THE POPULATION OF INDONESIA WAS 105,000,000 IN 1965, 70 PERCENT OF WHICH ARE ENGAGED IN AGRICULTURE ON THE SEVEN MAIN ISLANDS AND SOME OF THE 3,000 SMALLER ISLANDS. DIVERSIFICATION OF THE ECONOMY IS BEING EMPHASIZED. COMPULSORY PRIMARY EDUCATION EXTENDS OVER 6 YEARS. SECONDARY EDUCATION INCLUDES A JUNIOR LEVEL WITH BOTH ACADEMIC AND VOCATIONAL SCHOOLS AND A SENIOR LEVEL WITH ACADEMIC AND TECHNICAL SCHOOLS. IN 1961-62, 10,000,000 PERSONS WERE IN PRIMARY SCHOOLS, 750,000 IN SECONDARY SCHOOLS, 150,000 IN TECHNICAL SCHOOLS, AND 40,000 IN TEACHER EDUCATION. CONTROL OF TECHNICAL EDUCATION IS CENTRALIZED AND SUPERVISED BY INSPECTORS. THERE ARE SIX PUBLIC AND A NUMBER OF PRIVATE UNIVERSITIES, 174 SENIOR TECHNICAL SCHOOLS, 570 JUNIOR TECHNICAL SCHOOLS, AND SOME SPECIALIZED INSTITUTIONS. THERE ARE EIGHT TECHNICAL TEACHER EDUCATION INSTITUTES OFFERING A 3-YEAR TRAINING COURSE. ACCELERATED VOCATIONAL TRAINING OF 6 TO 12 MONTH'S DURATION IS PROVIDED BY THE MINISTRY OF EDUCATION FOR UNEMPLOYED ADULTS. NO FORMAL APPRENTICESHIP SYSTEM EXISTS. IN-INDUSTRY TRAINING IS UNDEVELOPED. MANPOWER UNITS ARE TO BE ESTABLISHED IN EACH MINISTRY. (JM)
Outline

of

Vocational Training

in

INDONESIA

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
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Frontispiece: Map of Indonesia

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1. Introduction

*Area, Population*

Indonesia comprises the islands of Sumatra, Java, Sulawesi, Kalimantan, Nusatenggara, Maluku Archipelago, West Irian and some three thousand smaller islands. The total land area is 575,450 square miles and in 1965, the population was estimated at 105,000,000.

*Primary Industry*

The economy is based on agriculture, this sector engaging nearly 70 per cent of the population. The main crops are rubber, sugar, rice, tea, coffee, maize, copra, tobacco and paddy. The intensification of food production is being planned according to co-operative methods, but, partly because of adverse seasons, production increases have not met expectations.

Indonesia is a major world producer of both tin and oil and also possesses considerable quantities of coal and bauxite.

*Secondary Industry*

The National Planning Board for Development, composed of ministers and officials of the Welfare Ministries, is responsible for the orderly development of industry. It is hoped that the plans which have been laid will lead to a more diversified economy and progress has been made in some sectors.

Activities in the basic industries have been planned with a view to meeting the demand for machinery and construction materials. Chemicals, cement, glass and paper are all showing upward trends and a steel mill was recently established at Tjilegon in West Java. The main problems facing industrial development include shortages of raw materials, equipment, skilled personnel and transport facilities.
To cope with economic difficulties and to accelerate development, an Economic Declaration was proclaimed in 1963, in which were set forth the short-term policies for stabilization and development. Prescribed, among other things, was the attainment of self-sufficiency in food-stuffs, with the highest priorities going to agriculture and clothing. The importing of luxury goods was to be reduced to a minimum, and priority was given to essential consumer goods such as raw cotton, fertilizer and newsprint, as well as raw materials, semi-finished goods and equipment (including transport and communication equipment) which will save or earn foreign exchange.

Unfortunately, development has been hindered by inflation and food shortages, problems which have been aggravated by low prices in the world markets for rubber and tin.
GENERAL EDUCATION

AGE 6 7 8 9 10 11 12 13 14 15 16 17 18

LOWER GENERAL SECONDARY
1 2 3

UPPER GENERAL SECONDARY
1 2 3 UNIVERSITY

AGRICULTURAL SCHOOL
1 2 3

HOME ECONOMICS
1 2 3 TEACHER TRAINING

LOWER VOCATIONAL SECONDARY
HOME ECONOMICS
1 2 3

SCHOOL OF ARTS
1 2 3 4 5 6

LOWER VOCATIONAL SECONDARY COMMERCE
1 2 3

UPPER SECONDARY COMMERCE
1 2 3

LOWER SECONDARY TECHNICAL
1 2 3

UPPER SECONDARY TECHNICAL
1 2 3

LOWER SECONDARY TEACHER TRAINING
1 2 3

UPPER SECONDARY TEACHER TRAINING
1 2 3

PRIMARY SCHOOL
1 2 3 4 5 6

2. General Education

Primary and secondary education, including secondary technical education, is under the control of the Ministry of Education; the schools themselves may be run by either public or private agencies.

Primary education is compulsory and extends over six years. It is currently planned to extend this compulsory elementary stage to nine years.

Secondary education is at present organized in two levels: the junior or lower level, which covers three years and includes both academic and vocational schools; and the senior or upper level, which also covers three years and includes both academic and technical schools. With the introduction of the nine-year elementary stage, the secondary stage will be reduced to an overall period of four years.

In 1961-1962, there were nearly ten million children in primary schools, being taught by about one quarter of a million teachers. There were, in the same year, more than three-quarters of a million secondary pupils and about 150,000 technical school pupils, being taught by approximately 35,000 and 13,000 teachers respectively. There were another 40,000 teachers of all levels in training colleges.

Indonesian education has, for some time, been faced with shortage of facilities and most schools at all levels are forced to operate double shifts. Some new secondary technical schools have been built, but problems of finance for existing schools have limited the opening of new institutions. Financial problems also make it difficult to obtain teachers who can readily find higher salaries in other occupations.
3. Technical Education

Organization and Administration

Technical education is the responsibility of the Ministry of Education and Culture. Control is centralized within this Ministry through a number of inspectors who supervise technical education in each of the twenty provinces and main centres.

There are no formal provisions for direct co-operation between industry and technical education. However, most of the demand for technical personnel is from the Ministries of Mining, Industries, Army, Navy, Air Force and Sea Communications, and the liaison between these Ministries and the Ministry of Education revolves around a system of joint training schools, i.e., the Ministries requiring personnel, provide a large proportion of the teachers, buildings and equipment which the Ministry of Education use to provide the required training.

Types of Institutions and Courses

There are six public universities in Indonesia the main two being the University of Indonesia, at Djakarta, and the University of Gadjah Madah, each with facilities for degree courses in civil, mechanical, electrical, ship-building and industrial engineering; and architecture. There are also a number of private universities with technological facilities.

There are 174 senior technical schools providing three year courses in Building Construction, Machine Shop Practice, Auto and Diesel Mechanics, and Electricity. Emphasis is placed on theoretical knowledge although some practical training is included. Approximately twenty per cent of the products of these schools continue to higher technical education, the rest entering Government service and industry as supervisors, technicians and junior engineers. There is also a school for advanced technical training which offers three-year courses in civil and mechanical engineering to boys from the senior technical schools. It also provides part-time courses for those employed in industry.
There are 570 junior technical schools offering training in building construction, metal working, electricity and allied subjects. The emphasis in these schools is on the development of practical skills.

The Government also provides specialist institutions such as the Civil Aviation Academy and the Schools of Physiotherapy, Pharmacy and Analysts.

Arrangements for Technical Teacher Training

The Dunwoody Industrial Institute entered into an agreement in 1953 with the Ford Foundation and the Government of Indonesia to establish the first Technical Teacher Training Institute at Bandung. Since then, seven more have been added. They offer three-year teacher training courses in auto diesel mechanics, electricity, building construction and machine-shop practice, while one in Djakarta also trains teachers for printing. The curriculum emphasizes practical training, with nearly 50 per cent of the time being devoted to practical shop work and another 20 per cent to related jobs and trade knowledge classes.
4. Apprenticeship

There is no formal apprenticeship system in Indonesia but there is on-the-job training of an informal and unsystematic nature.

5. Accelerated Vocational Training

Courses of six to twelve months' duration are provided by the Ministry of Labour for unemployed adults. Admission to such centres is restricted to unemployed adults between the ages of eighteen and thirty-five.

Training is provided chiefly in building, metal, motor, electrical, commercial and agricultural trades. Approximately 80 per cent of the time is devoted to practical work with the remaining 20 per cent given to related theoretical training, including language and social subjects.

In addition, training and upgrading, which includes T.W.I. training, is also provided for employed adults, both semi-skilled and skilled, and for foremen and supervisors.
6. In-industry Training

The Ministry of Labour is responsible for promoting and developing in-industry training, particularly through its Vocational Training Service. The only courses which it has, however, are those mentioned in the previous section.

Other Ministries with industrial and commercial activities conduct their own in-plant training for skilled workers and supervisors, but systematic training for semi-skilled workers is virtually non-existent.

Industrial concerns are generally cautious about extensive in-plant training because of the fear of losing trained personnel to other firms. Upgrading workers who have gained the necessary ability through experience, is therefore the most common way of filling skilled vacancies. Training-Within-Industry courses for foremen and supervisors have recently been introduced.

There are training officers in some Ministries and in a few of the larger companies. There are no formal facilities available for training them.
7. National Planning for Vocational Training

The Ministry of Labour, aided by the Body for National Planning and Reconstruction, establishes policy in national planning for vocational training in Indonesia.

Within the Ministry of Labour the Directorate of Vocational Training is responsible for organizing and administering training. A Directorate of Technological Education within the Ministry of Education determines the number of junior and senior technical schools for the various regions of Indonesia and plans the courses for the various types of technical training.

The body for National Planning and Reconstruction is made up of experts in many fields and provides directives for State industrial planning indicating the needs for skilled manpower.

By decree of the Cabinet's Presidium, manpower units will be established in each Ministry.
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