ED 019 490

VT 004 880

OUTLINES OF VOCATIONAL TRAINING IN TANZANIA.

AUSTRALIAN DEPT. OF LABOUR AND NAT. SERVICE, PERTH

PUB DATE 66

EDRS PRICE MF-\$0.25 HC-\$0.52 11P.

DESCRIPTORS- \*VOCATIONAL EDUCATION, \*TECHNICAL EDUCATION, INDUSTRIAL TRAINING, APPRENTICESHIPS, ECONOMIC DEVELOPMENT, TEACHER EDUCATION, \*GENERAL EDUCATION, EDUCATIONAL PLANNING, \*FOREIGN COUNTRIES, TANZANIA,

THE 1963 ESTIMATED POPULATION OF TANZANIA WAS OVER 10 MILLION. THE NATION'S ECONOMY IS PRIMARILY AGRICULTURAL. PRIMARY EDUCATION CONSISTS OF A 4-YEAR LOWER AND 4-YEAR UPPER LEVEL. BECAUSE OF LIMITED EDUCATIONAL FACILITIES, ADMISSION TO UPPER PRIMARY AND SECONDARY LEVELS DEPENDS ON PASSING EXAMINATIONS. FROM THE UPPER PRIMARY LEVEL, A STUDENT MAY ENTER A 6-YEAR SECONDARY EDUCATION PROGRAM: A 4-YEAR SECONDARY PLUS A 3-YEAR TECHNICAL INSTITUTE PROGRAM, A 3-YEAR SECONDARY TECHNICAL SCHOOL, OR A 2-YEAR COURSE AT A TEACHER'S COLLEGE. TECHNICAL EDUCATION CONSISTS OF UNIVERSITY-LEVEL COURSES FOR TECHNOLOGISTS, TECHNICIAN DIPLOMA COURSES IN A TECHNICAL COLLEGE, COMBINATION GENERAL-TECHNICAL COURSES IN TECHNICAL SCHOOLS, AND TECHNICAL SUBJECTS IN SELECTED SECONDARY SCHOOLS. ONE-YEAR COURSES FOR TECHNICAL TEACHERS ARE CONDUCTED AT THE DAR-ES-SALAAM TECHNICAL COLLEGE. APPRENTICESHIPS ARE AVAILABLE IN THE TRADES UNDER GOVERNMENT SUPERVISION. AS TRADE SCHOOL APPRENTICE TRAINING IS PHASED OUT, INDUSTRIAL SCHEMES WILL BE DEVELOPED TO INSURE TRAINING FOR AVAILABLE EMPLOYMENT. IN-INDUSTRY TRAINING IS GIVEN FOR SPECIALIZATIONS MEETING THE SPECIFIC NEEDS OF THE INDUSTRY GIVING IT. THE MINISTRY OF DEVELOPMENT PLANNING HAS GIVEN A HIGH PRIORITY TO DEVELOPING TECHNICAL EDUCATION TO PROVIDE URGENTLY NEEDED SKILLED MANPOWER. (JM)

# U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

# Outline

of

# Vocational Training

in

# TANZANIA

PREPARED BY THE DEPARTMENT OF LABOUR AND NATIONAL SERVICE
OF THE COMMONWEALTH OF AUSTRALIA FOR THE
PAN INDIAN OCEAN CONFERENCE ON TECHNICAL EDUCATION AND TRAINING
PERTH, 1966





## CONTENTS

## Frontispiece: Map of Tanzania

							Page
1.	Introduction	••••	••••	••••	••••	••••	6
	Area, Population	••••	••••	••••	••••	••••	6
	Primary Industry	••••	••••	••••	••••	••••	6
	Secondary Industry	••••	••••	••••	••••	••••	6
	General Economic Development				••••	••••	7
2.	General Education	••••	••••	••••	••••	••••	9
3.	Technical Education	••••	••••	••••	••••	•••	10
	Organization and Administration				••••	••••	10
	Types of Institutions and Courses				••••	••••	10
	Arrangements for Tec	chnical '	Teacher	Training	<b>3</b>	••••	11
4.	Apprenticeship	••••	••••	••••	••••	••••	11
5.	Accelerated Vocational Tra	aining	••••		••••	••••	12
6.	In-Industry Training	••••	••••	••••	••••		12
7.	National Planning for Vo	cational	Trainin	ıg		••••	13



## 1. Introduction

### Area, Population

The United Republic of Tanzania has an area of 362,826 square miles and an estimated population of over ten million (1963).

#### Primary Industry

The economy of Tanzania is based mainly on the production and export of primary produce and the growing of foodstuffs for local consumption, the main commercial crops being sisal, cotton, coffee, cloves and oil seeds. The greater part of the world's supply of cloves comes from Zanzibar, and half the world's supply of sisal comes from Tanganyika. The development of agriculture, has therefore received a high priority in Government plans to raise the gross national product.

The pastoral industry plays a significant part in the country's export earnings. Hides and skins are exported to neighbouring East African countries and overseas.

Tanzania's mineral resources include diamonds, gold, lead concentrates and mica, all of which are mined in commercial quantities. The diamond mine at Mwadui is potentially one of the richest in the world.

#### Secondary Industry

Tanzania lags its neighbours, Kenya and Uganda, in industrial development for a variety of geographic, climatic and political reasons. However, there has been a growth of secondary manufacturing industries in the past five years, with leather and rubber footwear, knitwear, razor blades, cigarettes and textiles now being produced.

The chief imports of secondary products include machinery, food products, beverages, tobacco, chemicals, clothing and base metal goods.



#### General Economic Development

Tanzania is faced with difficult developmental problems in a number of sectors of the economy, the most pressing being in transport and communications, health and education services, and agriculture.

In 1963, only four and a half per cent of the population were wage earners, and a large proportion of agricultural production was for subsistence.

Because of its dependence on a limited range of agricultural products, Tanzania's economy is sensitive to fluctuations in world prices. To reduce this danger, proposals are at present before the Government to develop industries such as tanning, meat packing, and milk, butter and cheese processing to the stage where imports of these commodities will be no longer needed, and to develop other secondary industries which will further broaden the base of economy. Proposals are also being considered which aim to increase the efficiency of agriculture, through a more equitable redistribution of land ownership.

In 1963, survey work for the Rufiji Water Conservation Project began. Its basic purpose will be as a large-scale reclamation and irrigation scheme, but it could be used for power production, and thereby lead to the development of industrial and manufacturing complexes.



TANZANIA **UNIVERSITY** TECHNICAL INSTITUTE -1 - 2 - 3 - 4 + 5 - 69 10 11 12 13 14 15 16 17 18 SECONDARY SCHOOL STRUCTURE OF EDUCATION -1 - 2 - 3TECHNICAL SECONDARY SCHOOL TEACHERS COLLEGE -1-2 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 -LOWER AND UPPER PRIMARY SCHOOL AGE

ì

### 2. General Education

Education in Tanzania is a joint undertaking by the Government, local authorities and voluntary agencies. The Ministry of Education is responsible for the provision of education throughout the Republic.

Lower and upper primary schooling covers a period of eight years. In 1962, there were 525,402 pupils enrolled in primary schools in Tanganyika, and 21,777 in Zanzibar. This represents approximately five per cent of the total population.

Four choices are open to students who have reached Standard VIII and wish to continue their education — they may spend four years at secondary school and gain the School Certificate; they may complete a three-years' craft course at a secondary technical school; they may begin a two-years' course at teachers' colleges; or they may train with various ministries and private firms.

Only three per cent of children who complete the School Certificate proceed to the Higher School Certificate. This takes a further two years and qualifies for entry to the University of East Africa.

Because of the pressure on educational facilities, admission to the upper primary school level depends on passing an examination at the end of the fourth year of the primary course. An entrance examination must also be passed before enrolment in a secondary school. The joint examination for the School Certificate and the General Certificate of Education ("O" Level examination), are taken at the end of Form IV.

By 1964, 20,000 students were enrolled in secondary schools in Tanganyika. There were 22 teacher-training centres for primary teachers and one for secondary teachers.

The University of East Africa has colleges in Kampala, Nairobi and Dar-Es-Salaam. Although facilities are being extended, the bulk of East African students must still find places in universities abroad.



## 3. Technical Education

Organization and Administration

The Ministry of Education, assisted by an Adviser in Technical Education, has responsibility for the overall direction of technical education in Tanzania.

Types of Institutions and Courses

The University of East Africa, with colleges located in Uganda, Kenya and Tanzania, provides limited facilities for training scientists and technologists. Courses in science and engineering are currently available.

The Dar-Es-Salaam Technical College admits students from Form IV and provides technician diploma courses which may be taken as a three-year full-time course or on a sandwich basis. Courses are available at technician level in civil, mechanical and electrical engineering. On successful completion of the technical diploma course, students may proceed to the Higher Diploma Course, two years' full-time, or, alternatively, enter the Engineering Faculty of the University of East Africa. There are at present, 700 full-time and 1,500 part-time students at the college.

Two technical schools take pupils after a primary schooling of seven years and include in their curriculum, subjects such as English, mathematics, chemistry, technical drawing and workshop practice. At the end of Form IV, students sit for the Cambridge School Certificate and may later proceed to the Higher School Certificate.

Technical subjects have also been introduced to selected secondary schools.

Formerly, trade schools offered craft subjects in a three-year course. A further year at the Dar-Es-Salaam Technical College enabled students to take the City and Guilds Craft Examination. However, this scheme of



craft training has been discontinued as technician training has become predominant. Some of the craft examinations are now being conducted by the Trade Testing Centre under the auspices of the Ministry of Labour.

Certain public bodies such as the Railways and the Harbours have elaborate training facilities at all levels and, in the private sector, Williamson Diamonds provides trade training facilities of high quality.

Arrangements for Technical Teacher Training

There is no college in Tanzania which specifically trains teachers for technical institutions, but several courses of one year's duration have been run for junior teachers at the Dar-Es-Salaam Technical College.

## 4. Apprenticeship

The Ministry of Labour is responsible for industrial and apprenticeship training in Tanzania. A tripartite sub-committee—the National Council for Industrial Training and Apprenticeship—advises the Ministry.

Apprenticeships are available in a wide range of trades in the building and engineering industries. The Ministry requires of an employer wishing to engage an apprentice, that he provide suitable training facilities and staff so that the apprentice will learn the prescribed skills. There is no maximum age limit for entry into apprenticeship, but 16 years is the minimum age.

As trade school training of apprentices is phased out, industrial apprenticeship schemes will be developed and there will no longer be the danger of training apprentices for whom no subsequent employment is available.



3



## 5. Accelerated Vocational Training

No scheme of this nature is in operation in Tanzania.

## 6. In-industry Training

A number of progressive private firms in Tanzania have established training schemes to produce the skilled operators they require. In general, however, these schemes are not based on the completion of formal indentures, and aim as producing a specialized artisan to meet the needs of the individual concern, rather than an all-round craftsman.

The Ministry of Labour conducts Training-Within-Industry courses for trainers and supervisors from both the private and public sectors. This scheme, started at the end of 1962, has proved very successful. Group courses are also conducted at various industrial establishments.

A request has been made to the United Nations Development Special Fund for assistance with the development of industrial/apprenticeship training. A decision, on whether or not U.N.C. will grant this request, has not yet been received. The project covers the provision of six experts and the supply of equipment for training purposes. The Government is extremely anxious to revise existing legislation and to introduce a modern apprenticeship training scheme.

The policy of the Government is that industry itself must undertake to train the skilled men it needs, and that the Government's role is to devise a comprehensive in-plant on-the-job training programme.



The Ministry of Communications and Works, one of the largest employers of labour in the country, has established the "Works Training School" to provide courses for selected craftsmen designed to improve their technical knowledge and to help them gain administrative experience for posts of higher responsibility. Suitable candidates are given a five months' course. The instruction is mainly given in the classroom, but there are also site demonstrations and practical work.

A successful candidate has to work for a further two years in the field before he can be considered for another course to gain promotion.

# 7. National Planning for Vocational Training

Following an examination by an inter-ministerial working party of the findings of the 1962 survey of high-level manpower resources and requirements, the Government has created a Ministry of Development Planning. The Ministry has given a high priority to the development of technical education. This has led to the establishment of an Advisory Council on Technical Education, with the objective of bringing together public and private groups to advise on the problem of providing increased technical education facilities to procure urgently-needed skills.

Seventeen per cent of the country's annual expenditure is at present absorbed by primary, secondary and technical education.

ERIC