).

Section 1 of this report covers the development of the village level data collection system; section 2 gives the best possible current estimates of fertility, mortality and migration for Arusha Region with seven districts; and section 3 deals with the development of a vital statistics system.

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1. ~~AN APPRAISAL OF THE PRESENT VILLAGE LEVEL COLLECTION AND REPORTING SYSTEM~~
FOR POPULATION AND MIGRATION DATA

One of the tasks involved in the establishment and development of the villages has been an attempt to collect data on population for planning purposes. There has as yet been no attempt to assess the accuracy of these data. It has been realized in Arusha Region that for long-term planning for optimal use of resources with the expansion of population and livestock pressure on the land resource accurate knowledge of the population and its growth is imperative. It has become necessary therefore to appraise and develop the present village data collection system. To accomplish this three tasks have been undertaken for this report:

- (a) Currently available data has been studied;
- (b) The present village data collection and reporting system has been reviewed; and
- (c) On the basis of information from tasks (a) and (b) ways of improvement have been suggested.

1.1 Available Data

There are currently three sources of data on villages in Arusha Region:

- (i) The 1967 and 1978 census and the 1973 National Demographic Survey (NDS) conducted by the government's Central Bureau of Statistics;
- (ii) The 1970/80 ARUPD Village Profile survey, and
- (iii) The CCM Party village data.

A. The 1967 and 1978 Censuses and the 1973 National Demographic Survey.

The 1967 census is published for small areal units (the enumeration areas)¹, but the present village boundaries were demarcated long after this census and the two types of units are therefore different. However aggregation to higher administrative units, the minimum being divisions can be done to compare today's boundaries.² The 1973 NDS followed the 1967 census enumeration areas boundaries but is more limited than the 1967 census since it was only on a small sample basis.³ The 1978 Census enumeration areas to a large extent followed boundaries of the present villages, although not in all cases as the leaders of contiguous villages differed on their common boundaries when taking the census mapping teams around. For the purposes of the census, natural boundaries were followed in these cases.⁴ The population of each village by sex and age-groups of under 1 year, 1-5, 5-9 & 10-14,

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15-24, etc. in ten year groupings were hand processed and are available at the district offices. Totals are also available in the Johnston Report (See footnote 2.) The government Census office is yet to publish these figures⁵. The 1978 census contains also detailed information on fertility, mortality, migration and other socio-economic variables. Although the data is on magnetic tapes, no processing has been done due to initial programming and chronic computer time constraints. Hence no firm date for publication is in sight.⁶ Arrangements could be made to get a copy of the data for Arusha Region processed separately. However, chances that data could be released without being "Cleaned" and reconciled with other areas and earlier releases are not very high.

- B. The APVDP Village Profile survey was ~~carried out~~ carried out from October 1979 to April, 1980. It covered 153 villages or 34 percent of all the villages in the six rural districts of the region.⁷ This survey offers a very useful insights into village life and the current attitudes of the people towards themselves and government beaurocrats. However, in terms of the accuracy of some of the numerical data, the methodology of getting the information at a meeting of all village people has reservations. Of course there are many factors influencing the level of accuracy of such data level of education being one example. Thus for population size and births and deaths occurring in a certain period the above method of survey is bound to produce inaccurate data. The household survey remains the appropriate technique. The population data that are available in the village profile survey are totals from the 1973 census, current estimated population of adults (by sex) and children, and births and deaths for a period of 12 months before the survey visit. The survey also contains in and out-migrants during the previous year (See Professor Mlay's report for details of these data).

Limitation of space does not allow the inclusion of data from the village Profile survey in this report; however a simple evaluation of these data is made here in terms of the rise or fall of total population between the 1978 census and the survey data. In an area where population has been shown to be growing rapidly one should expect a higher population size in a later period inspite of some migration. Of the 133 village for which data was available only 36.9 percent showed a rise,

as many as 33.8 percent had a decline, 7.5 percent had the same population as the earlier census, and 21.8 percent gave no figure. Vital data showed a surprisingly reasonable crude birth rate figure of 50.3 per thousand, but the crude death rate of 8.5 per thousand is certainly an underestimate due to under-reporting of deaths.

C. The CCM Party Village Data

The CCM Party has a system by which each village secretary has to submit a monthly report to the next administrative level (the Ward) with a copy to the Division. Similar reporting is done at each level all the way to the top. One of the items required in the report is information on population by sex and adult/child categories. Information on migration and deaths is also required but only on members of the party. Although many villages said that data on births was required, none did collect it and it does not appear on the report form designed for Ward Secretaries (See Appendix D for the form used in Mbulu District).

The party administrative structure is the only one with a continuous data collection system.⁶ Its structure goes all the way down to the smallest possible administrative unit, the ten cell ("ten - House") unit (shina). It is actually from this source that data on population originates, the upper levels being only collating points. Our starting point for development of a village level data collection system therefore is the assessment of village data from this source.

The data that will be used for assessment was collected from a sample of CCM Party Offices at district, ward and village levels. These are shown in Appendix C. The 1978 census data is also shown on the side for comparison because some of the villages we visited quote the 1978 figure in every monthly report rather than taking the actual account. Apart from data collection, interviews and discussions were held with the leaders for an average period of one hour (at the Mbulu Party Secretary's Office the interview lasted two hours). Because of distance and time limitation Kiteto and Ngorongoro Districts were not visited. The topic of discussion was the method used for obtaining the village counts.

A comparison of these village data all collected in 1980 with the 1978 census population sizes shows that out of the total 54 administrative units (villages and Wards) only 31.5 percent show a rise in population, 44.4 percent a fall (suggesting under-counts), 16.7 percent the same (no attempt to count) 1.8 percent (one village) had no data, not even the 1978 census data, and for the rest (5.6 percent, 3 villages actually visited) the officials were not available.

Two observations can be made here. The fact that about 72 percent of the sample administrative units show a figure different from that of the census is an indication that attempts are being made by the ten cell leaders to count the population. However the unexpected decline in 44.4 percent of the units indicates deficient methods which are also likely to exist even in the areas showing rises in population. Those with the same figures as that for the census and those with no data at all (a total of 18.5%) have obviously not made any attempt to count the population. On the basis of our impressions from discussions with officials there are two main factors contributing to this deficient counting:

1. deficiencies in the system itself, and the quality of the agents (the ten cell leaders).

There seem to be two main deficiencies in the system. First, there is no form (or questionnaire) given from the CCM office to the ten cell leader to use for counting (as for example in a census). As a result we found two methods of counting. Some villages reportedly designed forms and gave them to the ten cell leaders (Only one village, Sing'isi in Arumeru District, showed us a sample, see Appendix D), and others just told the ten cell leaders to make counts. In both cases, illiterate ten cell leaders were to go around to their "houses" with a standard seven school leaver to help them write down the numbers.

Also there are no written instructions as to how to conduct the counts. One could say that verbal instructions are enough, but in a place with a low level of numeracy written instructions could help.

Actually in Magugu village the Acting Village Secretary, on his own initiative, expressed the need for the village leaders in charge of data handling to be taught scientific ways of counting because he thought everywhere it was being done as a person thought fit.

One example of the effect of lack of specific instructions is on the age cut-off between adults and children. There is confusion on this. Some

villages took those aged 18 years and over as the adult population and those below it as children. Others used the above adult category, but for children counted those under the age of 15 years, thus leaving out the 15-17 age segment. Uniformity is needed and a method for obtaining uniformity in age grouping is suggested.

It can be seen that in the long run most children will enter primary schools at the minimum officially accepted age of 7 years and leave school at the age of 14 years (i.e. after seven years of primary school). At this age a person can participate fully in economic activities, and it is the conventional age used for labour force entry and hence for planning purposes. The questionnaire sent down from the CCM Party headquarters mentioned above (see footnote 9) required the under 15 above 15 years categories only; it would seem they have moved away from the age 18 cut off for their planning. For planning purposes it is thus recommended that population totals be collected for this groups: Those 15 years of age and older, and those under 15 years of age.

The second deficiency in the system is that there is lack of appreciation of the need for the data. Education in this regard could enhance accuracy. Some leaders reported a lack of responsibility on the part of some tea cell leaders. It may appear so, but the underlying reason is probably lack of incentive partly due to lack of data appreciation.

The low quality in terms of formal education and training for the specific task of tea cell leaders is also a major problem. Although in some cases use is made of standard seven school leavers, the training for the task is still lacking.

D. Use of CCM Village Data in Planning

The main planning institution for social and economic development is the government as an arm of the Party. However, although the CCM administration collects information on up-to-date population, though deficiently, this data is not used in the district planning offices.

Two related reasons were found on our visits.

First it is thought that the data collected by ten cell leaders are not accurate, although our informants have not done any evaluation of these. They rely on projections from the 1976 census to get the current size of the population, but without adjusting for net migration.

Second, it is felt that data which has not been collected by the institution charged with giving the "official" data, e.g. the Bureau of Statistics, should not be used for official purposes.

Officials of both government, regional and district offices on the one hand and those CCM regional, district, down to village offices on the other, agreed that an improved system that satisfies the needs of both sides should be developed.

1.2 Improvement of the Village Data Collection System

In the formulation of improvements in village data collection we were strongly guided by the objective of designing a system that would work. Consideration was made of two factors, the education level of the ten-cell leaders and the work-load in the processing and reporting system. The system that would work therefore was seen to be one which would make data collection as simple as possible and utilise the existing reporting system.

Two innovations have been suggested and discussed with the CCM Regional Executive Secretary. The first innovation is the collection of two additional pieces of information: (1) total migration and (2) births and deaths occurring in the whole population rather than for CCM party members only as at present (see the old form in Appendix B). The second innovation is a form designed to help the ten cell leader get more accurate data. It is shown in Appendix E. The procedure is to visit each household and count the number of persons. The form also inquires about the total number of births and deaths in the ten-cell unit. The ten-cell leader will be instructed to use a standard seven school leaver if he himself is unable to fill the form. This form will be completed annually. Although the CCM monthly report by the village requires population data, it is considered here that taking population counts monthly is certainly way too frequent. One cannot see the need for knowing population changes by month.

A period of one year should be the minimum interval between counts. Written instructions for filling the form will be provided and training given to the village secretaries who will in turn train the ten-cell leaders.

A separate form for the registration of births and deaths was considered. However, because currently CCM requires monthly reporting, it was seen that the monthly vital registration form would in most cases be empty. Only the total number of births and deaths occurring are therefore to be collected and no additional form is required. However, vital events for a full year would be difficult to recall. It is recommended that the ten-cell leader report the events as they occur to the village secretary for recording. Each village secretary will be provided with a book for recording migration and births and deaths as they are reported by the ten-cell leaders. The alternative of the ten-cell leader keeping a record then reporting after some period is not even second best because the ten-cell leader has no facilities (and personal qualifications) for safe record keeping. The Regional Planning Office should discuss these problems with the CCM officials so that an alternative suitable to all parties can be found.

When the ten-cell leader has completed the annual enumeration, he/she forwards it to the village secretary. The village secretary puts the totals from all the ten-cell leaders on a single form shown in Appendix E. The columns on this form correspond to the information on the ten-cell leader's form. Similar procedures could be followed at all levels up to the CCM Regional Offices with copies left at each office and another copy sent to the District and Regional offices. It should be noted that for planning purposes the information on each village should be shown in the reports to all the offices up to the regional level.

2.0 CURRENT ESTIMATES OF POPULATION GROWTH IN ARUSHA REGION AND DISTRICTS¹

Increasing pressure on land is one of the acute problems that has been expressed by leaders at all party and government administrative levels (from the village to the regional levels²). It is therefore important to know the current rates of population growth which is one of the main determinants of this pressure.

Table 2.1 shows a summary of the best possible estimates (BPE) of current (1981) population growth and its components in all seven districts and the region as a whole. These estimates were derived using the following information:

- (i) Existing data: Since no detailed data from the 1978 Census have come out after the preliminary report was issued estimates were assembled using data from the 1967 and the 1978 censuses, the 1973 National Demographic Survey (NDS), Johnston's "Population Profile of Arusha Region", and the APVDP Village Profile Survey (1979/80)³
- (ii) Other information: Social and economic trends in the region and districts over the last decade were reviewed and together with the impressions gained from discussions with leaders mentioned above used to extrapolate from the estimates in (i) to arrive at the current estimates. It should be understood that at present there is no data available to provide accurate estimates at the District level of the components of population growth (fertility mortality, migration). The following are merely the best estimates of informed observers. It must be emphasised that the best data will be provided by analysis of the 1978 census and the Region should press for this analysis to be done as early as possible.

The following is a summary of the factors that went into the estimates for the region and each district:

2.1 Arusha Region

(1) Fertility

The crude birth rate (CBR) for the region from both the 1967 census and the 1973 NDS was estimated at 47.2 births per thousand (mid-year population) per year. It is considered unlikely that fertility has declined since then.

TABLE 1. ESTIMATES OF COMPONENTS OF CURRENT POPULATION GROWTH

IN ARUSHA REGION					
DISTRICT	CBR (PER 100)	CDR (PER 1000)	RNI %	MR %	GROWTH RATE %
Arumeru	50	12	3.8	- 0.5	3.3
Hananu	49	14	3.5	+ 0.6	4.1
Mbulu	49	14	3.5	0.0	3.5
Monduli	42	16	2.6	+ 2.0	4.6
Ngorongoro	42	16	2.6	0.0	2.6
Kitato	42	16	2.6	+ 1.8	4.4
Arusha District	40	12	2.8	+ 2.2	5.0
REGION	47	14	3.3	+ 0.5	3.8

KEY: CBR - Crude birth rate
 CDR - Crude death rate
 RNI - Rate of natural increase
 NMR - Net migration rate (In-migration - out - migration)

in fact it has probably increased slightly due to what is generally agreed to be a decline in the practice of traditional methods of child spacing. The current crude birth rate is therefore estimated to be at 47 births per thousand population.

(ii) Mortality

The crude death rate (CDR) from the 1967 Census was found to be 14 per thousand per year. The 1973 NDS estimate of 12.2 is thought to be an underestimate as the mortality data are reported to be unreliable (1973 NDS vol. III, p. xxvi). The crude death rate is thought to be still at 14 per thousand because any decreases in mortality in the last few years are likely to be marginal and these have been offset by disease epidemics, for example measles, cholera, etc., and recent unfavourable food conditions. Further, the current national level of mortality is estimated at 18 per thousand (Population Reference Bureau 1980 Data Sheet), and Arusha Region is known to have much lower mortality than the national average (from 1967 Census and 1973 NDS).

(iii) Natural Growth Rate

The difference between CFR and CDR gives the rate of natural increase (RNI), which from the above estimates is therefore 3.3 per cent per year.

(vi) Migration

There is currently 0.5% per year net in-migration (NMR); that is, the factor of migration (alone) is increasing the region's population at this rate. The reasons for this increase are considered to be in-migration to Arusha Town by about 1,000 people per year; migration into Mangoch (Mbulu), Gallago (Hanang) and Kiteto by about 2,000 people per year; with an additional 2000 to the rest of the region. There is negligible out-migration to Kilimanjaro; and according to the 1967 census, Arusha is a region of in-migration.

(v) Annual Population Growth Rate

This is composed of both the rate of natural increase and the net migration rate; thus for the region it is 3.8 per cent per year. If it persisted the population of the region would double in about 19 years' time.

2.2 ARUMERU DISTRICT(i) Fertility

The current crude birth rate is estimated at 50 births per thousand. Parity (i.e. the average number of children ever born per woman) for women aged 20-24 years was found to be 7 percent higher than that of the Region as a whole. Likewise the 1973 NDS estimated the CDR to be higher than the regional figure: between 50 and 54 per thousand. One factor contributing to higher fertility in Arumeru District is that proximity to urban areas is likely to lead to a faster breakdown of traditional methods of child-spacing while the use of modern family planning is still very limited. However, the presence of pastoral people with lower fertility moderates the higher fertility of agriculturalists.

(ii) Mortality

The current crude death rate (CDR) is 12 per thousand. Mortality in Arumeru District is thought to be lower than the regional level because of the availability of better health and medical services. The 1967 census figure of 11 per thousand is probably due to an undercount of deaths.

(iii) Natural Growth Rate

The CBR of 50 and CDR of 12 give a rate of natural increase (RNI) of 3.8 percent per year.

(iv) Migration

Currently it is estimated that the district experiences out-migration of about 0.5 percent per year (the APVDP village survey shows it could be as high as 1.3% per year). Net out-migration means the population is decreasing due to people moving out of the district permanently. This direction of migration is expected because all the villages we visited expressed land pressure and reported young families

moving out. Further the villages did not accept any new members.

However, many of those who migrate to Arusha Town reside in Arumeru District in areas adjacent to the town, for example Tengeru, USA River, etc.

(v) Annual Population Growth Rate

Due to net out-migration the total growth rate of the population is about 3.3 percent per year. This is still high as it would double the population in about 21 years if growth persisted at this level.

2.3 MONDULI DISTRICT(i) Fertility

The current crude birth rate (CBR) for the district is estimated to be 42 births per thousand per year. The 1973 HDS put it at 44, but because of known sub-fertility among the pastoral populations in general, fertility in the district must be lower than this. Nevertheless the estimate of 42 is based on weak evidence.

(ii) Mortality

The crude death rate (CDR) for the district is estimated to be about 16 per thousand per year. This is lower than the national average of 18 because the Arusha Region pastoralists appear to have a stronger (protein) diet. Further the low population density in the pastoral areas counteracts much spread of disease. Still the mortality level in the district is thought to be higher than the regional estimate because health and medical services in Monduli District are much lower than in the agricultural districts of the region.

(iii) Natural Growth Rate

The difference between the CBR and CDR above gives a rate of natural increase for the district of 2.6 percent per year.

(iv) Migration

It is estimated that there is about 2.0 percent per year net in-migration into the district. In-migration is reported to come mainly from Arumeru and Ngorongoro Districts and Kilimanjaro Region (Hai District) by about 1,000 persons per year. There is also in-migration to the Monduli urban areas, Longido and Mto wa Mbu by about 500 persons per year. The APVDP Village Profile Survey of sample villages shows net in-migration of 2.18 percent per year. Out-migration to urban areas is negligible.

(v) Annual Population Growth Rate

The above annual rates of natural increase and net migration give a growth rate of the population of 4.6 percent. This rate could double the population in 15 years.

2.4 HANANG DISTRICT(i) Fertility

The current crude birth rate (CBR) is estimated at 49 births per thousand per year. This figure is a bit higher than 48 for the whole region because agricultural populations have higher fertility than pastoralists who are included in the regional total. The two 1973 NDS clusters in the district showed a CBR of 51, however the child-woman ratio showed Hanang to be lower than Mbulu. These are conflicting results for the same ethnic groups living adjacently in the same ecological zone. It is concluded therefore that Hanang's fertility is similar to that of Mbulu.

(ii) Mortality

The crude death rate (CDR) of the district is put at 14 per thousand per year as for the region for lack of a better estimate. A leading factor here is that Hanang's mortality is higher than in Arumeru as it has a lower level of medical and health services.

(iii) Natural Growth Rate

The difference between the above CBR (49) and CDR (14) gives a rate of natural increase for the district of 3.5 percent per year.

(iv) Migration

There is 0.6 percent per year net in-migration to the district. This is evidenced by about 1,000 in-migrants per year into Gallapo, Magugu, Barbaig and Minjungu and about 500 people per year into Babati town. Moreover the 1967-78 annual inter-censal growth rate of 5.5 percent included large in-migration from Mbulu (due to drought), although this has almost stopped. Also the APVDP Village Profile for sample villages showed a net in-migration rate of 1.1 per cent per year; but this has probably slowed down also as villages have become aware of land shortage and are restricting new settlement.

(v) Annual Population Growth Rate

A combination of 3.5 percent natural growth and 0.6 percent in-migration puts growth of Hanang District at about 4.1 per-cent per year. If growth continues at this level the current population will double in 17 years' time.

2.5. MBULU DISTRICT(1) Fertility

The current crude birth rate (CBR) for the district is estimated at 49 births per thousand per year. The 1978 child-woman ratio was 906 children per 1,000 women aged 15-54 years (the census grouping makes it impossible to use the conventional 15-49 year grouping); this is higher than the region's 842 (slight differences in mortality level notwithstanding).

This finding is supported by the fact that

agricultural populations have higher fertility than the pastoralists included in the regional total. However it is lower than that of Arumeru District because it is still more traditional and hence observes more of the norms of child-spacing.

(ii) Mortality

The crude death rate for the district is put at 14 per thousand per year as for the region for lack of a better estimate. A leading factor though is that Mbulu's mortality is probably higher than that of Arumeru District because the latter has better health and medical facilities.

(iii) Natural Growth Rate

A combination of the above CBR (49) and CDR (14) put the district's growth rate at 3.5 percent per year.

(iv) Migration

There seems to be zero net migration with small flows each way in and out of the District. The 1967-78 large net out-migration has almost stopped, and this is confirmed by the 1979/80 APWDP Village Profile which put migration at zero. There is however a small number of in-migrants from outside the District into Manjola.

(v) Annual Population Growth Rate

With a natural growth rate of 3.5 percent per year and zero net migration the current growth rate of the population is about 3.5 per cent per year. It is still a high rate as it would double the population in only 20 years.

2.6 NGORONGORO DISTRICT

(1) Fertility

The current crude birth rate (CBR) for the district is estimated to be 42 birth per thousand per year. The 1973 NDS put it at 44, but because of known sub-fertility among the pastoral populations in general, fertility in the district must be lower than this. Nevertheless the estimate of 42 is based on weak evidence.

(ii) Mortality

The crude death rate (CDR) for the district is estimated to be about 16 per thousand per year. This is lower than the national average of 18, because the Arusha Region pastoralists appear to have a stronger (protein) diet. Further the low population density in the district in the pastoral areas counteracts much spread of disease. Still, the mortality level in the district is thought to be higher than the regional estimate because health and medical services in Ngorongoro District are much lower than in the agricultural districts of the region.

(iii) Natural Growth Rate

The difference between the CBR and CDR above gives a rate of natural increase for the district of 2.6 percent per year.

(iv) Migration

Net migration in the district is estimated to be zero. This is derived from two pieces of evidence. The study by Arhem (1981) in the Ngorongoro conservation area shows the population to have declined after reaching a peak in 1978⁵. Some migrants out of the conservation area, however, moved to other parts within the district. There is in-migration into Lolionde but it is balanced by out-migration to Monduli District. It should be noted, however that although current net migration is zero, there is a potential of in-migration of people from the surrounding districts as land pressures there increase.

(v) Annual Population Growth Rate

With a rate of natural increase of 2.6 percent per year and zero net migration the current growth rate of the population is estimated at 2.6 percent per year. At this rate of increase the population would double in 27 years's time.

2.7 KITETO DISTRICT(i) Fertility

The current crude birth rate (CBR) for the district is estimated to be 42 births per thousand per year. The 1973 NDS put it at 44, but because of known sub-fertility among the pastoral populations in general, fertility in the district must be lower than this. Nevertheless the estimate of 42 is based on weak evidence.

(ii) Mortality

The crude death rate (CDR) for the district is estimated to be about 16 per thousand per year. This is lower than the national average of 18 because the Arusha Region pastoralists appear to have a stronger (protein) diet. Further the low population density in the pastoral areas counteracts much spread of disease. Still, the mortality level in the district is thought to be higher than the regional estimate because health and medical services in Kiteto District are much lower than in the agricultural districts of the region.

(iii) Natural Growth Rate

The difference between the CBR and CDR above gives a rate of natural growth for the district of 2.6 percent per year.

(iv) Migration

The extent of migration is estimated at 1.8 percent per year net in-migration. This is due to movement into the district of people from Arumeru District, Singida and Kilimanjaro Regions by about 1,200 persons per year. The 1979/80 APVDP Village Profile showed net in-migration of 0.4 percent; but the impression from officials is that it is on the increase.

(v) Annual Population Growth Rate

The above rate of natural increase (2.6%) and net in-migration rate (1.8%) give the population a growth rate of 4.4 percent per year, a rate that would double the population in only 16 years.

2.8 ARUSHA DISTRICT(i) Fertility

The crude birth rate (CBR) for the urban district, Arusha, is estimated at 40 births per thousand per year. It is thought to be lower than all the other districts following the general observation of lower urban than rural fertility in the 1967 census and in other countries. An additional factor is the sex ratio. There are more men than women in Arusha urban although this ratio is declining.

(iii) Mortality

The crude death rate (CDR) is put at 12 per thousand per year the same rate as for the surrounding Arusha District for lack of a better estimate.

(iii) Natural Growth Rate

The difference between the CBR and CDR above give the rate of natural increase for the district of 2.8 percent per year.

(iv) Migration

There is net in-migration at a rate of about 2.2 percent per year. Migration into Arusha Town has slowed down, as is shown by 1957-67 and 1967-78 intercensal growth rates of 12 percent and 5.0 percent respectively. The disbanding of the East African Community (the past attraction) and lack of industrial expansion have been contributing factors.

(v) Annual Population Growth Rate

A combination of the rate of natural increase (2.8%) and in-migration (2.2%) puts the total growth rate for the district at 5.0 percent per year.

2.9 DISCUSSION

It is clear from past surveys and current impressions that population growth rates in all districts are relatively high with several very high. Excluding Arusha (Urban) District these rates range from 2.6 to 4.6 and are mostly above 3 percent per annum; these rates would double the population in only 15 to 27 years. That the rates are indeed rapid is based on two grounds:

(a) Comparison of the time it would take for the population to double with the existing trends in economic capability of moulding the vast natural resources into goods that satisfy human needs; and

(b) The expression of "extreme" land pressures in all the villages we visited.

However, one thing we should keep in mind is that the above rates of growth are based on scanty data and impressions. The need therefore for instituting systems for the collection of more accurate data is obvious.

The formulation of appropriate policies requires correct knowledge of the determinants of the components of population growth, namely fertility, mortality and migration. Intensive micro-level household research surveys are prerequisites. These might be expensive in the short run but their benefits for planning are clear.

A major purpose of the present study has been to provide, on the basis of presently available information, the best possible estimates of current population growth for use by planners at the Regional and District levels. Estimates of the components of population growth for Arusha Region and Districts are provided in Table 1. Based on these estimates of population growth rates Table 2 presents population projections for the Districts and Region for the current five year plan period. These projections show that at current growth rates the population of Arusha Region will increase from 1,035,761 at mid-1981 to 1,256,036 by the end of the present five year plan in 1986.

Table 2. POPULATION PROJECTIONS FOR ARUSHA REGION AND DISTRICTS, 1978-1986

(BASED ON POPULATION GROWTH RATES ESTIMATED IN TABLE 1)

DATE	ARUSHA REGION	ARUSHA DISTRICT	ARUMERU DIST.	MONDULI DISTRICT	H.M.N.G DIST.	MEULU DIST.	NGORONGORO DISTRICT	KITETO DISTRICT
AUGUST 26, 1978 Census	928,478	86,845	238,020	71,725	231,292	193,775	47,031	59,790
JUNE 30, 1981	1,035,761	100,128	261,462	81,760	259,924	214,075	50,644	67,768
JUNE 30, 1982	1,076,404	105,262	270,235	85,609	270,803	221,700	51,978	70,817
JUNE 30, 1983	1,118,681	110,659	279,301	89,639	282,136	229,597	53,347	74,002
JUNE 30, 1984	1,162,665	116,333	286,672	93,858	293,944	237,775	54,752	77,331
JUNE 30, 1985	1,208,426	122,297	298,357	98,277	306,247	246,245	56,194	80,809
JUNE 30, 1986	1,256,036	128,567	308,367	102,903	319,064	255,016	57,675	84,444

3.0 DEVELOPMENT OF VITAL STATISTICS: COLLECTION OF DATA ON BIRTHS AND DEATHS.

This task involved first looking at the existing system. Here three things were surveyed:

- (a) the evolution (or history) of vital statistics collection in Tanzania and Arusha Region;
- (b) the effectiveness of the system; and
- (c) the use of the vital data that are collected.

On the basis of these points suggestions for improvement are made.

3.1 Evolution of Vital Statistics Collection in Tanzania and Arusha Region

The introduction of vital registration in Tanzania started with colonization. During the German occupation (1880's to 1915) reporting of births and deaths by the village headman was compulsory for all inhabitants of Tanganyika. Under the British Rule after 1920 registration was compulsory (in 1922) at first only for peoples of European and Asian descent; and deaths only registered for other non-natives (a person "neither a member of an African race nor a swahili and includes the Somali").¹ Since January 1950 birth registration was also extended to all non-natives.² No mention is made of natives who wished to register. Here maybe it was not so necessary as the system was very alien, if not ridiculous, to African culture.

The first time that registration was made compulsory for natives was in July 1952 for Tanga Township only; it was extended to Arusha Township in September, 1956.³ It is peculiar that Dar es Salaam the capital city is not mentioned in the document available to the writer. It is probable that the city was included right from the time it became the capital of the territory.

Long after independence, in July 1966, registration was extended to cover a total of 14 townships; again no mention is made of Dar es Salaam.⁴

Currently plans are under way for registration of births and deaths all over the country. Specifically, a project funded by UNFPA and executed by the Administrator General is in operation in 4 pilot areas: 3 districts, namely Moshi Rural, Bagamoyo and Morogoro Urban Districts.⁵ Dar es Salaam City has later been included since the executing agent, the Administrator General's Office, is located there.⁶

Thus in Arusha Region registration is compulsory only in Arusha Town. The information being collected is shown in Appendixes F and G. These are the Registrar's forms RD 5 and 6 for birth and death registration, respectively.

3.2 Effectiveness

From discussions with the Registrar General in Dar es Salaam and the District Registrars (Manpower Management Officers (MMOs)), in Arusha Region no evaluation has ever been made as to the effectiveness and completeness of vital registration in Tanzania. What is known as a fact is that the law is not enforced except for charges of a penalty fee for late registration, and this is only when a person "shows up" for registration. Hence vital registration is widely regarded as grossly ineffective and incomplete. A 1978 UNFPA mission was told at the Registrar General's Office that only 2700 births and 1000 deaths had ever been registered. Even these figures might be inaccurate because the mission reported that records there were not being kept in any meaningful way.⁷

In Arusha Region registration is compulsory only in Arusha Town. In the other districts, some birth are registered, but only for people who come forward. Few or no deaths have ever been reported. For example, in Arumeru District (around Arusha Town) where the registrar was asked to compile figures for us, only 79 births were registered in 1980, giving a crude birth rate of 0.3 per thousand per year.

In 1981 only 97 births had been registered by 28th September. No deaths were registered in 1980, and by September only 2 were registered for 1981. Even in Arusha Town where registration is compulsory, it is in effect voluntary and no enforcement is made. According to the Arusha District Registrar (MMO) the following is what happens:-

- (i) Births: Most births are thought to take place in government or private hospitals. Here a chit is given to the parents as evidence of a live - birth. It is left to the individual to go to the registration office. Due to lack of education, most parents take the chit as a birth certificate. Thus most births go unregistered. Efforts are being made to educate the public through church and noticeboard announcements. Since the extent to which births take place in hospitals is not known, those occurring at home could be contributing significantly to incompleteness of registration. Of those that are registered, evidence of the event is by a letter from the CCM Party Ward Secretary (Katibu Kata).
- (ii) Deaths: Registration of death is much less common than of births. One would have thought the contrary, since a permit is required for burial. The town council issues the permit and the District Registrar (MMO) registers the event, but these are not co-ordinated. To get the permit one requires either a doctor's death certificate or a letter from the CCM Party Ward Secretary. The Registrar is thus not involved in the process. Partly due to the African cultural values of minimum mention of the deceased, the event of death goes unregistered. (The National Insurance Corporation has many unclaimed policies partly due to this factor, an insurance officer of the corporation told me).

(iii) Data: The District Registrar is required to send in quarterly reports to Dar es Salaam. The data available at the office, however, was for the past year (October, 1980 to September 1981), the period for which the present registrar has been in the office (we were told that there is no proper keeping of records). During this period 1,157 births and only 23 deaths were registered, showing a crude birth rate (CBR) of only 12.3 per thousand and a crude death rate (CDR) of only 0.2 per thousand per year. Compared to the expected estimates of 40 and 12 per thousand CBR and CDR respectively, (see section 2.8) this shows extremely low reporting. Only 31 percent of the births and 1.7 percent of the deaths expected were reported.

3.3 Current Use of the Data

No use is made of vital data in any way except for being kept.

3.4 Improvement of the Current Vital Statistics System

(a) Villages:

Considering that vital statistics registration is not compulsory and has not been carried out in the region except for Arusha Town and the low educational level of the population, it is suggested that formal vital registration not be introduced at this time. However, for planning purposes, knowledge of current growth of population etc, can be ascertained by the ten-cell leaders reporting births and deaths to the village secretary as they occur. The totals would be part of the monthly report. This is suggested in order to use the existing CCM system of monthly reporting, hence no new system is established. This system of vital reporting is discussed in detail in Section 1.

(b) Arusha Town:

(i) Births - Since most births reportedly take place in hospitals, it can be assumed that the authorities there have records of their patients. The District Registrar and these hospitals should be co-ordinated so that required information on the child and mother is recorded at the hospital and can be copied into the Official Register by the Registrar.

For births that take place at home, the ten-cell leader, although it is understood that in Arusha the ten-cell leader system does not work as well as in the rural areas, can urge the parents to go to register. Of course general education campaigns can also help.

- (ii) Deaths Since a burial permit is required, the office issuing the burial permit can be asked to record the information required for registration, and then the office of the Registrar can later enter it in the Official Register.

Understandably the District Registrar takes his orders from the Registrar General in Dar es Salaam. This office could be approached on ways to improve the system. This seems the best approach since the office of the Registrar General as mentioned in section 3.1 is attempting to extend vital registration all over the country.

FOOTNOTES TO SECTION 1

1. See Tanzania, 1967 Population Census Vol. 1 (Statistics for Enumeration Areas), Dar es Salaam, (Bureau of Statistics, 1969).
2. Alan Johnston, "Population Profile of Arusha Region" (January 1980) (Available at the Arusha Regional Planning Office).
3. Tanzania, 1973 National Demographic Survey Vol. I (Methodology) Dar es Salaam, BRALUF and Bureau of Statistics.
4. By communication with the Arumeru District Planning Assistant who was in charge of the 1978 census in the District.
5. Only ward totals by sex, and district and region figures by sex and age-grouping mentioned above have been published. See Tanzania, 1978 Population Census Preliminary Report Dar es Salaam, Bureau of Statistics, n.d.
6. By communication with the Assistant Government Statistician Mr. Silvester Ngallaba, in charge of the census, and the UNFPA Demographer Dr. Rafiq, who came specifically for the 1978 Census analysis.

7. For details of the AF/VDP village survey see D.D. Peterson and T. T. Petersen, The Village Profile Exercise: Background information, Impressions and Perceptions. Regional Development Director's Office, Arusha Region, June 1980.
8. The report thus should be recommended reading material for leaders at all levels of party and government administration.
9. The Party headquarters in Dodoma had recently sent down a thick questionnaire for each village requiring various types of information. It was a one time survey rather than for continuous data collection.

FOOTNOTES TO SECTION 2

1. Estimation was a collaborative effort between Alan Johnston (APVDP, Arusha), Wilfred Mlay (Department of Geography) and C. L. Kamuzora (Department of Statistics, University of Dar es Salaam).
2. Information from discussions with regional, district and some ward and village officials during visits in the region (September, 1981) and available documents. For the latter see:
 - (a) "District Strategy Papers", 1980 - 81.
 - (b) Minutes of the Regional Planning Committee Meeting, February 9 - 11, 1981.
 - (c) Regional Commissioner's Office, Arusha Region: Development Strategies and Priorities for the Next 20 Years.
(The above documents are available in the office of the Regional Development Director, Regional Planning Office, Arusha).
3. See Bertil Egero and R.A. Hanin, The Population of Tanzania, Census Vol. 6, Dar es Salaam, BRALUP and Bureau of Statistics, 1973.

1973 National Demographic Survey: Vols III, VI, BRALUP and Bureau of Statistics.

Alan Johnston, "Population Profile of Arusha Region" January 1980.
1978 Population Census Preliminary Report, Dar es Salaam, Bureau of Statistics.

4. See Roushdi A. Henin, "The Patterns and Causes of Fertility Differentials in The Sudan," *Population Studies*, Vol. XXII, No. 2 (July, 1969), pp. 171-198.
5. Kaj Arhem, "The Ecology of Pastoral Land Use in the Ngorongoro Conservation Area," BRALUP, University of Dar es Salaam, February, 1981.

FOOTNOTES TO SECTION 3

1. See Tanzania, Administrator General, "The Births and Deaths Ordinance (Cap. 108) - Principal Legislation Rules and Government Notices Incorporated up to Sept., 1978" (Mimeo). Dar es Salaam, p. 9.
2. Ibid. p. 18.
3. Ibid.
4. Ibid. p. 26.
5. See government notice (GN) No. 41, April 3rd, 1981.
6. By communication with Mr. Mwitwa and Mr. Nazaret (UN expert) of the Registrar General's Office.
7. See UNFPA, Tanzania: Report of Mission on Needs Assessment for Population Assistance. Report Number 11. New York, May, 1979.

APPENDIX A

Visits and Consultations made during three weeks of field work in
Arusha Region, September 13th to October 4th, 1981

A. National Level

- (i) The Registrar General in Dar es Salaam.
- (ii) Assistant Government Statistician in charge of Population Section.

B. Regional Officials

- (i) CCM Party
 - 1. The Regional Executive Secretary
 - 2. The Assistant to Regional Executive Secretary
- (ii) Regional Development Director's Office
 - 1. APVDP officials
 - 2. Officials in the Regional Planning Office

C. District Officials

1. Arumeru District Officials

1. CCM Party

Acting District Executive Secretary

2. Government

- (i) District Planning Officer
- (ii) District Planning Assistant
- (iii) District Manpower Management Officer
(District Registrar of Births and Deaths)

3. Wards

Kimunyak Ward Party Secretary (Katibu Kata)

4. Villages

- 1. Lengijave: Village Chairman and Secretary
- 2. Ndatu: Village Chairman and Secretary
- 3. Ngere - Olmotony: Village Chairman
- 4. Nkoarua: Assistant Ward Party Secretary (Mratibu)
- 5. Singisi: Village Chairman and Secretary
- 6. Kikwe (absent)

2. Hanang District

1. CCM Party

- (i) District Party Chairman
- (ii) District Party Secretary (also Area Commissioner on the Government side)
- (iii) District Member of Parliament
- (iv) District Executive Secretary
- (v) Four Divisional Party Secretaries

2. Government

- (i) District Planning Officer

3. Ward

- (i) Gallapo: Ward Party Secretary

4. Villages

- (i) Gallapo: Village Secretary and Manager
- (ii) Magugu: Acting village Secretary

3. Mbulu District

1. CCM Party

- (i) District Party Secretary (also Area Commissioner on the Government side);
- (ii) District Party Executive Secretary

2. Government

- (i) District Development Director (DDD)
- (ii) Assistant DDD (Karatu Area)
- (iii) District Planning Officer
- (iv) District Manpower Management Officer (District Registrar of Births and Deaths)

3. Villages

- (i) Rhotia: Village Chairman and Secretary
- (ii) Gongali: Village chairman, secretary, and Manager
- (iii) Tlawi: Village Secretary
- (iv) Bashay: (absent)
- (v) Dongobesh: Village Secretary

4. Monduli District

1. CCM Party

(i) Administrative Officer

2. Government

(i) District Development Director

(ii) District Planning Officer

The assistance of all these officials is gratefully acknowledged.

APPENDIX B

Present Format for CCM Data Collection in Mbulu District

IDADI YA WANACHAMA WA CCM WA WILAYA YA MBULU KUANZIA 1977 HADI 1981 AGOST, KATIKA KILA TAWI

Kata	TAWI	WAKAZI WOTE	WANACHAMA WANZIJI- SHI 1977	WANACHAMA WA 1978	WANACHAMA WA 1979	WANACHAMA WA 1980	WANACHAMA WA 1981 JAN - AUG. 1981	WALIO HAI	WANA- ODAIWA	WALIO- HAMA	WALIO- HAMIA	WALIOKO MAFU- NZONI	WALIO- FARIKI
JUMLA KWA KATA													

=====Pamoja na fomu hii tunakutumia nakala 2 za kujaza, baada ya kujaza nakala moja irudishe Wilayani na nakala moja ibaki katika ofisi yake kwa kumbukumbu.

Fomu yenyewe inajieleza waziwazi, hivyo jaza ukionyesha wanachama kwa kila Tawi kama fomu inavyoonyesha. Rudisha fomu hiyo kabla ya tarehe 5/10/1981, ili ripoti hiyo itumwe Mkoani tarehe 7/10/1981 kama ilivyo hitajwa.

k.n.y. KATIBU WA CCM WA WILAYA MBULU

AFFENDIX CData Collected by CCM on Current Population Compared to 1978 Census1. From Arumeru District: CCM Office

Ward	Current Population (1980)	1978 Census Population
Songoro	6,293	6,293
Singisi	4,941	5,651
Akheri	11,141	11,597
Nkoarua	8,973	7,499
Nkoaranga	12,361	12,382
Poli	7,249	7,584
Sokon	13,970	13,972
Mlungarini	6,336	6,336
Moshono	6,613	-
Nduruma	10,109	10,770
Mbuguni	10,109	7,225
Kikwe	5,878	5,678
Majungo	5,701	3,722
Ilkindinga	5,667	8,535
Kimunyak	6,699	8,832
Loruvai	11,383	12,069
Kiranyi	11,370	11,370
Oljoro	7,282	13,685
Oldonyo Sambu	6,453	6,493
Olkokola	9,632	8,534
Kisongo	3,877	3,876
Mwandet	6,547	6,944
Miteves	3,804	4,161
Olturmet	2,403	2,772
Musa	9,326	6,087
Kikatiti	4,803	10,606
Maji ya chai	16,034	10,274
King'ori	12,270	9,950
Ngarannyuki	8,748	6,930
Leguruki	14,066	8,183

From Village visited

Kikwe	(absent but had 1978 census data on wall)	1,254
Lengijave	(no data to give)	1,903
Ngara- Olmotony	1,895	1,895
Ndatu	3,235	2,353
Nkoarua	(absent)	2,227
Singisi	3,360	3,450

2. Hanang District

<u>From Gallapo Ward Office</u>	<u>Current Population (1980)</u>	<u>1978 Census</u>
<u>Village</u>		
Gallapo	2,625	3,287
Orongodida	2,132	1,806
Majungo	1,125	867
Godemar	1,190	1,294
Halla	976	880
Isamasi	1,981	2,722
Ayamango	1,540	1,217
Qash	2,077	2,187

From villages visited

<u>Village</u>	<u>Current Population (1980)</u>	<u>1978 Census Population</u>
Gallapo	2,750	3,287
Magugu	2,366	2,797

3. Mbulu District

From Villages visited

Rhotia	2,717	2,717
Gongali	2,970	2,970
Tlawi	2,514	2,532
Bashay	(absent)	
Dongobeth	2,517	2,517

4. Monduli District:

From CCM Office

District Total	68,996	68,906
Majengo village	2,207	2,207
Longido village	2,725	2,134
Olmolog Ward	3,361	2,974

APPENDIX E

DRAFT FORM-T FOR CCM DATA COLLECTION

1. The Cell Leader Census Form

ID.DI YA WATU WOTE WA SHINA KWA KIFINDI

JINA LA BALOZI

ORODHA	JINA LA M'ENYE NYUMBA	JUMLA YA WATU WENYE MIKA 15 NA ZAIDI		JUMLAYA WATOTO WENYE UMRI CHINI YA MIKA 15	
		WANAUUME	WANAWAKE	WANAUUME	WANAWAKE
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
	J U M L A				

1. JUMLAYA WATU WOTE KATIKA SHINA _____
 2. WATOTO WALIOZALIMA _____
 3. JUMLAYA VIFO: WATU WAZIMA NA WATOTO _____
 4. WATU WALIOHAMIA _____
 5. WALIOHAMIA KUTOKA WILAYA NYINGINE _____
 6. WATU WALIOHAMA _____
- WANACHAMA
7. JUMLA YA WANACHAMA KATIKA SHINA _____
 8. WANACHAMA HAI _____
 9. WANACHAMA WANOCDAIWA _____
 10. WANACHAMA WALIOHAMIA _____
 11. WANACHAMA WALIOHAMA _____
 12. WANACHAMA WALICKO M.FUNZONI _____
 13. WANACHAMA WALIOFARIKI _____

1. The Ten Cell Leader Census Form

POPULATION OF THE TEN CELL UNIT FOR THE PERIOD

NAME OF TEN CELL UNIT LEADER

36

SERIAL NO.	NAME OF HEAD OF HOUSEHOLD	NO. OF PERSONS 15 YEARS AND OVER		NO. OF CHILDREN LESS THAN 15		
		MALES	FEMALES	MALES	FEMALES	
1.						1. TOTAL POPULATION OF THE TEN CELL UNIT _____
2.						2. NO. OF BIRTHS IN PAST 12 MONTHS _____
3.						3. NO. OF DEATHS IN PAST 12 MONTHS: ADULTS AND INFANTS _____
4.						4. NO. OF PERSONS WHO MOVED INTO THE VILLAGE _____
5.						5. NO. OF PERSONS WHO MOVED IN FROM ANOTHER DISTRICT _____
6.						6. NO. OF PERSONS WHO MOVED OUT OF THE VILLAGE _____
7.						<u>CCM PARTY MEMBERS</u>
8.						7. TOTAL NO. OF PARTY MEMBERS IN THE TEN CELL UNIT _____
9.						8. NO. PARTY MEMBERS WHO HAVE PAID DUES _____
10.						9. NO. PARTY MEMBERS YET TO PAY DUES _____
11.						10. NO. OF PARTY MEMBERS WHO HAVE MOVED INTO VILLAGE _____
12.						11. NO. OF PARTY MEMBERS WHO HAVE MOVED OUT OF VILLAGE _____
	TOTAL					12. NO. OF PARTY MEMBERS AWAY AT STUDIES _____
						13. NO. OF PARTY MEMBERS WHO HAVE DIED DURING LAST 12 MONTHS _____

2. The Village Secretary Census Form, Total Population

B. TOTAL POPULATION AND PARTY MEMBERS IN THE VILLAGE FOR THE PERIOD.....

NAME OF VILLAGE.....

TOTAL POPULATION.....

SERIAL	NAME OF TEN CELL UNIT LEADER	TOTAL NO. OF PEOPLE IN THE TEN CELL	NO. OF PEOPLE 15 YEARS AND OVER		NO. OF CHILDREN LESS THAN 15		NO. OF PEOPLE MIGRATED IN	NO. OF PEOPLE MIGRATED IN FROM ANOTHER DISTRICT	NO. OF PEOPLE MIGRATED OUT	NO. OF BIRTHS IN LAST 12 MONTHS	NO. OF DEATHS IN LAST 12 MONTHS ADULTS + INFANTS
			MALES	FEMALES	MALES	FEMALES					
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
TOTAL											

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3. The Village Secretary Census Form, Party Members

IDIDI YA MTU MOTE NA WALICHAMA KATIKA KIJIKI KWA KIPINDI.....

JINA LA KIJIKI.....

W A N A C H A M A

ORODHA	JINA LA BALOZI	JUMLA YA WANACHAMA							
		MENKA ULIOPITA	MENKA HUU	WALIO HAI	WANAO DAIMA	WALIO- HAMA	WALIO- HAMA	WALIOKO M.FUNZONI	WALIO- FARIKI
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
JUMLA									

3. The Village Secretary Census Form, Party Members

C. TOTAL POPULATION AND PARTY MEMBERS IN THE VILLAGE FOR THE PERIOD.....

NAME OF VILLAGE.....

PARTY MEMBERS

SERIAL	NAME OF TEN CELL UNIT LEADER	TOTAL PARTY MEMBERS					MIGRATED OUT	AWAY AT STUDIES	DIED DURING LAST 12 MONTHS
		LAST YEAR	THIS YEAR	PAID DUES	NOT YET PAID	MIGRATED IN			
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
TOTAL									

APPENDIX F.

BIRTH REGISTRATION FORM

JAMHURI YA MUUNGANO WA TANZANIA

MAOMBI YA KUANDIKISHA KUZALIWA KWA MTOTO

Kanuni za Kuandikisha Vizazi na Vifo (Kanuni ya 3)

1 Mahali alipozaliwa	2 Jina	3 Mvulana/ Msichana	4 Jina kamili la baba wa mtoto na jina la ukoo wake	5 Kazi ya baba na mahali anapoishi	6 Baba ni raia wa	7 Majina kamili ya ujane ya mama wa mtoto	8 Kazi ya mama na mahali anapoishi	9 Mama ni raia wa	10 Sahihi ya Mwombaji uhusiano wake na mtoto na mahali anapoishi	11 Tarehe aliyoza- liwa mtoto

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Nimi.....nathibitisha kwamba maelezo yote yaliyopo hapo juu ni kweli kabisa na sahihi kadri ninavyofahamu

Maombi haya yametolwa (taya mahali).....tarehe.....19.....

Sahihi ya Mwombaji

Angalia:- Katika safu ya 1,5,8 na 10 toa anwani kamili: kwa mfano taja nambari ya nyumba, jina la barabara au mtaa au nambari ya kiwanja.

THE UNITED REPUBLIC OF TANZANIA

Application for the registration of a Death under Rule 3 of the Registration of Birth and Deaths Rules

Name and Surname of Deceased	Age	Sex	Residence	Occupation	Nationality	Date of Death	Place of Death	Cause of Death	Signature, Description and Residence of Applicant

G P Dsm 1694/11-72/10m

I,....., hereby certify that the above particulars are correct to the Best of my knowledge and belief.

Date.....19.....

.....
Signature of Applicant

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