

*KILIMANJARO IDP
MANPOWER*

16

MANPOWER

Contents	Page
CONCEPT OF MANPOWER	1
1. PRESENT SITUATION	2
1.1 Governmental Manpower Development Policy	2
1.2 Administration	3
1.3 Labour Force and Employment	5
1.4 Education	8
1.5 Vocational Training	11
1.6 Wages, Labour Productivity and Workmen's Compensation	13
2. MANPOWER SUPPLY AND DEMAND	15
3. PROBLEM AREA	19
4. SUGGESTIONS AND MEASURES	21
5. DEVELOPMENT PLAN	23

CONCEPT OF MANPOWER

It has been widely recognized that manpower development is an essential factor in achievement of the economic growth and social welfare of developing nations. Manpower is an idea that has come to be used widely since the Second World War and deals with the development of human resources in quality. Therefore, the problem of manpower development relates closely to those of education and employment.

The problem of employment has been one of the most serious and strategic policy matters facing a number of countries, either industrialized or developing, in the world. However, it has been pointed out that the problem found in most developing nations differs from that in the developed countries. Dimensions involved in the problem are diverse: open unemployment, underemployment, migration from rural to urban areas, shortage of manpower, lack of discipline, labour productivity, income levels, income distribution, etc. Open unemployment is a matter of interest to the industrially matured societies while underemployment is a central concern to the developing economies. More emphasis is placed on an increase in income in the former while the shortage of both job opportunities and manpower is chronic in the latter. Unemployment of older age presents a problem in the industrialized countries, but unemployment of the young and educated faces the developing countries. These problems have come basically from the social and economic conditions of different nations at various stages of development. In many developing countries rapid increase of population owing to a decrease in mortality, relatively low economic growth, lower level of per capita income, shortage of foreign exchange, low labour productivity, etc. create the above-mentioned employment problems.

Education, fundamentally, is not provided for the purpose of employment. However, the more educated workers are, the more useful they are in employment. In a modern society the provision of education to labourers is indispensable to industrial development. In developing nations modern technology usually is introduced from abroad. Education is a necessary basis for such introduction of technology. In fact, the successful and speedy introduction of technology to a society is influenced greatly by the level of the culture and by the prevalence of basic education in the society as seen in the case of Japan. The rapid progress of the economy of Japan in the century since 1868 has been largely due to education and technology introduced from Western countries. However, the basis for adoption of new systems and technology had been formed long before 1868. It takes at least several decades for the full impact of education to be felt. This is a process of realization of good discipline among the majority of the people of a nation, which plays a critical role in the economic growth and social progress of the nation. Quality education over a long period, particularly at the primary level is a very important requirement which should be born in mind in planning the development of manpower.

In Tanzania the elimination of illiteracy and the spreading of universal primary education have been pushed forward as a top-priority national policy, but the nation has only started to move in the right way, although Kilimanjaro is relatively advanced in competition to other regions. For the sake of manpower development it is to be hoped that serious attention be paid to the quality of education and training.

1. PRESENT SITUATION

Manpower development is one of the development strategies on which the government has placed top priority in Tanzania and tends to be strengthened more and more as seen from the fact that the Ministry of Manpower Development was established in 1975. Manpower shortages at various levels have been keenly recognized by the Government since the early stage of national independence, prompting efforts for the spreading of national education, elimination of illiteracy, and development of necessary skills and in this respect the Kilimanjaro Region seems to have made greater progress than the country as a whole.

The present situation relating to manpower development is described below in its various aspects on the basis of the statistical data available and information collected through interviews.

1.1 Governmental Manpower Development Policy

The declared manpower development policy since 1963 has been:

- (a) To achieve, essentially, full self-sufficiency at all skill levels in the economy by 1980;
- (b) To give every Tanzanian child a basic education so far as the financial resources of the Government permit by 1980 as presently directed by the Party; and
- (c) To provide additional or further education (secondary, technical and university) only to the extent justified by the manpower requirements for economic development.

This policy entails (a) replacement of foreign experts and teachers by Tanzanians, (b) provision of opportunities to new graduates, particularly to those in highly technical and scientific fields, for practical experience in order to mature their skills before moving to supervisory office work; (c) expansion of training facilities for middle-level manpower, namely, technicians and craftsmen who are critically required in great numbers by the economy; (d) provision of employment opportunities in middle-level occupations such as clerical office work to those who have successfully completed the relevant pre-service training; (e) greater co-ordination in establishing or expanding training institutions to avoid wasteful duplication of efforts and ensure full utilization of available teachers, equipment and accommodation; and (f) careful re-examination of vacancies to minimize the need to recruit expatriates. In setting these targets, the results of previous five-year plans have been taken into full consideration.

The recent policy of decentralization, which has resulted in the regional distribution of high-level manpower in the public sector, will have a considerable impact on regional development if this policy is properly and consistently maintained.

1.2 Administration

There are three ministries concerned directly with manpower development, namely, the Ministry of Manpower Development, the Ministry of National Education and the Ministry of Labour and Social Welfare. The first is a newly established ministry responsible for the overall policy of manpower development while the other two execute the related policy in the context of their respective independent activities.

In November, 1975, the Ministry of Manpower was created after abolishment of the Ministry of Economic Affairs and Development Planning, which had been responsible for manpower planning. The major function of the new ministry is to guide and co-ordinate all manpower development programs in the country. It submits an annual report to the President which includes recommendations. The ministry has five divisions - manpower planning, training and manpower allocation, personnel policy, personnel administration, and management services and regional management officers are posted in regional development offices.

The Ministry of National Education plays an important role in manpower development through formal education, which ranges from adult education and universal primary education (UPE), which foster the basic knowledge and discipline required of the people as members of the community, to university education, which provides highly specialized knowledge and expertise. The place which the Ministry occupies in the development of skills is significant. Since 1973 it has been carrying out a vocationalization programme in public secondary education, and recently it started a two-year post-primary-education programme of training in various trades. The Ministry also promotes the training of teachers. Budgetary funds for primary education are allocated to the regions by the Prime Minister's Office while those for other education are allocated by the Ministry. A regional education officer is stationed in each regional development office. There were 5,804 public primary schools, 81 public secondary schools, 58 private secondary schools, 31 teachers' colleges, 1 technical college, and 1 university throughout the country as of 1975. In the Kilimanjaro Region there are 599 public primary schools, 9 public secondary schools, 21 private secondary schools and 4 teachers' colleges at present. It is noteworthy that the number of secondary schools, particularly private secondary schools, is extremely large in the Region and that the enrollment in schools is higher than the national average.

The Ministry of Labour and Social Welfare is responsible for employment and social welfare. Regarding labour and employment, its functions are: (1) administration and enforcement of labour laws; (2) inspection of employment conditions; (3) industrial safety, health and welfare; (4) trade dispute conciliation and arbitration procedures; (5) vocational training and trade testing; (6) provision of employment services and dealing with unemployment problems; (7) workmen's compensation; (8) trade unions and employers' organizations; (9) liaison with ILO; (10) issue of work permits to expatriates in collaboration with the

immigration division; (11) workers' education programmes; and (12) national occupational dictionary. There are separate organizations for vocational training and trade testing and workers' compensation, namely, the National Vocational Training Division and the National Provident Fund Corporation. In addition, there is another separate organization handling productivity the National Institute for Productivity. Regional and district labour offices have been established at 26 locations throughout the country, including Moshi and Same in the Kilimanjaro Region. These offices are concerned mainly with industrial relations, including conciliation, workmen's compensation, registration of job seekers, and offering of employment opportunities to job seekers. Moshi Regional and Same District Offices have 18 and 11 staff members, respectively. All are employed directly by the Ministry, and the funds for maintaining these offices are allocated by the Ministry as well.

In respect to the training of manpower, a variety of training facilities are operated by other ministries and governmental organizations such as the Ministry of Agriculture, the Ministry of Industry, the Ministry of Works, the Ministry of Lands, Housing and Urban Development, the Ministry of Health, the Ministry of Natural Resources and Tourism, the Ministry of Water Development, Energy and Minerals, the Tobacco Authority of Tanzania, the Tanzania Wood Industry Corporation, the Small-scale Industry Organization, and the Tanzania Electricity Supply Corporation. These training programmes are implemented independently.

Generally speaking, vocationalized education in secondary schools and above and the vocational training of skills are implemented not on the regional level but on the national level.

Regarding trade dispute conciliation and arbitration, the National Union of Tanganyika Workers (NUTA) plays an important role. NUTA establishes its branches at enterprises and, on behalf of labourers, demands of employers clarification of causes of dismissal, full provision of paid vacations, fair salary and wage increases, improvement of welfare facilities for workers, etc. It has been reported that, thanks to the improvement of employment conditions, labourers now stay with the same job longer than they used to.

1.3 Labour Force and Employment

The population of Tanzania in 1975 was estimated at 15.3 million, of which those over 15 years old accounted for approximately 8.0 million, or 53 per cent. Males accounted for about 49 per cent. About 92 per cent of the inhabitants of the country lived in rural areas. In the same year, the population of the Kilimanjaro Region was estimated at 865,000, of which those over 15 years old accounted for approximately 441,000 or 51 per cent. Males accounted for about 48 per cent. It is notable that the portion of the population represented by those under 14 years of age declined from 50% in 1967 to 49% in 1975 in Kilimanjaro, whereas it increased for the country as a whole. This is because the population under 9 years old, particularly, under 4 years old, declined. (see Figure-1 and Tables-1, -2 & -3)

The 1967 Census placed literacy at about 31 per cent nationwide and 56 per cent in the Kilimanjaro Region, the figures for men being 45 per cent and 67 per cent, respectively, and those for women 19 per cent and 47 per cent, respectively. In 1967 literacy was estimated at 70 per cent nationwide and 84 per cent in Kilimanjaro Region. These figures indicate that literacy has increased remarkably in the past nine years nationwide and even more so in the Kilimanjaro Region. This fact is also pointed up by the educational structure of the population. In Kilimanjaro the percentage of the population with primary education is much higher than nationwide, and over three-quarters of those between 15 and 29 years of age have had a primary school education. More than half of those of age 40 and over nationwide have had no education, whereas in the Kilimanjaro Region the figure does not go this high until only those 50 years old and above are considered. However, the percentage of the population with secondary or post-secondary education is almost the same in Kilimanjaro as nationwide. The percentage of the population with at least a secondary education is 3.4% in Kilimanjaro, this figure being considerably higher for younger age groups (see Table-4).

The 1967 Census put the rate of the labour force to the number of those 15 years old and over (referred to as the labourization rate) at about 80 per cent nationwide and 63 per cent in Kilimanjaro. The labourization rate for men was 88.4 per cent nationwide and 83.9 per cent in Kilimanjaro, and that for women was 71.5 per cent nationwide and 43.6 per cent in Kilimanjaro (see Figure-2). The unemployment rate was 1.8 per cent nationwide and 7.9 per cent in Kilimanjaro (see Figure-2 and Tables-1 & -2). One sees that in Kilimanjaro the unemployment rate is high and the rate of labourization for women is strikingly low. The reason why this tendency has continued up to now seems to be that the region is relatively rich in comparison to other regions and that the shortage of agricultural land has become more and more acute. There is, however, no data available to substantiate this.

A sizable number of emigrants from Kilimanjaro to other regions such as Arusha and Tanga and a considerable number of immigrants from Tanga to Kilimanjaro were identified in the 1967 Census. Emigration from Kilimanjaro was greater than immigration to it. The Regional Labour Office

is of the opinion that at present there is almost no emigration from but some immigration into Kilimanjaro. Considering the recent policy of the government of encouraging primary school leavers without technical skills to remain in their native villages not much emigration or immigration may be assumed of late.

Employment in different industries in 1967 is shown in Tables-5 & -6. Figures for those of age 15 and over have not been made available. The agricultural sector's share of employment was 83% in Kilimanjaro and 90% nationwide. In Kilimanjaro 90% of agricultural workers were smallholders and their families.

The labourization rate declines as the rate of advancement to higher education, the movement of agricultural population to the industrial sector, and the percentage of older people in the population rise. These factors have not yet come to have much influence on the labourization rate in the Kilimanjaro Region, which, like the whole country, is still in an earlier stage of social and economic development. The rate may not have changed very much since 1967. The rates for men and for women were 83.9% and 43.6%, respectively, in 1967 (see Table-1). In 1975 it is assumed that they were 83% and 44%, respectively, which gives the following figures for the labour force.

	15 years and older	Labourization rate (%)	Estimated labour force
Men	205,048	83	170,190
Women	236,054	44	103,864
Total or average	441,102	62	274,054

The following figures on employment in various industries in 1975 are based on employment and gross regional product (GRP) in 1967, estimated GRP in 1975, and the estimated rise in labour productivity from 1967 to 1975.

Agriculture	204,347
Mining	1,046
Manufacturing	11,146
Construction	1,293
Public utilities	769
Commerce	5,963
Communications	4,343
Services	21,638
Total	250,545

Corresponding to this level of employment are an unemployment level of 26,787 and an unemployment rate of 9.4% (see Table-19)

It has been reported that the biggest employment problems facing Kilimanjaro at present are migration from the upper area and the development of a labour market for young people, particularly those in the upper area, who are mostly primary school leavers and do not fully work owing to the shortage of agricultural land. This situation has resulted in under-employment of an estimated present scale of 30,000-50,000.

As stated before, the Regional Labour Office is responsible for the registration of job seekers and the offering of employment opportunities to them. However, since the Arusha Declaration in 1967 which encourages people to live in Ujamaa villages, registration for jobs is restricted to those who have completed at least Form-IV of secondary school. Moreover, parastatals, which are large employers, recruit employees not through labour offices but directly through their personnel officers. Accordingly, not too many people look for jobs through the labour offices. Table-8 indicates the trends in registration and placement of job seekers in Kilimanjaro and the whole country from 1968 to 1976. Recently the importance of local employment services has declined. It has been reported that the placement of clerical, administrative and service workers is not as easy as that of professional and technical job seekers. Registration and placement was as follows nationwide in 1973/74.

	Registration	Vacancies	Placements	P/R(%)
Professional & technical	35	93	35	100
Administrative & managerial	2	2	1	50
Clerical	795	458	252	32
Sales	12	13	8	67
Service	645	412	323	50
Agricultural	377	369	233	62
Production & transportation equipment operation	2,292	2,654	1,755	77
Unclassifiable	2,948	3,337	2,514	85
Totals	7,106	7,338	5,123	72

As indicated before, the number of expatriate residence permits issues, which can be taken as an index of the country's requirement for expatriate labour, does not seem to have declined. The numbers of applicants and permits issued in Tanzania from 1971 to 1974 are shown as follows:

Year	Applications	Permits issued
1971	1,858	1,703
1972	2,173	1,884
1973	1,645	1,497
1974	1,805	1,618

1.4 Education

The Tanzanian Government regards education as the most important factor in the social and economic development of the country. In fact, education accounted for 12.5 percent of all current and development appropriations of the Central Government in 1974/75 and continued to be the largest single appropriation item in the period 1967/68-1974/75.

In the First Five-year Plan (1964/65 - 1968/69) priority was given to expansion of secondary education, and in the Second Five-year Plan (1969/70 - 1973/74) the expansion of university-level education was emphasized. The Third Five-year Plan (1975/76 - 1980/81) sets the targets of (1) wiping out illiteracy; (2) expanding primary education, particularly achieving full enrollment in the Standard-I age group; (3) providing technology-oriented education through the national education system; and (4) vocationalizing secondary education. These targets are closely connected with established manpower development policy.

The national education system of Tanzania consists basically of 7 years of primary school, 6 years of secondary school and 3 years of university. Secondary education is divided into two parts: Form I through Form IV and Form V through Form VI. Those who complete the former and pass a national examination are given "O" level certificate and qualified to advance to Form V. At completion of the latter, the "A" level diploma is conferred. "A" level students are able to enter the university. However, before doing so, they have to perform 1 year of "national service", which consists of 5 months of military service and 7 months of village work. Students who want to study engineering must have 2 years of industrial experience before enrollment in the university. National service is compulsory for all those who plan to enroll in training courses after Form IV. There is one technical college in Dar es Salaam where 4-year technical secondary school leavers are able to follow 3-year courses in various fields of engineering.

In addition, there are 31 Colleges of National Education (CNE) providing a 2-year training course for various grades of teachers of primary and secondary schools. Those at Butimba and Kreluu offer agricultural diploma courses while those at DSM and Morogoro train teachers at diploma level in other subjects such as science, arts, technology, commerce, etc. Kreluu CNE is for in-service teacher training. These diploma courses are for teachers of secondary schools and of the CNE's themselves. The training period has been reduced to one year since 1974 in order to mitigate the shortage of teachers. The total training capacity of the CNE's is 8,300 persons. The output of teachers for secondary schools and CNE's themselves was 369 in 1974, and that of teachers for primary schools was 1,387 in Grade A, 80 in Grade B, and 5,752 in Grade C. Efforts have also been made to upgrade teachers, resulting in a rise of 177 from Grade A to Education Officer III, 888 from Grade B to Grade A and 1,787 from Grade C to Grade B. In Kilimanjaro there are 4 CNE's, with a total annual output capacity of 1,100 Grade C teachers.

Very recently the Government started post-primary technical education in existing primary schools. The purpose is to train Standard VII leavers in handicrafts such as carpentry, sewing, brickmaking so as to be able to meet the needs of their-fellow villagers within the frame of cooperatives. There are about 300 post-primary schools nationwide and 12 in the Kilimanjaro Region. It is too early, however, to evaluate post-primary education since there have not yet been any school leavers. A problem presently facing post-primary schools is a shortage of technical teachers.

From the viewpoint of manpower supply, secondary education is important to the social and economic development of the nation. In 1975 there were 81 public and 58 private secondary schools nationwide and 9 public and 21 private secondary schools in the Kilimanjaro Region. Enrollment stood at only about 38,000 in public schools and 15,000 in private schools throughout the country. In the Kilimanjaro Region the total enrollment was 8,191 in 1976. Nationwide Form IV and Form VI leavers numbered about 8,200 and 1,900 respectively in public schools and 2,400 and fewer than 200 respectively in private schools in 1975. In the Kilimanjaro Region the number of Form IV and Form VI leavers was estimated at 1,550 and 152 respectively in 1976. Only 6 per cent and 14 per cent of Standard VII leavers went on to Form I nationwide and in the region, respectively, in 1976.

Kilimanjaro exceeds other regions in terms of number of schools and enrollment and is characterized by a larger number of private schools. It is anticipated that the number of applicants for secondary education will increase owing to the relatively high income and the existence of underemployment.

After independence in 1961 secondary education was expanded rapidly, but such education was of the academic type as a reflection of the British education system. At the same time, the new state has been faced with a great deficiency of manpower with technical knowledge and practical skills. In accordance with the new policy of the Government regarding education for self-reliance on the basis of the Arusha Declaration in 1967, a secondary education has undergone a great change in terms of curriculum in the direction of "vocationalization". In 1973 there were 76 public schools, of which 30 were designed for agriculture-oriented education, 24 for commerce/craft-oriented education, 15 for technical education, and 6 for home-economics/crafts-oriented education. The aim has been to give students vocational training in addition to their academic development so that they can become productive members of society after leaving school. Twenty agriculture-oriented secondary schools are near completion. Two technical secondary schools, at Ifunda and Moshi, started as trade schools in 1951 and 1957, respectively. After independence they were incorporated into the national secondary education system. In 1964 and 1966, respectively, they were converted into technical secondary schools and later upgraded to their present status with the aid of the Netherlands Government. It has been reported that two more technical secondary schools are operational and that the total number of graduates at present is 500 per annum. Several other schools are on the way to technically oriented vocationalization. Thirty crafts-oriented courses in as many secondary schools are awaiting external financial support.

The technical secondary school is able to provide the industrial sector with craftsmen by giving students practical training in various trades. In the case of Moshi Technical Secondary School, in 1976 seven streams were organized, of which three were mechanical (welding, motor vehicle mechanics and machine shop), three civil (woodworking, painting, plumbing and masonry) and one electrical (electrical installation and electronics). In the school there are several workshops for practical training, with repair orders being accepted from the outsiders in order to give students practical experience. The number of teachers is 70 of which 30 are expatriates. All students complete a cycle of the above-mentioned three courses every 11 weeks in Form I and are specialized in one of them in Form II. In Forms III and IV training is divided further into sub-trades. School leavers are tested by the National Examination Council at the end of the fourth year for certification. In 1975 the school had 240 graduates of which 110 went on to Dar es Salaam Technical College. The rest entered employment in various institutes, governmental corporations and industries, with the exception of very few who returned to their home villages. All students at the school reside in the school dormitories and receive room, board and books free of charge from the Government.

In the way of college-level education there is only one technical college at Dar es Salaam at present. It provides a Full Technician's Certificate (FTC) course in the fields of civil, mechanical, electrical and telecommunications engineering and for laboratory technicians as well as a diploma course (DE) in the same engineering fields and for technical teachers. The FTC course is for those who have completed Form IV in technical secondary schools, the period of attendance being three years. However, the teacher training period is two years. New enrollment, total enrollment and the number of graduates stood at 258, 755 and 234 for FTC and 96, 196 and 64 for DE, respectively, in 1974, 24 of the 64 DE graduates being technical teachers. At present another technical college is being constructed at Arusha and will be able to enroll 500 students when completed. This sort of college should play more dominant role than secondary school in future.

The University of Dar es Salaam is the highest academic institution in the country, providing bachelor degree programs. The attendance period is 5 years for the medical program, 4 years for the engineering program and 3 years for other programs. The available programs are: arts-general and educational; law; science-general, education, agriculture, forestry, engineering and geology; medicine, and pharmacy. New enrollment, total enrollment, and the number of graduates were 532, 2,030 and 589, respectively, in 1976 of which 282, 1,160 and 282, respectively, were accounted for by science and medical programs. The first graduates from engineering programs will come out in 1977. It has been reported that post-graduate programs have been introduced, but detailed information on this development is not yet available. Most students seem to go abroad for post-graduate study.

Figure-3 relates the national education system to qualifications and to the national vocational training programme.

1.5 Vocational Training

There are a number of training programmes or institutes run by various ministries, parastatals and private organizations in Tanzania. The major ones are listed in Table-9. The National Vocational Training Programme (NVTP), under the Ministry of Labour and Social Welfare, is the most important as the qualifications conferred under it are accepted universally in Tanzania and are a positive personal asset in terms of salary and position.

The establishment of NVTP was stimulated by the conversion of the Ifunda and Moshi trade schools into ordinary secondary schools after independence since these schools had provided skilled workers up until then and assisted by UNDP and ILO. Its functions were confined to trade testing in 1966 - 1968 and extended to vocational training in 1969. The purpose of training is to provide the industrial sector with skilled labourers, and training methods include on-the-job training. The trainees are selected mostly from Standard VII Leavers through aptitude tests. Under NVTP there are four training centers at Dar es Salaam, Morogoro, Tanga and Mwanza the Chang'ombe center in Dar es Salaam being the major one. The training arrangement is as follows. In the first year the trainees undertake basic training in selected trades at the center and in the remaining three years they attend evening classes at the center while work in industry. At the end of each of the three years they are tested for Grade-III, -II, and -I certification. The trainees are assigned to various industries by NVTP. In 1975/76 the new enrollment at Chang'ombe was 400. About 75% of enrollees reach Grade III, 60% Grade II and 40% Grade I. A Grade III trainee is employed at a starting salary of 430 shillings per month, and a Grade II or Grade I employee is employed at a starting salary ranging from 855 to 1,414 shillings. Grade I trainees are employed usually by parastatals or institutes, and Grade II and III trainees by ministries or parastatals. At present the number of trainees receiving on-the-job training at Chang'ombe is 900. The school plans to increase its enrollment capacity from 400 to 1,000 in 1977. The Morogoro Center had an enrollment capacity of only 24 in 1974 since it has only just gotten started. The other two centers at Tanga and Mwanza are under construction. In addition, a center at Dodoma and two more at Tabora and Mbeya are supposed to open in 1980 and 1983, respectively. Training in the following trades is available at present: motor vehicle repair; fitting/turning; welding & fabrication; electrical installation; office machine repair; tailoring; shoe-making; painting/sign writing; blacksmith; civil drafting and printing/bookbinding. In addition, there are 22 trade schools approved by the Government with a total enrollment capacity of 762 in 14 trades. Besides the trainees at NVTP training centers, many applicants who attended evening classes at up-country centers take qualification tests in various trades. In 1974, 61, 334 and 1,054 were qualified in Grade I, Grade II and Grade III respectively. Also the ratios of successful candidates to the total applicants were 30%, 25% and 51% respectively. The total number of successful candidates from 1966 to 1974 was 9,378.

In addition to vocational training and trade testing, NTVP provides training courses for instructors and supervisors. The instructor course lasts 40 weeks and aims at producing full-time vocational instructors for various training centers and industrial undertakings. There is a 6-week course for part-time instructors, which provides basic training in planning techniques and techniques of instruction to individuals and groups. The supervisor course lasts 3 weeks and trains personnel in organization and supervision of work groups and in planning and co-ordination of human and physical resources to meet group objectives. The training officer course lasts 12 weeks and aims at imparting trainees skills and knowledge necessary for organization including co-ordination, presentation and evaluation of training programmes. Furthermore, there are part-time evening classes throughout the country mainly for artisans already employed in industries. These two courses only started in 1975.

There are about 40 training institutes under the control of various ministries. Also there seem to be many training facilities managed by governmental corporations and private undertakings. Of these, training institutes under the Ministry of Agriculture are important from the viewpoint of agricultural development. It is reported that agricultural training was very successful in 1974. About 35 diploma students, 383 certificate students and 173 refresher students are estimated to have graduated from such training institutes in 1974.

The Small-scale Industries Organization (SIDO) is providing a training programme for industrialist/entrepreneurs to develop small-scale industries of various kinds in the country. The training period is short, ranging from 3 months to 12 months. The courses offered are weaving, carpentry, metal fabrication, blacksmithing, bamboo craftsmanship, fruit canning, seed oil extraction, lime processing, pottery, cattle dung gas processing, callabash craftsmanship, tusk craftsmanship, tannery, carpet weaving, financing, management, small industries promotion and agricultural implements clinics at various locations. The total new enrollment in 1974 was 383.

1.6 Wages, Labour Productivity and Workmen's Compensation

Generally speaking, salaries and wages of employees of parastatals are higher than those elsewhere, and those of private enterprises are the lowest. Salaries and wages of parastatals and governments have been graded by Presidential Decree No.3. The minimum wage is stipulated by law: 380 shillings per month or 16.65 shillings per day for commercial undertakings and 230 in the rural area. In the case of casual employee- 16.65 shillings or 10.45 shillings per day are paid. Considering that their actual average number of working days per month is about 21 days, this daily wage is seem to be high in consideration of the quality of labour and the stagnation of real labour productivity.

It is said that the highest salary is 25,000 shillings per month at a parastatal. The progressive taxation system is applied to individual income. The income tax on a minimum wage of 380 shillings is 1.5 shillings per month. Taxes on monthly salaries of 400 shillings, 1,000 shillings, 5,000 shillings and 25,000 shillings are estimated to be 15 shillings, 240 shillings, 1,915 shillings and 14,000 shillings, respectively.

Wages are generally paid in cash. However, free housing and free rations are provided. Free rations are very small when compared to cash earnings, but free housing is a big book and is provided to a considerable number of employees (about 30% of regular workers in the enterprise sector and 11% in the public service sector).

Government employees work 7 hours a day from 7:00 A.M. to 2:00 P.M., except Saturdays when they work for 5 hours, from 7:00 A.M. to 12:00 P.M. In other institutions and undertakings employees work 8 hours a day.

Wages statistics are available for most industries, but not for owner farmers. In a survey covering about 470,000 employees nationwide, or 7.4% of the estimated labour force, the average monthly wage in 1975 was 569 shillings, the highest being 995 shillings, in the finance sector, and the lowest 338 shillings, in the agricultural sector. In Kilimanjaro the average monthly wage per employee was 600 shillings in 1975 (see Tables 10 to 14). Both nationwide and in Kilimanjaro the wage gap between industries is significant. That between male and female employees seems to be less pronounced in the case of regular employees* according to 1972 data. The wage gap between regular and casual employees* is

* Regular employees are defined as permanent or temporary workers engaged on a weekly or monthly basis in full-time work during the month surveyed while casual workers are defined as workers receiving daily wages and others who have worked for fewer than 26 days during the month surveyed.

considerable. In 1972 the average monthly wages of regular and casual employees in Tanzania were 403 shillings and 142 shillings, respectively, while in Kilimanjaro they were 349 shillings and 77 shillings, respectively. A breakdown of employees by wage groups in 1972 is given in Figure-4. In the case of the whole nation, the largest wage group is of those receiving 200-299 shillings a month followed by 150-199 shillings. In Kilimanjaro the largest wage group is of those receiving 150-199 shillings a month, followed by 200-299 shillings. At that time the minimum wage was increased from 180 shillings to 270 shillings. Statistics of real wages are not available. Real wages do not seem to have increased during the period from 1967 to 1975 although nominal wages increased sharply from 1973 to 1974 owing to the oil crisis (see Figure-5). Data have not been made available regarding the level of wages for different sizes of employers.

The Government, being interested in increasing labour productivity, has established an organ to promote this end under the control of the Ministry of Labour and Social Welfare, namely, the National Institute for Productivity (NIP). Presently, however, NIP activities are concentrated on consulting services for management development, the task of raising worker productivity having been put aside for the time being. Data on labour productivity is scarce. Figures on value-added per parastatal employee in the period 1967-1974 are given in Table-16. The contribution of parastatals to GDP was 14% in 1974. Again, as the retail price indices show, the labour productivity of parastatals seems to have stagnated or even to have declined in the said period (see Figure-6).

In Tanzania there is a social security scheme called the National Provident Fund (NPF), which was established as a corporation in 1964. Employers and employees of establishments with more than 4 employees are obliged to participate in the Fund. Employers and employees each contribute 5% of employee salaries to a maximum of 35 shillings per month. There are three main kinds of benefits which the Fund provides (1) unemployment benefits; (2) invalidity benefits; and (3) old-age benefits. If a participant loses his job, one-third of the outstanding amount attributable to his and his employer's contributions is paid to him in six months, and two-thirds in eighteen months. Interest accrues from the contributions at a compound interest rate of 6 per cent per annum. In the case of invalidity, a participant can get his due from NPF according to the degree of invalidity. When a participant working with the government or a parastatal reaches the age of 45, the contributions accrues by him, including interest, are repaid upon claim. He may choose how ever to postpone such claim. If he is an employee of a private firm, the accumulated contributions are refunded when he reaches the age of 55. At present the number of participants in the Fund is about two hundred thousand, and the total outstanding amount of contributions from participants is estimated at 800 million shillings. The contributions accumulated are invested in government bonds at an interest rate of 8% per annum. It is anticipated that the outstanding amount will reach a billion shillings in mid 1977. During 1975/76 about 20 million shillings was refunded to ten thousand participants. NPF is planning to introduce annuities in the future. About 700 employees work at NPF headquarters and branches.

There is no medical insurance plan for workers as medical care is free for all.

2. MANPOWER DEMAND AND SUPPLY

In Tanzania high- and middle-level manpower surveys were carried out in 1964, 1968 and 1974 to formulate criteria for investment in higher education and formal training facilities to properly meet the nation's needs. The last of these surveys gives a forecast of requirements and resources with respect to high- and middle-level manpower for the third five-year plan from 1975/76 to 1979/80. Although the implementation of the plan has been delayed, the Ministry of Manpower Development is of the opinion that this plan can still be used by shifting all of the relevant by two years.

The 1974 survey covered the central and all local governments and 592 private and parastatal enterprises, most of which had 50 or more workers. The number of employees in the establishments covered by the survey represented 64.5% of all wage/salary employment in Tanzania in 1974. About 7.3 million self-employed small farmers were excluded from the survey.

The survey covered the following occupations: (1) top-level posts in administration and management; (2) professional occupations; (3) sub-professional or technical occupations; (4) highly skilled manual occupations requiring 2 to 3 years or more of combined training and experience in the specific duties of the job held; and (5) skilled office and clerical occupations requiring Form IV education plus at least 6 months of supervised training in a specific office skill. These occupations are grouped into three categories: Category A - occupations usually requiring a university degree, in which the above-mentioned occupations (1) and (2) are included; Category B - those usually requiring 1 to 3 years to formal post-secondary education or training, in which (3) is included; and Category C - those usually requiring secondary education for standard performance of the full array of tasks involved in the occupation, in which (4) and (5) are included. In addition, Category D was defined for reference purposes as those occupations requiring a fairly high degree of manual skills but not such an extensive educational basis as Category C.

Employment by industry from 1975 to 1980 was estimated on the basis of actual employment in 1974, the estimated GDP elasticity of employment in the planning period and the estimated growth of GDP in the same period. Also estimated was labour productivity of all industrial sectors except agriculture. In the case of government employment, the growth rate is regulated by the level of recurrent expenditures. The growth rate of the employment during the Third Five-year Plan is to be 3% per annum. Forecasts of employment the period 1975-1980 are given in Figure-7 and Table-16.

The high- and middle-level manpower requirements have been estimated on the basis of the number of non-citizens to be replaced, the vacancies to be filled in 1974, and the estimated increases in employment by occupational category. It has been assumed that the various occupations

will be found in the surveyed industries in the planning period in about the same proportions as at the time of the survey and, therefore, that no significant change in skill mix will take place within each industry. It has also been assumed that no significant retirement from the labour would take place owing to age because the actual retirement age in Tanzania ranges from 55 to 70 and because most of the working population is below age 45. Past employment and future manpower requirements by occupational category and by industry in Tanzania during the planning period are given in Figure-8, Figure-9, and Table-17.

The supply of high- and middle-level manpower has been estimated on the basis of the expected number of graduates of secondary or higher-level schools and formal training courses. Only Category A and Category B have been included. As for Category C, data on manpower supply are not available because the skills which the occupations in this category require are acquired on-the-job and through promotion after some years of experience. The Ministry of Manpower Development is of the opinion that there will not be much of a shortage in this category because the personnel employed in this category are secondary school leavers with several years of experience in their jobs. The supply of manpower by occupational category during the period from 1975 to 1980 is shown below.

The whole estimated manpower demand and supply picture is as follows:

	Demand	Supply	Balance
Category A occupations	8,276	5,434	-2,842
Category B occupations	28,556	18,997	-9,559
Category C occupations	58,892	-	-
Total	95,724		

The Ministry of Manpower Development has estimated that the total number of persons graduating each year from secondary schools, including private schools and equivalents, will be 10,000 and 6,000, respectively, and that 96,000 secondary school leavers will join the labor force in the period 1975-1980. As stated before, employment in Category C occupations should be adequate if the above-mentioned number of secondary school leavers is secured. However, since Category A and B occupations require specific skills and expertise, it is estimated that in them 2,842 and 9,559 posts, respectively, may not be filled.

Major specific occupations in which there are expected to be manpower shortages or surpluses in 1980 are as follows:

	<u>Shortage</u>	<u>Surplus</u>
Category A:		
Civil engineers	155	
Electrical engineers	156	
Mechanical engineers	317	
Agricultural engineers	8	
Surveyors	85	
Agronomists		160
Physicians	246	
Secondary teachers, science	275	
Economists	448	
Secondary teachers, arts	138	
Category B:		
Laboratory technicians		8
Draughtsmen	240	
Civil eng. technicians	150	
Senior water technicians	392	
Surveyor technicians	120	
Electrical eng. technicians		67
Telecommunications eng. technicians		63
Mechanical eng. technicians, Senior water technicians	59	
Agricultural field officers		
Agricultural ass't field officers	2,773	
Veterinary field officers		
Veterinary ass't field officers	738	
Technical & primary teachers	2,188	
Accountants	301	
Stenographic secretaries	656	
Senior police & prison officers	259	

In Tanzania the supply of manpower with specific skills and expertise is not on the regional level but on the national level. This is because the institutions supplying such skilled manpower are operated on the national level and because the number of such institutions is limited. Also, Category A and B manpower requirements are concentrated in government and parastatals, where requirement of manpower is centralized. The government shares of the estimated increases in manpower requirements in Category A and Category B occupations are about 51% and 80%, respectively. The information is not available regarding demand for manpower in Kilimanjaro by occupational category. A shortage of teachers, particularly secondary school and post-primary school technical teachers, is definitely anticipated, the shortage of technical teachers being a problem confronting education through the country.

Information necessary for estimation of future employment and high- and middle-level manpower has not been made available with respect to Kilimanjaro. The estimates below therefore largely represent guesswork. Employment by industry in Kilimanjaro in 1980 and 1985 has been estimated on the basis of estimated employment in 1975, the estimated rate of growth of GRP, and estimated labour productivity. Estimated employment in Kilimanjaro is shown in Table-18. The requirements for high- and middle-level manpower have been estimated on the basis of the ratio of manpower by occupational category to employment. The estimated requirements are:

	<u>1976-1980</u>	<u>1981-1985</u>
Category A occupations	838	894
Category B occupations	3,647	4,401
Category C occupations	7,566	15,318

As stated above, the supply of high- and middle-level manpower is on the national level, on which it is estimated that 80% and 82%, respectively, of Category A and Category B manpower requirements will be met in 1980. Kilimanjaro, too, may face similar shortages of high- and middle-level manpower, at least until 1985. As mentioned previously, Category C manpower requirements should be met with secondary school leavers, the expected number of which is estimated at 10,000 for the period 1976-1980 and 13,000 for the period 1981-1985, during which an increase in the new enrollment in secondary schools in the region is expected to be necessary.

Information on the manpower requirements of each occupation in each category is not available for Kilimanjaro. However, it is likely that the same occupations will have shortages as nationwide.

3. PROBLEM AREA

As stated in Section 1.4, educational budget appropriations are quite large. If the budget appropriations for various training programmes are added, the expenditures for education and training may exceed 20% of the total national budget. There is no doubt that emphasis has been placed on manpower development as a national policy. Priority is being given to technical education and training of skills. Since education and discipline are basic requirements for assimilation of introduced technology and for social and economic progress, the direction taken and the efforts made by the Tanzanian Government in this regard are to be commended.

Nevertheless, there are some problems which have been pointed out by the government itself. The first is a shortage of trained people in a variety of specialities in terms of absolute numbers, particularly of technicians and teachers. Other major problems are a shortfall in educational and training facilities, misuse and redundant use of manpower, a decrease in labour productivity, and lack of co-ordination in establishing and expanding training institutions.

In Kilimanjaro, as stated previously, it has been reported that the biggest problem is underemployment of young people in rural areas, particularly of Standard VII leavers in the upper area. In this connection, the Regional Labour Office feels that educational and training facilities are not sufficient to cope with this situation.

The following are some specific problems:

- (1) More attention should be paid to the quality of education and training. For example, short-term training of teachers may not bring good results in the long run. The most important factor in education is good-quality teachers. It takes time for education and training to pay off, and rushing teacher education can result in less than satisfactory education of all.
- (2) Decentralization of technical education and training institutes.... Technical secondary schools like Moshi TSS and industrial vocational centers like Chang'ombe Center are needed in every region. Also definitely needed are the kind of agricultural training institutes presently operated at several locations by the Ministry of Agriculture. Such training or educational institutes that are essential to regional development should be operated under the control of regional governments in order to properly meet local needs. Such a plan should be gradually implemented in a long-range development programme and, if possible, should include the cooperation of private schools and institutes.
- (3) Re-examination of technical education and training systems.... Technical secondary schools and NVTP are major sources of handicraft-oriented skilled workers. More institutions providing training in higher technical skills such as that provided by DSM Technical College will be needed in each group of some regions. In the context of plans for such institutions, an agricultural college plan might be incorporated in the fourth five-year plan.

- (4) Utilization of existing manpower without educational or training background..... It has been reported that many workers who have obtained practical knowledge and skills through long industrial experience in enterprises are not well paid and suffer other disadvantages owing to lack of formal certificates. They are not qualified to apply for trade testing because they have no primary education and no knowledge of the English language. Improvement in the treatment of such manpower would no doubt contribute to mitigation of the manpower shortage.
- (5) Underemployment of young people in the upper area of Kilimanjaro ... The solution is to create a labour market for these young people as a matter of industrial development. It has been reported that training programmes for small-scale industries are being started in various parts of the region. However, more effort should be put into the agricultural sector. The aforementioned high level of underemployment can be absorbed only by the agricultural sector. For the further development of agriculture, facilities offering, for example, training of extension workers in the use of water, fertilizers and insecticides, reclamation, cultivation of new crops, farm management, etc., are needed. Also, agriculturally related industry using agricultural products should be extensively developed, and training facilities should be provided for it as well.

4. SUGGESTIONS AND MEASURES

Most of the problems pointed out in the previous section have to be treated at the national level because they are by nature closely related to national government policy. Nevertheless, it may be worthwhile to discuss these problems from the angle of regional development.

- (1) Decentralization of technical education There is a technical secondary school in Moshi, but it is operated on the national level. According to a plan for the vocationalization of secondary schools drawn up by the Ministry of National Education, 9 secondary schools in the Kilimanjaro Region are to be vocationalized as follows:

	Hai	Moshi	Rombo	Pare
Technical	-	Moshi Umbwe S.S.	-	-
Agriculture	Lyamungu S.S. Machame S.S.	-	-	-
Commerce/craft		Mawenzi S.S. Moshi S.S. Weruweru S.S.	-	Same S.S.

Home economics/
crafts

If the plan is fully implemented, technical education at the secondary school level can be decentralized, although more agricultural secondary schools may be needed in Rombo and Same in the future. It is desirable that the expansion of agricultural secondary schools be carried out in cooperation with the existing private secondary schools in those districts.

- (2) Decentralization of vocational training At present there are two national vocational training centers at DSM and Morogoro. Two more are under construction at Tanga and Mwanza, and three others at Dodoma, Tabora, and Mbeya are in the planning. In Kilimanjaro such a training center should be established urgently in consideration of existing unemployment and underemployment. At the same time, employment registration, vocational training and placement can be managed systematically and in accordance with local needs by placing the center and the regional labour office under the control of the Regional Development Office.

- (3) College Level Education Technical skills higher than those provided by technical secondary education and NVTP will be needed with the industrialization of society. There is a technical college at DSM, and another college is needed for every few regions. After 4 or 5 additional technical colleges are established in other regions, the college at Arusha can serve the Arusha and Kilimanjaro regions. At present there is no agricultural college anywhere in the country. Instead, there are 12 agricultural training institutes with specific subjects under the Ministry of Agriculture and a single institute specializing in horticulture in Kilimanjaro. Considering the situation in which the Region finds itself an institution providing both agricultural knowledge and training in a comprehensive way is definitely needed. It is therefore strongly recommended that an agricultural college be established in the Region.
- (4) Utilization of skilled labour without formal certificates A system of qualification of skilled labourers without an educational background should be established at the national level, the criteria for qualification being labour productivity and workmanship. Upon qualification, workers should be promoted in terms of salary and wage and given an opportunity to participate in advanced training.
- (5) The implementation of the measures stated in (1), (2) and (3) above will result in a shortage of teachers. In this respect, foreign experts should be utilized without hesitation.
- (6) A water management training institute A key to development of agriculture which can offer a great deal of employment opportunities in the region is the supply of water to cultivable land. Investigations and studies of water resources are presently underway. However, a continuous survey of water use and prospective water sources as well as well-managed maintenance and operation of irrigation facilities are essential and should be carried out under the control of the regional government to properly meet local needs.

There could be a number of manpower development projects to be localized as stated above. However, some are incorporated in sectoral projects of respective industries. For example, an industrial estate project for small industries includes industrial vocational training facilities, and agricultural technical center and agricultural mechanical service center projects plan to provide technical training services. Others such as vocationalization of secondary schools are underway. Therefore, the present chapter just states suggestions and measures, and the implementation of such projects will be left to the hands of respective industrial sectors.

5. DEVELOPMENT PLAN

As seen from the fact that education is the largest single item of all governmental appropriations and that expenditures for education and training may exceed 20% of the total national budget, manpower development is one of Tanzania's most important national policies. However, the availability of region-wise facilities for technical education and training of skills is very limited. Vocationalization of secondary education and expansion of industrial vocational training programs are being carried out by the Ministry of National Education and the Ministry of Labour and Social Welfare, respectively. This is expected to gradually assuage the shortage of such institutions for training of middle-level manpower. On the other hand, high-level manpower development is the responsibility of the Central Government, and since only one additional technical college is being established for this purpose, the supply of high-level manpower can be expected to be tight in the foreseeable future.

As often pointed out in the present report, the biggest problem is under-employment of young people in the region, particularly of primary school leavers in rural areas. This is fundamentally a matter of industrial development. The present development plan anticipates a decline in the unemployment rate from 9.4% in 1975 to 7.0% in 1980 and 3.0% in 1985.

A number of regional development projects are proposed in the present report, those in main industries such as agriculture and manufacturing including training programs. However, high-level manpower necessary for the implementation of these projects will be provided mostly by educational and training institutes at the national level. The manpower requirements of these projects are summarized as follows:

	Category A	Category B	Category C	Other manpower
Nature				
conservation	5	9	34	2,630
Water resources	4	0	20	0
Agriculture	21	33	101	194
Roads	5	0	117	112
Town and village development	7	0	1	0
Public utilities social service	122	436	923	222
(Education)	(112)	(410)	(890)	(0)
Tourism	1	4	0	100
Industry	8	23	84	1,356
Total	181	513	1,351	4,699
	(112)	(410)	(890)	(0)

The manpower classification above is based on the occupational categories defined in the high- and middle-level manpower survey:

Category A	Top-level administrators and managers and professionals	University or above
Category B	Semi-professionals and technicians	Technical college or equivalent
Category C	Highly skilled labourers and skilled office workers	Secondary school (Form IV)
Other manpower	Semi-skilled labourers	Primary school

Regarding Category C, the Ministry of Manpower Development is of the opinion that there will not be much of a shortage as the personnel employed in this category are secondary school leavers with several years experience in their jobs. As for education, 18% and 27% shortages of secondary school and upper-grade primary school teachers in these categories is the responsibility of the Central Government Educational and training institutes at the national level also supply other kinds of manpower in Categories A and B. According to the ministry's manpower requirement forecasts, personnel, hydrologists, soil scientists, forest officers and foresters. On the other hand, some classifications will be faced with manpower shortages, the percentages to which manpower requirements in them will be met being anticipated as follows: civil engineers - 74%, irrigation engineers - 74%, hydro-geologists - 64%, village planners - 50%, agricultural field officers - 55%, agricultural engineers - 55%, veterinary field officers - 69%, medical assistants - 69%, and mechanical engineering technicians - 85%. Accordingly, there are expected to be shortages of 18 experts in Category-A and 30 experts in Category-B with respect to the manpower requirements of the regional projects proposed in the present report.

Breakdown of Population of Tanzania by Age and Sex, 1967 (Table-1)

	Total	Male	Female
14 years & younger	5,398,445	2,724,536	2,673,909
15 years & older	6,901,366	3,288,077	3,613,289
N. S.	5,745	3,141	2,604
Totals	12,305,556	6,015,754	6,289,802

Source: 1967 Population Census, Volume 3, xxii Summary Table

Population of Tanzania 15 years old and over,
Size of Labour Force and Level of Employment, 1967

	Total	Employed	Unemployed	Labour force
Male	3,186,719	2,738,502	79,723 (2.8%)	2,818,231 (88.4%)
Female	3,512,434	2,493,007	17,095 (0.7%)	2,510,102 (71.5%)
Totals	6,699,153	5,231,509	96,824 (1.8%)	5,328,333 (79.5%)

Source: 1967 Population Census, Volume 4, xxxiii

Breakdown of Population of Tanzania by Age and Sex, 1975

	Total	Male	Female
14 years & younger	7,250,333	3,524,549	3,725,784
15 years & older	8,043,078	4,005,215	4,037,863
N. R.	10,511	6,970	3,541
Totals	15,293,411	7,529,764	7,763,647

Source: 1973 National Demographic Survey of Tanzania, Vol.1, p.1

Breakdown of Population of Kilimanjaro Region by Age and Sex, 1967 (Table-2)

	Total	Male	Female
14 years & younger	325,473	163,597	161,876
15 years & older	326,933	155,160	171,773
N. S.	252	151	101
Totals	652,658	318,908	333,750

Source: 1967 Population Census, Volume 3, p.32

Population of Kilimanjaro Region 15 years old and over,
Size of Labour Force and Level of Employment, 1967

	Total	Employed	Unemployed	Labour force
Male	155,178	117,437	12,764 (9.8%)	130,201 (83.9%)
Female	171,779	71,366	3,445 (4.6%)	74,811 (43.6%)
Totals	326,955	188,803	16,209 (7.9%)	205,012 (62.7%)

Source: 1967 Population Census, Volume 4, xxxiii

Breakdown of Population of Kilimanjaro Region
by Age and Sex, 1975

	Total	Male	Female
14 years & younger	423,320	212,002	211,318
15 years & older	441,102	205,048	236,054
N. R.	92	52	40
Totals	864,514	417,102	447,412

Source: 1973 Demographic Survey of Tanzania, Vol.1, p.11

Age Structure of Population of Tanzania and of Kilimanjaro Region, 1967 & 1975 (Table-3)

(%)

Age group	Tanzania						Kilimanjaro Region					
	1967			1975			1967			1975		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0 - 4	17.9	18.0	17.7	20.3	18.5	22.2	19.6	20.0	19.1	18.1	18.7	17.5
5 - 9	15.8	16.2	15.3	15.7	16.2	15.2	17.2	17.8	16.7	17.0	18.0	16.1
10 - 14	10.2	11.0	9.5	11.4	12.1	10.6	13.1	13.5	12.7	13.8	14.1	13.6
Subtotals	43.9	45.3	42.5	47.4	46.8	48.0	49.9	51.3	48.5	48.9	50.8	47.2
15 - 19	8.9	8.6	9.1	8.1	8.0	8.2	9.0	8.5	9.5	9.3	8.0	10.6
20 - 24	7.5	6.3	8.6	7.2	6.3	8.0	6.1	5.1	7.1	6.2	5.1	7.2
20 - 25	8.4	7.7	9.1	7.4	6.8	7.9	6.8	6.1	7.4	6.1	5.5	6.7
30 - 34	6.1	5.9	6.3	6.0	5.9	6.2	5.4	5.4	5.3	5.4	5.2	5.6
35 - 39	5.5	5.7	5.3		5.5	5.5	4.9	5.1	4.7	4.7	4.8	4.6
40 - 44	3.7	3.6	3.7	4.3	4.4	4.2	3.4	3.4	3.4	4.1	4.1	4.0
45 - 49	4.0	4.2	3.7	3.8	4.2	3.4	3.2	3.5	3.0	3.3	3.6	2.9
50 - 54	2.9	2.9	2.9	3.0	3.4	2.7	2.5	2.6	2.4	3.1	3.2	2.9
55 - 59	1.7	1.8	1.6	2.2	2.4	1.9	1.6	1.7	1.4	2.2	2.4	2.1
Subtotals	48.7	46.7	50.5	47.4	46.9	48.0	42.9	41.5	44.3	44.4	41.9	46.6
60 - 64	1.8	1.8	1.8	1.9	2.2	1.6	1.6	1.5	1.6	2.0	2.3	1.8
65 - 69	1.2	1.3	1.2	1.2	1.4	1.0	1.0	1.2	1.1	1.0	1.0	1.1
70 - 74	1.0	1.0	1.0	1.0	1.3	0.8	1.1	1.0	1.1	1.6	1.6	1.6
75 -	3.4	3.8	2.9	1.0	1.3	0.6	3.4	3.5	3.3	2.0	2.4	1.7
Subtotals	7.4	7.9	6.9	5.1	6.2	4.0	7.2	7.2	7.2	6.6	7.3	6.2
N. S.	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0

Educational Structure of Population of Tanzania and of Kilimanjaro Region, 1975 (Table-4)

(%)

Age Group	Tanzania				Kilimanjaro Region					
	No formal education	Primary	Secondary	Post-secondary	No formal education	Primary	Secondary	Post-secondary		
Total	100.0	54.4	42.2	3.1	0.3	100.0	41.0	55.6	3.2	0.2
10 - 14	0.0	32.7	61.3	4.3	1.7	-	-	-	-	-
Subtotals	0.0	32.7	61.3	4.3	1.7	-	-	-	-	-
15 - 19	1.2	37.2	60.8	1.9	0.1	0.9	22.0	78.0	0	0
20 - 24	8.0	29.2	65.5	4.9	0.4	7.6	12.9	79.5	7.4	0.2
25 - 29	13.9	35.3	59.1	5.1	0.5	13.7	17.3	76.9	5.3	0.5
30 - 34	13.1	41.8	53.2	4.4	0.6	12.5	21.5	72.9	5.4	0.2
35 - 39	13.5	48.7	47.5	3.4	0.4	14.1	31.3	64.9	3.6	0.2
40 - 44	11.2	55.5	41.6	2.7	0.2	9.8	38.9	57.9	3.2	0
45 - 49	10.1	64.4	33.2	2.2	0.2	10.3	48.5	50.3	1.0	0.2
50 - 54	7.6	64.7	33.2	2.0	0.1	7.9	52.5	45.8	1.7	0
55 - 59	7.4	76.1	22.2	1.6	0.1	7.8	64.0	35.8	0.2	0
Subtotals	86.1	50.0	46.3	3.4	0.3	84.7	33.8	62.4	3.6	0.2
60 - 64	4.6	76.3	22.5	1.1	0.1	3.9	62.8	35.1	2.1	0
65 - 69	4.7	83.2	16.1	0.6	0.1	4.1	87.5	11.1	1.4	0
70 -	4.5	86.3	13.1	0.5	0.1	7.3	87.0	12.4	0.4	0.2
Subtotals	13.8	81.9	17.3	0.7	0.1	15.3	80.9	17.9	1.1	0.1

Economically Active Population by Industry and Sex: Tanzania, 1967 (Table-5)

	Total	%	Male	Female	N. S.
Agriculture	5,078,038 (4,744,406)	(91.0)	2,484,076 (2,318,116)	2,592,788 (2,426,290)	1,174
Mining	4,994 (4,827)	(0.1)	4,736 (4,729)	99 (98)	3
Manufacturing	91,508 (90,736)	(1.7)	82,374 (81,827)	9,067 (8,911)	67
Construction	30,422 (30,226)	(0.5)	30,169 (30,006)	222 (220)	31
Public Utility	5,571 (5,562)	(0.1)	5,419 (5,411)	151 (151)	1
Commerce	72,077 (71,234)	(1.3)	65,266 (64,603)	6,774 (6,631)	37
Communication	44,530 (44,366)	(0.8)	43,811 (43,719)	649 (647)	70
Services	197,601 (192,675)	(3.6)	160,294 (158,100)	37,185 (34,575)	122
Total	5,524,741 (5,184,190)	(99.1)	2,876,301 (2,706,667)	2,646,935 (2,477,523)	1,505
N. S.	52,826 (47,519)	(0.9)	34,891 (31,966)	34,893 (15,553)	42
Totals	5,577,567 (5,191,709)	(100.0)	2,911,192 (2,738,633)	2,664,828 (2,453,076)	1,547

Remark: Figures in parentheses indicate the number of those 15 years old and over

Source: 1967 Population Census, Volume 4, p.379

Economically Active Population by Industry and Sex: Kilimanjaro, 1967 (Table-6)

	Total	%	Male	Female	N.S.
Agriculture	160,685	(83.3)	92,212	68,173	299
Mining	380	(0.2)	379	1	0
Manufacturing	7,146	(3.7)	6,757	358	31
Construction	2,203	(1.1)	2,190	13	0
Public utilities	343	(0.2)	332	11	0
Commerce	4,032	(2.1)	3,706	291	35
Communication	1,997	(1.0)	1,976	13	8
Services	13,246	(6.9)	9,712	3,498	36
Total	190,032	(98.5)	117,265	72,358	409
N.S.	2,911	(1.5)	1,701	869	341
Totals	192,943 (188,817)	(100)	118,966 (117,444)	73,227 (71,373)	750 (-)

Number of Workers by Industry & Occupation

	Total	Emp.	Own acc't	Emp'ee	Fam. work	Stated	N.S.
Agriculture	160,685	648	138,871	14,559	6,308	160,386	299
Mining	380	10	35	335	0	380	0
Manufacturing	7,146	137	1,641	5,309	28	7,115	31
Construction	2,203	32	403	1,768	0	2,203	0
Public utilities	343	1	14	323	5	343	0
Commerce	4,032	367	1,715	1,856	59	3,997	35
Communication	1,997	46	149	1,788	6	1,989	8
Others	13,246	152	1,009	11,017	1,032	13,210	36
Stated	190,032	1,393	143,837	36,955	7,438	189,623	409
N. S.	2,911	62	912	1,303	293	2,579	341
Totals	192,943 (188,817)	1,455 (1,447)	144,749 (142,247)	38,258 (37,601)	7,731 (6,817)	192,193 (188,112)	750 (705)

Remark: Figures in parentheses indicate the number of those 15 years old and over.

Source: 1967 Population Census, Volume 4, p.366 and xxxv

Employment by Age and Occupation, 1967 & 1975 (Table-7)

(%)

	Tanzania										Kilimanjaro Region							
	Tanzania					Kilimanjaro Region					Kilimanjaro Region							
	Prof.	Cleric	Non-ag.	Ag.-self	Ag.-paid	Others	Prof.	Cleric	Non-ag.	Ag.-self	Ag.-paid	Others	Prof.	Cleric	Non-ag.	Ag.-self	Ag.-paid	Others
Total	2.7	8.5	8.8	78.2	1.1	0.7	2.4	15.0	9.8	71.2	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
10 - 14	6.2	9.5	6.1	71.8	0	6.4	0	100.0	0	0	0	0	0	0	0	0	0	0
15 - 19	2.0	10.3	7.9	78.1	0.9	0.8	4.9	27.3	12.1	55.8	0	0	0	0	0	0	0	0
20 - 24	3.1	13.7	12.2	69.0	1.3	0.6	1.5	25.3	17.3	52.7	1.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
25 - 29	3.5	13.1	14.0	67.3	1.7	0.4	2.7	28.9	13.3	53.3	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6
30 - 34	4.1	11.2	12.0	70.5	1.8	0.3	3.8	17.6	12.8	63.9	1.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
35 - 39	3.1	9.8	10.7	74.3	1.6	0.5	3.0	17.8	11.1	66.3	1.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5
40 - 44	3.1	7.9	9.0	78.5	1.1	0.4	3.6	16.2	11.3	67.3	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
45 - 49	2.4	5.5	6.9	83.9	0.7	0.5	2.5	7.0	7.3	82.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3
50 - 54	2.2	5.2	5.2	86.0	0.6	0.7	1.4	4.9	6.1	86.7	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
55 - 59	1.1	3.4	3.0	91.5	0.3	0.7	0.7	4.8	2.7	90.7	0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
60 - 64	0.6	2.8	2.3	92.9	0.3	1.1	0.7	2.1	3.0	93.0	0	1.2	1.2	1.2	1.2	1.2	1.2	1.2
65 - 69	0.4	2.6	1.8	92.8	0.3	2.0	0	1.3	1.1	96.2	0	1.3	1.3	1.3	1.3	1.3	1.3	1.3
70 - 74	0.4	2.7	1.4	91.5	0.5	3.5	0.8	1.2	3.3	91.4	0	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Averages	1.5	3.4	3.7	88.5	2.3	0.6	3.6	6.2	6.7	86.0	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7

1967

Number of Job Seekers, Vacancies & Vacancies Filled 1968 - October, 1976 (Table-8)

	Registered job seekers	Vacancies	Vacancies filled
Kilimanjaro			
1968	843	948	882
1969	1,828	785	698
1970	5,114	1,417	1,043
1971	1,968	1,709	1,386
1972	1,121	1,005	621
1973	492	487	390
1974	358	311	272
1975	463	314	316
1976 (up to Oct.)	218	185	172
Tanzania			
1970	45,196	31,484	19,388
1971	43,458	33,827	22,116
1972	22,370	11,778	11,580
1973	16,035	14,740	8,908
1974	7,106	7,338	5,123

Vocational Training by Ministries (Table-9)

I. Education

Name of institute	Location	Sponsor	Training course	Period	Qualification	in 1974		Remarks
						New enrollment	Total enrollment of trainees graduating	
Colleges of National Education (CNE)	Dares Salaam Morogoro	Min. of National Education (MONE)	Science, arts, commerce, technical, music, domestic science	2 years (recently reduced to 1 year)	Education Officer Grade III (diploma)		369	
	Butimba		Agriculture					
	Kirelu		In-service training					
	31 locations	MONE	Primary school teacher course	1 year	Grade A " B " C		1,387 80 5,752	

2. Agriculture

33

Ukiriguru Training Institute (ATI)	Ukiriguru	Min. of Agriculture (MOA)	In-service training of crop production	3 years	diploma	40 (1975)	287	
			Agriculture	10 weeks	certificate III		97	
			Cotton irrigation	2 months	refresher course		28	
Mkata ATI	Morogoro	MOA	Ranch management	3 years	diploma	12		
			Agriculture Poultry	3 years	certificate	94	243	
Mpwapwa ATI	Mpwapwa	MOA	Animal production	3 years	diploma		26	
Mlingano ATI	Tanga	MOA	Farm management Fodder management	3 years	diploma		49	
				3 weeks	refresher		33	
Iyamungu ATI	Moshi	MOA	Horticulture	3 years	diploma		22	

in 1974

Name of institute	Location	Sponsor	Training course	Period	Qualification	New enrollment		Remarks
						ment	ment	
Nyegezi ATI	Nyegezi	MOA	Agriculture	3 years	diploma	68	193	In-service training
			Land planning	2 years	certificate		27	
			Irrigation		refresher		15	
Maruku ATI	Maruku	MOA	Agriculture	3 years	certificate	36	107	
Tumbi ATI	Tabora	MOA	Agriculture	3 years	certificate	54	129	
		Tobacco Authority of Tanzania	Tobacco cultivation			150		under construction World Bank aid
			In-service training of Tanzania					
Ilonga ATI	Kilosa	MOA	Nutrition	3 years	certificate	23	61	
Tengeru ATI	Tengeru	MOA	Agriculture	3 years	certificate	40	119	
C. V. L. Temeke		MOA	Laboratory technician	3 years	certificate	-	21	
Uyole ATI	Mbeya	MOA	Agriculture, veterinary, home economics	2 years	certificate			under construction Nordic aid
Overseas training	15 countries	MOA	In-service training of MOA's staff	less than 1 year to 4 years			92	
Mutwara ATI	Mutwara	MOA	Coastal crops		certificate	80		under construction (1975)

in 1974

Name of institute	Location	Sponsor	Training course	Period	Qualification	in 1974		Remarks
						New enrollment	Total enrollment	
3. Industry								
National Vocational Training Programme	Chang'ombe	Min. of Labour & Social Welfare	(1) Training of skilled workers of 15 trades	4 years	Grade I, II & III	400 (1976)		UNDP/ILO aid, later CIDA aid
			(2) Training of supervisors	3 weeks			225	(total of DSM, Morogoro, Mbeya & Mwanza)
			(3) Training of training officers	12 weeks				
			(4) Training of instructors	40 weeks	Full time instructor			
				6 weeks	Part time instructor			
			(5) Evening courses	1 year			2,108	of which 1,099 are given by up-country centers
			(6) Trade testing				5,040	1,449
	Morogono	"	Mason & carpenter	4 years	Grade I, II & III	29		
	Tanga & Mwanza	"	Similar to Chang'ombe	4 years	Grade I, II & III			under construction, IDA aid
	Dodoma, Tabora & Mbeya	"	Similar to Chang'ombe	4 years	Grade I, II & III			in planning stage

in 1974

Name of institute	Location	Sponsor	Training course	Period	Qualification	in 1974		Remarks	
						New enrollment	Total enrollment		
SIDO Training Programmes (Training of industrialists/entrepreneurs)	Tabora	Small-scale Industries Organization (SIDO)	Weaving	12 months		24	-	14	1975
	Tabora, Dodoma, DSM		Carpentry " (up-grading)	12 months		51	-	37	"
	DSM		Metal fabrication	6 months		54	-	39	"
	Tabora, Dodoma		Blacksmithing " (up-grading)	12 months		35	-	23	"
	Njombe		Bamboo craftsman-ship	12 months		31	-	33	"
	Lanzoni		Fruit canning	3 months		22	-	-	"
	Kilosa		Seed oil extraction	4 months		22	-	-	"
	Kiomoni		Lime processing	4 months		19	-	-	"
	Moshi		Pottery	3 months		33	-	-	"
	Mwanza, Mara, Shinyanga, Singida, Arusha & Dodoma		Cattle-dung gas processing	1 month		38	-	-	"
	Usseri		Callabash crafts- manship	12 months		26	-	-	"
	Manzese		Tusk craftsmanship	24 months		14	28	14	"
	Moshi		Tannery	6 months		-	-	4	"
	Tanga		Carpet weaving	6 months		3	-	-	"

in 1974

Name of institute	Location	Sponsor	Training course	Period	Qualification	in 1974		Remarks
						New enrollment	Total enrollment	
SIDO Training Programmes (Training of industrialists/entrepreneurs)	Hyderabad, India	Small-scale Industries Organization	Financing, Management, Small industries promotion	3 months		5	5	1974/75
	New Delhi, India	(SIDO)	Agricultural implements clinic	10 days		2	2	"
	Tanzania & abroad		Staff training in industrial promotion, management, small-scale industrial engineering, accountancy, office supervision, canning, oil extraction, pottery, marketing, industrial estate administration, group training, programme extension services			3	3	"
						1	1	"
							71	1975
National Service Cottage Industry Training Programme			Training of youths mostly from Ujamaa villages in trades of masonry, carpentry, mechanics, tailoring, shoemaking, tin/blacksmithery, welding domestic science, plumbing, soap manufacturing, electrical work, driving and weaving			1,430	1,430	SIDO's programmes are aided by Commonwealth Secretariat, SCAAP & India

in 1974

Name of Institute	Location	Sponsor	Training course	Period	Qualification	New enrollment	Total enrollment	No. of trainees graduating	Remarks
4. Natural Resources									
College of African Wildlife Management	Mweka	Natural Resources & Tourism Ministry (NRTM)	Training of game wardens and game assistants		diploma certificate			23 (6) 50(11)	Figures in parentheses for Tanzanians
					post-graduate orientation		10	Up to 1974	UNDP/FAO, CIDA, WWF, USAID, Ford Foundation, FRG aids
Pasiansi Natural Resources Institute		NRTM	Training of field assistants			55			
Kunduchi Fisheries Institute		NRTM	Pre-service and in-service training in fishery	2 years	diploma	20	40		Dutch aid
Mbegani Fisheries Development Center	Bagamoyo	NRTM	Training of extension work staff in fishery, future training of specialists in marine engineering, boat building, navigation & gear technology		certificate	40	39		NORAD aid
Nyegezi Freshwater Fisheries Institute		NRTM	(1) Short courses in freshwater fisheries, fish cultivation & fish processing						

in 1974

Name of institute	Location	Sponsor	Training course	Period	Qualification	New enrollment	Total enrollment	No. of trainees graduating	Remarks
Nyegezi Freshwater Fisheries Institute		NRIM	(2) Research work in fish handling, processing, conservation and marketing						
Tanzania Hotel Training School		NRIM	Training of: receptionists cooks & bakers rest. & bar waiters bartenders	3 months			10		Dutch aid
			Will give refresher courses in food and beverage management, financial management, hotel accounting, and hotel law & economics	3 to 6 months			24		
			Will give longer courses in the future		diploma		36		
Olmotony Forestry Institute	Arusha	NRIM	Training of junior officers in forestry beekeeping		(diploma certificate diploma certificate	26 51 6 32	49		
Wood Industry Training Institute	Moshi	NRIM	Training of sawmill managers in logging, sawmilling and woodworking. At present training of TWICO staff: supervisor wood working	13 months 2 years				8	Not yet officially started, Swedish aid

in 1974

Name of institute	Location	Sponsor	Training course	Period	Qualification	New enrollment	Total enrollment	No. of trainees graduating	Remarks
Ministerial Training Program	DSM	Land, Housing and Urban Development Ministry (LHUDM)	Pre-service training for Form IV leavers in: cartography photolithography photogrammetry	1 year				11 7 4	
			Refresher course in: survey town planning drafting					17 3 6	
	abroad		Urban & Regional Dev. Survey Cartography Computer eng., photographic & printing Others		M. Sc. B. Sc. certificate			8 1 2	
Ardhi Institute	Morogoro	LHUDM	Estate management Land surveying Urban & rural dev.	2 years	diploma			11(31) 10(16) 0(7)	Figures in parentheses for 1975, UNDP aid
Kidatsu Training School	Kidatu	TANESCO	Training of electricians and electric fitters						Transferred from NVTP in 1974

in 1974

Name of institute	Location	Sponsor	Training course	Period	Qualification	in 1974		Remarks
						New enrollment	Total enrollment	
5. Health								
Health Training Programme	51 institutions various locations	Health Institutions Ministry	Medical auxiliaries (medical assistants, rural medical aids, assistant medical officers) Paramedical health staff (laboratory technicians and dental, pharmaceutical & nursing personnel) Public health personnel (health auxiliaries, health education officers) Nurse tutors					
6. Office Services								
Civil Service Training Center	DSM		In-service training of office workers	1 year		510		
DSM Secretarial College	DSM	MONE	Pre-service & refresher course in: typing stenography	41 weeks			100 104	22 60
Tabora Secretarial College	Tabora	MONE	Pre-service training & refresher course in: typing stenography	6 months				165 104
			Part-time course in typing, stenography & book-keeping					

in 1974

Name of institute	Location	Sponsor	Training course	Period	Qualification	New enrollment	Total enrollment	No. of trainees graduating	Remarks
Cooperative College	Moshi	Prime Minister's Office	Cooperative management and accountancy	2 years	diploma	108	188	24	
			Advanced retail/wholesale management	1 year		26	-	26	
			Shop management	6 months		15	-	15	
DSM School of Accountancy	DSM (Mwanza, Moshi, & Mbeya Branches)		Pre-service and in-service training for Government employees in accounting, materials/stores management and taxation	2 to 5 months		1,107	-	1,107	
College of Business Education	DSM		Business administration and management of parastatals and governmental institutions	2 years	diploma	77	142	65	FRG aid
			Evening class			500	-		
Institute of Finance Management	DSM	Finance & Planning Ministry	Long course in: Banking Licentiate and associate in insurance Professionsl accountancy		diploma)))))	17 22		1975 1976/77
			In-service course in finance management						

in 1974

Name of institute	Location	Sponsor	Training course	Period	Qualification	New enrollment		Total enrollment		Remarks
						ment	ment	ment	ment	
Institute of Development Management	Mzumbo		Business management	3 years	diploma	44	117	23	1975	
			Certified public accountancy	3 years	diploma	83	218	24	1975	
			Certification Law	1 year	certificate	92	-	86		
			Certificate in Law	1 year	certificate	37	-	27		
			Public administration	3 years	diploma	35	90	27		
			Economic planning	1 year	diploma	25	-	24		
			Post-graduate diploma in management	1 year		14	-	12		
			Community development							

Employment and Wages by Industry, Tanzania (Table-10)

Industry	1967	1968	1969	1970	1971	1972	1973	1974	1975
Estate agriculture	123,887	109,213	112,888	107,377	108,971	113,843	109,047	123,973	122,522
Mining and quarrying	6,493	6,121	5,919	6,039	5,753	5,558	5,013	4,762	5,012
Manufacturing	31,186	35,359	40,323	43,417	55,158	55,389	59,336	64,921	73,768
Construction	41,929	47,309	52,767	54,497	54,984	51,842	104,777	72,810	58,197
Public utilities	7,093	9,601	9,755	11,296	10,603	12,324	18,904	16,074	15,334
Commerce	20,077	21,415	19,072	20,627	23,353	24,777	26,713	25,322	32,721
Transport and communications	29,725	31,764	32,389	33,702	33,351	37,049	38,115	45,166	45,251
Finance	-	-	4,257	4,835	5,668	6,356	6,515	7,399	8,777
Services	86,351	90,933	90,556	92,901	94,929	98,575	104,083	123,659	103,934
Totals	346,741	351,711	367,926	374,691	392,770	405,713	472,503	484,086	465,516

Industry	1967	1968	1969	1970	1971	1972	1973	1974	1975
Estate agriculture	167	164	161	172	171	171	209	313	338
Mining and quarrying	427	451	472	480	414	517	530	672	643
Manufacturing	376	382	384	396	370	388	446	618	591
Construction	236	220	220	245	235	240	223	362	448
Public utilities	291	279	256	260	252	327	369	524	565
Commerce	529	539	495	512	539	507	559	623	516
Transport and communications	433	449	446	455	532	506	621	827	840
Finance	-	-	977	986	982	1,040	995	1,223	995
Services	389	402	406	429	418	432	503	718	706
Average	301	312	314	335	337	347	380	553	569

Remark: Figures for 1975 are tentative.

Sources: Economic Survey - 1970/71, 1973/74 & 1974/75; Central Statistical Bureau

Employment and Wages by Sector, Tanzania (Table-11)

	1967	1968	1969	1970	1971	1972	1973	1974	1975
Enterprise		212,281	216,947	220,547	231,553	241,242			
Private		142,468	143,986	141,438	143,464	150,663			
Parastatals		45,712	52,438	64,461	75,308	74,790			
Non-profit inst.		19,505	16,250	10,114	8,052	7,948			
Marketing corp.		4,596	4,273	4,534	4,729	7,841			
Public services		139,430	150,979	155,083	161,217	164,471			
Central government		88,327	94,050	95,318	99,564	101,182			
Local government		31,371	36,896	39,562	39,110	41,127			
EA, R & harbours		15,745	14,671	15,428	17,874	18,374			
EA, P & T		2,378	3,551	2,880	3,010	2,326			
EAC (others)		1,609	1,811	1,990	1,719	1,462			
Employment									
Enterprise		313	320	328	333				
Private		266	277	301	298	287			
Parastatals		435	427	386	407	446			
Non-profit inst.		42	60	116	134	243			
Marketing corp.		1,648	1,443	743	520	316			
Public services		308	303	340	342				
Central government		281	286	315	314	342			
Local government		303	301	342	362	364			
EA, R & harbours		383	340	403	379	386			
EA, P & T		582	397	532	576	752			
EAC (others)		751	801	746	766	712			
Wages (shillings)									
Enterprise									
Private									
Parastatals									
Non-profit inst.									
Marketing corp.									
Public services									
Central government									
Local government									
EA, R & harbours									
EA, P & T									
EAC (others)									

Source: Survey of Employment and Earnings, 1972

Employment and Wages by Type of Employment and Sex, Tanzania (Table-12)

	1970	1971	1972		1971	1972
Enterprise				Male	353,349	360,734
Regular	163,650	166,282	173,008	Regular	273,847	284,361
Casual	56,897	65,271	68,234	Casual	79,502	76,373
Public services				Female	35,142	39,524
Regular	131,534	136,057	145,971	Regular	24,213	29,163
Casual	23,554	25,160	18,500	Casual	10,929	10,361
Regular	295,184	302,339	318,979			
Casual	80,451	90,431	86,734			
Enterprise				Male		354
Regular	395	408	416	Regular	400	408
Casual	135	143	136	Casual		152
Public services				Female		314
Regular	340	343	362	Regular	413	401
Casual	379	384	387	Casual		68
Regular	388	398	403			
Casual	130	136	142			
Enterprise				Male		354
Regular	395	408	416	Regular	400	408
Casual	135	143	136	Casual		152
Public services				Female		314
Regular	340	343	362	Regular	413	401
Casual	379	384	387	Casual		68
Regular	388	398	403			
Casual	130	136	142			

Employment & Wages by Industry, Kilimanjaro (Table-13)

	1967	1968	1969	1970	1971	1972	1973	1974	1975
Employment									
Estate agriculture	13,020	12,126	12,989	12,446	12,921	16,488			
Mining & quarrying	250	282	244	222	280	490			
Manufacturing	2,030	1,837	1,728	1,484	2,119	2,423			
Construction	2,800	2,797	3,884	3,319	4,233	3,895			
Public utilities	950	578	1,070	1,294	1,488	1,046			
Commerce	1,670	1,911	1,795	1,319	1,518	1,631			
Transport & communications	460	761	580	1,143	1,074	1,242			
Finance	-	241	215	205	220	298			
Services	5,450	5,860	5,988	5,691	6,215	6,319			
Totals	26,630	26,393	27,893	27,123	30,094	33,831	4,925	33,948	27,561
Wages (shillings)									
Estate agriculture			164	156	170				
Mining & quarrying			139	162	193				
Manufacturing			316	321	334				
Construction			194	183	227				
Public utilities			248	153	200				
Commerce			332	392	377				
Transport & communications			328	350	362				
Finance			940	859	1,195				
Services			421	443	442				
Average	273	256	255	253	270	250	356	524	600

Source: Regioned Statistics Abstract Survey of Employment & Earnings, 1972, Central Statistics Bureau

Monthly Earnings per Employee by Type of Employee, Kilimanjaro (Table-14)

	1969	1970	1971	1972	
Regular workers (shillings)	Agriculture	230	234	235	
	Mining	115	158	223	
	Manufacturing	339	353	351	
	Construction	210	236	273	
	Public utilities	545	402	243	
	Commerce	392	417	407	
	Transport	387	358	367	
	Finance	944	885	929	
	Services	454	457	457	
	Totals	324	338	336	349
	Casual workers (shillings)	Agriculture	69	59	79
Mining		92	168	126	
Manufacturing		118	154	253	
Construction		192	132	177	
Public utilities		189	28	137	
Commerce		139	120	121	
Transport		79	222	146	
Finance		614	141	181	
Services		220	161	219	
Average		109	79	119	77

Source: Regional Statistics Abstract, 1969-1971

Value-added per Parastatal Employee by Industry, Tanzania (Table-15)

	1967	1968	1969	1970	1971	1972	1973	1974
Agriculture	4,347	3,592	3,692	3,563	3,581	5,137	14,145	17,388
Mining	91,054	42,615	49,895	35,348	36,518	32,258	35,899	35,112
Manufacturing	15,522	13,091	13,514	13,705	11,101	14,956	13,421	20,711
Electricity	24,299	25,012	25,511	27,529	31,708	33,748	32,281	23,793
Construction	2,910	5,891	3,700	6,919	4,159	5,281	4,729	1,893
Commerce	9,030	31,669	19,098	15,741	22,956	24,510	30,274	27,125
Transport	7,254	-	42,331	32,319	31,044	25,394	22,285	19,996
Finance	7,565	14,034	14,827	9,448	9,780	1,020	9,533	10,638
Services	4,826	4,869	3,452	9,418	4,179	6,640	7,692	10,251
Totals	17,522	15,016	12,148	12,374	12,508	15,043	17,453	21,148

Source: Analysis of Accounts of Parastatals, 1966-1974

Estimated Employment in Tanzania, 1975-80 (Table-16)

Industry	Employment 1974	Estimated employment								Rate of increase of labour productivity (%)				
		I	II	III	IV	1975	1976	1977	1978	1979	1980	1964 /68	1964 /74	1975 /80
Enterprise agriculture	123,990	-	-	-	0.6	124,700	125,400	126,200	127,000	127,800	128,100			(esti- mated)
Mining & quarrying	4,760	1.16	0.5	9.3	4.6	5,000	5,200	5,400	5,600	5,900	6,200	2.6	-5.1	4.7
Manufacturing	64,990	1.15	0.8	9.3	7.4	69,800	75,000	80,600	86,600	93,000	99,900	3.1	-3.8	1.8
Public utilities	16,080	1.26	1.25	10.0	12.5	18,100	20,400	22,000	25,900	29,100	32,700	2.6	-1.1	-2.3
Construction	36,490	0.49	0.5	5.6	2.8	37,500	38,600	39,700	40,800	41,900	43,100	2.5	0.8	2.7
Commerce & trade	25,320	1.30	1.2	5.8	7.0	27,100	29,000	31,000	33,200	35,500	38,000	-	-2.3	-1.2
Transport & communications	45,160	0.48	0.5	6.5	3.2	46,600	48,100	49,600	51,200	52,800	54,500	2.6	1.1	3.2
Finance	7,400	4.16	2.1	5.8	12.2	8,300	9,300	10,400	11,700	13,100	14,700	-	-13.5	-5.9
Services	159,980	0.49	0.5	6.0	3.0	164,800	169,700	174,800	180,000	185,400	191,000			3.0
Totals	484,170	0.79	0.76	6.8	3.9	501,900	520,800	539,700	562,000	584,500	608,200			2.9

Remarks: (I) GDP elasticity of employment, 1964-73

(II) Estimated GDP elasticity of employment, 1975-80

(III) Estimated annual growth of GDP, 1975-80

(IV) Estimated annual rate of increase in employment, 1975-80

Source: Survey of high- and middle-level manpower requirements and resources, 1974.

Summary of High- and Middle-Level Manpower Employment in Tanzania, 1964-74 (Table-17)

Occupation	Employment, 1962	Employment, 1964	Employment 1968		Employment 1974		Required employment, 1980			
			Total Citizens	Non-citizens	Total Citizens	Non-citizens				
Category Science	1,518	1,789	1,937	446	1,491	3,660	2,487	1,173	4,929	7,416
A	2,805	1,586	2,112	944	1,163	4,146	3,401	745	3,347	6,748
Totals	4,323	3,375	4,049	1,390	2,659	7,806	5,888	1,918	8,276	14,164
Category B	1,760	5,771	10,773	8,309	2,474	23,994	23,149	845	28,556	51,705
Subtotals (A + B)	6,083	9,146	14,822	9,699	5,133	31,800	29,037	2,763	36,832	65,869
Category C	2,789	18,236	26,262	23,094	3,168	93,365	90,036	3,329	58,892	148,928
Subtotals (A + B + C)	8,872	27,382	41,084	32,793	8,301	125,165	119,037	6,092	95,724	214,797
Category D	1,370	3,952	10,404	10,194	242	67,155	66,626	529	52,915	119,541

Source: Survey of High- and Middle-Level Manpower Requirements and Resources, 1974

Estimated Employment by Industry, Kilimanjaro (Table-18)

Industry	1967		1975		1980		1985		Rate of increase in employment (%)		
									67-75	75-80	80-85
Agriculture	137,236	83.3	204,374	81.6	241,562	80.0	284,140	77.5	3.8	3.4	3.3
Mining	372	0.2	1,046	0.4	1,099	0.3	1,155	0.3	13.8	1.0	1.0
Manufacturing	6,993	3.7	11,146	4.4	16,529	5.5	26,140	7.1	6.0	8.2	9.6
Construction	2,156	1.1	1,293	0.5	2,064	0.6	3,431	0.9	-6.6	9.8	10.7
Public utilities	336	0.2	769	0.3	918	0.3	1,004	0.3	10.3	3.6	1.8
Commerce	3,945	2.1	5,963	2.4	7,574	2.5	9,171	2.4	5.3	4.9	3.9
Communications	1,954	6.9	21,638	8.6	26,545	8.9	34,858	9.5	4.0	4.2	5.6
Services	12,962	1.5	-	-	-	-	-	-	-	-	-
Totals	188,803	100.0	250,572	100.0	301,781	100.0	366,839	100.0	3.6	4.3	4.3
Unemployed	16,209	7.9	25,998	9.4	20,464	6.4	11,346	3.0	6.1	-4.9	-12.5
Labour force	205,012		276,572		322,245		378,185		3.8	3.1	3.3
Population, 15 years & over	326,955		441,102		511,500		604,000		3.8	3.0	3.4
Laborization rate (%)	62.7		62.7		63.0		62.6				
Population	652,658		864,514		1,022,000		1,193,000		3.6	3.4	3.1

Estimated Manpower Requirements of Projects Proposed in Industrial Sectors
(Table-19)

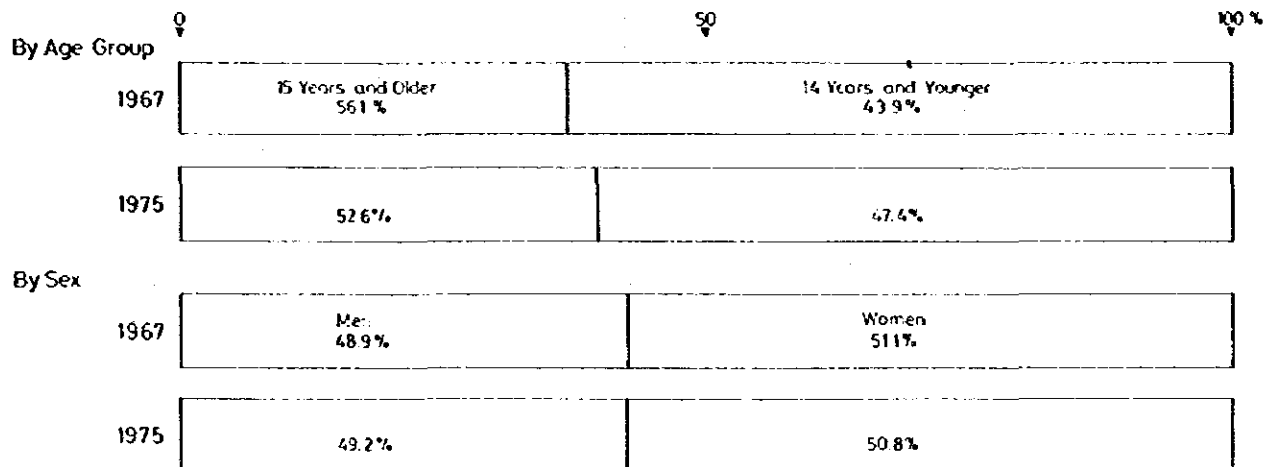
Project	Category A	Category B	Category C	Others
Nature conservation				
Afforestation		Project officer 1 Forester 1	Assistant foresters 6	Forest workers 50
Production forest development	(District Forest Officer)	Project officer 1 Forest officer 1 Foresters 4	Assistant foresters 8	Guards 30 Forest workers 120 Part-timers 2,400
Game conservation	Hydrologist 1 Hydrogeologist 1 Agriculturalist 1 Livestock expert 1 Architect 1	Civil engi. technician 1	Assistants Civil 10 Agri. 6 Archi. 2 Machine operators 2	Skilled carpenters 15 Assistant carpenters 15
Water resources	Hydrologist 1 Civil engineer 1 Engineering geologist 1 Hydrogeologist 1		Assistants Civil 10 Drillers 10	
Agri-culture Irrigation	Manager 1 Civil engineers 9 Irrigation engineers 5		Assistants 31 Administ-rators 2	
Extension service		Agri-cultural experts 16		Drivers 8 Others 4
Mechanical service		Agri-cultural engineers 6		Tractor operators 78 Others 60
Water survey	Hydrologists 2 Irrigation engineer 1 Hydrogeologist 1 Soil scientist 1		Assistants 15	

Project	Category A	Category B	Category C	Others				
Live-stock	Manager	1	Veterinary field officers	11	Assistants Administrators	43	Drivers	44
Industry Expansion		0		13		34		613
New development		5		10		37		681
KIDC		3		0		13		62
Tourism KIA tourism center complex	Managers	1		4				100
Road	Engineers	5			Assistants Administration Chief mechanics Foremen	10	Inspectors Sub-inspectors Operators	26 18 68
Public Utilities Water supply	Inspector	1	Water technicians	5	Water technicians Mechanics	23		2
Sewerage	Water engineer	1	Water engineer	1	Technicians (civil) Mechanical operators	4		3
Electricity	Electrical engineer	1	Electrical engineer	2	Electrical technicians	33	Skilled labourers	36
Town development	Town engineers	5			Administor	6	Assistant staff	49
Village Development	Village planner	1			Administor	1		
	Civil engineers	2						
	Utility engineers	2						
	Architects	2						
Social service Medical service	Medical doctors (1995)	10 (22)	Medical assist. Nurses A	10 (23) 16			Rural medical aids Nurses B Midwives Others	70 45 60 47

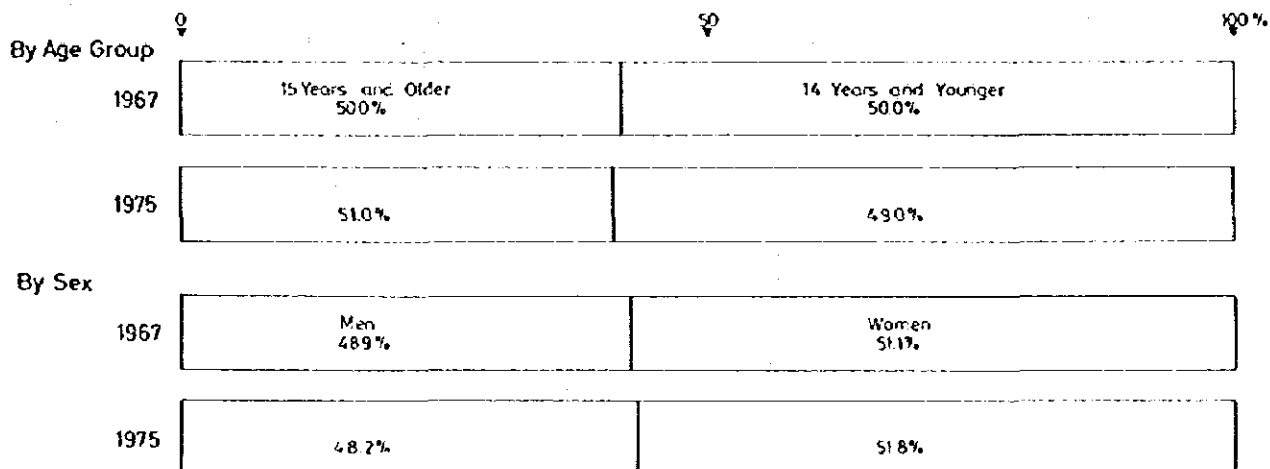
Project	Category A	Category B	Category C	Others
Community center			Literacy tutors	25
			C.D. instructors	5
			Administrators	3
Education secondary teachers	112	28		
Primary teachers		382	890	
Total	181	513	1,351	4,699
Those other than teachers	64	103	455	4,650
Teachers	112	410	890	0

BREAKDOWN OF POPULATION Fig-1

NATIONWIDE

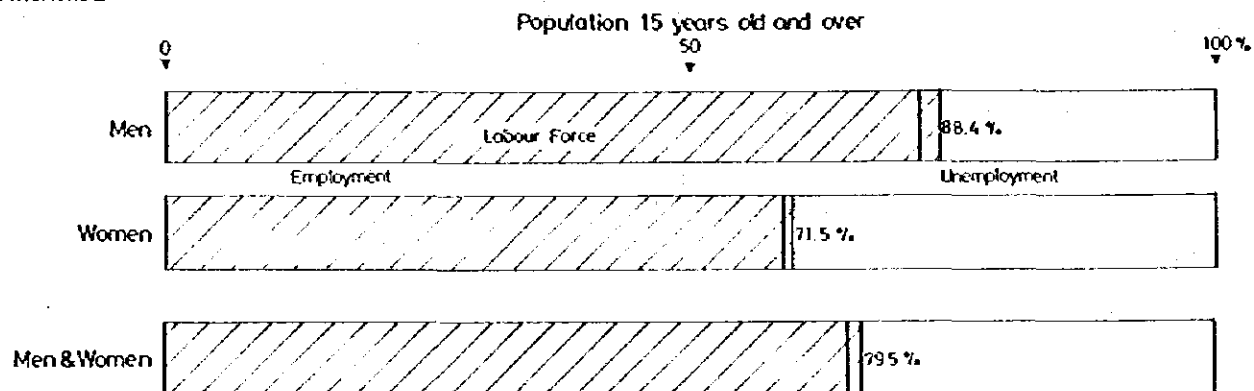


KILIMANJARO REGION

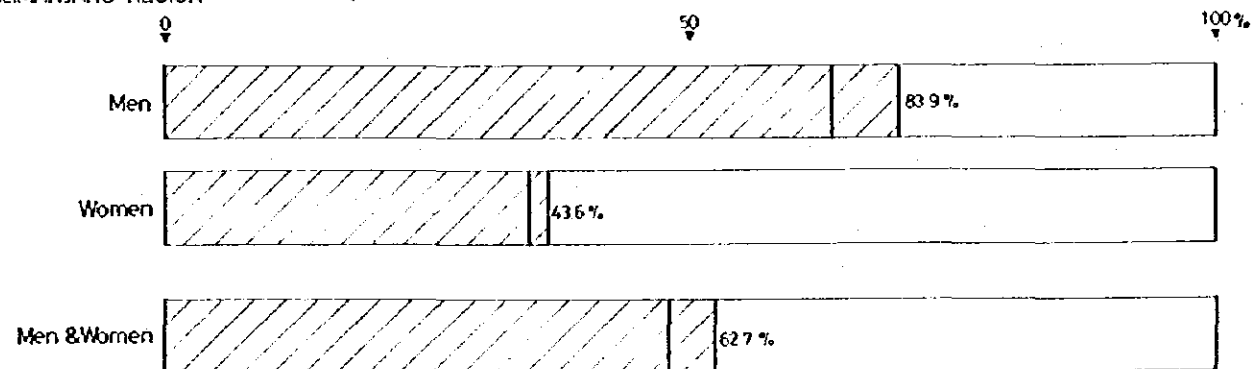


LABOUR FORCE, EMPLOYMENT AND UNEMPLOYMENT, 1967 Fig-2

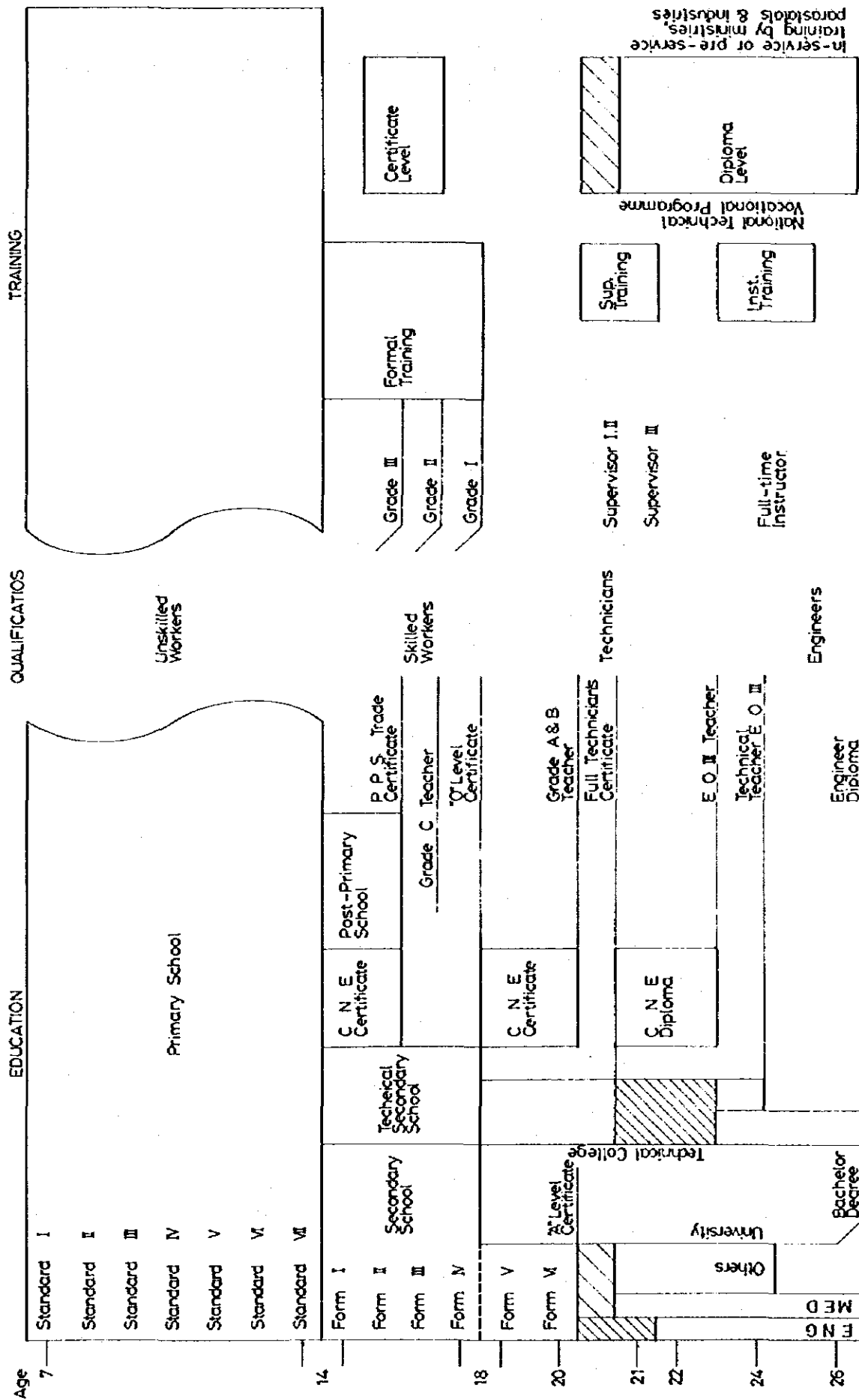
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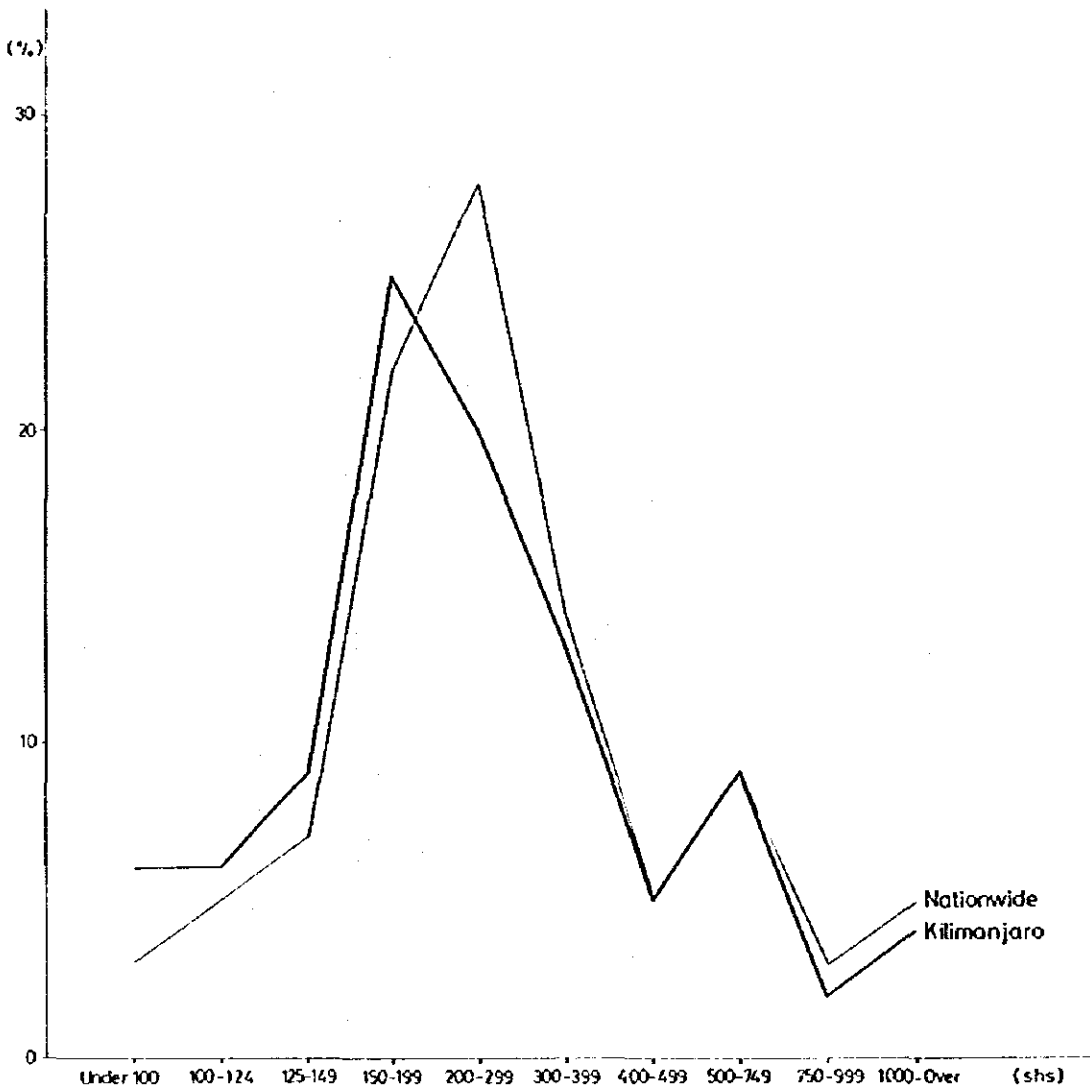
KILIMANJARO REGION



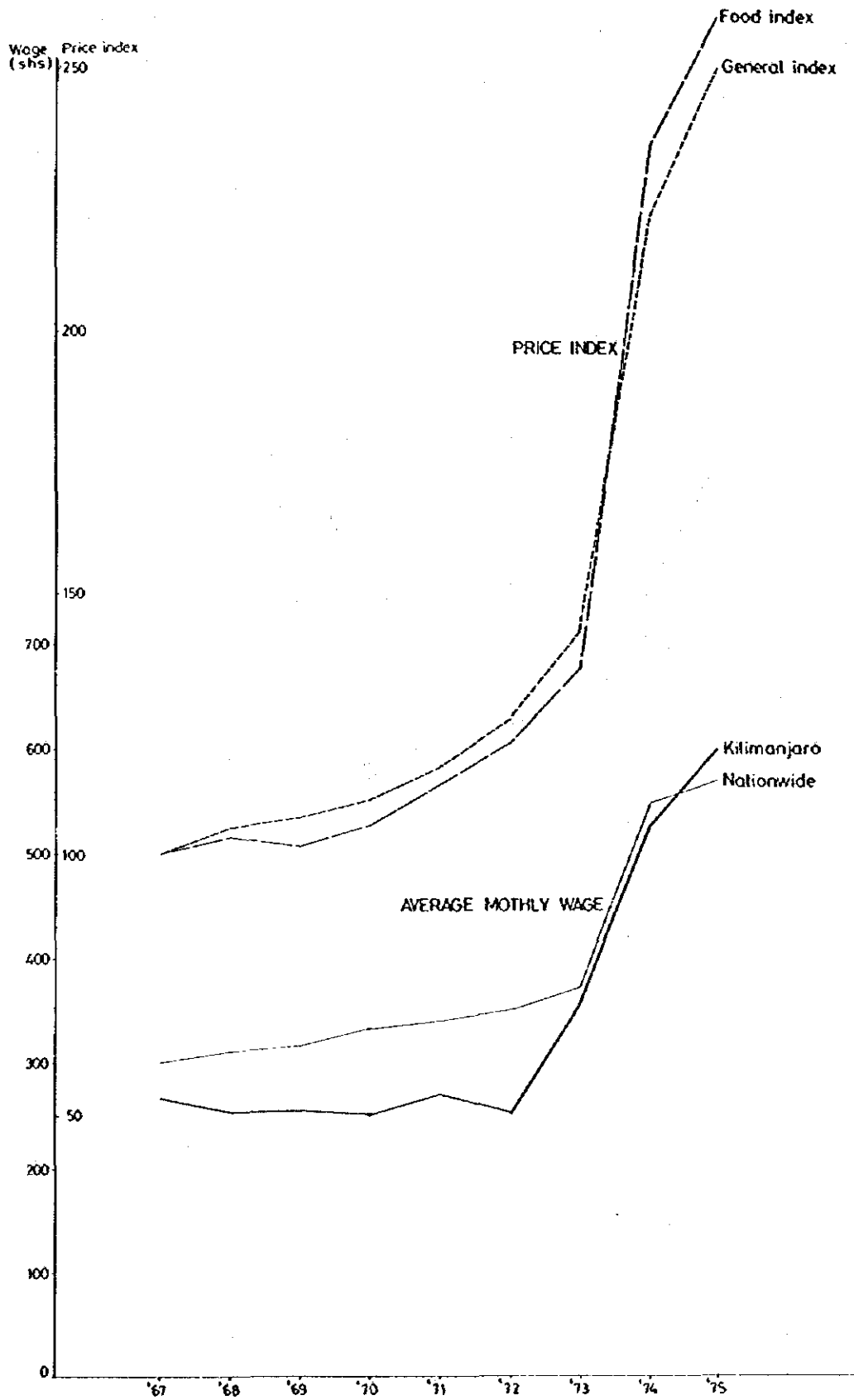
EDUCATION, TRAINING AND QUALIFICATIONS Fig-3



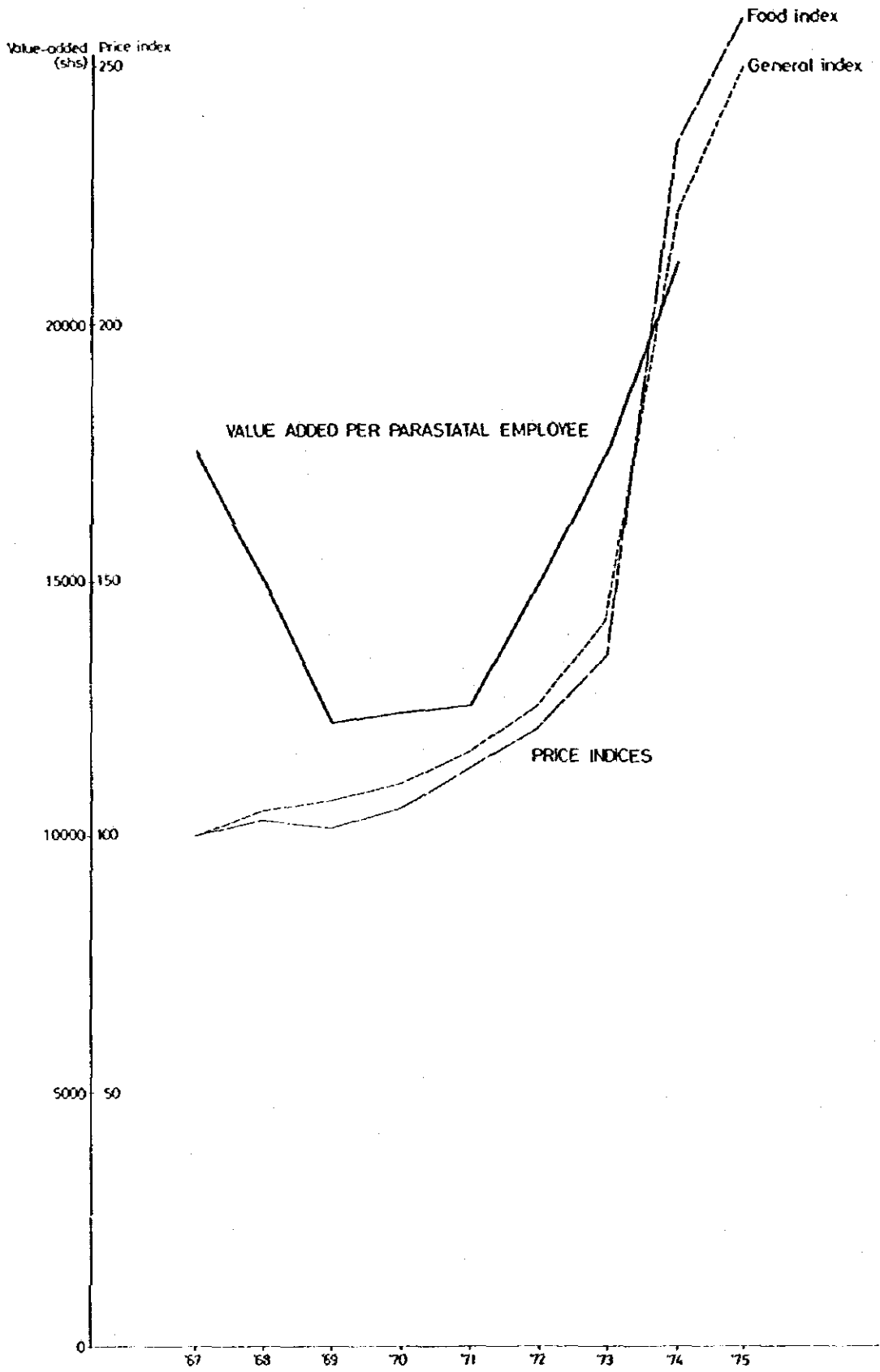
DISTRIBUTION OF REGULAR CITIZEN EMPLOYEES BY WAGE LEVEL , (1972) Fig-4



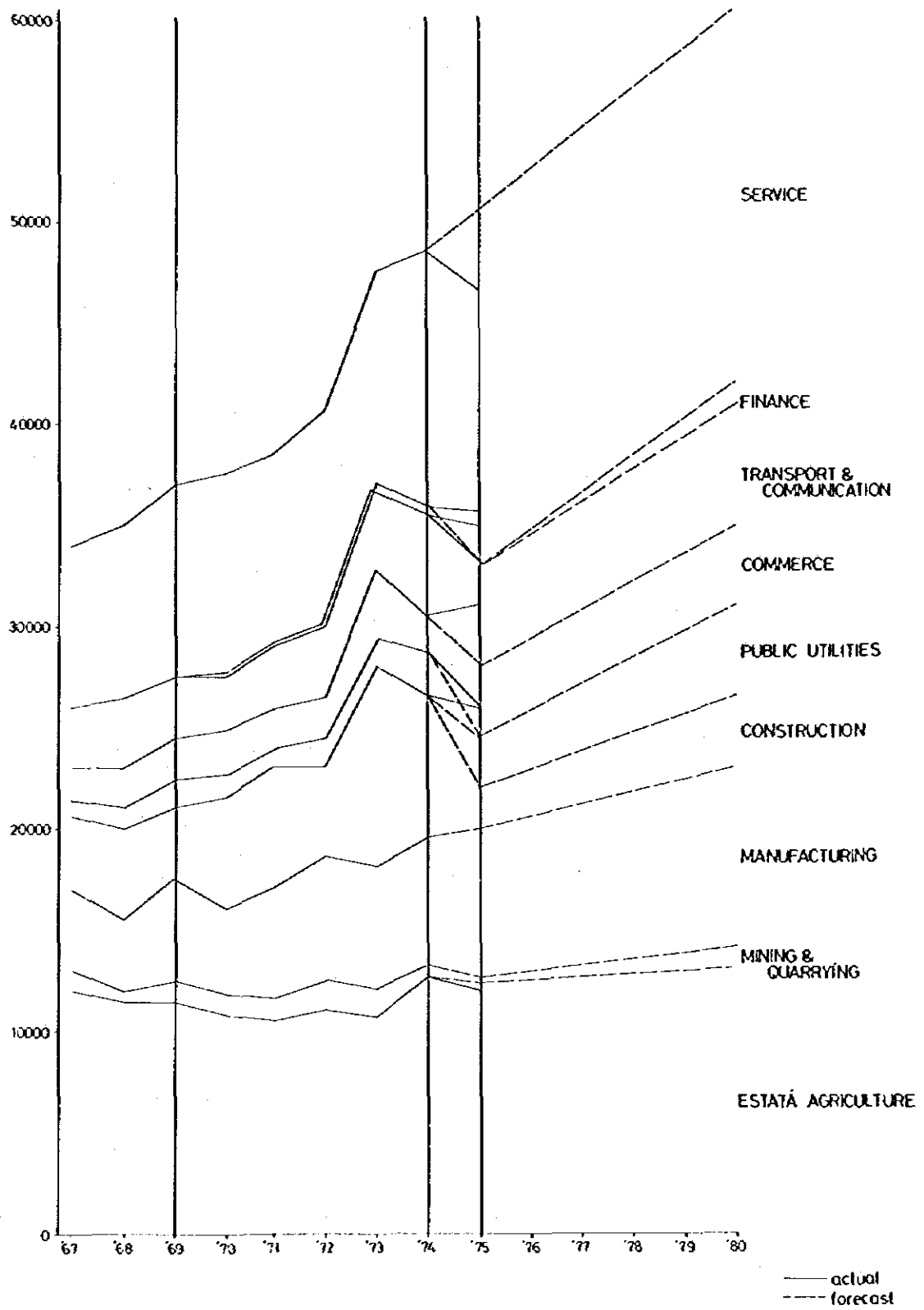
AVERAGE MONTHLY WAGE AND RETAIL PRICE INDEX Fig-5



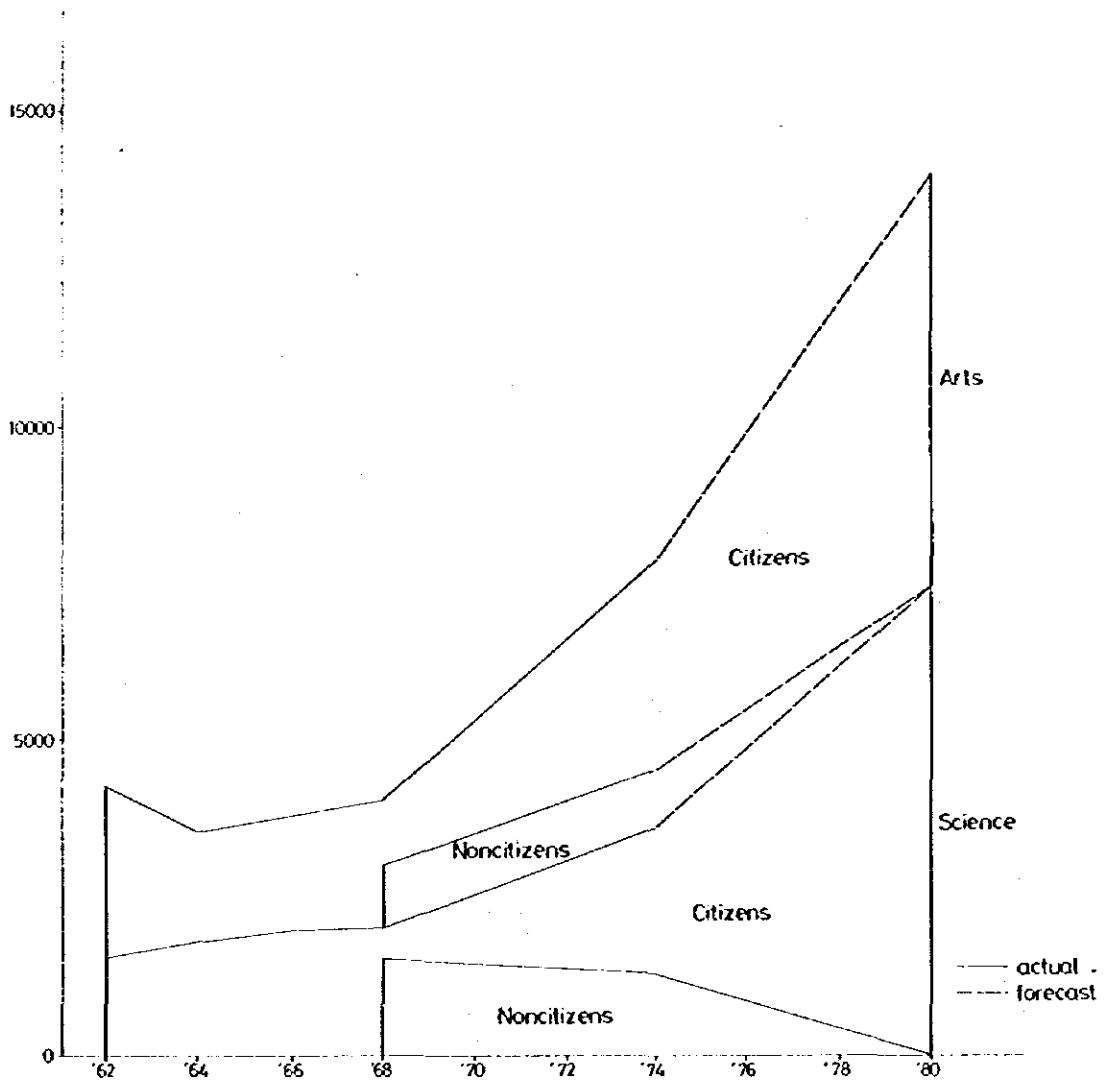
VALUE-ADDED AND PRICE INDICES Fig-6



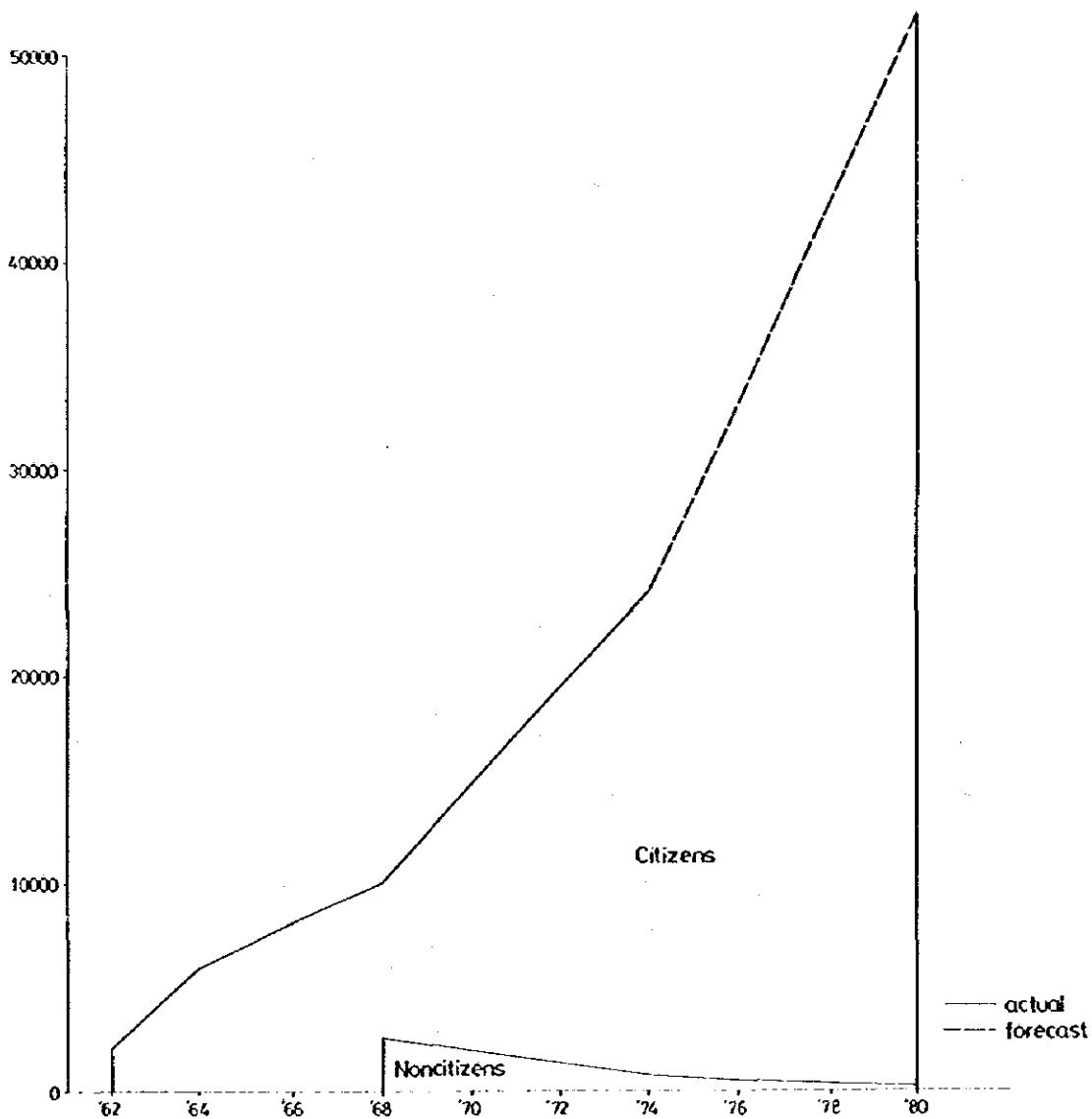
TOTAL WAGE EMPLOYMENT BY INDUSTRY, TANZANIA Fig-7



EMPLOYMENT OF CATEGORY, A Fig -8



EMPLOYMENT OF CATEGORY , B Fig-9



KILIMANJARO IDP
FINANCIAL ADMINISTRATION

17

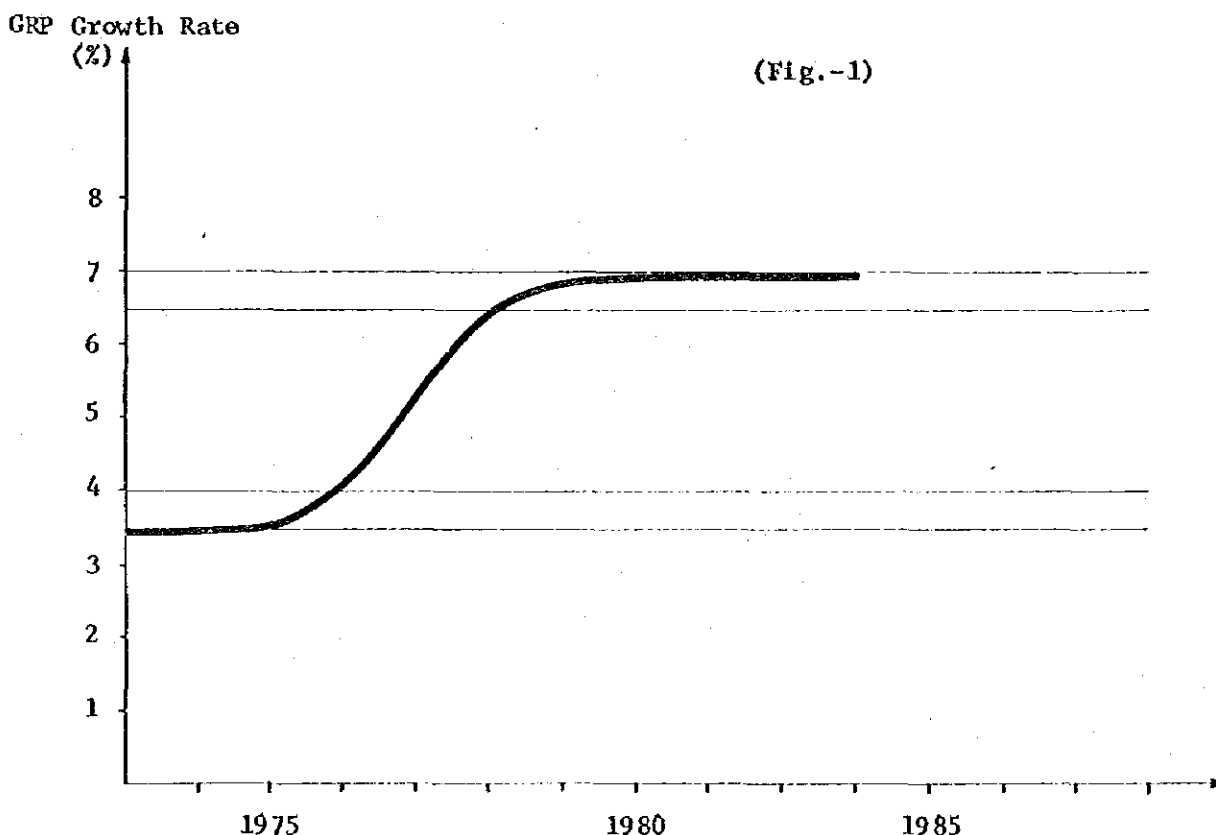
FINANCIAL ADMINISTRATION

Contents	Page
1. MACROFRAME OF THE THIRD AND FOURTH 5-YEAR DEVELOPMENT PLANS	1
2. THIRD AND FOURTH 5-YEAR DEVELOPMENT INVESTMENT PLANS	6
3. MACROECONOMIC FEASIBILITY OF THE THIRD AND FOURTH 5-YEAR DEVELOPMENT PLANS	8
4. THE THIRD AND FOURTH 5-YEAR DEVELOPMENT PLANS AND PUBLIC FINANCE	10
4.1 The Financial Feasibility of the Third and Fourth 5-Year Development Plans of the Kilimanjaro Region	10
4.2 Financial Feasibility of Development Plans for the Whole Country along the Lines of the Third and Fourth 5-Year Development Plans of the Kilimanjaro Region	13
4.3 The Third and Fourth 5-Year Development Plans and Tanzania Foreign Exchange Position	14
5. DEVELOPMENT PLANNING AND PUBLIC ADMINISTRATION	15

1. MACROFRAME OF THE THIRD AND FOURTH 5-YEAR DEVELOPMENT PLANS

The macroframe of the Third* and Fourth 5-year Development Plans of the Kilimanjaro Region (see Chapter Three: Goals Systems P.10) sets the high targets of 6.4%, 2.9%, 4.3%, and 2.0% for the GRP growth rate, the per-capita GRP growth rate, the rate of growth of employment, and the rate of rise in labor productivity, respectively, for the period 1975-1980 and the still higher targets of 7.0%, 3.7%, 4.2%, 2.6%, respectively, for the period 1981-1985, as opposed to the actual rates of 3.6%, 0%, 3.6%, and 0% that were registered in the period 1967-1975.

These figures are averages, the time-serial GRP growth rate in question being projected as per the graph below.



* The Third "5-year" Plan actually covers only the 4-year period 1977/78-1980-81.

2. THIRD AND FOURTH 5-YEAR DEVELOPMENT INVESTMENT PLANS

Table-1 & -2 give the Third and Fourth 5-year Development Investment Plans corresponding to the above-mentioned macroframe by sector and project classification.

Whereas the Third 5-year Development Investment Plan emphasizes directly productive activities, the Fourth places the emphasis somewhat on social services.

Notes: (1) D : Development Expenditures

R : Recurrent Expenditures

- (2) The figures in parentheses indicate the amount borne by the government, the difference between them and the figures immediately above them representing the amount to be borne by those benefiting from such spending. This latter amount can be considered recurrent revenue, with recurrent expenditures being partly covered to that full amount and further covered to the amount deficient by other government funds. If there is a surplus in the recurrent account, it can be applied to development expenditures, making the government burden that much lighter.

Development and Recurrent Expenditure by Sector for Kilimanjaro Region (1977/78-1985/86)

	77/78			78/79			79/80		
	D	R	S.T.	D	R	S.T.	D	R	S.T.
●Agriculture	3,390	-	3,390	6,835	272	7,107	22,360	1,002	23,362
Irrigation	3,390	-	3,390	5,180	-	5,180	12,010	-	12,010
Extention Program	-	-	-	1,400	150	1,550	9,500	256	9,756
Crop Production	-	-	-	255	122	377	850	746	1,596
●Communication	1,483 (-)	4,295 (-)	5,778 (-)	5,913 (1,324)	4,664 (-)	10,577 (1,324)	6,222 (1,085)	5,081 (-)	11,303 (1,085)
Telephone	1,283 (-)	1,852 (-)	3,135 (-)	5,713 (1,324)	1,964 (-)	7,677 (1,324)	6,022 (1,085)	2,124 (-)	8,146 (1,085)
Postal Service	200 (-)	2,443 (-)	2,643 (-)	200 (-)	2,700 (-)	2,900 (-)	200 (-)	2,957 (-)	3,157 (-)
●Trans- portation	42,208	17,345	59,553	48,686 (47,977)	24,358 (4,026)	73,044 (52,003)	65,233 (62,704)	31,461 (4,429)	96,694 (67,133)
Road Improv.	21,835	2,019	23,854	27,833	2,378	30,211	42,654	2,223	44,877
Road Rehabilitt.	12,450	1,641	14,091	12,762	1,648	14,410	13,784	2,206	15,990
Bus Service	1,522	53	1,575	1,050 (547)	5,337 (-)	6,387 (547)	1,050 (-)	10,537 (-)	11,587 (-)
Rail Way	6,401	13,632	20,033	7,041 (6,835)	14,995 (-)	22,036 (6,835)	7,745 (6,266)	16,495 (-)	24,240 (6,266)
●Village Developt.	-	-	-	1,530	-	1,530	1,530	-	1,530
Low-Land Devpt.	-	-	-	480	-	480	480	-	480
Pillot Village Devpt.	-	-	-	1,050	-	1,050	1,050	-	1,050
●Water Res. Devpt.	2,750	-	2,750	3,000	-	3,000	2,650	-	2,650
●Manufacturing	-	-	-	4,275	4,446	8,721	4,108	4,932	9,040
●Public Utility	22,312 (18,645)	11,687 (2,968)	33,999 (21,613)	26,112 (21,338)	12,911 (3,380)	39,023 (24,718)	29,426 (24,524)	14,627 (3,276)	44,053 (27,800)
Electricity	4,325 (2,848)	7,382 (-)	11,707 (2,848)	4,325 (2,506)	8,366 (-)	12,691 (2,506)	5,772 (4,102)	9,843 (-)	15,615 (4,102)

(Table-1-a)

(1,000 shillings)

80/81			77/78-80/81			81/82-85/86		
D	R	S.T.	D	R	Total	D	R	Total
28,590	2,022	30,612	61,175	3,296	64,471	89,315	4,810	94,125
21,220	-	21,220	41,800	-	41,800	61,030	-	61,030
6,800	593	7,393	17,700	999	18,699	25,840	1,460	27,300
570	1,429	1,999	1,675	2,297	3,972	2,445	3,350	5,795
7,491 (1,910)	5,526 (-)	13,017 (1,910)	21,109 (4,319)	19,566 (-)	40,675 (4,319)	56,150 (12,812)	34,135 (-)	90,285 (12,812)
7,291 (1,910)	2,284 (-)	9,575 (1,910)	20,309 (4,319)	8,224 (-)	28,533 (4,319)	54,950 (12,812)	12,775 (-)	67,725 (12,812)
200 (-)	3,242 (-)	3,442 (-)	800 (-)	11,342 (-)	12,142 (-)	1,200 (-)	21,360 (-)	22,560 (-)
64,257 (61,876)	33,553 (4,872)	97,810 (66,748)	220,384 (214,765)	106,717 (30,672)	327,101 (245,437)	387,109 (331,988)	151,103 (24,360)	538,212 (356,348)
41,458	2,389	43,847	133,780	9,009	142,789	167,362	13,343	180,705
14,279	2,483	16,762	53,275	7,978	61,253	71,500	11,017	82,517
- (-)	10,537 (-)	10,537 (-)	3,622 (2,069)	26,464 (53)	30,086 (2,122)	4,342 (2,049)	36,023 (-)	40,365 (2,049)
8,520 (6,139)	18,144 (-)	26,664 (6,139)	29,707 (25,641)	63,266 (13,632)	92,973 (39,273)	143,905 (91,077)	90,720 (-)	234,625 (91,077)
6,047	-	6,047	9,107	-	9,107	13,210	-	13,210
749	-	749	1,707	-	1,707	2,610	-	2,610
5,300	-	5,300	7,400	-	7,400	10,600	-	10,600
-	-	-	8,400	-	8,400	-	-	-
1,012	2,134	3,146	9,395	11,512	20,907	9,660	16,489	26,149
29,184 (24,123)	16,430 (3,260)	45,614 (27,383)	107,034 (88,627)	55,655 (12,884)	162,689 (101,510)	153,495 (110,664)	76,954 (856)	230,449 (111,520)
3,780 (2,263)	11,320 (-)	15,100 (2,263)	18,202 (11,718)	36,911 (-)	55,114 (11,718)	20,550 (-)	49,236 (-)	69,786 (-)

Development and Recurrent Expenditure by Sector for Kilimanjaro Region (1977/78-1985/86)

	77/78			78/79			79/80		
	D	R	S.T.	D	R	S.T.	D	R	S.T.
●City Water	17,987 (15,797)	4,305 (2,968)	22,292 (18,765)	21,787 (18,832)	4,545 (3,380)	26,332 (22,212)	23,654 (20,420)	4,784 (3,276)	28,438 (23,696)
Rural	12,400	2,968	15,368	16,200	3,380	19,580	16,200	3,276	19,476
Urban	5,587 (3,397)	1,337 (-)	6,924 (3,397)	5,587 (2,632)	1,165 (-)	6,752 (2,632)	7,454 (4,220)	1,508 (-)	8,962 (4,220)
●Tourism	-	-	-	4,595 (-)	970 (-)	5,565 (-)	6,888 (1,689)	970 (-)	7,858 (1,689)
●Livestock	-	-	-	432	-	432	3,849	-	3,849
●Conservation	12,240	5,574	17,814	12,030	5,074	17,104	1,230	5,074	6,304
Prod. Forest	12,000	5,300	17,300	12,000	4,800	16,800	1,200	4,800	6,000
N.E. Reservation	50	168	218	10	168	178	10	168	178
Game Reservt.	190	106	296	20	106	126	20	106	126
●Social Service	12,031	47,169	59,200	11,843	51,473	63,316	10,873	55,455	66,328
Health	2,660	14,086	16,746	3,160	14,998	18,158	2,700	15,802	18,502
Primary School	6,442	26,940	33,382	6,166	29,616	35,782	5,556	32,042	37,598
Secondary "	750	3,114	3,864	810	3,411	4,221	900	3,744	4,644
Adult Edct.	45	2,604	2,651	44	2,892	2,936	45	3,178	3,223
Family Life	2,134	423	2,557	1,663	556	2,219	1,672	689	2,361
●Town Development	7,894 (6,642)	2,664 (1,234)	10,558 (7,876)	43,520 (37,885)	3,120 (1,000)	46,640 (38,885)	45,710 (38,748)	2,980 (1,100)	48,690 (39,848)
Land Supply	600	-	600	12,600 (8,600)	-	12,600 (8,600)	12,600 (8,600)	-	12,600 (8,600)
Housing Supply	-	1,170 (234)	1,170 (234)	16,800 (16,362)	1,170 (-)	17,970 (16,362)	16,800 (15,690)	1,170 (-)	17,970 (15,690)
Urban Facility	250	350	600	1,300	350	1,650	2,100	450	2,550
Road/Street	5,200	650	5,850	10,400	650	11,050	10,400	650	11,050
Sewage	1,844 (592)	494 (-)	2,338 (592)	2,420 (1,223)	950 (-)	3,370 (1,223)	3,810 (1,958)	710 (-)	4,520 (1,958)
●Total	104,308 (97,664)	88,734 (74,290)	193,042 (171,954)	168,771 (148,469)	107,288 (69,671)	276,059 (218,140)	200,079 (175,314)	121,582 (75,268)	321,661 (250,582)

(Table-1-b)

(1,000 shillings)

80/81			77/78-80/81			81/82-85/86		
D	R	S.T.	D	R	Total	D	R	Total
25,404 (21,860)	5,110 (3,260)	30,514 (25,120)	88,833 (76,909)	18,744 (12,884)	107,576 (89,792)	132,945 (110,664)	27,718 (856)	160,663 (111,520)
16,200	3,260	19,460	61,000	12,883	73,883	82,120 (82,120)	17,144 (856)	99,264 (82,976)
9,204 (5,660)	1,850 (-)	11,054 (5,660)	27,833 (15,909)	5,960 (-)	33,693 (15,909)	50,825 (28,544)	10,574 (-)	61,399 (28,544)
6,888 (1,991)	970 (-)	7,858 (1,991)	18,371 (3,680)	2,910 (-)	21,281 (3,680)	15,397 (-)	4,850 (-)	20,247 (-)
3,849	-	3,849	8,130	-	8,130	11,947	-	11,947
1,230	5,074	6,304	26,730	20,796	47,526	6,150	25,370	31,520
1,200	4,800	6,000	26,400	19,700	46,100	6,000	24,000	30,000
10	168	178	80	672	752	50	840	890
20	106	126	250	424	674	100	530	630
11,028	59,578	70,606	45,775	213,675	259,450	67,975	354,864	422,839
2,900	16,806	19,706	11,420	61,692	73,112	21,870	102,889	124,759
5,382	34,381	39,763	23,546	122,979	146,525	25,290	194,603	219,893
1,020	4,104	5,124	3,480	14,373	17,853	11,946	31,977	43,923
44	3,464	3,508	178	12,140	12,318	256	19,370	19,626
1,682	823	2,505	7,151	2,491	9,642	8,613	6,025	14,638
46,250 (40,357)	5,490 (1,430)	51,740 (41,787)	143,374 (123,632)	14,254 (4,764)	157,628 (128,396)	261,650 (243,272)	65,050 (14,350)	326,700 (257,622)
12,600 (9,800)	1,200 (-)	13,800 (9,800)	38,400 (27,600)	1,200 (-)	39,600 (27,600)	62,400	24,000 (4,000)	86,400 (66,400)
16,800 (15,858)	2,010 (-)	18,810 (15,858)	50,400 (47,910)	5,520 (234)	55,920 (48,144)	114,000 (110,010)	24,450 (-)	138,450 (110,010)
2,100	650	2,750	5,750	1,800	7,550	13,500	4,800	18,300
10,400	780	11,180	36,400	2,730	39,130	51,600	5,550	57,150
4,350 (2,199)	850 (-)	5,200 (2,199)	12,424 (5,972)	3,004 (-)	15,428 (5,972)	20,150 (5,762)	6,250 (-)	26,400 (5,762)
205,826 (182,013)	130,777 (78,370)	336,603 (260,383)	678,984 (603,735)	448,381 (297,599)	1,127,365 (901,334)	1,072,059 (896,993)	733,625 (441,099)	1,805,683 (1,338,092)

Development Expenditures by Project Classification (Table-2) (1,000 shillings)

	1977/78	1978/79	1979/80	1980/81	1977/78- 1980/81	1981/82- 1985/86
DPA	12,000 (11.5)	21,302 (12.6)	16,045 (8.0)	12,949 (6.3)	62,296 (9.1)	43,004 (4.0)
EI	80,177 (76.9)	105,736 (62.7)	142,561 (71.3)	151,369 (73.5)	479,843 (70.7)	783,126 (73.1)
SI&AS	12,131 (11.6)	41,733 (24.7)	41,473 (20.7)	41,508 (20.2)	136,845 (20.2)	245,929 (22.9)
Total	104,308 (100.0)	168,771 (100.0)	200,079 (100.0)	205,826 (100.0)	678,984 (100.0)	1,072,059 (100.0)

Note: DPA : Directly Productive Activities
 EI : Economic Infrastructure
 SI & AS : Social Infrastructure & Administration and Security

The following can be pointed out with regard to the Third Plan, for which figures on investment each year are given:

- (i) In order to make possible the rapid GRP growth rate indicated in Fig.-1, particular emphasis is to be placed on investment in directly productive activities in the first two years.
- (ii) The amount of investment is greater each year, particularly in the first half of the period, the figures for 1980/81 being as high as the annual average for the period 1981/82-1985/86.

3. MACROECONOMIC FEASIBILITY OF THE THIRD AND FOURTH 5-YEAR DEVELOPMENT PLANS

Although many reasons can be given for the recent low economic performance in the Kilimanaro Region occasioned by low rates of operation, the ultimate explanation is the low level of technology (see Chapter 10 for details).

In order to cope with this problem, the Kilimanjaro Industrial Development Center is to be established during the period of the Third 5-year Development Plan for the purpose of improving the technology of the region and this and the Fourth 5-year Development Plan have been formulated in an integrated manner for improvement of the climate of economic activity and a rise in the rate of operation of enterprises through large-scale government investments particularly in directly productive activities as mentioned in paragraph 2 above. The ability of government investment to induce private and parastatal investment will not become evident, however, until the rate of operation passes a certain normal level and funds come to be provided by banks and from abroad. In other words, such inducement is expected to be small during the period of the Third 5-year Development plan, a value of less than 0.1 having been assigned it.

Once the rate of operation passes a certain normal level and is sustained above it, however, such inducement will be very much in evidence everywhere. This is an example of the economy's built-in mechanism for autonomous development. In the period of the Fourth 5-year Development Plan such inducement can be expected to attain a value of approximately 1.0.

The macroeconomic coefficients in the table below are based on this conclusion.

Macro-economic Coefficients for the Third and Fourth 5-year Development Plans (Table-3)

	(1,000 shillings)	
	1977/78-1980/81	1981/82-1985/86
Government investment (Z)	678,984	1,072,059
Private, parastatal and other investment (I)	50,359	986,058
Total investment (Z+I)	729,343	2,058,117
Δ G.R.P.	276,267	717,479
Marginal capital coefficient	2.6	2.9
(Z + I) / G.R.P. (%)	12.8	21.5
I / Z	0.074	0.92

- Notes: (i) In the macroframe the figures for GRP are given in terms of the calendar year. Here they are given in terms of the fiscal year, and Δ GRP is estimated.
- (ii) If investment plans now in the process of being realized and future investment not covered by the present development plans are taken into account, the marginal capital coefficient will be a little higher.

The levels of all of these macroeconomic coefficients are quite plausible, and both plans are feasible from a macroeconomic viewpoint.

Furthermore, the following can be said with regard to the logic of the two plans. In the first four years there will be large-scale government investment, particularly in directly productive activities, for the sake of improvement of the economic climate and a rise in the rate of operation of enterprises and, in turn, an increase in potential for inducement of private and parastatal investment. In the last five years inducement of private and parastatal investment will become evident, the regional economy will set out on a course of growth, and it will be possible to divert a considerable amount of government investment to the social infrastructure for the sake of still greater development in the future (see Fig.-1).

4. THE THIRD AND FOURTH 5-YEAR DEVELOPMENT PLANS AND PUBLIC FINANCE

4.1 The Financial Feasibility of the Third and Fourth 5-year Development Plans of the Kilimanjaro Region

The real development expenditures indicated in these 5-year plans and the corresponding recurrent expenditures do not include the amounts paid by those directly benefiting from the services made possible by such development. Rather, such amounts are indicated in parentheses in the tables. Needless to say, the figures for recurrent expenditures do not include present recurrent expenditures but only those corresponding to development expenditures in question.

Since the last year for which figures on recurrent expenditures are available is 1974/75, the figure for 1976/77 has been estimated in the following manner.

Recurrent expenditures in the whole of mainland Tanzania declined by 8.6% in 1975/76 from what they were in 1974/75. Even assuming that they rose again in 1976/77, they can be expected only to have regained the 1974/75 level. Hence our assumption that recurrent expenditures in the Kilimanjaro Region in 1976/77 have been about the same as those in 1974/75.

Next, let us consider this level of recurrent expenditures to be the fixed portion of recurrent expenditures thereafter, even though this might result in overestimation of recurrent expenditures during the periods covered by the two development plans since there is the possibility that the amounts that are expected to be paid by those directly benefiting from development expenditures will in part cover this fixed portion.

The following table gives the figures for real development and recurrent expenditures in the periods covered by the Third and Fourth 5-year Development Plans of the Kilimanjaro Region as estimated on the basis of the above assumptions.

(Table-4)

	1977/78	1978/79	1979/80	1980/81	1977/78- 1981/82	
					1980/81	1985/86
Development expenditures (thousands of sh.)	97,664	148,469	175,314	182,013	603,735	896,993
Recurrent expenditures (thousands of sh.)	143,154	138,535	144,134	147,234	570,055	785,419
<u>Recurrent expenditures</u> <u>Development expenditures</u>	1.47	0.93	0.82	0.81	0.95	0.88
% of total expenditures to be borne by those directly benefiting	10.9	21.0	22.1	22.6	20.1	25.9

The tax burden rate (taxes/GRP) of the Kilimanjaro Region took a big jump in 1974/75 to 13.1% [see 4-(3)-(ii)-(6)] and rose still further to 15% in 1975/76. Nevertheless, considering the fact that the national average in recent years has been about 23%, it can still be considered fairly low.

Taking into account also a further rise in the past two years, we have assumed that the tax burden rate of the Kilimanjaro Region will reach the national level early in the period covered by the Third 5-year Plan.

Thus we obtain the tax outflow of the region and the tax reflux rate as the ratio of development and recurrent expenditures to the tax outflow.

(Table-5)

	1977/78	1978/79	1979/80	1980/81	1977/78- 1981/82-	
					1980/81	1985/86
Tax outflow (thousands of sh.)	296,930	315,790	336,030	357,190	1,305,940	2,197,880
Tax reflux rate (%)	81.1	90.9	95.1	92.2	90.1	76.5

Note

$$\text{Tax reflux rate} = \frac{\text{Development expenditures} + \text{recurrent expenditures}}{\text{Tax outflow}}$$

The average reflux rate, which comes to 90.1% in the period covered by the Third 5-year Development Plan, will decline to 76.5% in the period covered by the Fourth 5-year Development Plan.

If development plans on the regional level can be carried out with a reflux rate of less than 100%, they can be considered fiscally feasible, and hence our conclusion that the present development plan for the Kilimanjaro Region is very feasible. Still, one has to admit that in comparison to the 61.6% of 1974/75 and the 52.6% of 1975/76 the reflux rate will be quite high during the periods covered by the two plans, particularly in the period covered by the Third 5-year Development Plan.

One should not, however, take this for a manifestation of regional egoism in the form of overambitious development planning goals.

Agriculture and industry are organically interdependent, development of the former stimulating industrialization, which in turn raises agricultural productivity.

The agriculture of the Kilimanjaro Region is a major source of Tanzania's foreign exchange earnings not only in terms of coffee and other cash crop exports but also in terms of foreign exchange savings thanks to fewer food crop imports.

Thus, implementation of these 5-year development plans will activate an accumulative development mechanism of agriculture and industry in the Kilimanjaro Region for an improvement of Tanzania's foreign exchange position and stimulation of further industrialization of the country as a whole. In other words, the development of the Kilimanjaro Region will make an active contribution to the development of the whole country. This is the first reason.

Next, there is the fact that widening of the economic gap between different regions is undesirable in the long run both economically and socially. Efficiency in the short run does not necessarily lead to efficiency in the long run. Equity before efficiency, efficiency in the long run rather than in the short run, and development of major towns, including Moshi, as "growth poles"--this is the spirit of the Arusha Declaration and national policy. This is the second reason.

4.2 Financial Feasibility of Development Plans for the Whole Country Along the Lines of the Third and Fourth 5-year Development Plans of the Kilimanjaro Region

The Third and Fourth 5-year Development Plans of the Kilimanjaro Region are quite ambitious plans. Such ambitious plans should not be limited to the Kilimanjaro Region, however. Rather, consideration ought to be given to similar plans for all of the regions of Tanzania, and this entails consideration of the financial feasibility of such plans.

Since development and recurrent expenditures during the periods covered by the Third and Fourth 5-year Development Plans of the Kilimanjaro Region are already given quantities, it is possible for us to compare the ratio of their sum to GRP to the ratio of total fiscal expenditures of the whole country to GDP as a means of judging the financial feasibility of such plans.

(Table-6)

	77/78	78/79	79/80	80/81	77/78- 80/81	81/82- 85/86
(Development expenditure + recurrent expenditures) GRP	18.7	20.9	21.9	21.2	20.7	17.6
	70/71	71/72	72/73	73/74	74/75	75/76
Budget/GDP	31.7	27.2	28.5	33.8	39.2	35.9
Tax burden rate	23.1	20.7	21.3	23.1	26.4	22.8
Government bonds/GDP	1.6	0.8	1.6	1.5	1.8	1.5
Borrowings from domestic banks/GDP	3.9	2.0	0.9	4.0	4.4	1.6
External sources/GDP	3.1	3.7	4.5	5.2	6.6	10.0

Although the figures for the ratio of development and recurrent expenditures to GRP are those for the Kilimanjaro Region, they can also be considered as those for the ratio of the budgets for such plans for the whole country to GDP in the absence of national project expenditures and general administration expenditures of the Central Government itself.

As one can see from the table, it would be possible for such development plans for the whole country to be financed with tax revenues, and the Central Government will be able to use approx. 10% of tax revenues in 1977/78-1980/81 and approx. 25% in 1981/82-1985/86 for national projects and general administration [these figures can be derived from (1-Reflux rate)]. Add to that income from government bonds and domestic bank loans, and almost all of the Central Government's national projects and general administration expenditures are covered at least as far as the Fourth 5-year Development Plans are concerned.

One can therefore conclude that development plans for all of the regions of Tanzania modelled after the Third and Fourth 5-year Development Plans of the Kilimanjaro Region are financially feasible.

4.3 The Third and Fourth 5-year Development Plans and Tanzania's Foreign Exchange Position

The Kilimanjaro Region receives 4-6% of the Central Government's foreign exchange allocations in the form of public and parastatal investments.

Since, however, it is up to the Central Government to determine foreign exchange allocations, for the most part the amounts of foreign exchange that will be needed for the different projects included in the Third and Fourth 5-year Development Plans of the Kilimanjaro Region have not been indicated. Let us therefore consider the economic feasibility of these plans in terms of acquisition of the necessary foreign exchange on the assumption that Kilimanjaro Region will continue to receive the same percentage of total Central Government foreign exchange allocations and from the standpoint of the total foreign exchange needs of the plans rather than the needs of individual projects.

As we have already seen, the Third and Fourth 5-year Development Plans of the Kilimanjaro Region, although ambitious, are nevertheless economically feasible. In the period of the Fifth 5-year Development Plan the economic growth rate should be even higher, and although economic feasibility will depend on the period of depreciation of the facilities in which the foreign exchange is invested, a period of ten years would be long enough for the plans to be economically feasible, and a still longer period would, of course, make them still more feasible.

Moreover, the economic growth of the region will make it more than able to pay off the foreign exchange debts that it will incur through the investments envisioned in the development plans, particularly in terms of its coffee production.

As for the country as a whole, similar development plans for all of its regions should also be economically feasible, as we have already seen, particularly since the debt service rate will be only about 2-4%. Since, however, the deficit in the current account of the country's balance of payments is growing, although the overall balance has been maintained after a fashion thanks to surpluses in the capital account, and the ratio of funds obtained from abroad to GDP is rising, reaching 10% in 1975/76, it will be necessary to strive for introduction of foreign exchange in the form of grants from many different quarters and, there this is not possible, to shop for soft loans as the next best thing.

5. DEVELOPMENT PLANNING AND PUBLIC ADMINISTRATION

Generally speaking, it is necessary to build a strongly centripetal system of public administration in the early stages of national construction for the sake of nurturing strong self-awareness and unity of the state.

On the other hand, in later stages an agricultural country such as Tanzania should concentrate on rural development since agriculture will continue to be the mainstay of its economic strength. The basic strategy of rural development should be the strengthening of the regional economy through local market integration and development of a suitable corresponding production system.

Accordingly, the public administration system is a network centering on a line system (chain of command) supported by a trunk-line transportation system, road and communications networks, and so forth, and local public administration must be incorporated as a partial system within this unitary system.

At the same time, since the strengthening of regional economic autonomy is basic to regions development and the local economic system needs to maintain its autonomy, the local administrative system must not impair such autonomy.

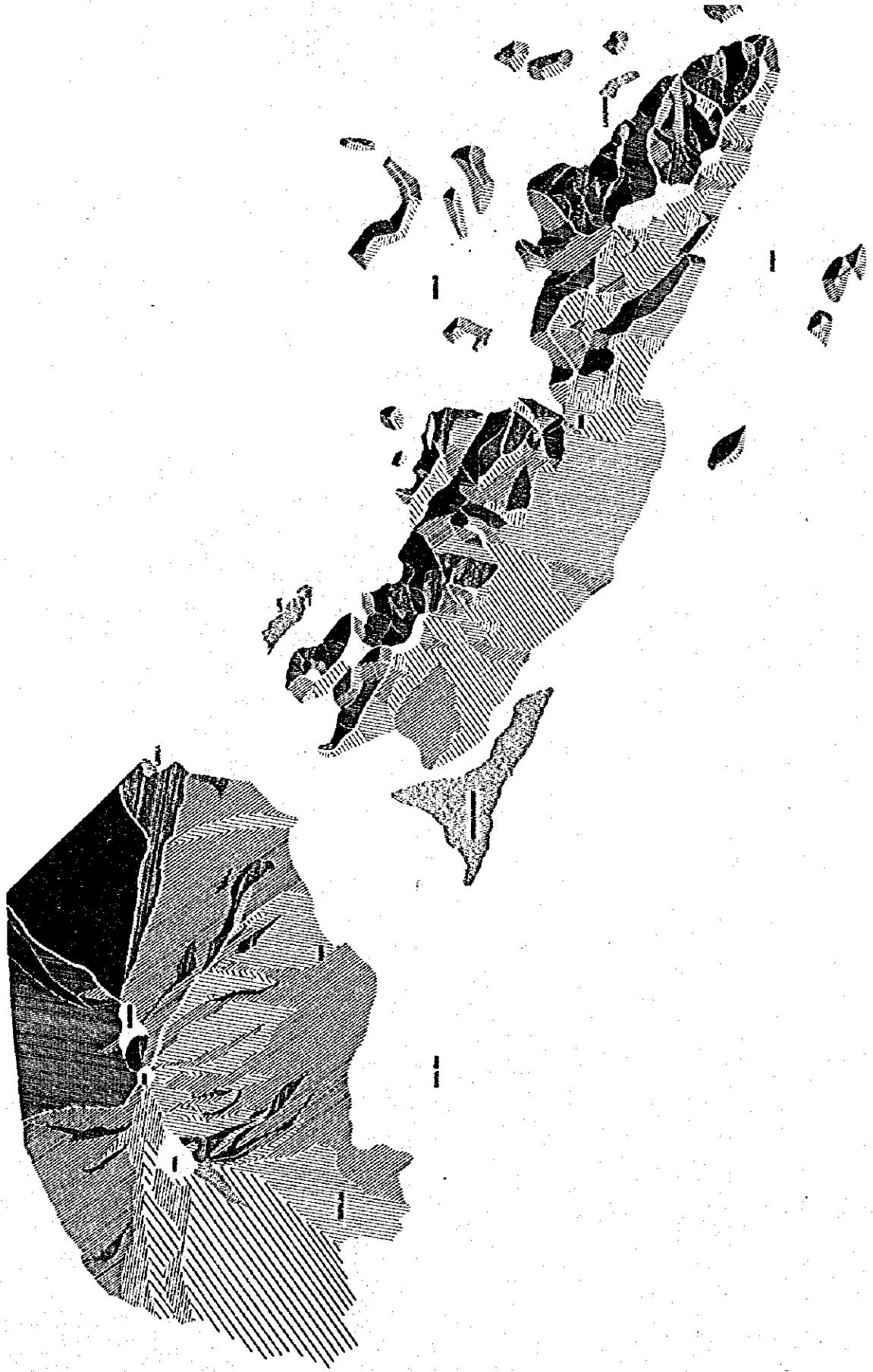
In order to avoid conflict between local economic autonomy and local administration, the maintenance of the economic circulation and coordination between local and central administration must not be placed in a competitive relationship to one another. Moreover, the fruits of rural development made possible by the proper functioning of the economic circulation should be evaluated as representing partial attainment of national goals.

The emphasis of the national unity movement should be placed on party organization and activities, and this will result in enlargement of the economic circulation, a result which will be integrated with national goals by the administrative process.

One must not forget that local public administration as a whole is a combination of:

- (i) Motivation of party organization as organization for promotion of movements;
- (ii) Autonomy of economic organization as organization for efficiency; and
- (iii) Unity of administration organization as organization for integration.

The requirements of public administration for achievement of the goals of the Third and Fourth 5-year Development Plans are, in the context of the total system outlined above, simplification of regional administrative organization, improvement and integration of two-way communication between all levels of the administrative hierarchy as well as development of an effective feed-back mechanism, and systemization of self-help.





KILIMANJARO IDP