

**SUMMARIES OF
MANPOWER SURVEYS AND REPORTS
FOR DEVELOPING COUNTRIES
1958-68**



**U.S. DEPARTMENT OF LABOR
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Foreword

This publication is based on manpower reports and surveys prepared by consultants assigned to developing countries. The reports and surveys were assembled and summarized by the Bureau of Labor Statistics of the U.S. Department of Labor under contract with the Agency for International Development, U.S. Department of State.

The Bureau is indebted to many organizations whose cooperation and assistance made preparation of this publication possible. Special acknowledgment is due to the following organizations who searched their files to identify and supply copies of reports: International Labour Office, Education and World Affairs,⁶ The Ford Foundation, Governmental Affairs Institute, and Stanford Research Institute. In addition, many individuals, too numerous to list, aided in tracking down fugitive reports.

Summaries of the manpower reports and surveys were prepared by Evelyn R. Kay, of the Office of Foreign Labor and Trade.

Preface

For many years manpower surveys, assessments, forecasts and projections have been made in differing ways, for various purposes, often repetitively, for many developing countries. Reports and surveys have been sponsored, supported, or conducted, by AID, its predecessor agencies, ILO, UNESCO, IBRD, OECD, Ford Foundation, and private contract agencies. This work has been diverse in explicit objective, scope, depth, method, quality, and final utilization. Projects have focused variously on total resources and requirements, characteristics of the total manpower pool, employment and unemployment levels, occupational composition, and outlook and requirements, sometimes in selected occupations and categories of skills and training.

A preliminary review of AID manpower activities, requested by the Administrator in 1966, found that no careful appraisal of any part of this experience had been made. It was not possible to find a comprehensive assembly of the relevant materials in any central place. As a result, in March 1967, AID arranged for the Bureau of Labor Statistics to collect, organize, and classify the basic reports and surveys which would meet minimum requirements for systematic evaluation and would contribute a useful reference resource to the Agency's information system.

Critical examination of the significance, adequacy, and applications of manpower survey findings has become more important with growing emphasis on appraisal of manpower requirements as a basis for planning of education and training programs. Still more crucial is the need for appraisal of the "state of the art" in this technical field in relation to the vitally important employment dimensions of economic development. The inventory presented in this report, and availability of the basic documents which lie behind it, furnish an important partial resource for further study and evaluation, country by country, and on a comparative basis. Together, they constitute the first necessary step toward analyzing manpower development and planning efforts in developing countries.

Preface—Continued

A word should be added regarding the limitations of this report and the project which has made it possible. First, the report makes no attempt to provide complete coverage of the subject for the countries covered, a task which would require a sifting of the country references in the basic documents and a supplemental canvass of indigenous country literature and sources. Second, in general no linkage between the individual reports and surveys for a given country has been undertaken except as the documents themselves reveal this linkage.

This report reflects the existing record. Its use should advance the quest for best practice in this field, reveal steps to be avoided or taken with skepticism, and contribute to some degree toward further wisdom in dealing with the important but elusive manpower and employment objectives in the international development effort.

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Summaries of Manpower Surveys and Reports for Developing Countries, 1958-68

Introduction

This collection of manpower reports and surveys represents a step in AID's long-range goal of appraising and evaluating manpower activities in developing countries. Every attempt was made to locate all AID-sponsored manpower reports and significant reports prepared by other organizations. The omission of any AID report is unintentional and merely indicative of the difficulty of locating and identifying elusive reports.

Manpower reports and surveys selected for this inventory cover the 10-year period 1958 to mid-1968. In all, about 300 reports were collected from various sources for this project. From this group, 226 were selected on the basis of their relevance to the field of manpower development and satisfaction of one or the other of the following criteria:

1. They deal with the overall planning and implementation of a manpower development program, taking into consideration the economic, social, and political factors in the country.
2. They provide technical assistance in specific areas, such as measuring current or potential manpower resources and requirements, describing techniques to make these measurements, analyzing educational and training institutions to meet manpower needs, or developing job placement services.

The rest of the reports (about 75) were not included because they were prepared by the countries themselves, rather than by consultants, or because they did not conform to the above criteria. Reports prepared for developed countries or for Communist countries also were excluded.

Summaries of the 226 reports collected for this project are arranged in alphabetical order by country within each region. They include, where possible, statements on the manpower administrative and organizational machinery, highlights of the mission accomplishments, and major recommendations. The summaries should serve as a quick reference to manpower programs and technical assistance in specific countries. Manpower consultants preparing a follow-up study in the same country or a new program in another, but similar, country should refer to the full reports. Copies of the reports are available on a loan basis from the AID Historical and Technical Reference Branch or from the U.S. Department of Labor library.

Consultants and students of manpower development will be interested particularly in the selected readings listed on the inside back cover of this report. These sources were either prepared or sponsored by the Agency for International Development. They include technical manuals for setting up and conducting manpower programs, proceedings of symposia and seminars on manpower subjects, and AID Manual Orders on strengthening labor ministries and on manpower and employment development.

The following tabulation summarizes the reports, by region, of the various organizations responsible for their preparation:

Organization	Total	Africa	American Republics	East Asia and the Pacific	Near East and South Asia
Total.....	226	65	89	34	38
Agency for International Development.....	98	12	59	14	13
Education and World Affairs.....	11	10	1	--	--
Ford Foundation.....	16	14	1	--	1
International Labour Office.....	65	19	15	10	21
Stanford Research Institute.....	7	--	3	4	--
United Nations.....	6	2	2	2	--
Universities.....	10	1	5	2	2
Other organizations.....	13	7	3	2	1

A broad range of topics relating to manpower is covered in this collection of reports. Although consultants usually were assigned a specific project, they tended to advise on several facets of manpower development and planning. Therefore, column totals on the following tabulation differ from the preceding tabulation because many reports contained more than one subject:

Subject	Africa	American Republics	East Asia and the Pacific	Near East and South Asia
Assessment of current manpower situation based on already available information....	28	19	9	13
Manpower surveys				
Establishment surveys of employment.....	25	12	8	6
Household surveys of the labor force.....	1	2	1	3
Projections of manpower resources and require- ments.....	20	12	11	7
Employment service activities.....	14	25	9	10
Education and training programs.....	38	33	20	10
Manpower planning, ad- ministration, and organization.....	24	23	15	13
Statistical services and organization.....	4	7	4	2
Statistical techniques.....	2	4	7	4

Report on Middle-Level Officials in Africa
(1963; 39 pages and 8 sections)

Prepared for UNESCO by Derek T. Healey

This is a collection of reports on 10 African countries. The reports relate to the supply of and demand for middle-level personnel in the social sciences. The analysis is based on manpower surveys already carried out in these countries and on other information that may be available. In addition, an analytical description of the facilities for training middle-level personnel in each country is provided.

The countries included in the report are Ghana (50 pages), Nigeria (60 pages), Rhodesia and Nyasaland (46 pages), Tanzania (15 pages), Kenya (15 pages), Uganda (12 pages), Sudan (14 pages), and Mali (in French, 28 pages). The sections on Madagascar and Senegal are missing.

The following is a summary of the conclusions reached by the consultant:

1. Only Ghana has a functioning Manpower Unit.
2. No worthwhile supply and demand estimates or forecasts of middle-level manpower are available.
3. Techniques of collecting education and occupational data should be improved and expanded.
4. Employment Exchange functions should be expanded to meet demands of labor and employers.
5. Occupational and vocational guidance counseling should be initiated.
6. More flexibility should be developed in educational and training institutions to develop a well educated and adaptable labor force.
7. Standards regarding teachers of secondary schools should be established and maintained.

French Education Policy in Sub-Saharan Africa and Madagascar
(1965; 38 pages and 2 appendixes)

Education and World Affairs: Study Committee on Manpower Needs and
Educational Capabilities in Africa, prepared for AID

Reviews the French assistance program in education
and in technical assistance as of 1964. USAID is advised
to follow the guidelines established by the French.

Observations of French assistance

1. In the sub-Saharan and Madagascar regions, about 50 percent of the 8,500 French aid personnel were in education, concentrated largely in secondary education.

2. There were very few technical assistance "advisory" personnel in Africa. Most personnel were in "active" function categories such as doctors, engineers, and government administrators.

3. French policy favored reducing its personnel in "active" functions by means of increasing the output of local high-level manpower through secondary and university programs.

4. French policy favored strengthening local educational systems and training centers for formation of "cadres" where needed, rather than creating specialized educational schools in the French pattern.

Weaknesses in educational system

1. Mass primary education reaches relatively few. Only a few people get a good education.

2. Secondary education is weighted heavily toward classical curricula rather than the technical "Lycee."

3. The proposed training centers for formation of cadres are mostly in the project stage.

French education assistance policy

1. The French have a timetable of 5 to 8 years to produce well-trained cadres needed to replace their expatriate personnel in education and government service.

2. The French are rationing assistance funds to education by giving preference to professional and technical schools, adult agricultural schools, and primary schools adapted for rural areas.

USAID education assistance policy

1. Should be part of integrated program.
2. Should grant scholarship only for graduate work overseas.

3. Should not try to transfer U.S. culture or institutions but should cooperate with French in their general approach to education and manpower development.

Study of Manpower Needs, Educational Capabilities, and Overseas Study
(1965; 48 pages)

Education and World Affairs (Report No. 1): Study Committee on Manpower
Needs and Educational Capabilities in Africa, prepared for AID

Summary report of the general characteristics and developments observed in nine African countries: Ethiopia, Guinea, Kenya, Liberia, Nigeria, Sudan, Tanzania, Tunisia, Uganda.

This report summarizes observations and recommendations of a general nature as they apply to all or most of the countries surveyed. Detailed surveys were made in nine African countries: Ethiopia, Guinea, Kenya, Liberia, Nigeria, Sudan, Tanzania, Tunisia, and Uganda. Separate reports for each of these countries have been prepared ¹/_{and} provide data on the following topics:

1. An assessment of available data concerning high-level manpower needs.
2. An appraisal of the capabilities of indigenous African educational institutions to meet manpower needs.
3. A survey of opportunities for study overseas as they relate to high-level manpower needs.

General Observations

1. Most high-level manpower is employed in Government or education services, and most of these personnel are non-Africans.
2. Only Nigeria, Tanzania, and Kenya have produced reasonably satisfactory manpower analyses.

3. Effective manpower planning machinery has been developed only in Nigeria and Tanzania.
4. All countries face shortages in high-level and middle-level manpower in the scientific and technical fields.

General recommendations

1. AID should strengthen research capabilities of universities in the expectation of a feedback to Government circles.
2. AID should provide key operational personnel in addition to technical advice during the period of rapid Africanization.
3. AID should assist educational planning by making skilled personnel available for planning and administrative positions in Government agencies and in educational institutions.
4. AID should develop a comprehensive approach to educational planning by giving more attention to organization of an overall human resource development strategy.

¹/_{See individual country for summary.}

East Africa: Study of Manpower Needs, Educational
Capabilities, and Overseas Study
(1965; 183 pages)

Education and World Affairs (Report No. 3): Study Committee on Manpower
Needs and Educational Capabilities in Africa, prepared for AID

This study covers three East African Countries: Kenya,
Tanzania, and Uganda.

The educational and manpower planning organizations and programs in each country are analyzed and recommendations are made on the needs of individual countries. Recommendations cover each educational level based on surveys of manpower needs. An excellent bibliography lists all documents to 1965 relating to economic, manpower, and educational development.

Kenya--Basic guidelines for Kenya's development are contained in the Development Plan for 1964-70. The 1965 Manpower Survey ¹/ provides the most recent data on current employment and projections of future requirements. To meet these needs, Kenya must develop its teacher and technical educational facilities and continue to rely on overseas training for developing some of these skills.

Tanzania--Manpower planning is relatively advanced, both in the systematic analysis and in

the establishment of effective administrative machinery. A number of surveys which provide excellent occupational information have been prepared. The need to train great numbers of high- and middle-level manpower will place an exceedingly heavy burden on the country's educational institutions, but the goal of self-sufficiency may be reached by 1980.

Uganda--Development has been impeded seriously by a shortage of trained manpower. No manpower survey is available comparable with those of Kenya and Tanzania. Indications are that middle-level rather than high-level manpower is an immediate need. According to various studies, this need will not be met by 1971.

¹/ See page 28.

East African Manpower Utilization Study
(1965; 59 pages and 6 appendixes)

African-American Institute report, prepared for AID
Summary of the problem of human resource development
and utilization in East Africa.

The main purpose of this study is to recommend measures to increase the rate of return of African students from the United States and to maximize their productive reintegration into their home countries.

Many East African students are attending universities and high schools in the United States and Canada. An attempt was made to establish a list of students for each country. Kenya has approximately 1,200 students in the United States and Canada, or 40 percent of total students; Tanzania, about 300 students; and Uganda, about 400 students.

Critical problems which will affect the timely return and maximum utilization of these students by their governments were observed. For example, overseas study programs do not meet school priority manpower needs of East Africa; coordinated guidance programs are lacking, particularly among "unsponsored students;" and, to assure return of students to responsible posi-

tions, effective recruitment and pre-return job placement procedures are lacking.

Recommendations for alleviating and preventing some of the critical bottlenecks in manpower development and utilization cover the following topics:

1. Administrative support--improvement in student recordkeeping procedures.
2. African training seminars--coordination between advisers in New York and in East African countries.
3. Student seminars--specialized training programs to supplement academic courses while studying abroad.
4. Guidance counseling and information services.

Monthly reports have been prepared by the African-American Institute on manpower needs by detailed occupation in Kenya and in Tanzania.

An Inter-Organization Mission Survey of Manpower
(In French; 1962; 136 pages)

ILO Report to the Government of the Federal Republic of Cameroon;
OIT/TAP/Cameroon/R.3; Paul Casselman (Canada); John Andoff (Canada); Marcel Fabri (Belgium)

Assessment of the manpower supply and demand, and
recommendations on improving survey techniques and
training for skills.

The organizations involved in the manpower assessment survey included the International Labour Office, various offices of the United Nations (FAO, UNESCO), International Civil Aviation, the World Meteorological Organization, and others.

In order to obtain information on the work force, a pilot study of 40 establishments which employed 10 workers or more was conducted. However, because of lack of qualified personnel to complete the survey, the results are not included in this report. Manpower information was obtained from several other sources to develop the occupational composition and needs for each major economic activity.

Conclusions

1. Information for developing a national economic and manpower development plan was lacking.

2. The institutional structure was rigid, which impeded social and economic changes.

3. Workers were instilled with traditional values and resented change.

4. The traditional educational system failed to prepare workers for the world of work.

5. Rush of rural migrants to urban areas transformed rural underemployment into urban unemployment.

6. Educated young people are needed in the rural areas to improve agricultural production.

Recommendations

1. Information on population, labor force, and training facilities should be collected as soon as possible. Details of the required manpower statistical data are explained.

2. Governmental organizations concerned with labor and labor problems should be established at the national level and expanded into local areas.

3. Education and training should be adapted to current needs, such as agricultural techniques in farm areas, introduction of vocational education to train for middle-level occupations, education for women.

4. Other recommendations deal with methods of checking the rural-to-urban migration.

Organization of the Employment Service
(In French; 1962; 36 pages and 3 tables)

ILO Report to the Federal Republic of Cameroon;
OIT/TAP/Cameroon/R.4; Roger Farine, (Switzerland)

Describes manpower and employment problems, and recommends the extension and improvement of the Employment Service.

Political insecurity and economic slack aggravated the problem of unemployed urban workers. In Douala alone, 20,000 workers, representing 17 percent of the population, were unemployed. Possibilities of employment in the private sector were low, but the military, the civil service, and utilities (railroads) were in a position to create jobs. Current Employment Service activities were inadequate because of lack of personnel and funds to operate efficiently. Training facilities also were organized inadequately and were not prepared to train for the modern economy. Some apprentices, however, were provided on-the-job training to meet the needs of individual establishments.

A survey in two provinces was conducted; it covered 400 establishments that employed 10 workers or more. The following observations were made:

1. The employed work force is stable, except among unskilled workers.
2. Employers were solicited daily by job seekers.
3. The greatest manpower needs were for stenographers and mechanics.

Some idea of future requirements for manpower was gleaned from the survey but not with

any certainty. Employers lacked confidence in projecting their requirements because of the unstable economic and political situation of the country.

A pilot Employment Service office was established in Douala to replace the previous unorganized activities. Its first duties were to estimate labor force characteristics, obtain job vacancy information, evaluate manpower needs in each industry, and to determine the manner in which to meet these needs.

Recommendations

1. The Ministry of Labor and Social Laws should collaborate with other public and private organizations to promote a plan for improving rural labor conditions. The urban unemployment problem can be solved only by finding means of encouraging excess labor to remain on the farms. This result can be achieved by improving crop production (cocoa and coffee) and by developing cottage industries.
2. The Ministry should encourage industrialization by studying characteristics of available labor supply and by training qualified manpower to meet industry needs.
3. The Government should consider the Employment Service as its principal instrument for the development and training of manpower.

The Demand for and Training of Middle-Level
and Supervisory Personnel

(In French; 1962; 40 pages and annex)

ILO Report to the Government of the Central African Republic;
OIT/TAP/Centrafricaine/R.1; Paul Andre Bonnefoy

Assessment of middle-level manpower and methods of
meeting training needs.

Out of a population of 1.2 million, about 480,000 men and women were in the labor force, mostly in agriculture, hunting, and fishing. Only about a tenth of those in the labor force were salaried; the remainder were primarily self-employed and family workers.

Estimates of available manpower are based on incomplete information of the population, labor force, industry and occupation, and salaries of workers. Middle-level and supervisory occupational requirements are based on an analysis of the major economic sectors.

The types of training and educational facilities already available are discussed. Also discussed are the curricula offered, number of graduates and enrollees, and budget allocation. An analysis of the effectiveness of the educational and training output relative to the needs of the various economic sectors is made.

Recommendations

1. Training programs should be improved and expanded to meet the needs of a modernizing economy.

2. The services of the Commission on Technical Training should be utilized.

3. The Center for Labor Studies should prepare statements on occupational requirements.

4. The Agricultural School should be guided by a Commission representing labor, management, and independent farm workers to produce higher skilled farm technicians who, in turn, can train others.

5. The remaining recommendations concern various types of training programs for developing specialized middle-level personnel for each economic activity.

Training and Improvement of Middle-Level Personnel
(In French; 1962; 35 pages and 2 annexes)

ILO Report to the Government of Congo (Brazzaville)
OIT/TAP/Congo (Brazzaville)/R.1; Paul Bonnefoy

Review of available information on the labor force and
on vocational education and training.

The purpose of the mission was to assess available manpower information and technical training in order to aid the Government in planning and organizing a vocational educational system for the development of a qualified labor force.

Population was estimated to be 800,000, of whom 358,000 were economically active. About three-fourths of the active population were engaged in agriculture. A large majority of the high- and middle-level wage and salary workers were non-Congolese.

About two-thirds of the school-age population attended primary schools, but the proportion of students in secondary schools was very low. Technical training attracted relatively few people. Information regarding output and types of courses of agricultural schools is provided. In addition, there are two higher level schools:

1. Lysee Technique de Brazzaville is fashioned after the French system and is divided into industrial and commercial sections. About 500 students attend the 6-year program.

2. Center for Administrative and Technical Studies of the Institute of Higher Studies (attached

to the University of Bordeaux) conducts 2-year training programs for those preparing for middle-level technical and administrative occupations.

Vocational training is conducted by several private and quasi-public firms, such as the Commercial Company (50 technicians), National Bank (clerical and stenographic trainees), Air-France (7 trainees), Shell Petroleum (8 depot chiefs).

Recommendations

1. Republic of Congo should replace foreign workers as soon as possible.

2. Training should be expanded and improved to prepare local workers to replace foreign workers.

3. Employment Service functions should be initiated for the collection and analysis of manpower data, vocational guidance, placement services, etc. Appendix I (26 pages) describes available information on manpower development and vocational training in the country. Appendix II (26 pages) contains all the available statistical data on manpower, education, and related information.

The Employment Situation and the Organization
of the Employment Service
(In French; 1962; 44 pages)

ILO Report to the Government of Dahomey;
OIT/TAP/Dahomey/R.1; Robert Andrez (France)

A review of available manpower data and a discussion
of manpower problems.

The purpose of this report is to review the existing Employment Service functions and to make recommendations regarding its improvement and expansion, on the basis of an analysis of current and projected manpower needs.

More than half of the 2 million people in Dahomey are in the labor force. Of this total, about 25,000 persons are wage and salary workers. The economic and financial aspects of the economy are described as they relate to the utilization of available manpower. Problems of unemployment, underemployment, overcrowding in the urban areas, and related topics are discussed in detail.

The principal services of the Manpower Office (Employment Service) are to issue work permits, to place workers in jobs, and to keep records of employment and unemployment. An attempt has been made to maintain an inventory of all workers with a skill or profession, but these records are incomplete.

Recommendations

Immediate action recommendations call for an expansion of placement activities, compulsory announcement of job vacancies in establishments that employ 20 workers or more, requirements for State and quasi-public operations to hire through the Employment Service, and the initiation of vocational guidance and selection activities.

Recommendations concerning the collection of statistical data include periodic reports of employers on the manpower situation, social security records for classification of industry, and the development of an occupational classification system.

Other recommendations covered items such as the creation of a committee to carry out ILO Convention No. 88 (Employment Service activities), allocation of scholarships, and creation of a committee to regulate the employment of foreign manpower.

Appraisal of Proposed Manpower Survey
(1960; 10 pages and 15 tables)

Clinton A. Johnson, AID Manpower Consultant

Alternative proposals are suggested in place of the proposed high-level manpower survey.

Available data on employment are meager and unreliable. The Ministry of Commerce, Industry, and Planning collected statistics on employment, wages, and occupational distribution in manufacturing and some retail establishments. Employment information is available from quasi-government institutions, such as the Bank of Ethiopia, but not from the Imperial Ethiopian Government (IEG), the largest employer of trained manpower. Some information on educational and training facilities is also available from the Ministry of Education. In all, about 30 documents were reviewed.

Discussions with government officials indicated a manpower shortage in high-level occupations, especially in the administrative field. Teachers and doctors are also in short supply. However, there is danger in overestimating requirements based on need, since the ability of the IEG to carry out economic expansion proposals depends on its effectiveness in collecting tax revenues. In the private sector, industrial development is handicapped by lack of capital and incentives to foreign investors. Hence, the

Five-Year Plan for 1957-62, drawn up by Yugoslav technicians, which calls for 140,000 new nonagricultural jobs, is considered a "wild dream."

Recommendations

Instead of the proposed high-level manpower survey, a manpower specialist should be added to the USOM/Ethiopian Staff to carry out the following tasks:

1. Continue the analysis of manpower supply and demand.
2. Promote a labor market analysis program in the Central Statistical Office of the Ministry of Commerce and Planning.
3. Explore the possibility of organizing a National Placement Exchange for professional, administrative, clerical, and skilled personnel.
4. Train personnel in the Ministry of Commerce and Planning to operate the labor market analysis program.
5. Develop a manpower survey suitable for planning purposes.

Ethiopian Training Policies and Their Relationship to Unemployment
(1961; 5 pages)

Robert W. Landry, USOM/Ethiopia Training Officer

Recommendations for the establishment of administrative machinery for manpower planning, training, and utilization.

The shortage of trained human resources generally is conceded to be a major problem faced by Ethiopia in its program for accelerated economic development. Despite the overall shortages, some sectors of the economy are faced with an overabundance of trained manpower. To alleviate the problems of this paradoxical unemployment and to assure that future training of Ethiopia's manpower parallels its requirements, it is necessary that Ethiopia develop an overall manpower scheme.

It is recommended that a Committee of Labor Utilization be formed within the Imperial Ethiopian Government to be responsible for the development of policy concerning the planning, training, and utilization of Ethiopia's manpower. Responsibility for the implementation of Committee policy, as well as technical and administrative matters, should be vested in a

Directorate General of Labor Utilization who is immediately subordinate to the chairman of the Committee.

During the initial stage, the organization should concentrate on surveying present trained manpower resources; surveying and extrapolating trained manpower needs; and acting as the Placement Exchange Center for all technical, managerial, teaching, clerical, and professional personnel.

At such time as a strong central Ethiopian economic development agency is activated, the Labor Utilization Committee should be in a position to assist in the areas of developmental planning, manpower forecasting, and educational and occupational guidance.

(Summary prepared by the author of this report.)

Ethiopia's High-Level Manpower--Analysis and Projections
(1964; 74 pages and 11 tables)

Arnold M. Zack, U.S. Fulbright Professor, prepared for the
Haile Selassie I University

Manpower supply and demand are projected to 1972 and
an occupational outlook statement is presented for each
major high-level occupation.

Current and future estimates of high-level and skilled manpower were not available to assist the Planning Board in determining whether the various projects of the 1962-67 Development Plan would have the necessary manpower to carry them to fruition. The Five-Year Plan estimated total employment requirements for each economic sector but, since detailed information was lacking, no occupational requirements were made. It was necessary, therefore, to analyze currently employed manpower and to make projections of occupational needs.

An inventory of high-level (university-trained) manpower was constructed by means of a survey of all firms that employed 50 workers or more and of small firms that had clusters of professionals. A total of 125 establishments were interviewed; they represented 60 percent of total nonagricultural employment and 90 percent of the nation's high-level employment. Two-thirds of the 5,000 high-level personnel covered in this survey were Ethiopians.

A combination of classical projection methods was used for estimating high-level man-

power demand for 1972: projection of current distribution of employment, regression analysis, projection of production goals, and employers' estimates of needs. Wastage was calculated by using the UN Study of Age and Sex Patterns of Mortality. Based on these projections of demand and on an analysis of the educational facilities to train enough people to meet this demand, estimates that the 1972 supply would fall far short of its goal were made. Therefore, it would be necessary to use middle-level manpower to fill some of the gaps and to continue hiring foreign workers.

Recommendations

1. A middle-level manpower survey is needed as a complement to the high-level manpower survey.
2. Manpower studies of various types should be continued by the Labor Department.
3. Employment Service functions should be introduced to aid in meeting employers' needs.
4. The University should adapt its curricula to meet anticipated manpower demand.

Study of Manpower Needs, Educational Capabilities and Overseas Study
(1965; 49 pages)

Education and World Affairs (Report No. 6): Study Committee on Manpower
Needs and Educational Capabilities in Africa, prepared for AID

An assessment of available manpower data and an
appraisal of educational capabilities.

The Imperial Planning Board is the principal government planning agency through which all development projects are channeled. External aid is channeled through the Economic and Technical Assistance Board in the Ministry of Finance, but little effort has been made to coordinate this foreign aid with the Second Five-Year Plan (1962-67). Information on manpower resources and requirements was developed through several studies by UNESCO and by Professor Zack (see preceding summary) but they lacked the occupational detail necessary for educational planning. AID currently is negotiating for a study on the overall assessment of future manpower requirements.

Dramatic strides have been made in education, despite an overcentralization of administration and a limitation of funds for education. Weaknesses of the system, as pinpointed by the 1962 UNESCO study, still exist, such as the small proportion of school age children in school (5.5 percent), the high dropout rate (50 percent between grades 1 and 2), poor geographical distribution of schools, low teacher-pupil ratios, low percentages of girls attending schools, and poor teacher training.

Priority needs should be integrated in AID's own development strategy for Ethiopia. Continuous consultation with appropriate Ethiopian

agencies is necessary to revise the strategy periodically. Although existing studies fail to provide occupational needs, certain priority needs can be identified easily; specifically, secondary school teachers government administrators, agricultural technicians, and managers and skilled workers for manufacturing industries.

Recommendations

1. A comprehensive manpower survey is needed.
2. New manpower planning machinery should be encouraged. AID should provide advisers to coordinate efforts of the proposed Manpower Research and Statistics Section of the Labor Department and the Interdepartmental Manpower Information Advisory Committee.
3. AID should assist in the recruitment and training of government employees through the participant training program.
4. Assistance to secondary education and teacher training should be continued by the University of Utah.
5. High priority should be assigned to institutional development at the university level.
6. Registration of overseas students should be established.

A Manpower Strategy for Ethiopia
(1966; 79 pages)

Eli Ginsberg (U.S., Columbia University) and Herbert A. Smith
(Government of Israel), AID Manpower Consultants

A comprehensive study of the various factors affecting
manpower development in a modern economy.

The Ethiopian Government established a National Manpower Advisory Committee in the Ministry of National Community Development as a result of the recommendations of the Education and World Affairs Committee report. (See preceding summary.) This study is an outgrowth of the Committee's recommendations.

Information on manpower supply and demand came from various sources, such as the 1955 census of population, the Planning Board, educational institutions, and conversations with knowledgeable people. The population figure is around 2.5 million, of which 6.7 percent is urban. The best estimate of literacy in the country as a whole places it in the 5 to 7 percent range. Literacy in urban areas is higher; 52 percent of the male population 10 years and over are literate. The only prospect for a substantial rise in general literacy hinges on an expansion of the educational system in rural areas.

The Ethiopian Government is the prime employer of trained manpower--about 95 percent of all college-trained people are in the government sector. Therefore, the most important determinant of future demand for trained manpower will be the rate of growth in government expenditures. Difficulties are emerging in finding the right balance between professional and

subprofessional manpower. In numerous cases, it was observed that the high-level professional was underutilized because he had to spend a great portion of his time in activities usually assigned to technicians. These and other strategic manpower issues are discussed in full.

The educational output at each grade level was assessed for each year since 1950. Enrollment at the lower grades has expanded rapidly, but the dropout rate remains high. Only about 0.5 percent reach the first year of college and fewer than one-fourth of these graduate.

Recommendations cover every facet of a manpower development and utilization program. The following are a few examples:

1. Teacher training institutes should be established and supplemented by Peace Corps volunteer teachers.
2. Contracts with foreign firms should require that Ethiopians be trained for all skill levels.
3. Government salaries should be independent of university degrees held; rather, a career system based on merit should be developed.
4. A rural educational system should be expanded and broadened in order to develop a more productive agricultural society.

Development of an Employment Information Program
(1958; 26 pages)

ILO Report to the Government of Ghana;
ILO/TAP/Ghana/R.2; Knut Palmstrom (Norway)

A report on the current sources of employment information, the conduct of an establishment survey, and programs for continuing and improving the employment information program.

As a whole, existing statistical data on manpower were unreliable or out of date. The following are the two main sources of information:

1. The Office of the Government Statistician collected by mail annual and quarterly data on employees in private nonfarm establishments. The results generally were published two years late; no attempt at analysis was made.

2. The 18 Public Employment Centers (PEC) submitted monthly statistical reports to the Labour Department on unemployment, vacancies, and placements. The law required that these data be analyzed to provide general employment market information. However, no analysis or appraisal of the employment situation was being attempted.

The consultant introduced several fundamental changes in the method of operating the PEC's in order to improve their efficiency and thereby provide reliable and more useful reports on local employment market conditions. To consolidate these improvements, he prepared a new

Manual of Instructions, which was distributed to the PEC's.

Conclusions and Recommendations

The experience of the consultant confirmed the view that existing services could provide a solid foundation on which to start building an employment information program. The improvements initiated by the consultant in the administrative organization and in technical competence of the officials concerned should be considered as only the first stage. Considerable further development will be needed over the coming years before the program will be providing the full range of information necessary for the formulation of manpower policy and before the country will be in a position to make full use of the information so provided.

Detailed recommendations on administrative issues and technical aspects were made. The recommendations relate to developments which appear practicable in the next few years.

Manpower Problems in Ghana's Economic Development Program
(1959; 3 pages and 4-page attachment)

Robert L. Thomas, Consultant, The Ford Foundation

This memorandum consists of recommendations and conclusions regarding a manpower program for Ghana based on discussions with high-level officials.

In a memorandum to government officials, the consultant lists his observations on the types of manpower information needed for Ghana's Five-Year Development Plan (1959-64). Although steps had been initiated to establish a labor market information program (see preceding page), it may be several years before the program is fully functioning. To bridge this gap, it is recommended that a manpower survey be conducted along the lines of a similar one made in Uganda by the consultant. (See page 69.) He suggests that the Ford Foundation provide a con-

sultant for this project. (See following two pages.)

The Government of Ghana should go beyond taking a one-time manpower survey and make plans to establish a permanent organization for manpower development. Several pages of notes on the subject of a manpower program are attached. The major topics cover the administrative and organizational machinery required for a manpower development program and the principal kinds of statistical data necessary for manpower planning.

Survey of High-Level Manpower in Ghana
(1960; 17 pages)

Edward D. Hollander, Consultant, The Ford Foundation

This report is a direct outgrowth of the recommendations made previously by a Ford Foundation consultant. (See preceding summary.)

The purpose of the mission was to conduct a survey of high-level manpower and to recommend organization and procedure for an effective manpower development program. The survey was to provide a benchmark for projecting supply and demand of highly trained people. It was hoped that the survey would also serve as a first step toward the establishment of a manpower organization.

During the 1950's, the economy grew 5 percent a year, about twice as fast as population. Lacking official estimates or projections, the consultant made his own assumptions that the rate of growth for the 1960-65 period would continue at the same pace. Separate assumptions were made regarding the impact of the projected Volta River Project, in accordance with plans submitted by engineers from Kaiser Aluminum.

The survey covered over 200 establishments in both public and private sectors of the economy, which represented about 90 percent of nonfarm wage and salary and government employment. Among the 241,000 employees covered, about 54,000 were working in 120 high-level administrative, professional, technical, and skilled crafts occupations.

Projections of high-level manpower requirements indicate a net increase of 39 percent over the 1960-65 period. Replacements for death and retirement bring this figure up to 62 percent. Requirements are largest among primary school teachers and in the skilled manual occupations; but secondary school teachers and physicians will be the most difficult to find.

The most serious manpower problem is the underutilization and low productivity of the labor force. Capital investment and spread of technology eventually will improve underemployment, especially among those in agriculture and trade. Low productivity, resulting primarily from poor nourishment and endemic illness, can be alleviated through vigorous national programs to increase food production and to extend public health services.

Recommendations cover the procedures for:

1. Establishing a manpower organization.
2. Recruiting, training, and utilizing Ghanaians.
3. Introducing an institutional base for manpower programs.
4. Developing a program for manpower information and research.

Survey of High-Level Manpower in Ghana
(1960; 62 pages)

Robert D. Loken, Manpower Adviser, The Ford Foundation

Final report of the 1960 Ghana Manpower Survey.
(See preceding summary.)

The findings of the 1960 survey are described more fully in this final report. There are some small discrepancies in data between the two reports but not enough to alter the conclusions and recommendations. Tables on current occupational vacancies and projected needs are provided. Problems of shortages and anticipated supply in each of the major occupations are discussed.

Ghana can draw on three basic sources of supply to meet its high-level manpower requirements:

1. Those employed now--By upgrading those already in high-level occupations, most of the requirements for additional personnel will be met by 1965. Furthermore, if only 5 percent of the large pool of unskilled labor were trained for skilled trade occupations, more than 10,000 employees would be added to the high-level segment by 1965.

2. The educational system--Schools and colleges will furnish about 25,000 additional persons to the high-level labor force. Vocational guidance

should be provided to middle and secondary school leavers; these are the almost exclusive source of Ghana's future high-level manpower. An inventory of personnel in training at technical schools, universities, and on-the-job is provided.

3. Imported personnel--The use of overseas personnel should be limited to urgent needs only. Most expatriates can be hired on contract basis for short-term assignments.

Recommendations include the creation of a Manpower Committee representing all sectors of the economy and coordinating all activities relating to manpower. The 1960 Manpower Survey should serve as basis for the preparation of a comprehensive manpower development plan to establish programs and targets.

Appendix A describes the method used in estimating wastage among high-level manpower. It was necessary to construct life tables of males from data derived from various studies made for other countries. The method used here would be adaptable to many other countries.

Development of the Employment and Manpower Information Program
(1963; 138 pages)

ILO Report to the Government of Ghana;
ILO/TAP/Ghana/R.7; A.N.K. Nair (India)

Report appraises the progress of the manpower information situation since 1958, evaluates the usefulness of this information in relation to manpower planning, and provides technical assistance and recommendations on other manpower programs and procedures.

The consultant worked directly with the Employment Service Branch in the Labour Department and cooperated with the National Planning Commission, the Central Bureau of Statistics, and the Department of Education. Eventually, a Technical Working Group was formed consisting of representatives from all organizations concerned with the collection of manpower data.

Available Manpower Information

1. Establishment reports on employment and earnings, collected quarterly by Central Bureau of Statistics from establishments that employed 10 persons or more--Although many recommendations were made by the 1958 ILO mission, 1/ the program has not made much progress.

2. Public Employment Centers (PEC) for monthly statistical summaries of their activities --Because of inadequate technical supervision at these Centers, quality of the work suffers.

3. Factory inspectors reports on important information regarding occupational descriptions and salary ranges--Lack of staff prevents adequate coverage of plants.

4. Survey of High-Level Manpower in Ghana, 1960 2/--This study provides a factual assessment of and projections for high-level manpower requirements.

5. Educational statistics on enrollments, by type of course--Figures on the successful completion of these courses are not available.

6. Population census of 1960 (available 1963) --This source provides benchmark data for employment and manpower studies.

Work of the Mission

With the advice and guidance of the Technical Working Group, the consultant worked out a plan for the effective development of the Public Employment Centers, which included a test pilot project. More than half the publication is in the form of appendixes which make up a manual for establishing an effective employment service program:

1. Sample forms for collecting manpower information (20 pages).

2. Examples of operating activity reports (9 pages).

3. Procedure for collecting and analyzing employment and manpower information (36 pages).

4. Interim recommendations (9 pages).

5. Letter from the Commissioner of Labour regarding the collection of manpower information (3 pages).

1/ See page 20.

2/ See two preceding summaries.

Report on the Punched Card Tabulating Equipment
for the Republic of Guinea
(1962; 14 pages)

J. L. McPherson, AID Statistical Consultant

Statement on one segment on an AID report.

The main portion of this report is on the subject topic. However, the consultant commented on the state of statistical competence of the professional Guinean. The observation was based on discussions with persons in authority and responsibility regarding the compilation of statistics to be machine-processed.

In essence, there was a complete lack of regard for the quality of the statistical data being processed. Members of the Office of Statistics felt their role was only to process the data and not to question the accuracy and completeness of the basic input information. The most distressing element, to the consultant, was the obvious satisfaction of the professionals with this state of affairs.

Further questioning with regard to the disposition of tabulated output revealed that the tabulations were kept secret within the GOG until they were at least 1 year old. The express reason for this practice was "because we are not sure they are right and we do not want to subject the reports to outside criticism."

The consultant believes there is great need for competent statistical advice in Guinea. "Ill-advised, ill-implemented statistical activities will result in unsatisfactory results which will be blamed on the the data-processing equipment supplied by the United States. This would be an easy way out for them and deleterious to our image as a nation anxious to help."

Study of Manpower Needs, Educational Capabilities,
and Overseas Study
(1965; 54 pages)

Education and World Affairs (Report No. 7); Study Committee on Manpower
Needs and Educational Capabilities in Africa, prepared for AID

A review of the current political, economic, and social
situation in Guinea, and an analysis of manpower supply
and demand.

The aftereffects of independence (1958) left Guinea seriously handicapped when it decided not to join the French community. In retaliation, the French pulled out virtually all middle- and high-level administrative staff, technical personnel, and capital equipment. They also removed or destroyed much of the statistical data that had been compiled on Guinea's economy, labor force, and educational system. Despite assistance from the Sino-Soviet countries, which encouraged monopoly of most enterprises, little economic progress has been made. In addition, the Ministry of Economic Development prepared a Seven-Year Development Plan (1964-70), which is more of a list of proposed projects rather than an integrated strategy.

Little or no data are available on manpower. A 1957 labor force census indicates a nonfarm African labor force of 92,000 of which 420 are in managerial occupations and 18,000 in skilled and

semiskilled jobs. Supply of trained manpower is very limited and acute shortages are likely to persist for some time because of the relatively few secondary school and university graduates. An analysis of manpower needs of the country revealed that the most critical need is for secondary schoolteachers and for middle-level personnel. Guinea must set out a course to produce needed skills in the shortest and best manner possible.

Regarding AID's role in Guinea, a set of priorities should be established, conditioned by the political and economic instability of the country. Recommendations are aimed at supporting the various schools producing middle-level skills. USAID also should encourage an integrated system of manpower and educational planning, which should include manpower planning machinery and a statistical office to collect pertinent data.

Utilization of Manpower in the Kenya Public Service

(1963; 17 pages)

John L. Thurston, Manpower Consultant, The Ford Foundation

An appraisal of the manpower situation, especially in Government Service, and the results of the Africanization program.

Kenya's forthcoming independence (1964) and the probable departure from Government service of sizeable numbers of foreign professional and administrative officers will create a serious manpower shortage. Extraordinary efforts will have to be made to fill the manpower gap occasioned by the time lag between the departure of the expatriates and the return of Africans from universities and colleges overseas.

In 1961, there were 6,000 expatriate officers in the public service. Of this total, 1,000 already have left the service, 900 have filed retirement papers, and 100 are expected to retire soon. Thus, one-third will have left by the time of independence. By the end of 1965, it is estimated that 2,700 will still remain on the rolls. The resulting shortage can be met by only three

sources: new graduates, new expatriates, and existing staff. It is anticipated that by 1965 only 550 eligible graduates will be available to fill the vacant posts. Therefore, the most immediate course of action to meet requirements appears to be through recruitment, training, and promotion of those on the current staff who may not meet normal requirements of education and experience.

Recommendations

1. Retain expatriates as a holding operation.
2. Improve higher educational institutions.
3. Upgrade current employees.
4. Establish a strong Africanization and training unit, responsible also for producing statistical data.

High-Level Manpower Requirements and Resources
in Kenya 1964-1970 (1965; 46 pages)

Calvin F. Davis, Manpower Consultant, The Ford Foundation

A manpower supply and demand survey to serve as base
for revising educational and training programs and
policies.

The high-level and middle-level survey included 348 public and private establishments that employed 100 workers or more and represented three-fourths of total nonfarm employment. The survey covered 165 important occupations.

An analysis of the results indicates that shortages, on the average, are not as serious as expected. For example, the supply of university-trained personnel will be nearly sufficient to meet minimum needs; a 20-percent shortage in middle-level and professional-supporting occupations will occur, shortages in skilled technicians and office workers will be serious; and shortages in the skilled manual worker category will be minor. In some individual occupations, however, serious shortages will exist by 1970 and in others, wasteful surpluses.

Recommendations

1. The proposed Manpower Planning and Programme Section in the Ministry of Economic Planning and Development should be established.

2. The Statistics Division should issue an Employment Trend Report, and should improve techniques of employment surveys.

3. The Africanization program should be expanded and improved.

4. Educational planning should be coordinated and integrated with other plans and programs to meet the occupational needs of the country. The various methods and systems are described in detail.

5. Various measures for increasing the supply of high-level manpower in the Government sector also are described.

Manpower Situation in Basutoland
(1964; 59 pages)

ILO Report to the Government of Basutoland;
ILO/TAP/Basutoland/R.1; Dr. Walter Elkan (United States)

This report assesses the manpower situation and recommends steps to improve the collection and analysis of manpower data for economic planning.

Sources of Manpower Information

1. 1956 Census of Population.
2. 1956 Social Survey--sample survey of households.
3. 1956 Census of Agriculture.
4. Annual Reports--record of number of passes issued to those leaving the country to take employment in the Republic of South Africa.
5. 1963 Survey of Establishments, conducted by the Chamber of Commerce--occupations of skilled workers by income and employment sector.
6. Records of miners recruited on contracts through the Transvaal and Orange Free State Chamber of Mines.
7. Department of Education Annual Reports--training facilities and number of enrollees and graduates at each educational level.

Recommendations

1. The proposal of the Government of Basutoland to set up a Central Statistical Office should be carried out.
2. Integration of statistical data on manpower should be the responsibility of an economic adviser attached either to the Central Statistical office or to a separate planning office.
3. Administrative machinery should be created for economic planning and, later for manpower planning.
4. For the short term, the employment situation and the adequacy of the educational and training systems should be reviewed periodically.

A Pilot Survey of High-Level Manpower in Liberia
(1961; 70 pages)

William Langbehn, AID Manpower Adviser

A detailed description of a manpower supply/demand study.

This report on high-level manpower requirements is one of a series prepared as an overall economic survey of Liberia under the direction of Northwestern University, Evanston, Ill. The consultant was a member of the University Survey Team and worked closely with the Bureau of Economic Research of the Government of Liberia. By identifying the magnitude of existing and prospective shortages of high-level manpower, the team hoped that Government, educational institutions, and establishments would institute action programs to provide training in high-level occupations.

The report describes the various steps taken to conduct a pilot survey of establishments for estimating current levels of employment and projected needs in 25 selected occupations. Techniques used in conducting the survey are outlined; examples of the questionnaire, and the instructions for completing the questionnaire, are supplied. Results from the establishment survey provide information on the current (1961) levels of employment in the surveyed occupations, non-Africans employed in these jobs,

trainees, vacancies, and estimated employment requirements in 1966.

For purposes of analyzing and projecting each occupation, estimates of supply and wastage were calculated. Supply data for each occupation were obtained from various educational institutions in Liberia, and information on students abroad came from Government of Liberia sources. Wastage was estimated from various sources. Each occupation is then described in detail, after all these factors are taken into consideration.

Based on the results of this survey, the consultant discusses the manpower problems in Liberia and makes recommendations for alleviating some of these problems. A short section evaluates the techniques used in this survey and makes recommendations for improving subsequent studies.

Appendix E summarizes a recent report, Survey on the Present Vocational Training Facilities and the Future Vocational Training Needs of Liberia, by Dr. Hans Baritsch of ILO.

Study of Manpower Needs, Educational Capabilities, and Overseas Study
(1965; 42 pages)

Education and World Affairs (Report No. 5); Study Committee on Manpower
Needs and Educational Capabilities in Africa, prepared for AID

Educational study for the purpose of delineating AID's
role in manpower and educational development in Liberia.

Liberia is attempting to launch a 5-year development plan. The Office of National Planning is to be the staff arm of the National Planning Agency. The Department of Education, the Bureau of Labor, and the Office of National Planning probably will coordinate to form a National Manpower Commission. It is assumed that one of the first tasks of the Commission will be to estimate Liberia's manpower requirements and to propose a strategy by which all training programs could be utilized most effectively.

Precise data on current employment of high-level manpower are not available. Langbehn's 1961 survey is limited to certain manpower fields and to major employers; the government census of 1962 fails to distinguish between high-, middle-, and low-level manpower. Nonetheless, even with these limitations, statistics from these surveys can be useful for manpower planning.

The bulk of the report describes the educational capabilities of Liberia and the availability

of overseas scholarships. About 10 percent of the national budget is allocated to the Department of Education; additional funds are available from external grants and loans (USAID, Peace Corps, Ford Foundation). Current enrollment, the number and quality of the teaching staff, and the curricula of each education and training facility are discussed in detail.

Recommendations for AID action

1. Encourage the development of the education and manpower planning machinery in Liberia.
2. Support boarding facilities and consolidation of small schools at the secondary level.
3. Continue to improve secondary teacher-training techniques and materials.
4. Assign highest priority to the development of an effective instructional program at the university.
5. Support overseas postgraduate study.

Manpower in Libya
(1960; 13 pages)

E.L. Keenan, AID Manpower Consultant

Description of Libya's manpower problems.

The many facets of Libya's manpower situation are categorized into the following major segments:

Manpower in the short term

Current manpower needs can be satisfied somewhat by stepping up the use of training facilities already in existence and by intensifying on-the-job training. Audiovisual training has proved successful for short-term development of large numbers of workers in other countries and may be a useful technique in Libya.

Manpower in the long term

School attendance is increasing at the lower grade levels, but six years of schooling is not enough preparation for the technical and mechanical knowledge required for many jobs. Teachers should be trained to provide occupational guidance to students at a relatively early age. To meet anticipated demand for middle- and high-level manpower requirements, technical and teacher training at the secondary and university levels must be improved.

Balance between foreign and Libyan workers

The national goal is to fill all positions with Libyan workers. On the other hand, employers want qualified workers who know their job and know how to produce. In the short run, Libyans

can fill semiskilled and some skilled positions through on-the-job training or apprenticeship with short-term wage subsidies. These systems are cheaper and faster than expanding the vocational school system. On-job training also permits upgrading people already employed. More attention should be paid to increasing labor productivity rather than enforcing rigid labor laws which make it difficult and costly to discharge inefficient workers.

Manpower in Government

The various shifts of personnel in Government result in poor manpower utilization. To cope with this situation, training-within-government programs should be initiated to provide training to Government workers. Foreign experts already employed by the Government could assist as training instructors in their special areas of competence.

Recommendations (other than those indicated above)

1. The new Ministry of Labor and Social Affairs should plan and administer a manpower program coordinated with the overall economic goals.

2. The Libyan Development Council eventually should coordinate the various phases of manpower development with various Ministries, organized labor, and organized employers.

A Manpower Information Program
(1962; 24 pages)

ILO Report to the Government of the United Kingdom of Libya;
ILO/TAP/Libya/R.7; C.P. Van Rijn (Netherlands)

An assessment of current and anticipated manpower supply and demand, and recommendations for the development of a manpower information program.

Existing sources of data include the 1954 Census of Population, 1956 Census of Employment and Production, 1958 National Income Estimates, the biannual establishment survey, and social security records. Data from these sources are not comparable with each other and are incomplete for the purpose of analysis. Improvements in the methods used in the establishment survey are most likely to yield the most potentially useful data for manpower analysis.

Recommendations

1. A separate Department of Manpower should be established in the Ministry of Labor and Social Affairs. This Department should exercise a co-

ordinating function, in consultation with representatives from government, employers, and workers, to determine the need for manpower information and to allocate responsibility for collection, analysis, and dissemination of the results.

2. Information from the establishment survey should be utilized better. By law, employers are required to **prove** details of their work force to employment offices every 6 months. Specific recommendations for improving the various step in the collection of information are detailed. For example, the Department of Labor should prepare a card index on employers, by using social security cards as a check.

A Survey of Requirements of Professional, Technical and
Skilled Manpower in Libya, 1964-69
(1964; 64 pages)

A.N.K. Nair, ILO Expert

A step-by-step description of a manpower survey and an
analysis of occupational needs.

The purpose of the survey was to collect manpower information regarding employment, occupations, shortages, anticipated requirements, and supply of trained personnel. The survey covered all government facilities and three industries in the private sector: petroleum mining; construction; and automobile sales, service and repair. It was believed that these sectors employed most of the high- and middle-level workers. Vocational training institutes furnished data on the output of trained personnel, and the Ministry of Education and the Civil Service provided data on persons in overseas or government training.

Many problems were encountered in collecting information from establishments. Despite repeated visits to individual firms, there were long delays in the receipt of the returns. Lack of staff and time prevented adequate industry coverage. The absence of a national occupational classification system created considerable difficulty in classifying occupations. Moreover, it

was believed that estimates of future manpower requirements were understated. Despite these problems, the results of the survey provided the planning and training authorities with some quantitative data, which did not exist before, to enable them to appreciate the magnitude of manpower needs and to prepare a manpower development plan.

Recommendations

1. Additional training programs of higher quality should be available and should include training overseas.
2. Better utilization of manpower should be made by placing people in occupations for which they were trained.
3. The wage and salary policy should be reviewed in order to provide incentives to young people to enter technical and skilled fields.
4. The continuing study of manpower supply and demand should be strengthened and improved.

High-Level Manpower in Nyasaland's Development
(1962; 29 pages)

George Seltzer (University of Minnesota), Manpower Consultant for Carnegie Corporation;
article in Manpower and Education, Country Studies in Economic Development,
Frederick Harbison and Charles A. Myers, editors (New York, McGraw-Hill
Book Company, 1965), pages 268-296

A policy-oriented discussion of key manpower issues
confronting the Government of Nyasaland (later Malawi).

Nyasaland is in the process of transition (as of 1962) from a territory within the Federation of Rhodesia and Nyasaland to self-governing status. The new Malawi Government will face massive problems in all areas of development.

Agriculture is the dominant economic activity; nearly half of the Gross Domestic Product comes from agriculture which employs about 38 percent of total labor force. Thirteen percent of the labor force are employed in construction activities and 10 percent are in manufacturing.

Nyasaland is a substantial exporter of labor throughout central and southern Africa. In 1960, about 160,000 Nyasas were working outside the country compared with about 152,000 employed internally. It is, however, an importer of high-level and skilled manpower. Over 90 percent of all administrative and professional personnel come from European countries.

Basic education in Nyasaland has its roots in missionary activities. A dual school structure has prevailed for both Africans and non-Africans. The formal education process usually does not yield high-level manpower qualified to enter employment; customarily, additional training or education is required. The results of a 1962 study of current and projected manpower resources and requirements are described.

The establishment of a Manpower Council is essential for coordinating and developing a manpower program. Its basic role is two-fold:

1. To provide assurance the manpower, education, and socioeconomic decisions are made in a common frame and with direct reference to one another.
2. To prepare an action-oriented human resource program in support of development goals and targets and to oversee its operations.

Education for Development
Education in Malawi
(1964; 81 pages)

American Council on Education, prepared for AID

Describes the present educational situation in Malawi and recommends that priority be given to expansion of secondary education and to introduction of higher education.

The purpose of the survey team was to assess Malawi's needs for educational institutions and curricular emphasis and to propose an educational plan for Malawi's economic and social development for the next 15 years. Whenever possible, the team correlated its work with the manpower survey recently completed under Carnegie Corporation (see preceding summary) auspices and with the Malawi Government's economic development plan.

Malawi's 3.7 million population (1963) is growing at a rapid rate; the number of children needing education is increasing at an even greater rate. About 360,000 children (half of the total) are in primary schools, 3,000 in secondary schools, 900 in vocational schools, and over 200 in foreign schools. The 11 teacher-

training schools do not prepare enough teachers adequately. In light of these and other facts, the Government has given education high priority and is devoting 3 percent of its gross domestic product to education.

The team made detailed recommendations for the development of education at each level on the basis of analyses of available data and projections to 1980. Priorities are suggested and cost estimates are provided.

The team specifically recommends the establishment of an educational planning function within the Ministry of Education and the University. In addition, a representative from this unit should work closely with the Manpower Council, which had been proposed by the Carnegie Corporation Manpower Survey Team.

Manpower Study for Mali
(1961; 47 pages)

Valmore J. Doucett, AID Manpower Consultant

A survey of manpower resources and requirements in
Mali.

Prior to the arrival of the consultant, questionnaires regarding employment had been sent to all Ministries; only one was returned. Direct contact with individual Ministries was not permitted and travel restrictions prevented direct observation. Available data from other records were inadequate. Some information on students abroad was obtained through the Office of Foreign Affairs and the Ministry of Plan and Rural Economy.

The population figure of Mali is 3.8 million, of which 95 percent are rural and 97 percent are illiterate. Only 8 percent of school age children attend school. Per capita income is US\$52. Life expectancy is 37 years.

Based on the Five-Year Plan, estimates of manpower requirements for industrial establishments were made. Estimates of Government employment were projected on the basis of the number of vacancies reported in the 1961 budget. Nearly 600 students are being trained abroad, about half in France and about one-fourth in Communist countries. About 160 are in the process of being selected for technical training in the U.S.S.R. Most of the skilled workers will have to be imported until training facilities are adequate to meet the needs.

An interesting section on comparative studies describes the experiences in training people of other developing countries: Indonesia, Liberia, Nigeria, and Libya.

Diagnostic Report on Manpower Statistics
and Conditions in Morocco
(1966; 44 pages)

DOLITAC 1/ Staff Paper No. 27;
Kenneth G. Van Auken, Jr., Manpower Consultant

An inventory and evaluation of available manpower data and recommendations for short-term and long-term manpower development programs.

Most of Morocco's economic and social problems are a result of the rapid rate of population growth, 3.3 percent annually (projected to 3.5 percent in 1960-70). Agricultural output has not kept pace with population growth and has forced a rural-to-city migration and importation of food products. Labor-intensive programs and a firm educational base for the development of skilled workers are needed. An especially strong emphasis should be made to produce workers with technical skills in agriculture.

The Planning and Statistical Division of the Ministry of Development faces the problem of skilled manpower shortages and imbalances, which were revealed when the Five-Year Plan (1965-70) was drawn up. However, there is a lack of current and reliable manpower data for assessing and planning action programs. Data sources include:

1. 1960 Census (lacks detail in occupational skills).
2. National Accounts: section on employment in manufacturing and mining (1964).
3. Establishment survey of high-level manpower (1963).

4. Pilot survey of establishments for employment and wages (1958).

The Ministry recognizes the limitations of these sources and currently is attempting to improve and expand its data-gathering activities.

It is recommended that at least two U.S. manpower experts be assigned to work with the Planning Division to help develop manpower programs. Most urgent work is required to combat the high urban unemployment, about 28 percent of the urban work force, by applying the experience of the U.S. Civilian Conservation Corps to orient urban unemployed youth toward agricultural and rural pursuits. Upgrading existing skills is another major area for technical assistance. Course work to produce agricultural extension workers and other farm workers can help improve food production and work opportunities in the rural areas. In the long run, an inventory of skills and a survey of skill needs should be prepared in order to determine educational and training needs. Steps on how these tasks can be accomplished are described.

1/ U.S. Department of Labor International Technical Assistance Corps.

Investment in Education 1/
(1960; 139 pages)

Sir Eric Ashby, Chairman of the Commission on Post-School Certificate
and Higher Education in Nigeria (financed by Carnegie Corporation)

A comprehensive report of Nigeria's educational needs
up to 1980, based on projections of high-level manpower
requirements.

One of the basic documents used by the Commission to project education needs was the study prepared by Frederick Harbison on Nigeria's high-level manpower needs. A copy of this study is included in the Commission's report.

Harbison estimated that 31,000 additional high-level personnel and 55,000 additional technical and supervisory personnel would be needed by 1970. The current educational system is not capable of producing this quantity. The short fall would have to continue to be filled with expatriates. (About one-third of high-level manpower is foreign.) Some upgrading of skills can fill the gap a little, but not to the extent required.

Harbison concluded that Nigeria's most urgent need is for a fivefold expansion of intermediate (technical) education. At the university level, the most urgent need is for technical and scientific education. Although technical education is more costly than liberal education, Nigeria should be prepared to support this program.

The major recommendations of the Commission aim at upgrading current skills and designing a postsecondary system to ~~produce~~ the

estimated 1970 needs. In order to assess educational needs at the higher levels, the Commission estimates the number of pupils and teachers in primary and secondary grammar schools up to 1970. The final report covers in detail all levels of the education system. The acceptance of the Commission's report appears in Educational Development 1961-70, Sessional Paper No. 3 of 1961, Federation of Nigeria, along with modifications and changes in the recommendations.

To provide guidance and balance between education and manpower, the Commission recommended the establishment of an Inter-Regional Manpower Board and a Manpower Secretariat. 2/

1/ Also known as the Ashby Commission Report.

2/ A National Manpower Board was established in 1962, members of which are drawn from all sectors of the economy. Several interesting and informative manpower studies have been published by this board.

Establishment of an Employment Market Information Program
(1962; 24 pages)

ILO Report to the Government of Nigeria;
ILO/OTA/Nigeria/R.3; R.N. Jackson (United Kingdom)

A review of the employment service organization and
sources of employment data.

The Labour Division of the Federal Ministry of Labour operates a field organization of labor offices; a main labor office is in each of the three regional capitals. There is no separate budgetary provision of a national employment exchange as such. Employment exchanges are operated at most labor offices, but their control is only one of the many duties of a labor officer. Very little specialization, such as testing and counseling, is done. The offices are poorly equipped and scantily staffed. This situation will be aggravated when new responsibilities are assumed as a result of the acceptance of the Ashby Commission Report. (See preceding summary.)

Available data on employment were insufficient for effective employment service operations. They consisted of the following:

1. 1952-53 census (a 1962 census is underway).
2. Annual establishment report of employment and earnings.
3. Quarterly review of labor inspection activities and similar matters.
4. Registrations and placements of the employment exchanges.

Steps were taken to conduct a pilot survey of establishments to obtain the necessary current data. An index of establishments was compiled for Lagos and later extended to cover all of Nigeria. All manufacturing establishments that employed 40 workers or more, all nonmanufacturing establishments that employed 100 or more, and selected government agencies were included in the survey. The questionnaires were mailed and followed by personal visits. Occupational classification was done by the consultant and his counterpart. Later an Occupational Research and Analysis Unit was set up in the Employment Services Branch. The results of the survey confirmed the pressing need for trained technicians, a need mentioned by the Ashby Commission.

Specific recommendations covered improvements in the administrative, financial, and functional aspects of an effective Employment Service Office. The index of establishments should be maintained; other agencies possibly could supply the needed information. Future establishment surveys should be based on the method devised by the consultant and a manual of procedures should be prepared when these methods have been standardized.

Study of Manpower Needs, Educational Capabilities, and Overseas Study
(1965; 58 pages)

Education and World Affairs (Report No. 8): Study Committee on Manpower
Needs and Educational Capabilities in Africa, prepared for AID.

Report assesses available data on high-level manpower needs, appraises capabilities of Nigerian educational institutions to meet these needs, and surveys opportunities for study abroad.

The National Development Plan, 1962-68, prepared by the Ministry of Economic Development, called for an average annual Gross National Product growth rate of 4 percent. Highest priority was given to agriculture, industry, and training of high-level and intermediate-level manpower. Accomplishments to date were difficult to assess at this time (1965) but many observers concluded that Nigeria fell short of its goal.

The National Manpower Board, created in 1962, prepared a comprehensive establishment survey of high-level manpower needs in government, educational institutions, and private industry. There is a severe shortage of skilled manpower. Revised projections indicate that Harbison's 1970 estimates of middle-level manpower were too low by nearly half. ¹/ In fact, 1963 employment already approximated Harbison's 1970 target. This discrepancy arose because he defined intermediate personnel in terms of education received or required, whereas the Manpower Secretariat counted all those

who actually were working in the occupation regardless of their educational background. This situation suggests the critical importance of in-service training and upgrading of those already employed.

Excellent descriptions of the manpower machinery and of the educational capabilities of Nigeria are provided.

The major recommendations of this report concentrate on the "desirable directions" of U.S. Government aid. AID should give first priority in its assistance strategy to the development of indigenous institutions and second priority to scholarships and other student aid at Nigerian universities. Lower priority should be given to assist Nigerians to study in the United States. Each of these items is explained in detail.

¹/ Copy of Harbison's study is included in the Ashby Commission report. See page 39 for reference.

Nigerian Human Resource Development and Utilization
(1967; 200 pages)

Education and World Affairs Report: Committee on Education and Human Resource Development, Nigerian Project Task Force, Frederick H. Harbison

Manpower needs of the Nigerian economy and the educational and training system.

The purpose of the project was to assist AID in evaluating and planning its program of assistance to Nigeria in the area of education and human resource development.

Nigeria is fortunate in having available well developed planning machinery. The principal integrating body is the National Economic Council and its subsidiary, the Joint Planning Committee. In the area of education and human resource development, there are the Joint Consultative Committee for Education, the National Manpower Board, and the National Universities Commission.

Part I of the report describes the problems and manpower needs of the Nigerian economy; Part II analyzes its training and educational system, both formal education at all levels and in-service training; and Part III discusses the financing and efficiency of formal education.

The summary presents five priorities for AID action:

1. The educational and training system should be directed more effectively to the needs

of the intermediate and low productivity sectors, especially small industries and rural enterprises.

2. Critical high-level and middle-level personnel, such as scientists, technicians, management personnel, teachers, should be trained to fill the needs of the high productivity sectors.

3. Existing educational and training resources should be better utilized through improved planning and coordination among governmental units.

4. Better qualified teachers should be developed by upgrading through in-service training programs.

5. To facilitate achievement of these priorities, "development orientation" should be encouraged throughout the educational and training system. Such a system incorporates two vital elements: (a) an employment orientation whereby youth are trained to serve as productive members of society, and (b) service on the part of the educational system to the critical national development goals (social, political, and economic).

Manpower Development and Utilization Policies and Practices
in the Rhodesian Private Sector and their Interrelationships with the Management System:
A Case Study
(1966; 295 pages)

New York University, Graduate School of Business Administration:
Ph.D. dissertation by Charles G. Nowacek

A study of the practices and policies of private firms
and statutory boards that affect manpower development
and utilization in Rhodesia.

Since mid-1950, the labor market has moved rapidly toward an advanced stage of maturity. An increasing number of male Africans are employed in manufacturing, mining, and construction and have relatively stable attachments to the urban labor markets. However, the continued use of worker registration for controlling mobility and the weakness of the trade union mechanism are signs of structural inhibitions to full labor market maturity.

For the economy as a whole, and within firms, training of manpower deserves more resources, attention, and planning of government and top management. The output of skilled workers is inadequate to meet current and future needs of industry. Industry should encourage general upgrading of all skills of the work force by depend-

ing primarily on apprenticeships and in-service training rather than on external sources of supply.

Given the political stability in Rhodesia in terms of the assumptions outlined and the political-racial context, both the constitutional government and the juridical system should provide the framework for a continuation of past industrial and social development. This framework should provide the means of escaping not only the policies of apartheid but also the implementing measures implicit in these policies. It should also encourage attitudes and the institutional patterns of advancing the growth and development of Rhodesia as a whole, within multiracial schemes, systems, and subsystems of manpower administration.

Development of a Manpower Program
(In French; 1962; 52 pages)

ILO Report to the Government of the Republic of Senegal;
OIT/TAP/Senegal/R.2; Leon Reneau, (Belgium)

Assessment of manpower situation in Senegal.

The Four-Year Economic Development Plan (1961-64) did not include statements on human resources or on manpower development. Recognizing this omission, the Government created a Ministry of Education and Training to provide the necessary trained manpower to meet the economic goals. Current data are insufficient to provide an accurate picture of the employment situation. The few data that are available are described.

The Employment Office has not been able to render useful service because of the competition from private employment placement offices. According to a recent labor law, the Government plans to grant the Employment Service complete monopoly in placement functions.

Two manpower surveys were conducted to determine occupational requirements for meet-

ing the needs of the economic plan. The surveys covered both public and private sectors of the economy. The results indicate that the number of high- and middle-level manpower in the public sector must be increased by a third (or 9,000), and in the private sector by 5,000. A survey also was made of the various training institutions to determine availability of trained manpower.

Recommendations

1. Surveys of manpower resources and requirements should be made on a continuing basis.
2. An inventory of trained manpower should be maintained by utilizing records of training institutions.
3. The administrative machinery for manpower development should be expanded and improved.

Organization of the Employment Service
(In French; 1963; 34 pages)

ILO Report to the Government of the Republic of Senegal;
OIT/TAP/Senegal/R.3; Leon Reneau, Belgium

Description of the functions and operations of the
Employment Services.

As the result of the labor law of 1961, the Employment Service was established on the basis of the ILO Convention No. 88. However, because of its small budget, it has not been able to fulfill the needs of an effective manpower service. For example, only one agent was assigned to carry out placement and registration functions in each regional office. (The law provided that these functions be separate.) Lack of funds also delayed the collection of statistical information such as number of workers employed. The functions and operations of the Employment Service offices are described in detail.

The structure of the central office at Dakar and of the four regional offices appears to be

adequate for normal Employment Service functions, but the opening of two new regional offices was not justified.

Recommendations emphasized that the work which was started by the consultant should be continued. This work consisted of collection of registration statistics, improvement in placement procedures, and adaptation of ILO occupational classification system. In addition, an inventory of establishments should be developed.

A National Consultative Commission on Statistics, at the level of the Commissioner General of the Plan, should be established. The Chief of the Employment Service should be an effective member of the technical section of the Planning Organization.

The Organization of the Employment Service
(In French; 1964; 17 pages)

ILO Report to the Government of the Republic of Senegal;
OIT/TAP/Senegal/R.5; Alfred Caron, (Belgium)

Continuation of the work started by the preceding
ILO consultant.

This report is an elaboration of preceding recommendations concerning the organization of the central and regional Employment Service offices in accordance with the labor law of 1961.

Recommendations described the efforts which should continue or should be initiated to provide an effective Employment Service. Recommendations were made on the following topics:

1. Improvement of physical facilities.
2. Cooperation among the various offices and with the central office.
3. Popularization of Employment Service activities.
4. Training of personnel.
5. Preparation of a technical manual.
6. Improvement of operating procedures.
7. Classification of occupations.

Survey of Manpower Requirements at Higher and Intermediate Levels
(1965; 59 pages)

Report to the Government of Sierra Leone, prepared by Robert Brown (London)

A preliminary study based on limited available data.

The first Census of Population, conducted in 1963, indicates a population of over 2 million, of which 90 percent is directly dependent on agriculture. About 63,000 people in the labor force are wage earners. Surveys of establishments and of educational and training institutions were conducted by the consultant to analyze currently employed nonfarm manpower, to estimate future needs, and to compare these needs with anticipated educational output. The methods used in the establishment survey and in the educational training capability survey are described fully and detailed tables on the results are presented in the appendix.

An analysis of manpower supply in relation to estimated needs reveals that serious deficiencies will occur in almost every occupation

at all levels of education. Government administrative officers represent the only real surplus, primarily because certain students are on government scholarships and "bonded" to government services on graduation.

Recommendations

1. Manpower needs should be reviewed periodically in order to revise manpower and educational planning.
2. A Manpower Planning Unit should be established in the Development Office and integrated with all planning functions.
3. After organization of this Unit and processing of census data, a full-scale supply and demand manpower survey should be conducted.

Somalia Manpower Survey
(1966; 4 pages)

Airgram A347, May 14, 1966, prepared by Amembassy Mogadiscio

Summary of an ILO report on the manpower situation
in Somalia (full text, 11 pages).

Because of high birth and mortality rates, Somalia has an unusually large proportion of its population in the preworking age. Approximately 75 percent of the population is dependent on the other 25 percent. No national figures are cited, but recorded unemployment in Mogadiscio was four times higher by the end of 1963 than it was in 1960 and is expected to get worse.

The ILO consultant, Dr. Nizan, recommended concentration on labor-intensive rather than capital-intensive projects to help absorb the large potential pool of unemployment. To bring this about, he proposes bringing new farm areas under cultivation, introducing agrarian reform,

constructing reservoirs and ponds, developing forest and fisheries resources, and promoting community development programs.

Present shortages in skilled manpower also will continue to get worse unless certain steps are taken. The country particularly needs scientific and engineering graduates. These can be trained by overseas study and by intensive on-the-job and technical school training.

In summary, the study makes an "excellent case for planning for education, not as a desirable adjunct to, but as a necessary and integral part of, economic planning."

Establishment of an Employment Market Information Program
(1965; 38 pages)

ILO Report to the Government of the Republic of the Sudan;
ILO/OTA/Sudan/R.9; H. P. Davenport (India)

An intensive study of all aspects of manpower develop-
ment and planning in Sudan.

An Employment Service had been established in Khartoum; but the methods of registration, occupational and industrial classification, and statistical collection made the data unsuitable to serve as a source of employment market information. To obtain up-to-date information regarding employment in industrial establishments, the consultant conducted surveys of establishments to obtain information on employment, occupations, in-service training programs, vacancies, and similar data. Only about 50 percent of the surveyed establishments responded. Population and labor force projections were made on the basis of the 1956 Census of Population. The results from the surveys and these projections aided in the preparation of the proposed Ten-Year Plan.

Conclusions

1. Manpower problems were developing as a result of the rapid increase in the number of persons of working age, the shortage of skilled personnel, and dependence of foreign workers.

2. The development of manpower was hampered by the lack of coordinating manpower administrative machinery.

Recommendations

1. Officials should promote wide understanding of the need for manpower planning.

2. A manpower advisory committee and coordinating machinery should be established to integrate manpower policy with economic and social development planning.

3. The work of the existing Manpower Planning Administrative Unit should be reviewed. (Work consisted of survey techniques.)

4. The Employment Service should be organized according to ILO Convention No. 88.

5. In view of the serious shortage of skilled workers as revealed by the survey, the valuable comments made by respondents should be re-examined.

6. A manpower assessment and planning consultant should be assigned to aid in carrying out the various recommendations, and a suitable local counterpart officer should be identified.

Functions and Activities of the Department of Labor
(1965; 26 pages)

DOLITAC 1/ Staff Paper No. 3;
Arthur W. Motley, Manpower Consultant

Review of current labor programs and recommendations
for the establishment of a workable Ministry of Labor.

The purpose of the mission was to make a detailed analysis of the functions and operations of the Department of Labor in Sudan. The effectiveness of the Department would be improved by AID's assisting it to provide leadership for the creation of a viable labor movement and to contribute to a long-term economic development program. The recommended organizational pattern and a summary of the various recommendations, actions to be taken, and technical services needed appear in the appendix.

Under the Ministry of Labor, three specific functions should be established:

1. Manpower--responsible for all activities of the Employment Service, vocational training, apprentice training, on-the-job training.

2. Standards--responsible for ordinances providing worker protection: collection of wages, protection against job injuries, factory inspections, workmen's compensation, child labor.

3. Labor relations--responsible for trade disputes, registration of trade unions.

Recommendations

1. The Labor Department should assume leadership in manpower planning in coordination with other Ministries.

2. The Employment Service should be improved and reorganized at national and local levels. Especially needed are rural employment development programs and labor market information programs.

3. The Ministry should hire additional personnel and provide in-service training in order to carry out the various recommendations.

4. AID should provide technical assistance in all aspects of the reorganization of the Labor Ministry. Technical services are listed in the appendix.

1/ U.S. Department of Labor International Technical Assistance Corps.

Study of Manpower Needs, Educational Capabilities and Overseas Study
(1965; 42 pages)

Education and World Affairs (Report No. 4): Study Committee on Manpower Needs
and Educational Capabilities in Africa, prepared for AID

An assessment of available data on manpower needs, an appraisal of educational institutions, and a study of overseas training opportunities.

The Ten-Year Plan of Economic and Social Development (1961-71) was formulated by the Economic Planning Secretariat of the Ministry of Finance. Data on manpower are too scarce to be of assistance in planning for high-level manpower development. The records of some of the research conducted by various foreign technicians (ILO, UN, AID) have been lost or mislaid. The manpower analysis conducted by Edwin C. Crosby ^{1/} in 1960 was reviewed as the most comprehensive available study to date.

According to estimates, high-level manpower supply would meet almost 75 percent of the additional personnel required by 1971. Middle-level manpower supply appears to be in greatest need for assistance since only 12 percent of requirements are expected to be met. Specific needs at this level are for technically trained personnel.

Recommendations

1. More effective manpower planning machinery should be encouraged.
2. Assistance should be provided to developing middle-level manpower.
3. Training of employed manpower should be supported.
4. USAID should continue its present support for the University of Khartoum and perhaps increase its assistance.
5. Overseas training should be maintained especially for the development of middle-level manpower.

^{1/} Of the Education Division of USAID/Sudan.

High-Level Manpower Requirements and Resources
Republic of Sudan, 1968-1972
(1967; 55 pages)

John B. Seal, Jr., Manpower Adviser, The Ford Foundation

Assessment of the employment situation of graduates of
higher education institutions in Sudan.

A survey of public and private establishments was conducted to determine the occupational distribution in each nonfarm economic activity. Only a little over 2 percent of Sudan's population hold nonfarm wage employment. Of this group, the public sector employs 87 percent. Five-year estimates were projected on the basis of the returns from establishments. Estimates of supply were based on an analysis of the output trends of secondary and higher education institutions.

The major portion of the report analyzes the relationship between supply and demand projected to 1971. In order to establish meaningful relationships, specialized skills are matched with specialized requirements. Only in this way can scarce resources be allocated to the priority needs of economic development. About 10 pages of tables present these details.

Recommendations

1. Sudan should invest in secondary and higher education solely in the amounts necessary

to fill the educational and skill needs for economic development. Details of the administrative mechanism to effect this recommendation are provided.

2. Sudan should establish a Manpower Planning and Program Section in the Ministry of Finance and Economics to implement the recommendations made in this report into an active program. Other manpower organizational units also are recommended to carry out manpower-related functions.

3. The Manpower Branch of the Ministry of Labor and Cooperation should prepare manpower and employment reports periodically; for example, establishment surveys, labor force surveys, educational statistics.

4. Personnel programs, such as recruitment and selection, placement, vacancy analysis, in-service training, retirement system, should be expanded and improved for effective utilization of the Public Service.

Manpower Assessment
(1965; 81 pages)

ILO Report to the Government of Swaziland;
ILO/TAP/Swaziland/R.1; A. V. Tottle (United Kingdom)

Preliminary assessment of manpower resources and requirements with particular reference to skilled manpower requirements.

Available information consisted of the 1956 Census of Population, the 1960 sample survey of the labor force, quarterly establishment surveys of employment, and fragmentary data from various other sources. Information about future developments was contained in "Swaziland Development Plan 1963-66," which was little more than a listing of desirable projects to be submitted to the British Government for approval and allocation of funds. The lack of national income statistics and of staff made comprehensive planning impossible. As a result, little information could be deduced about future manpower requirements.

Quarterly establishment surveys had been conducted to obtain information on current employment of wage earners in the nonfarm sector. The results of these surveys were analyzed to make estimates of current and future manpower needs by occupation, industry, locality, and educational requirements. Because the coverage varied from quarter to quarter, the data were not comparable; therefore, an analysis of the employment trend was not possible.

For the most part, the survey tended to confirm what already was known about manpower. Twenty percent of all paid jobs were held by expatriates. Unless educational output is higher, there is little chance of many local people replacing expatriates in these jobs.

Recommendations

1. Greater attention should be paid to the creation of employment in planning future economic development.
2. Training of local people should be emphasized in order to replace expatriates.
3. Vocational guidance and training opportunities should be offered to direct people into middle-level and technical activities.
4. An effective labor market organization should aim at reducing current surpluses and shortages. Details of such an organization are provided.
5. A pilot Employment Exchange Office should be established.

Human Resources and Manpower Planning in Tanganyika
(1960; 30 pages)

John L. Thurston, Consultant, The Ford Foundation

The development of human resources in Tanganyika is more critical than in most developing countries because of its emergence toward independence and the attendant urge for Africanization.

The consultant recommended against conducting a job survey at the present time (1960) because there is no danger of oversupply of trained workers in the immediate future. It was suggested, however, that a job survey and an educational output survey be conducted around 1963.

In the meantime, because of the great importance of agriculture to the economy, effort should be expended to develop skilled agricultural advisers or extension workers to aid farm families. Recruitment and training of such workers will be a formidable job over the next few years.

Government Service is an important employer of trained manpower. The need to Africanize and the expected loss of one-third of the presently employed expatriates will create

strong pressures on the Government Service to find adequately trained manpower to fill not only the vacancies but also the anticipated expansion of services. It was recommended that a training unit be established in the Ministry of Education to which four training experts from the United Kingdom or the United States would be assigned for at least 3 years.

Other types of activities for review include entrance requirements for high- and middle-level jobs, standards and requirements, job analysis, and job testing. One section of the report analyzed the current educational system and output. Only a very small percentage of Tanganyika's children attain a high school education. Teachers and school facilities are in crucial need. Calculations are made to estimate the cost of supplying the required number of teachers.

Survey of High-Level Manpower Requirements and Resources in Tanganyika, 1962-67
(1962; 81 pages)

George Tobias, Consultant, The Ford Foundation

This analysis of high-level manpower resources and requirements is a followup of previous studies and recommendations.

This report advances by one step the continuous process of making approximations of manpower resources and requirements and of suggesting programs necessary to bring them into balance.

Information from a survey of establishments and from other available statistical data formed the basis for making a high-level and skilled manpower inventory. Employers were asked to report their current employment by occupation and other information on nationality of workers, vacancies, trainees, and sources of new workers. They also were asked to estimate employment needs 2 and 5 years ahead and to base their projections on anticipated production plans. This type of information, supplemented by assumptions on mortality and retirement rates, was the basis for projecting the number of additional workers needed for replacement of each occupation. The program of Africanization also was taken into account to determine some of the losses to various occupations.

The supply of high-level manpower to meet this demand was estimated from a review of the educational system. Training facilities and curricula were analyzed to determine the level and

quality of output. Against a total requirement of 8,000 workers in high-level occupations over the next 5 years, slightly over 2,200 trained people will be available. The report discusses in detail the supply of medical workers and teachers and the output of trade schools.

To maintain a continuous review of the manpower situation, a Human Resources Secretariat should be established in the Economic Development Commission. The Secretariat should be responsible for initiating and developing programs, setting priorities, and seeing that they are carried out by the appropriate Ministries. The staff should be drawn from present employees of various Ministries and should be knowledgeable of Tanganyika's social, economic, manpower, and educational problems.

A statistical system also was proposed with major responsibility for coordinating all economic and social data in the Statistics Division of the Treasury. Responsibility for collecting statistical data on manpower should remain in the appropriate Ministries. Several recommendations were made concerning the collection of labor market information, survey techniques, occupational classification, and similar subjects.

Survey of the High-Level Manpower Requirements
and Resources for the Five-Year Development Plan 1964-65 to 1968-69
(1965; 21 pages)

Robert L. Thomas, Consultant, The Ford Foundation

The establishment survey of 1964 reveals that the target goal of self-sufficiency in high-level manpower will be reached in 1980, if proposed educational and manpower programs are carried out.

The first manpower survey was made in 1962 by George Tobias. (See preceding summary.) Since that time, national manpower planning machinery was established and a Five-Year Plan was formulated. A new survey was needed to obtain information to prepare supply and demand projections for specific high-level occupations under the conditions for development laid down in the Plan.

The 1964 study surveyed all large establishments in Tanzania; they represented nearly three-fourths of all nonagricultural employment. High-level manpower was concentrated in government and in the larger establishments. All administrative, management, professional, technical, skilled crafts, and clerical occupations, which were considered high-level and skilled, were categorized according to educational and training requirements.

The establishment survey provided occupational information on employment, vacancies, number of jobs held by Africans, and employer estimates of requirements in the 5-year period

to 1969. The numbers of persons actually required to fulfill employer demand were calculated by adding losses (death, retirement, and Africanization) to anticipated net increases. Where possible, refinements were made to these basic projections. Tables showing both industry and occupational projections and their components are presented.

Supply data were estimates based on educational and training output. University-trained manpower supply was estimated by straight extrapolation of current levels among the various disciplines. No attempt was made to estimate the shortfall in skilled occupations since most skills were acquired on the job and through promotions.

The analysis reveals that the target goal of self-sufficiency in high-level (professional and technical) manpower will be achieved by 1980, if the proposed educational programs are carried out. Some problems with developing skilled (manual) occupations exist, but there is every reason to believe the difficulties which do exist will be resolved satisfactorily.

Integration of Educational and Economic Planning in Tanzania
(1965; 78 pages)

George Skorov, UNESCO, International Institute of Educational Planning (IIEP)

This study explores the problems of formulating educational development plans and evaluates the methods used in Tanzania to overcome these problems.

The first half of the study summarizes the economic development plan and the labor force and employment situation to provide a setting for the main thesis of the study. Existing studies on manpower needs and resources are evaluated. Consideration is given to the fact that the various consultants started practically from scratch and that they often had to substitute experience and imagination for facts and figures which were not available.

The Hunter Study (1962) was the first rough assessment of high-level manpower in East Africa. Its major purpose was to assist those engaged in university planning. The major criticisms of the study were that insufficient occupational details were supplied and that a constant correlation between the relative size of employment and changes in national income was assumed.

The Tobias Survey (1962) was a landmark in manpower surveying in Tanzania and the first systematic inventory of high-level manpower by broad occupational groups. Its main weakness was that the study could not be related to a specific economic program since there was no development plan yet in existence.

The Thomas Survey (1964) was geared to the economic development plan, its occupational coverage was more inclusive than the Tobias study, and its conclusions on the educational system were more precise. Its major weaknesses were the application of a developed country's annual rate of economic growth to an underdeveloped country and the assumption that the existing occupational distribution would be the same in 1970.

The second half of the study evaluates the manpower and educational planning programs that resulted from these surveys. An analysis of the economic outlook of Tanzania indicated that a more cautious approach to manpower projections would be required since the projected high rates of economic growth and productivity may not be achieved. All the manpower surveys made clear the vital role of secondary and higher education, especially in scientific and technical fields, in order to meet high-level manpower requirements. It was suggested that any surplus educated manpower would be absorbed by the increased rate of Africanization and, therefore, the danger of overestimated needs is really not so great.

Job Analysis, Africanization, and Manpower Management in Tanganyika
(1965; 6 pages)

John B. Seal, Jr., Manpower Utilization Officer to the Government of
Tanganyika, Article in Personnel Administration (July-August 1965) p.36ff.

This article deals with the efforts to Africanize the
Civil Service through the technique of job analysis.

Africanization of the Civil Service has been an important objective of the Government of Tanganyika. While the number of Africans employed in the Civil Service increased from 78 percent in 1951 to 88 percent in 1961, they were largely concentrated in the lower levels; only 20 percent were represented in the higher ranks. The Ford Foundation was invited to examine the economy from the standpoint of human resources development and manpower planning. The report ^{1/} submitted in 1960 concluded that (1) expatriate officers would be needed for several more years; (2) supervisors must be responsible for job-training activities; (3) the Government must provide outstanding professional leadership to develop an expanded training program; and (4) maximum efforts are needed to adjust both entrance standards and job content to facilitate hiring Africans into the Civil Service. Thus, job analysis as a management technique would be a partner in the tremendous training and staffing effort facing the country.

The Ford Foundation sent three job analysts to coordinate the training effort toward Africanizing the Civil Service. Their first task, occurring in the midst of independence activities, was to survey high-level administrative jobs.

These included 80 posts in 12 Ministries and constituted the "elite corps" of the Civil Service. The results became the benchmark documents for job analysis and measurements. The report consisted of position descriptions, functional and organizational charts, and observations and recommendations of all factors related to job performance. One of the major problems encountered in this survey was the distrust engendered by operating officials and their fear that their jobs would be downgraded. This apprehension required constant salesmanship to explain the real purpose of job analysis and measurement.

Specific outcome of the survey resulted in a more effectively organized and flexible cadre of administrative talent at a large saving in annual salaries. Since the time of the survey, by 1965, almost 89 percent of the total Civil Service was African and nearly half of the high-level positions were held by African officers. The next step was to extend job analysis throughout all sectors of the economy in a way to convince both management and employees of its worth. In its modest way, job analysis can help determine the speed and direction in the development of African business leaders of tomorrow.

^{1/} See summary on page 54.

Strategy of Implementing a Manpower Program in a Developing Country
Paper delivered to Conference of International Institute of Educational Planning
(1966; 59 pages)

Robert L. Thomas, Consultant, The Ford Foundation

A description of the actions taken to implement a manpower program in Tanzania and an evaluation of the effectiveness of these measures are "relevant to other sub-Saharan, newly independent countries."

Two basic or "master" policies govern Tanzania's manpower program:

1. Achieve self-sufficiency at all skill levels by 1980.
2. To achieve this ambitious goal, invest in education that is related to the skills needed for economic development.

Necessary preconditions to a successful manpower program include:

1. Support by highest political leaders and government officials.
2. Integration of program with the economic development plan.
3. Direct communication between chief manpower planning officer and chief executive of nation.
4. High-level manpower requirements expressed in specific occupational terms for guidance of educational planners.

The section on the "Process of Implementation" describes the steps taken to bring supply into balance with demand through Tanzania's educational system. The implementation of the various policies are discussed in detail. Much of the success of the program is the result of occupational counseling based on employment market information. Training of high-level professional and technical workers can be done in

the school system. Middle-level workers can be produced by less formal means through upgrading, better utilization of current skilled workers, on-job and apprentice training, and retention of skilled expatriate workers.

A strong central planning organization is essential to the accelerate economic development of a developing country, and a manpower planning unit is a necessary part of that organization. Tanzania's Planning Organization is independent of any other government agency and has been given great authority. It developed the five-year plan in collaboration with other Ministries. One of the features of the Planning Organization is the establishment of Planning Units in the Ministries. These units are integral parts of the Ministries but provide a focal point for the Central Planning Organization in dealing with the Ministries.

Within the Planning Organization, the Manpower Planning Unit created a National Manpower Advisory Committee made up of management, labor, and government leaders. This committee obtains advice, reactions, and opinions on such projects as the National Apprenticeship Plan, trade, testing, etc.

The rest of the report describes the role of the public and private sectors in the process of developing and utilizing skills. Special emphasis is placed on the development of a flow of information needed to carry out an effective manpower program.

Manpower Development for Industrialization
Country Case Study: United Republic of Tanzania
(1966; 67 pages)

Prepared for the Center for Industrial Development, United Nations, by
Robert L. Thomas, Consultant, The Ford Foundation

This case study deals with estimates, plans, and implementation actions relating to Tanzania's program of high-level manpower development to meet the needs of its Plan for Economic and Social Development.

A description of the country, the economy, and the Five-Year Plan sets the stage for the discussion on Tanzania's manpower supply/demand outlook and on the various programs for producing the skills needed for its economic development.

Tanzania's current stock of high-level manpower skills was estimated in 1964 and matched with estimates of demand in order to identify shortfalls. Effects on Africanization and wastage from deaths and retirement were also considered in these appraisals. It was concluded that science-based occupations requiring a university degree or post-high school education suffer the greatest shortages. Most other occupations would be in adequate supply by 1980.

The target of "self-sufficiency by 1980" will be achieved if the Plan's educational programs are carried out. Success already has been experienced in the expansion of secondary school enrollment and the task of educating the public of the purposes of a manpower program has been well done.

The strategy for developing high-level skills in Tanzania includes the following:

1. Investment in education is made only to the extent that need for specific skills exists.
2. Government-sponsored students must attend the University of East Africa.
3. Student grants are offered almost exclusively in faculties producing specific skills.
4. Measures were introduced to increase the number of science and mathematics students.
5. To carry out the decision of Africanize the public sector first, government-sponsored students must work for the Government for 5 years after graduation.

The strategy for developing middle-level skills was relatively simple in concept. Many of these workers (nurses, primary teachers, technicians) will be trained in institutions operated by government ministries. Clerical workers and craftsmen will be trained primarily in trade and vocational schools, in plant, and on the job; industry will assume the basic responsibility for training many of these workers.

Labor Force Survey of Tanzania
(1966; 156 pages)

Robert S. Ray, Consultant, The Ford Foundation

The primary objective of this study is to provide information on labor supply in Tanzania to balance previous reports that dealt with labor demand only.

Tanzania has long needed to know more about its current supply of labor in order to (a) establish a benchmark for making projections and (b) develop quantitative and qualitative data on middle-level and unskilled labor. The techniques used in this survey were adapted from other countries and should be applicable for subsequent surveys. ILO definitions, concepts, and recommendations were followed throughout the survey.

The survey was conducted by interviewing a sample of households covering 1.25 percent of the urban population and 0.5 percent of the rural population. Based on population estimates, 8,290 rural and 1,225 urban households were selected and interviewed for a period in March 1965. There were 61 trained enumerators and 6 supervisors engaged in collecting the data. The types of questions, listed in the appendix of the report, were concerned mostly with the employment status and the educational level of the respondents. Questions on hours worked and pay

received helped pinpoint the extent of underemployment. The appendix also contains an abridged (37 pages) enumerator's training manual.

The bulk of the report analyzes the results of the survey. Separate chapters, supported by 77 tables, discuss the characteristics of the population and the labor force, employment, the underemployed and unemployed, educational levels, and mobility of the labor force.

In summary, the results of the survey show that, out of an estimated population of 10,248,000 in March 1965, over 95 percent were living in rural areas. More than half of the population were 14 years and over. Of this group, two-thirds were in the labor force; the remainder were keeping house, in school, or unable to work. The overall unemployment rate was 4.0 percent, which represented 7.0 percent in the urban areas and 3.9 percent in the rural areas. An excellent chapter describes the various components and alternatives for measuring and analyzing underemployment.

Utilization of Tanzania Science Graduates of
the University of East Africa, 1962-66 (first draft)
(1967; 18 pages)

James A. Johnson, Consultant, The Ford Foundation

A study of recent university science graduates to determine the relationship between their university training and their current employment.

Projections of supply of and demand for high-level manpower had been made previously in Tanzania, but no information was available to estimate the requirements to replace specially trained persons who fail to enter the occupation for which they were trained or who leave the occupation some time after they enter it. To improve the quality of projections of manpower requirements, a survey of recent science graduates (1962-66) was conducted to determine to what extent their university training was being utilized in their current employment.

Each graduate was asked his employment history, post-graduate training, mobility, and a number of attitudinal questions. Of the 148 graduates from the university, 57 were personally interviewed, 60 were studying abroad under government sponsorship or on their own, and 31 were in inaccessible areas or otherwise not available for personal interview. Of the 130 graduates who responded, 85 percent were employed in government or government-related enterprises.

Of the 57 respondents actually interviewed, 68 percent were employed in occupations for which their science training was essential; the remainder were in occupations which barely utilized their science training. Other breakdowns by emigration, post-graduate training, etc., are discussed.

The study revealed that, without exception, the Ministries placed the graduates in posts without regard to their preferences. Moreover, government employees were apt to be transferred from area to area on short notice and at frequent intervals. Contrary to the usual preference for the capital city by educated persons in most developing countries, the great majority of Tanzanians interviewed strongly preferred placement up-country rather than a position in Dar es Salaam. The reasons given for this preference were better housing facilities and a more satisfactory climate.

Recommendations for government employment:

1. Establish a committee to review assignment of graduates.
2. Include a factor for underutilization and for movement out of the occupation in next manpower projection.
3. Review government policy of scholarships.
4. Remove "office work" functions from scientific jobs.
5. Establish uniform placement and transfer policies.
6. Provide administrative and accounting training.

The Employment Situation and the Organization of the Employment Service
(In French; 1960; 15 pages)

ILO Report to the Republic of Togo; OIT/OTA/Togo/R.2; Andre Aboughanem

A study of the manpower situation and suggestions for
the improvement of the Employment Service.

According to the 1959 Census, population is estimated to be 1,200,000. Approximately 500,000 are economically active, of which 90 percent are in agriculture. Only 1,200 people are employers and 12,000 are wage and salary workers in Government services, industry, and trade.

Training facilities consist of a small training school and a few apprenticeship centers, supplemented by informal on-the-job training. The methods of training are archaic and have not kept pace with the changing needs of a modernizing economy.

The Employment Service consists of a Director and six agents. Its placement services have been minimal over the last few years and apprenticeship services have been extremely limited.

Recommendations

1. The Ministry of Labor and Social Affairs should participate in economic planning and co-

ordinate apprenticeship, training, and placement work.

2. The Employment Service should have additional personnel and should be reorganized into three sections:

- a. An information section for employment market studies.
- b. A section on skill development and apprenticeship training.
- c. A placement section.

3. The Employment Service should organize a small center for skill development and the Ministry of Labor and Social Affairs should seek foreign technical assistance for the centers.

4. Worker cards (carnets) should be abolished because they are a hindrance to mobility and placement of job seekers.

5. The Service should regulate the placement of seasonal workers.

Human Resources for Economic Growth and
Social Progress in Tunisia
(1961; 75 pages)

Memorandum from Burnie Merson, AID Manpower Adviser, to USAID/Technical Services Division, dated May 8, 1961.

Summary of reports prepared by Mr. Merson during his tour of duty in Tunisia.

The purpose of this memorandum is to prepare the framework for the development of a position paper on human resources for the guidance of U.S. officials in Tunisia. Information from various reports and airgrams relating to manpower and human resources which were prepared during Mr. Merson's tour of duty is pulled together to provide a cohesive analysis of the current manpower situation in Tunisia. A doctrine of human resource development is presented in relation to the economy as a whole, economic and manpower planning, manpower mobilization, human freedom, and the role of specific AID programs.

Manpower programs and planning for economic development in developing countries require a central planning and development agency. This organization establishes the needs and goals of the economy as a whole. Separate but coordinated functions to carry out these goals should be the responsibility of specialized units, such as a manpower planning unit and an educational planning unit. These groups can develop methods and processes for developing,

utilizing, and distributing manpower to meet the economic and social goals.

Basic to economic and human resource development programs is the need to understand the institutions and attitudes which have developed as part of the traditions of the society. An agricultural society experiences difficulty in rapid adjustment to an industrial economy which demands discipline, productivity, leadership, and entrepreneurship. The change-over should be gradual and only as needed. AID priority programs, at least in the early stages of development, should be directed toward improving agricultural output, both in quantity and quality, to satisfy the most immediate needs of the country--food enough to feed the population.

A 31-page appendix describes the manpower problems, trends, and developments related to Tunisia's economic program. All available statistical data relating to the labor force (characteristics, employment, industry, and occupation) are assembled and analyzed in light of the economic development plans.

Manpower, Education, and Training in Tunisia as Related to the USAID Program
(1963; 32 pages)

Edgar C. McVoy, AID Manpower Consultant

An appraisal of manpower needs and of training programs to meet these needs, and an assessment of foreign assistance.

There are acute shortages of many types of trained manpower at all skill levels. Estimates of these needs and of potential supply were made for the Ten-Year Development Plan (1962-71). In order to meet these needs, the Government of Tunisia began a program of educational reform and expansion. The main objectives of this new system are to provide universal primary education, to give education a "national" character, and to provide trained manpower needed for development. The various vocational training and apprenticeship programs are scrutinized.

The main agency responsible for improvement of manpower utilization is the Employment Service, which was initiated in 1960 under the Ministry of Public Health and Social Affairs. Emphasis is placed on job market information; placement is a secondary function. The Service has a small testing and selection center for candidates of vocational training and apprenticeship. The Ministry of Education conducts its own tests for students applying for admission to schools. Tunisia has not developed other features of an integrated system of manpower utilization; there is no overall manpower policy or coordinating board.

Most foreign assistance comes from French technicians, most of whom fill post as teachers civil servants. The United Nations has a manpower-related project for supporting the Occupational Training and Productivity Institute. Members of the U.S. Peace Corps are training teachers and construction workers. USAID has many projects directly and indirectly related to manpower development.

Recommendations for USAID programs

As a general policy, USAID should:

1. Provide enough technicians in each area of study to coordinate with the Government of Tunisia and with other technical assistance programs.
2. Develop a pool of French-speaking technicians in order to work more effectively with Tunisians.
3. Require that U.S. contractors train local workers at each skill level.
4. Extend additional assistance to the Employment Service to develop it into an effective manpower development, utilization, and distribution organization.

A Study of the Public Employment Service in Tunisia
(1965; 78 pages)

Joint report by survey team: Lazard Seiff, AID;
Karl Ahlemius, The Ford Foundation; Edgard-Louis Gosse, ILO

Results of an intensive survey of the Tunisian Employment Service organization, administration, function, and objectives.

This study arose from concern expressed by officials in the Ministry of the Plan and National Economy and the Ministry of Youth, Sports, and Social Affairs regarding the accomplishments of the Employment Service. The survey team attempted to identify the strengths and weaknesses of the Tunisian Employment Service with a view to increasing its contribution toward a progressive manpower program. All aspects of the Service were investigated. Visits were made to local offices and to employers.

The major portion of the report describes in detail the observations and recommendations for each Employment Service operation. Many of the

recommendations were made by officials in the Service and covered employer relations, occupational classification, job order taking, application taking and filling, recruitment, selection of applicants, referral techniques, followup of referrals to employers, and statistical reporting. Other observations and recommendations were made on the organization, staffing, supervision, and staff development in the Employment Service. Detailed recommendations are presented on each of these topics.

The final chapter of the report discusses the formulation of a policy strengthening the Employment Service and for adapting its services to the changing needs of the economy.

Study of Manpower Needs, Educational Capabilities, and Overseas Study
(1965; 41 pages)

Education and World Affairs (Report No. 8): Study Committee on Manpower
Needs and Educational Capabilities in Africa, prepared for AID.

Description of manpower and educational planning in
Tunisia.

The Government's estimates of skilled manpower needs are given in the Ten-Year Development Plan (1962-71). Total requirements at all skill levels amount to over 15,000 trained personnel each year. This figure relates only to the secondary and tertiary sectors and omit requirements for skilled agricultural personnel. In addition, the plan failed to foresee Tunisia's loss of qualified manpower through the departure of many expatriates. Therefore, trained manpower requirements may be much greater than originally estimated. Existing manpower data are insufficient to provide detailed estimates of occupational needs. The greatest need appears to be for middle-level manpower and for skilled workers.

The Ten-Year Educational Plan has first priority within the general development plan. In 1964, 26 percent of the national budget was allocated to education. Educational reform emphasized increased enrollments at every level in accordance with the economic, social, and cultural needs of the country.

About 80 percent of the 3,000 students abroad were studying in France. It is anticipated that this number will be cut back drastically because enrollments at the University of Tunis are high and the University probably will be able to fill most high-level manpower needs within a few years. According to current estimates of manpower requirements, the supply of high-level personnel is considered to be well over 40 percent ahead of schedule, if needs of the agricultural sector are included. It is anticipated that there will be a shortage of 1,500 high-level agricultural workers by 1972.

Recommendations

1. Further studies should concentrate on specific occupational needs of key economic sectors.
2. Development of middle-level manpower should be accorded first priority.
3. Secondary training, agricultural training, and in-service training should be supported by USAID.

Reorganization of the Employment Service
(In French; 1966; 39 pages)

ILO Report to the Government of Tunisia;
OIT/TAP/Tunisia/R.15; Edgard-Louis Gosse (France)

Role and function of the Employment Service and recom-
mendations for its reorganization.

The Employment Service is located in the Ministry of Youth, Sports, and Social Affairs. The major services offered are placement, statistics on placement and job registrations, and occupational classification. Details of the administrative and operating functions of the central office and branch offices are provided.

Recommendations

1. The Government should recognize the importance of Employment Service activities.
2. Both trained personnel and budgetary sources should be increased in order to provide adequate services to the public.

3. Labor inspection activities should be a separate unit from Employment Service activities.

4. The occupational classification system should be developed according to ILO recommendations.

5. Statistics should be collected and analyzed on all aspects of the employment market situation.

6. All agencies involved in manpower development should cooperate with each other and coordinate their plans for improving the quality of the labor force.

Report on the Survey of Manpower and Training
(1959; unnumbered pages)

Robert L. Thomas, Manpower Consultant, The Ford Foundation

Results of a survey to determine current and projected occupational supply and demand.

A survey of nonagricultural employment in the public and private sectors of the economy was conducted. Information on all levels of occupations was obtained through personal visits to 102 employers who represented 82 percent of all nonagricultural employment in Uganda. Employer cooperation was excellent and no information was denied the interviewers. Supply information was obtained from educational and training institutions and from records of individuals studying abroad.

Current employment by occupation and estimated 1964 demand/supply relationships are presented in detailed tables. Evidence indicates an urgent job market demand for an adequate supply of "better educated" manpower. Many vacancies exist now because not enough trained people are available. This situation will become even more serious in the next five years. Edu-

cational facilities are not keeping pace with the anticipated expansion of government and industry and with the need to replace those who die or retire. Training is needed particularly at the middle-level occupational categories where serious shortages already exist.

The Ministry of Education and Labour has been aware of this educational need and has taken steps to increase the supply. The number of graduates of African schools has risen but not enough. If increases are to be achieved and the urgent demand to be met, a reallocation or redistribution of present educational facilities and funds will have to be made.

The point was stressed concerning the desirability of the establishment of administrative machinery for providing continuing job market information.

**"Alianza para el Progreso" Demands Quick Action
on Manpower and Labor Programs
(1961; 44 pages)**

Fernando Sierra Berdecia and Malcolm Kennedy, AID Consultants

An assessment of program needs and plans in worker education and labor leader training and in labor ministry administration, in six Latin American countries.

If the Alliance for Progress is to be carried out so that the benefits of economic expansion are distributed equitably to those who contribute to the productive efforts, it is necessary to strengthen democratic trade unions and to develop labor programs that will guarantee fair minimum standards and improve opportunities for jobs.

General recommendations, applicable to all countries

1. To preserve democracy in Latin America, the U.S. public policy, as stated in Public Law 86-735, 1/ should be circulated more widely and emphasized more positively among U.S. personnel on duty there.

2. When compared with the need for full-scale, well balanced labor programs, AID assistance is "absurdly small." Well-trained personnel and efficient speedy services are needed to provide a strong and respected labor ministry.

3. Reliable statistical information is needed to know the nature and magnitude of labor problems.

4. Employment services are needed to make better use of the labor force in line with the requirements facing economic development.

5. Programs for industrial safety must be developed to reduce losses in man-hours.

6. Flexible systems for setting up minimum wages should be established to give workers increased buying power.

Specific recommendations cover the following countries:

Argentina (10 pages)

Brazil (5 pages)

Colombia (4 pages)

Mexico (4 pages)

Uruguay (7 pages)

Venezuela (5 pages)

1/ The policy of the U.S. Government "supports the strengthening of free democratic trade unions to raise standards of living through improved labor-management relations." (Section 1 (b) (4), P.L. 86-735.)

Training Qualified Manpower for Industry
(In Spanish; 1961; 20 pages)

ILO Report to the Government of Argentina; OIT/TAP/Argentina/ R. 5

A report on the second stage of the work of a group of ILO experts from 1956 to 1960. The group was asked to establish various educational programs concerning vocational training and, in particular, to organize courses for instructors and skilled workshop leaders in general mechanics.

The report is divided into three parts: Part I concerns the problems existing when the mission arrived. Argentina at that time was reorganizing her administrative, economic, and social organizations on a national scale. One of importance to the Mission was the combining of the National Commission of Apprenticeship and Vocational Orientation with the Office of Technical Education to form the National Council of Technical Education, CONET.

Some of the problems are discussed. They deal mostly with lack of budget for adequate supplies and salaries. Poor coordination between the schools and industry limited adequate training for industrial requirements. Need for training in agricultural areas was ignored.

Part II describes the work accomplished by the Mission. Several seminars and courses were organized; for example, a course to improve the competence of instructors and workshop leaders, study sessions on technical teaching techniques for workshop leaders, study periods with professors of general technology and mechanical drawing.

The mission submitted a program for skilled mechanics, lathe operators, and millwrights; planned programs and selected participants for foreign grants; helped to install and utilize demonstration equipment; and helped to create a pilot center for training.

Part III consists of the following recommendations:

1. Consider creating permanent government units to study the needs of local industries in the provinces.
2. Create a permanent service to examine the results of teaching techniques.
3. Study the possibility of giving autonomy to schools to take care of immediate needs.
4. Organize teaching centers so that all teaching personnel can learn from instructors who have taken improvement courses.
5. Grant facilities to the director of teaching centers and inspectors to permit their professional improvement.

Survey of Manpower
(In Spanish; 1957; 81 pages)

ILO Report to the Government of Argentina;
OIT/TAP/Argentina/R.3; Mr. Josef Deroo (Belgium)

Analysis of the industrial and occupational structure of manpower in industry, based on available information and on an establishment survey.

Available data consisted of censuses of population, birth and death records, and projections made by the United Nations. These data are analyzed, as far as possible, by occupation and industry. Data on student output of technical and professional schools also are described.

A survey of nonagricultural establishments in Buenos Aires and several provinces provided manpower needs by industry. Nearly 2,000 establishments were included in the sample: all establishments employing 1,000 workers or more, and every third establishment employing 25 to 999 workers. More than 1,200 establishments representing 261,000 workers responded.

Eighteen industries were included in the survey. Workers were classified into 94 occupations. Job vacancy data and anticipated occupational needs six months after the survey also were requested. Detailed tables provide the occupation and industry distributions of current employment, job vacancies, and future needs.

The report concludes that an abundant supply of workers who have few skills is available for industrial needs, but a scarcity of skilled workers (such as lathe operators and mechanics) will continue to exist. The survey indicates that additional training programs geared to the needs of industry are needed.

Recommendations call for the creation of a system to collect information about the actual and potential work force; better coordination of statistical sources; the use of statistics compiled by the social security administration; improvement of census statistics on labor force and employment; classification of occupations based on ILO recommendations; development of the National Employment Service; more attention to technical training; improvement in compiling statistics on industrial and technical training; closer contact of training programs with labor and industry; and the formation of a national coordinating body.

Notes for a Manpower Survey Prepared for the Instituto Torcuato di Tella
(1961; 27 pages)

Robert L. Thomas, Manpower Adviser, The Ford Foundation

Description of the techniques of obtaining manpower supply and demand data for the Center's prospective survey of high-level manpower in Argentina.

The Instituto Torcuato di Tella (the Center) proposed a study of the current and projected supply and demand of high-level manpower in Argentina. The purpose of the study was to effect governmental and private decisions in education and training so that future skill output would be consistent with national needs. These Notes provided the basis for the study which the Center conducted in 1961-62.

The major portion of this report describes the step-by-step procedures necessary to carry out the proposed manpower study:

1. Occupations to be covered--only professional, technical, and administrative occupations.
2. Sample coverage--construction of a benchmark.
3. Questionnaire design.
4. Methods of obtaining supply data from educational and training institutions.

The results of the survey are described in:

Los Recursos Humanos de Nivel Universitario y Tecnico en la Republica Argentina, Parts I and II, 646 pages (including a 116-page appendix, a 20-page bibliography, and a 12-page annex). Second edition 1964. Center for Economic Investigations, Instituto Torcuato di Tella.

Techniques of the survey are described in:

Informe Metodologico Recursos Humanos, Argentina, by Enrique Oteiza, 1963. Instituto Torcuato di Tella.

Related reports published by the Institute include:

La Emigracion de Profesionales y Tecnicos Argentinos, by Morris A. Horowitz, 1962. (6 pages)

Estimating Future Requirements for Engineers, by Al Broehl, 1964. (54 pages)

Industrial Development in Argentina
(1961; 181 pages and appendix)

Arthur D. Little, Inc.

A study of the problems of industrial development in Argentina. One section (pages 130-158) covers human resource development for industry.

Shortages of personnel ranging from skilled labor to top management are costly and limit economic growth in every segment of industry.

Most training organizations have just begun operations and therefore cannot be evaluated critically. For example, the Productivity Center has barely begun its program of upgrading labor; the Institute for Executive Development has just opened its doors; the National Council of Technical Education (CONET) is so new that few people interviewed knew it existed.

The major recommendations were:

1. A council of training organizations should be formed to plan coordinated educational efforts.
2. An enlarged and accelerated program should be developed to increase training facilities outside Buenos Aires.
3. Methods of decrease the loss of trained people to other countries should be devised.
4. The number of scholarship applications should be increased and the selection procedures should be streamlined.

Organization of Technical Education and Professional Training Services for Industry
(In Spanish; 1962; 85 pages and 12 annexes)

ILO Report to the Government of Argentina; OIT/TAP/Argentina/R.7

Report studies actual and projected needs for technical and professional training, recommends national policy in these fields, and establishes priorities to attain the proposed objectives.

Argentina had reorganized the services of apprenticeship and professional orientation (CNAOP) and technical education (DGET) to form the National Council of Technical Education (CONET) in May 1960. (Refer to OIT/TAP/Argentina/R.5)

Part I describes the structure and functions of CONET. In general, CONET has not functioned satisfactorily. In response to a decree to simplify administrative chores through the decentralization of a part of its activities (e.g., more autonomy to the schools), a new organizational structure was recommended. Charts are included to show the actual structure and the projected structure.

Part II refers to the structure and functions of the diverse training establishments: (1) centers to train qualified workers (2) schools to train technicians (3) special courses for ad-

vanced apprenticeship and (4) missions to train artisans and farmers.

Part III covers manpower requirements and training needs. A survey of establishments using a different base and coverage from previous studies of manpower was conducted. Details of the survey are provided, and the results are used to estimate apprentice training and technical training relative to needs of industry. The distribution of training institutions by educational levels and geographic sectors also is analyzed. Recommendations are based on these analyses.

First stage priorities deal with the expansion and improvement of training institutions. Second stage covers employment service functions which place people in jobs and determine needs of industry. Third stage describes specific details of further refinement to provide a broader base for institutional training.

Organization of the Employment Service and the Development of a
Labor Market Information Program
(In Spanish; 1959; 33 pages)

ILO Report to the Government of Bolivia;
OIT/TAP/Bolivia/R.5; William H. Mason (United Kingdom)

A description of Employment Service activities in Bolivia.

The mission's objective was to aid the government in developing the measures necessary to obtain reliable and current information on the manpower situation in Bolivia. However, the expert had to dedicate a considerable part of his work to the general organization of the Employment Service.

The first practical manifestation of an Employment Service was a decree published April 4, 1945. The decree called for eight offices, but only one was established in La Paz. Very little had been accomplished up to the time of the mission.

Several other offices were created in March 1958. Their principal function was to place unemployed mine and factory workers in public works programs. The immediate need was to establish procedures to effect such placement. Development of the Service as an instrument to

carry out a policy of full employment was to come later. Job market information is related intimately to such development. The most urgent information needs are listed.

Included in the report are evaluations of office installations, brief descriptions of staff duties, and comments on staff recruitment and training. The mission outlined procedures to be followed in the next few years and commented that much work is necessary to assure the continued functioning and future growth of the service.

Technical recommendations call for a systematic program of employer contacts, reports on job markets, and a plan for long-term manpower utilization. Those of an administrative nature cover budget allocations, office and equipment, organization, and personnel.

Survey of the Comibol Mines
(1964; 7 pages plus tables and charts)

Edward L. Omohundro, USAID/Bolivia Manpower Division

Description of the results of the first attempt by USAID to gather and evaluate labor force data on the nationalized mines.

Information collected in the survey of mines included employment and occupational trends for each operating mine and the employment history of workers recently laid-off. An analysis of unemployed and discharged miners, and interview responses from the managers of the operating mines are presented in detail.

Employment data on Comibol mines came from the Social Security Office, USAID Controller's Office, and the Economic Section of the American Embassy. These data are not consistent, but they do reflect employment changes over time even if their levels of employment do not agree.

Information on the occupational distribution of employment came from the Social Security Office for the third quarter of 1963. The occu-

pations were coded according to the U.S. Dictionary of Occupations. No attempt was made to obtain information on wages. Names of laid-off miners were obtained from various sources and intensive interviews were held with these people. The results of these interviews are analyzed in an unnumbered section of this report.

Questionnaires requesting information on employment, surplus workers, plans for layoffs, reasons for lay-offs, etc., were sent to the managers of Comibol mines. The report warns that responses to these questions may not reflect the views of central offices.

About 80 pages of this report are devoted to statistics and an analysis of employment and related information for each of the Comibol mines.

Manpower Assessment Planning
(In Spanish; 1964; 58 pages)

ILO Report to the Government of Bolivia;
OIT/OTA/TAP/Bolivia/R.9; Dr. Sanford Cohen, University of Michigan

A review of available manpower information and the development of a manpower planning organization.

Bolivia's first national economic and social development plan covered the 10-year period 1962 to 1971. This document was more of a declaration of objectives than a plan of action. Subsequently, a 2-year plan (1963-64) was prepared to remedy some of the immediate deficiencies of the long-term plan. The preparation of the next 2-year plan (1965-66) was in the preliminary stage. Because of lack of manpower data, both short-term plans were delayed in presentation. The National Secretariat for Planning and Coordination was established in mid-1963 to develop these plans.

The ILO mission examined these separate plans to identify the manpower role in economic development. Aside from specifying the objective of creating 60,000 new job opportunities annually, no mention of manpower was made in the 10-year plan or in the 2-year plans. Very few data were available for analysis. The latest census of population was for 1950 and all projections were made from this base. A labor force

sample survey was conducted in 1963 but data from this source were not yet available. Preliminary estimates from this survey indicated an unemployment rate of 5 percent, most of whom were new workers.

The ILO consultant, a member of the CEPAL group, worked with the Ministry of Planning and the manpower section of the Ministry of Labor. He recommended the creation of a central manpower planning section in the Ministry of Planning and the conversion of the regional employment service offices, which have been virtually inactive, to manpower evaluation offices. These recommendations and others regarding organization are given in detail.

The major portion of the report is an annex representing a special report to the National Secretariat for Planning and Coordination. The topic evaluates the employment situation and problems of manpower planning. This report coordinates available data on manpower and attempts to analyze needs by economic sector.

Bolivian Apprenticeship Program and the Highway Training Project
(1965; 11 pages)

Archie G. Beaubien, AID Apprenticeship Adviser

A review of the experimental worker-training programs included in construction contracts and the modernization of the apprenticeship program.

The highway contract training proposal appears to be desirable and worthy of a trial run as an experiment to provide industrial training not otherwise available to unskilled workers. To implement this proposal, the following suggestions are made: the contractor should (1) hire a training director and several job instructors; (2) construct and equip a training center; and (3) establish a ratio of apprentices to skilled workers. Specific recommendations regarding the selection and training of apprentices also were made.

Apprenticeship in Bolivia is presently dormant. Sections of the labor code refer to apprenticeship. An effort was made to revamp the law in late 1950's, but it foundered in the Labor Ministry. An interest in the needs for an apprenticeship program will be reviewed as soon as industrial projections and manpower training needs are fully assessed. The consultant discusses some of the internal problems of getting a training program started.

Manpower Development in the Ministry of Labor
(1963-1965; 4 pages)

DOLITAC 1/ Staff Paper No. 19; Edward L.Omohundro, Manpower Adviser

Recommendations for the establishment of a Manpower
Division in the Ministry of Labor.

The Manpower Division was to have a major role in organizing and managing local and national employment markets. This Division was expected to provide information on labor supply and demand, by occupation and industry, for each significant local job market. It was to work closely with all other agencies involved in manpower development planning.

The consultant assisted in strengthening the statistical and research branch of the Manpower Division. From AID funds, six people were employed and \$5,000 worth of office equipment was purchased. In addition, several members of the staff received in-service training; and two mem-

bers attended the labor and price statistics seminar in Puerto Rico. The greatest obstacle in the research branch, however, has been the complete lack of coordination between the central office of the Manpower Division and the eight local offices.

It was recommended that continuing technical assistance be provided the Manpower Division and that the employment market information program be continued.

1/ U.S. Department of Labor International Technical Assistance Corps.

A Feasibility Assessment of Human Resource
Development Planning in Bolivia
(1965; 23 pages)

Donald P. Sanders, AID Manpower Consultant (Ohio State University)

Description of the problems of human resource development, the current manpower situation in Bolivia, and requirements for effective manpower planning.

A summary of the various problem areas of manpower development includes statements on the rural/urban socioeconomic cleavage, low productivity and underemployment, emigration of skills, illiteracy, and the educational system.

Bolivia's manpower activities are directed toward rural education, community development, agricultural extension, and public health; but very little has been accomplished. The 10-year plan and the 2-year plans are inadequate for manpower development. (See ILO report R.9).

Coordination between individual planning agencies and between planning and implementing agencies is not effective. In addition to the Education and Human Resource Development Section of the Ministry of Planning, there are also a Planning Section of the Ministry of Education and an Office of University Development at the University of Bolivia. The EHRD section of the Ministry of Planning apparently coordinates all groups but some work has already been done without any coordination or consultation.

Educational activities seem to have been coordinated with the National Council of Educational Coordination.

A serious deficiency of statistical data and information on manpower and education exists. The absence of these data prevents an adequate assessment of the current and future situation.

Special problems in education include the poor quality of teachers, the high wastage of students at all educational levels, the paucity of schools in the rural areas, and inadequate facilities to train people.

The ideal conditions under which human resource development planning should be conducted are described. Technical assistance should seek three main objectives to develop human resources: (1) to encourage cooperation and coordination among planning agencies; (2) to provide resources for data collection and analysis; and (3) to provide technical skills and experience which will insure the technical validity of the effort. Details of how these objectives should be carried out are provided.

Review of Data Available in Bolivia
Relating to Population and Labor Force
(1967; 33 pages)

John H. Linton, Manpower Adviser, Human Resources Division, USAID/Bolivia

Analysis of population and labor force statistics and
projections from various sources.

Current and reliable data on the population and labor force in Bolivia are needed as a base to formulate plans and programs and to prepare projections. The most recent census was taken in 1950 and a new one is scheduled for 1968.

Population Data

The 1950 Census of Population enumerated 2.7 million people. Adjustments for undercount and for a calculated coefficient of error resulted in a new total of over 3 million people. During the 1950's, the annual rate of growth was 1.4 percent, well below the average rate of growth of 2.3 percent experienced in other South American countries.

In 1963, under U.N. sponsorship, a sample household survey was made. Population was estimated to be nearly 3.1 million people; nearly 20 percent lived in urban areas.

Labor Force Data

The 1950 census indicates that about one-half of the population is economically active. The

actual proportion is probably lower because the "gainful worker" concept includes many marginally employed, such as part-time street vendors and unpaid family workers on farms. The 1963 sample household survey indicates a labor force participation rate of around 40 to 45 percent of total population.

About 72 percent of the labor force worked in agricultural activities, according to the 1950 census. By 1963, this figure is estimated to have dropped to 67 percent. Short-term projections of labor force activity, by industry and occupation, were made by USAID and other groups.

Skills Levels of the Labor Force

Few data are available for analysis of skill levels, especially for middle-level skills such as craftsmen in the construction industry. These skills require prior training and experience to qualify at the journeyman level. Absence of occupational skill data make estimating and planning of future training needs difficult.

National Training Establishments in Venezuela and
Colombia and their Relevance to Bolivia
(1967; 19 pages)

John H. Linton, Manpower Adviser, Human Resources Division, USAID/Bolivia

Description of features of other Latin American training
centers which might usefully be adopted in Bolivia.

The vocational training institutions in Colombia (SENA) and Venezuela (INCE) were created in response to the increasing level of industrialization in those countries and a demand for greater and higher degree of skills in the labor force. These institutions are similar in concept and organization. For example, they are autonomous training institutions removed from the regular educational system and they are supported by a special tax levied on payrolls. Each organization is described so that comparisons may be made and the quality of the programs may be observed.

Observations

Development of training institutions similar to those of INCE and SENNA will require more and different types of industry in Bolivia before demand warrants expenditures for such schools.

The El Alto (La Paz) School was developed in response to demand stimulated by increased activity in construction. It is hoped, however, that new demand for other skills can ultimately be met by improved vocational training in public and private school systems.

The INCE construction training center at Petare has certain features which might be adapted for the El Alto (La Paz) School; these features include space arrangement for each trade, emphasis on hand tools, teacher training courses for instructors.

The El Alto long-range program is to provide training for current employment demand in the La Paz area. This will require more data on the labor force and on labor requirements. Such data are collected by SENNA (Colombia) which has its own statistical department. Eventually, this type of job market research capability should be developed in Bolivia, perhaps in the Ministry of Labor.

Sampling and Other Statistical Activities in Brazil, 1956-59
(1960; 11 pages)

Thomas B. Jabine, AID Sampling Adviser

Introduction of sampling techniques and data processing
to the Brazilian Institute of Geography and Statistics.

The consultant was assigned to work with the Brazilian Institute of Geography and Statistics, (IBGE) to suggest possible applications of sampling techniques for 1960 census. The IBGE is the Federal Government's central statistical agency.

Details of the various activities relating to sampling and to data-processing systems are

described. A summary of accomplishments in each topic is listed. Recommendations are made for continuing the progress already made by consultant assignments in specific fields and by participant training of computer programmers and other specialized fields.

Summary Report of Manpower Consultant to USAID Brazil
(1963; 5 pages and attachments)

Theron J. Williams, AID Manpower Consultant

Describes the need for manpower assessment and planning capability and makes recommendations to assist in rectifying deficiencies.

The Need for Manpower Assessment and Planning

A critical period was reached in 1962-63 when Brazil experienced industrial unemployment for the first time following a decade of expansion. Economic development planning required reappraisal of employment potential. The new Three Year Plan did not recognize manpower resources as a factor in industrialization capability. U.S. assistance to Brazil did not provide for, and was not equipped to fill, this crucial gap in Brazil's planning. Brazil itself was not technically equipped for manpower assessment and planning, although many officials had realized the need and had requested technical assistance.

Recommendations

The primary recommendation is that a competent manpower consultant be assigned to USAID on a full-time basis. The program recommendations, as follows, are made with the qualifica-

tion that the attitude and the competence of the USAID mission must be improved significantly before any recommendations can be initiated effectively.

An Office of Manpower Planning and Development should be established to provide information, advice, and guidance to all planning agencies on human resources. It should include a small statistical and research section to organize and interpret, in manpower resource terms, the data collected by various agencies.

A National Bureau of Labor Statistics should be established to centralize and coordinate research and data-collection activities of various agencies.

A National Employment Service System should be established temporarily under the proposed Office of Manpower Planning and Development, and eventually transferred to the Department of Labor. (See Robert Clay report for details of employment service functions.)

Technical Labor Program -- End-of-Tour Report
(1963; 7 pages)

Robert J. Clay, AID Labor Technical Officer

Describes the objectives of a proposed technical labor program and the work of the consultant to develop such a program.

The objectives of the program were to provide a strategy of human resources development and utilization through manpower analysis, planning, and organization; to provide an employment service to serve as the principal support agency for manpower strategy; and to assist in a plan which visualizes a domestic alliance for progress whereby the States of Sao Paulo and Guanabara extend the benefits of the program to other States.

Recommendations

1. When conditions warrant, a complete technical labor program should be initiated and carried out within the framework of an independent organizational unit.

2. A manpower program which includes the development of a national employment service as a support agency to implement planning and analysis of manpower requirements on a continuous basis should be provided. The agency

should be semiautonomous, and two model offices should be established initially in Rio de Janeiro and Sao Paulo.

3. USAID should assist by providing (a) a labor leader participant training program; (b) a worker-education adviser to help develop worker-education programs; and (c) a full-time labor technician to help SUDENE (the Superintendency for the Development of the North East) develop a manpower research and statistics program and to assist SENAI (the National Service of Industrial Apprenticeship) and other organizations to train their personnel in the techniques needed to determine manpower skill needs and training requirements.

4. Employment service work should initially emphasize industrial services, such as occupational analysis and job evaluation upgrading middle management, and developing a job market and statistics program.

Manpower Planning Report
(1965; 14 pages)

DOLITAC 1/ Staff Paper No. 1; Raymond Larson, Manpower Adviser

Describes the problems and needs in manpower and makes recommendations for U.S. assistance.

The objective of the assignment was to determine the types of assistance needed to collect and use data in analyzing manpower resources and requirements as they relate to Brazil's economic and social development, and to prepare a work plan for such assistance.

Major Manpower Problems and Needs, and Suggested Approaches to their Solution

1. Improvement of the Decennial Census is needed.
2. Projections of occupational requirements are needed.
3. Current information on population, mobility, and labor force characteristics is needed on a regional basis, as well as earnings, employment conditions, and multiple job-holding in key occupations.
4. A National Citizens Manpower Advisory Council is needed to guide and coordinate large household surveys while awaiting a decision on responsibility for the nation-wide household survey.
5. A Statistical Advisory Panel should guide and advise the Manpower Advisory Council.
6. Brazil's universities should be involved in Brazil's manpower programs. For example, a Manpower Center at the University of Bahia is planned to coordinate for the Salvador area all

of the government, private, and university-sponsored manpower activities.

7. AID should encourage SENAI to be more effective in organizing employment service activities for its trainees and for others, and should assist them in developing information on labor demand in general and for specific occupations.

8. The Labor Ministry should be assisted in law enforcement.

9. Communications between employers and schools should be developed.

Recommendations for U.S. Assistance

1. The AID Human Resources Office should have a manpower adviser to supervise and coordinate all manpower activities.

2. A U.S. technician should be sent to the Planning Ministry to assist in manpower projections and to plan establishment surveys.

3. The U.S. should supply a census specialist to aid in a major overhaul of the census. If this task has been started already, then work on a series of studies on earnings, fringe benefits, and other conditions of employment should be assisted.

1/ U.S. Department of Labor International Technical Assistance Corps.

An Overview of Industrial Education in Brazil
(1965; 15 pages)

DOLITAC 1/ Staff Paper No. 30, Joshua Levine and John Walsh

Assesses the need for industrial education in Brazil, evaluates AID efforts in developing a program, identifies the problem areas, and makes recommendations for further AID assistance.

In the absence of accurate data, requirements for trained manpower can only be estimated. Using the experiences of other countries, the consultants estimate that the annual number of new entrants requiring skill training is 160,000. However, only half of this number is currently being trained each year. Therefore, a substantial change is needed in existing training institutions if they are to meet Brazil's manpower needs. A short description of each institution is provided.

USAID efforts to develop industrial education started in 1946 when CBAI (Comissao Brasileiro-Americano de Educacao Industrial) was created. USAID contributions since that time appear to have been effective in bringing about useful change, but much still remains to be done.

The problem areas in Brazil's industrial educational program fall into these categories:

leadership and direction, planning and development, coordination, financing, staffing, and research and evaluation. In these areas the following recommendations are made:

1. The Area Technical Center program should be continued and should direct its attention more to meeting industrial manpower needs.

2. A training advisory team should assist SENAI to reorient its policies and practices. The team should be composed of a training administrator, four in-plant training advisers, three industrial apprenticeship advisers, a labor force analyst, and short-term technical assistants in specialized areas.

1/ U.S. Department of Labor International Technical Assistance Corps.

SENAI Project Review
(1968; 6 pages)

Charles V. Youmans, AID Manpower Development Adviser

Reviews the SENAI Project to improve its industrial manpower training programs.

The major purposes of the mission were to improve the effectiveness of SENAI's industrial manpower training programs, to increase the number of trainees 20 percent, to set up a system to collect data, to improve quality of instructors, and to develop instructional materials.

A manpower survey was planned and implemented in Sao Paulo. Data have been tabulated and a final report will be forthcoming. Industrial manpower surveys have been requested in other SENAI regions.

A training program for analysts on "occupational analyses for training needs purposes" has been started.

SENAI suggested five priorities for the project team relating primarily to details of manpower surveys and to specific school programs. The rest of the report outlines the progress of each priority, participant training, counterpart development, and detailed visits to schools and training centers.

It was recommended that the SENAI Project Team be continued at the four-man level and the work be extended to the end of 1970. The improvement of industrial manpower training is one of Brazil's most critical needs.

The Manpower Situation in British Honduras
(1963; 23 pages)

ILO Report to the Government of British Honduras;
ILO/TAP/British Honduras/R.4; V.G. Munne (Great Britain)

A survey of the manpower situation, especially for skilled occupations.

Available data to analyze the manpower situation were meager. The West Indies Population Census of 1960 provided some basic facts on population and labor force but very little on occupations.

Future requirements for manpower will be assessed more readily after the national economic development plan has been prepared and the requirements of specific projects within the plan can be studied. There appears to be a substantial surplus of labor and, unless a major economic expansion is realized, demand in the near future is not likely to absorb this surplus.

Since the construction industry is expected to have most demand for skilled workers, the expert surveyed nine building contractors and other sources to estimate current employment by occupation in the skilled crafts. Skilled workers in occupations concerned with the main-

tenance and repair of equipment and machinery were more difficult to estimate since they are employed in small numbers among many firms. Indications, however, are that these occupations are also in short supply.

Recommendations

1. Obtain technical assistance to aid manpower assessment and planning.
2. Establish accelerated training courses for building trades.
3. Prepare and maintain list of establishments, classified by economic activity.
4. Obtain tabulations of the 1960 Population Census from Jamaica Tabulation Center.
5. Collect information from all departments on economic development projects affecting the manpower situation.

Human Resources of Central America,
Panama and Mexico, 1950-1980
(1960; 155 pages)

Louis Ducoff, United Nations, Economic Commission for Latin America

Comprehensive analysis of Central America's demographic situation and its relation to economic development and regional economic integration.

Population in Central America, Panama, and Mexico has been expanding faster than in any other region of the world. The average annual rate of increase between 1950 and 1959 was 3.2 percent. Urban population consisted of about one-third of the total. Age composition of the population, education levels, marital status, and other demographic aspects of the population are discussed.

Based on the past trends of birth and death rates and their projected direction and magnitude in the future, estimated population to 1980 is provided for each country according to three assumptions in rates of birth. Labor force is projected by regression analysis. Built into these projections are certain assumptions regarding the economic goals of each country.

Comparative trends in gross national product (1946-1956) indicate that relatively high annual growth rates were experienced in El Salvador

(5.3 percent), Mexico (6.3 percent), and Costa Rica (7.1 percent), resulting in high per capita gains. GNP annual growth was lower in other countries which had correspondingly lower per capita gains. Based on medium-assumption population projections, GNP growth rates to 1980 have to increase 64 percent in Honduras and 91 percent in Costa Rica just to maintain the 1954-56 per capita real GNP. This staggering task for Central American countries which have limited resource appears less formidable when other aspects of the problem are examined. For example, even small shifts from farm to industrial employment will affect total GNP; improved farming techniques will increase productivity; educational facilities will provide a better prepared work force.

The appendix provides techniques and methods of projections and analysis, and detailed tables on labor force in each country.

Industrial Manpower in Central America and Panama
Some Issues and Aspects
(1963; 34 pages)

Francis X. Gannon, Manpower Adviser to the Central American Economic
Integration Secretariat (SIECA)

Describes existing and potential sources of regional manpower information and suggests administrative machinery for setting the manpower plan in motion. Training programs are analyzed in light of technical manpower needs in the region.

The manpower aspect of economic integration of Central America has lagged behind capital investment. Further expansion of the integration movement depends on the role which human factors must play in both contributing to and stimulating regional integration. So far, manpower information and data have been produced by national ministries but have not been coordinated for regional analysis. It is suggested that SIECA create a Human Resources Office to stimulate action and long-range coordination in manpower analysis, planning, and utilization for the region.

Basic information required for manpower analysis comes from periodic censuses which serve as a base for interim surveys. All Central American countries have or are planning a census, but they are lacking in most other information sources. A study of the supply and demand for professional and middle-level technical manpower is being conducted by the Central American Superior University Council (CSUCA) to determine educational requirements for the projected labor force. ^{1/} Discussed are other current and proposed studies such as studies of family budgets, vocational training, middle-level manpower requirements.

The major portion of the report concerns regional manpower utilization. Manpower development has not kept pace with the switchover from artisan skills to highly technical skills required for the changing industrial climate. Part of the problem results from tension that has developed between old and young workers and from antiquated methods of teaching. It is suggested that more funds be devoted to technical education and that closer ties be established between industry and vocational schools. A regional uniform apprentice training program, including a system of vocational guidance, is proposed. The various national training programs are discussed to point up the diversity of training systems. Coordination needed to stimulate uniformity may very well come through SIECA. To bring about overall manpower coordination, a Regional Manpower Planning and Development Conference to be held in the near future is recommended.

^{1/} See Oferta y Demanda Recursos Humanos en Centroamerica, 7 volumes, CSUCA, Costa Rica, 1966.

Analysis of Manpower Services in Central America
(1966; 54 pages)

DOLITAC 1/ Staff Paper No. 14; Jennings Lee, Manpower Consultant,
(Utah State Employment Service)

Describes available manpower services in Central America and proposes a regional model of an employment organization.

A comparative analysis of the various national employment services was made for the use of the Organization of Central American States (ODECA) to encourage uniform regulations, systems, and services for meeting manpower needs. Information was obtained primarily from interviews with officials of government, educational institutions, and industry.

El Salvador has the most highly developed Employment Service in the region. It is a section organizationally subordinate to the National Department of Apprenticeships and has 41 positions on its staff. The Employment Service in Guatemala is the least developed and the least adequately staffed in Central America; very few services are offered. Neither Nicaragua nor Honduras has an Employment Service of any consequence.

A detailed description of the types of services provided by an ideal Employment Service Office is provided. To implement these services, a regional model for a manpower services organization is presented. The model attempts to coordinate and reconcile the national manpower services already in existence in El Salvador, Costa Rica, and Guatemala. In a few cases, the proposal may require legislative or administrative action to get started at the national level. Regionally, the correlative function would rest with ODECA. At some later date, a Central Office for manpower services could be established to interlock administrative ties.

The feasibility of establishing a pilot Employment Service Office in Costa Rica was in-

vestigated. The organization, functions, and personnel duties are discussed for setting up such an office coordinated with the activities of National Institute of Apprenticeship (INA). Such an office could serve as a regional center for training, experimental work, and leadership for other similar offices in Central America. (However, the consultant believes that El Salvador is better equipped than Costa Rica since El Salvador has developed most of the essential elements of a well-rounded Employment Service.)

Among the recommendations made were the following:

1. Manpower services in ROCAP should be strengthened and supportive services provided in each country.
2. Full-time AID personnel should be assigned to ODECA to assist in its various functions.
3. Labor and manpower functions should rest with one person in country missions.
4. Efficiency of DOLITAC team members should be improved by continuous language training, participation in United States manpower seminars, and periodic staff meetings of DOLITAC members.

1/ U.S. Department of Labor International Technical Assistance Corps.

Improving Manpower Statistics in Central America
(1967; 25 pages and 4 appendixes)

DOLITAC 1/ Staff Paper No. 56; Sherrill W. Neville, Labor Statistics
Adviser, (Utah State Employment Service)

Manpower statistics in the region are analyzed to aid the Organization of Central American States (ODECA) draft plans and programs leading to improved data.

Population projections indicate that the Central American labor force of 4 million in 1960 will double in size by 1980. The rising tide of jobseekers presents an unprecedented challenge for private industry and government to find employment for these new workers. Solutions to this problem of employment creation require improved statistical information as guidance. This report analyzes available statistics in each country (comparative data appear in appendix C) and suggests improvements.

Each country must plan for better population censuses and interim sample surveys to provide current information. Regional control and financial participation will assure uniform timeliness and quality for the four statistical priorities of employment, unemployment, hours, and earnings. Only Panama provides periodic information on total employment and unemployment changes. Costa Rica expects to publish these data soon. Honduras and El Salvador need funds to effectuate plans. Nicaragua has no information on unemployment. All countries have partial information about wages and salaries which should be made uniform and complete. Present knowledge of unemployment conditions in Central America is weak.

A joint and cooperative regional effort and a centralized power of a federal type is needed to produce the required employment and wage statistics. Only through centralized power will the Central American countries arrive at uniform definitions and methods, meet time schedules, and disseminate the data. ODECA can fulfill the role of the federal counterpart to the six countries, but it needs finances, staff, and U.S. recognition. The money might come from a regional tax, foundation support, or other sources.

In summary, ODECA should be encouraged to serve as a central coordinating body to promote and develop in each country a statistical program that is uniform, reliable, and timely. The Ministries of Labor should employ at least one high-level, competent economist-statistician to analyze all available data. Household and establishment sample surveys should be initiated and developed in each country, and 5-year population censuses should be carried out to obtain comparative benchmark data.

1/ U.S. Department of Labor International
Technical Assistance Corps.

Some Observations on the Chilean Education System
and its Relation to Economic Growth
(1963; 20 pages)

Paper for the Conference on the Role of Education in Early Stages of
Economic Development, at the University of Chicago
Rudolph C. Blitz, Vanderbilt University

Some characteristics of the educational system in Chile,
and the reasons why public education, with all it could
mean for Chilean economic development, turned out to
be a failure.

The Educational System

1. Data on the school population from 1940-1957 showed that the relative proportion of secondary and superior education increased substantially in relation to primary education, but that the proportion of superior to secondary education diminished.

2. The educational pyramid has an extremely narrow peak; i.e., only 1.2 percent of those entering primary education enter the university.

3. A large proportion of university entrants are unprepared to study natural sciences. Hence, the growth of enrollment in engineering and science has narrow limits.

4. The rate of school desertion, especially at the early stages of the educational ladder, is heavy despite the 40-year-old law of compulsory primary education and a tradition of free education for more than a century.

Reasons for the High Desertion Rate
from the Education System

1. Income distribution is uneven and the rural areas are isolated in Chile.

2. Educational motivation may be weak because of the complete lack of a guild and apprenticeship tradition.

3. A country which has a high birth rate and a low life expectancy finds free general education a greater burden than a country which has a low birth rate and a high life expectancy.

Concluding Observations

1. Chilean economic development has been impeded by feudal values and traditions, especially in the agricultural sector.

2. The proportion of Chilean women in education and the professions is high. This may indicate a stage in development in which women are no longer discriminated against and still have the advantage of cheap household help.

Manpower and Educational Planning in Chile--Preliminary Study
(1964; 62 pages)

Chile-California Program of Technical Cooperation, Stanford Research Institute;
William J. Platt, Al M. Loeb, and Russell G. Davis

Evaluates existing activities in manpower and educational planning, projects supply and demand of manpower to 1970, and recommends a more efficient manpower planning organization.

General Observations

Educational institutions in Chile offer an impressive list of seminars, courses, and workshops to develop middle- and high-level technical and management manpower. Regional colleges and other training institutions are expected to retard migration to crowded urban areas.

Several organizations are assembling manpower data that can form the basis for further studies. For example, INSORA (Institute of Organization and Administration of the University of Chile) is studying the supply and demand of graduates of professional, technical, and administrative fields; and CORFO (National Development Corporation) is studying manpower needs by industrial sector.

Manpower Demand

Supplementing INSORA and CORFO efforts, a method of determining economic demand for educational output was suggested. Data from the 1960 Census and estimates of productivity trends were projected to 1970 to evaluate manpower requirements by major industry and occupation.

Educational Supply

Projections of number of graduates at each level indicate a shortage of high-level manpower supply by 1970. Several recommendations call for changes in the educational structure; for example, 2-year colleges instead of 4-year institutions; redesign of course content in secondary level to aid those terminating their education and training.

Manpower Information and Employment Services

Recommendations are outlined for providing an effective employment service exchange to match job opportunities with available skilled manpower.

Organization for Manpower
and Educational Planning

Recommendations and major structural changes are proposed regarding the organization and coordination of human resources planning. A special unit to carry out this function should be established; an Advisory Board would represent various public and private organizations as coordinator of policies, plans, and projects.

Training and Educational Needs in Chile's Agricultural Development
(1965; 86 pages)

Chile-California Program, Stanford Research Institute;
William J. Platt, Raymond A. San Giovanni, G. Allen Sherman, and Lloyd Dowler

A study of the problems of agricultural education as they relate to requirements of the proposed agrarian reform program. Recommendations are made to aid in the preparation of an agricultural manpower development program.

Data in this report were gathered by conducting personal interviews and by examining existing statistical and planning reports. The research team participated in meetings of the Advisory Commission on Agricultural Education. Other organizations which were helpful were the Service of Technical Cooperation (SCT), the Institute of Rural Education (IER), and the Foundation of Rural Life (a private secondary agricultural school system).

Demand for Agricultural Personnel

The Manpower Planning Office of the National Development Corporation (CORFO) estimated the demand for 750,000 agricultural personnel in 1970 based on the assumption that productivity would increase 3.3 percent per year. In contrast, the research team estimated productivity would increase only 0.8 percent per year. Thus, about one million agricultural personnel would be required in 1970.

Accelerated Skill Training

This type of program concentrates on the short-term objective of training skilled and

semiskilled agricultural personnel. So far, the SCT has a program in tractor operation and repair. Its long-range plans call for courses to train farm managers, owners, businessmen, and workers. IER is qualified to assist in rural community development and skill training projects. Almost every aspect of rural life is embodied in IER programs through 23 regional educational centers.

Formal Education

The educational system provides the foundation for training by supplying teachers of training institutions. The technical educational level (US junior college level) supplies the middle-level manpower that is of critical importance to achievement of Chile's agricultural goals. The secondary educational level (US high school level) suffers low prestige in the eyes of the Chileans, and provides, in general, poor quality preparation at a relatively high cost per pupil.

Sections on adult education and on secondary and postsecondary agricultural education are provided. Recommendations cover all aspects of training and education for the rural sector, including administration, facilities and equipment, educational materials, curricula, and teachers.

The Emigration of High-Level Manpower
The Case of Chile

Pan American Union: S.G. Olivos (Former Chilean Ambassador) and
J.R. Perez (Specialist, Latin American Human Resources Planning Program)

Results of a survey of Chilean professional manpower
residing in the United States.

The purpose of the survey of Chilean professional personnel residing in the United States is to provide data on emigration of high-level manpower and, based on the results, to recommend basic measures for the solution of the problem.

The survey consisted of a mail questionnaire to a sample of the 2,320 university-level professional Chilean emigrants.

Summary of Findings

1. The greatest number of respondents is concentrated in California.
2. The largest number is at the 27- to 37-year age level.
3. Most are married and have established homes in the United States.
4. Fewer than 10 percent become naturalized U.S. citizens.
5. Engineering and nursing account for 36 percent of the total loss to Chile. Economists are next, and lawyers are last.

6. The vast majority (80 percent) have permanent U.S. contracts.

7. Nearly 40 percent of the professional emigrants were university professors in Chile.

8. Salaries to Chilean professionals in the United States are high relative to those in Chile, but achievement of outstanding positions is the exception.

9. Practically all Chileans hope to return to Chile some day.

Recommendations

Short-term: eliminate obstacles which impede return of emigrants; and establish incentives to facilitate return to Chile. Long-term: define clearly the manpower policy in Chile; organize a central agency to develop human resources; establish a centralized information service to register all professionals; increase salaries to retain professionals in Chile.

Status of ICETEX 1/ Survey of High Level
Human Resources in Colombia
(1963; 17 pages)

William A. Langbehn, AID Manpower Consultant

Reviews progress made by ICETEX in the manpower resources survey and recommends guidelines to complete the survey.

The Survey Plan

The project, an adaption of the research methodology utilized by the Instituto Torcuato di Tella (Argentina), was divided into four basic phases: (1) investigation of preexisting material; (2) supply; (3) demand; and (4) conclusions and analysis. The occupational coverage was limited to high-level professional and administrative personnel. On the supply side, the plan proposed to investigate the output of the educational system at the 12th grade and above. On the demand side, all nonagricultural firms who have 50 employees or more and all segments of government employment were to be surveyed. In the data collection for both supply and demand phases, the country was divided into six zones; each zone had a central research group, generally a university, in charge of data collection.

Summary of the Status

Work on the supply sector was well advanced; detailed planning for the analysis was completed. Work on the demand phase was on schedule; field work of data collection was to begin in August 1963. Analysis of the economic development plan, as the first part of the final stage, has been started. Completion was scheduled for mid-1964.

Recommendations

1. Early assurance of adequate financing is essential.
2. Recruitment and training of the interviewing staff for the demand phase should be expedited.
3. A Human Resources Coordination Committee should be formed immediately.
4. The potential lack of cooperation by regional universities must be anticipated and, if necessary, financial aid must be provided.
5. Research must be integrated to include the census of population and work done by SENA (National Apprenticeship Service), the Association of Colombian Universities, and other agencies.
6. Immediate commitments and decisions must be made to process the demand-phase information.
7. Plans for final analysis and for presentation of the final report should be developed.
8. Followup by a short-term consultant should be provided after the data-collection phase is completed.

^{1/} Instituto Colombiano de Especializacion Tecnica en el Exterior (Colombian Institute for Advanced Training Abroad).

ICETEX 1/ Survey of High-Level Human Resources in Colombia
(1964; 12 pages)

Gabriel J. Molnar, AID Manpower Consultant

Reviews the progress of the ICETEX survey, identifies the remaining problems, and provides an outline for the final report.

Information on the educational output and the demand data were not ready for final analysis, although the education-output phase was well advanced. The weaknesses of the survey were as follows: (1) organization and coordination were lacking; (2) in many respects, the survey was too inclusive for the amount of time, money, and personnel available; and (3) establishments employing fewer than 50 workers were not included.

The principal remaining problems hindering the analysis of the study concern estimates of the following items:

1. Current and future supply of and demand for occupations in the self-employed category.
2. Current (1963) universe by industrial category.
3. Future requirements of primary and secondary school teachers.

The consultant outlined the essentials that the analysis of the survey should include and the form the final report should take. 2/ In addition, training sessions for key officials of the Human Resources Division of ICETEX were held on the techniques of making forecasts from information obtained from an establishment survey.

1/ Instituto Colombiano de Especializacion Tecnica en el Exterior (Colombian Institute for Advanced Training Abroad). See also, 1963 AID report by Langbehn.

2/ The final report was entitled Recursos y Requerimientos de Personal de Alto Nivel, Colombia 1964-1975, Implications for Educational and Economic Policies (246 pages), and published by ICETEX, Department of Human Resources, in 1965. A 34-page summary was prepared in English in 1966, under the title of Resources and Requirements for Highly Trained Personnel.

A Comprehensive Manpower Planning Program for Colombia
(1964; 31 pages)

M. Vasudevan (India), ILO Expert

Reviews existing manpower planning programs, including the ICETEX survey, and makes preliminary observations concerning the establishment of a comprehensive human resources program.

Manpower planning in Colombia requires action to develop well-trained personnel and measure levels of unemployment and underemployment. The ICETEX survey, when it is completed, will provide information on the needs for high-level manpower and assist in directing educational programs to satisfy these needs. An outline for planning an educational system on the basis of manpower objectives is summarized in 14 steps.

A discussion on the value of the ICETEX survey and its shortcomings is presented. The most serious limitation is that the survey covers only those establishments employing 50 workers or more.

Among the dozen or so recommendations, one emerges as being basic to any manpower development plan. It is recommended that the various official agencies now active in human resources coordinate their activities through a work group. ICETEX should take the initiative to organize such a group. The agencies involved include the Ministries of Education and Labor, the Department of Planning, ICETEX, SENA, DANE, and the Colombian Association of Universities.

For further reference, see: Manpower Perspective of Colombia, by Dieter K. Zschork, Industrial Relations Section, Princeton University, 1967, 152 pages.

Organization of the Employment Service
(In Spanish; 1961; 30 pages)

ILO Report to the Government of Costa Rica;
OIT/TAP/Costa Rica/R.3; Morris J. Doran (United States)

Employment Service operations are reviewed to determine the needs for an effective organization.

An Employment Office was established in 1949, but was not effective until the ratification of ILO Convention 88 in 1960. Its responsibilities and operations were further strengthened by decree. In 1961, National Employment Service personnel consisted of a chief, three interviewers, and a secretary in San Jose; there were no offices in other areas. Duties consisted of registering job offers and placements only.

The expert reviewed all aspects of the Employment Service and recommended improvements in the Service as a major step toward the development of manpower and of the economy in general. He suggested a reorganization consisting of a national office separated from the local

office in San Jose, and the establishment of local offices in six major employment centers.

Assistance was provided for preparing a dictionary of occupations based on ILO recommendations. Personnel selection and training techniques also were prescribed.

Over 1,000 establishments were surveyed in San Jose to determine past, present, and projected employment, by sex and occupation. A second survey was made with some modifications to the method.

The recommendations dealt primarily with details of the functions and operations of an effective employment service office.

Interim Report on Manpower Planning and Human Resource Development
(1963; 31 pages)

Arnie Solem, AID Manpower Consultant

Recommendations for the introduction of human resource planning and for expansion and improvement of the Employment Service, including specific projects to be undertaken by the Employment Service.

Human Resource Planning

First priority should be given to an overall plan for the development of human resources. The main obstacles to effective planning are determining the direction that economic planning should take and establishing the policies and institutions to carry on human resource planning. Moreover, much of the statistical data are not available, and trained personnel to carry out this work have not been selected. A basic program to develop human resources requires good management and a sound educational system.

Employment Service

Second priority should be given to staffing the Employment Service. A few capable people can become a nucleus for effective leadership and future expansion. Visits to establishments have been planned to estimate need for trained

manpower and other basic job market information. The following subjects which included suggestions and recommendations were treated in considerable detail:

1. Information needed for manpower planning.
2. Organization and policies for manpower development.
3. Improvement and future development of the Employment Service.
4. Employment and unemployment.
5. Market research into labor-intensive crops.
6. Community development and farm extension services.
7. Employment objectives for industrial and urban areas.
8. Utilization of scarce manpower.
9. Training.

Human Resources Development Report
(1965; 40 pages)

AID Human Resources Development Team, Eldon Y. Stewart, Team Leader

Evaluates the present status of educational projects and recommends an extended program of educational development.

The AID Human Resources Development Team visited educational, business, and government institutions and other national and international agencies, and collected data from documents and interviews to prepare this report.

The strategy of developing human resources includes:

1. Development in conjunction with private sector support and involvement.
2. Use made of Puerto Rican institutions, development experience, and professionals.
3. Continuous communication maintained with all agencies involved in human resource development in the Republic to assure coordination.
4. New and untried methods and approaches explored to deal with institutional and developmental programs when conventional procedures appear inadequate.

Developing human resources rather than material resources was the main philosophy of the team. For example, teacher training comes before book purchases, and books before classroom construction.

The rest of the report is divided into sections, as follows:

1. Schedule for program initiation including cost breakdown. (Total cost, \$736,200.)
2. Detailed execution of each proposal, in sequence, in phases or components of the proposal.
3. Description of the project proposals with detailed cost estimates and supporting information.

In brief, the project proposals for the development of human resources covered the following:

1. Reorganize the Ministry of Education.
2. Develop a new salary schedule for teachers.
3. Train teachers and administrators.
4. Develop agricultural education. (See Garcia and Stewart report.)
5. Develop adult and literacy education.
6. Create and support post-graduate development institute.
7. Develop vocational industrial education. (See Garcia and Justice report.)

Development of Vocational-Industrial Education and Training
(1965; 32 pages)

AID Human Resources Development Team; Eldon Y. Stewart, Team Leader

This report (referred to as the Garcia and Justice report) covers one project proposal of the Human Resources Development Report.

The main objective of the Garcia and Justice team was to assess priority training needs in trades and industry, to evaluate interest of local groups, and to determine role of AID. A second objective was to examine the vocational-industrial education and training field in the Dominican Republic.

The Skilled Manpower Development Center (SMDC) is operated with Seabee participation to train young men in auto and diesel mechanics. Addition of courses on house wiring and on air-conditioning and refrigerating are recommended. Eventually, the responsibility of directing the Center should be transferred from the Ministry of Labor to the Ministry of Education.

The team tried to assess the quality and types of existing training programs and to evaluate future training priorities. Employers and schools were visited. Observations and recommendations are presented in detail. No comparative data were available for the team to determine whether a graduate from a concentrated

6- to 7 1/2-month course or a graduate from a 3-year course would be more valuable to industry.

Urgent action is required to improve social and economic development of the country through well planned and balanced skill manpower training programs at the national level. A manpower survey to determine specific skill needs of industry was recommended for immediate action. When manpower needs are known, a master plan should be formulated to determine location of schools, skills to be taught, outside professional help, and budgetary requirements.

Of utmost importance is the organization of a Manpower Development Board to coordinate existing and potential action programs on skilled manpower training. The Division of Vocational Education in the Ministry of Education should be strengthened and improved. Coordination and cooperation at all levels and among all interested parties should be encouraged and maintained.

Development of Agricultural Education
(1965; 11 pages)

AID Human Resources Development Team; Eldon Y. Stewart, Team Leader

This report (referred to as the Garcia and Stewart report) covers one project proposal of the Human Resources Development Report.

The agricultural sector in the Dominican Republic accounts for 4 percent of the national income, employs 55 percent of the labor force, and furnishes 90 percent of the value of all merchandise exports. Population growth is rapid and nutritional needs are great. Thus, the increase in and diversification of agricultural production have first priority for economic development. To meet these needs, trained agricultural workers are required. Solutions to the agricultural problems will require a broad approach, coupled with short-term and long-range national plans and action programs. The formation of a National Advisory Board for Agricultural Education is essential.

More specifically, the educational system and its agricultural training institutions should be reoriented. At present, there are only three high schools teaching basic and technical agriculture. New institutions should be developed, and the ability of the Republic to support these institutions after foreign assistance is withdrawn should be considered.

The rest of the report provides the estimated costs and schedule for the initiation of agricultural education program. The total cost of the entire program would be \$1,675,000, including \$900,000 to construct three new vocational agricultural schools.

Survey of Needs for and Potential Technical Assistance
to the Dominican Republic Ministry of Labor
(1966; 6 pages and 1 appendix)

DOLITAC 1/ Staff Paper No. 17;
Joshua Levine and Eldon Vie, Manpower Advisers

Presents proposals for technical assistance in manpower,
wage policy, and labor administration.

As a result of this mission, a two-year program was developed requiring one long-term adviser in skills training and one in labor administration; 12 short-term technician assignments; and participant training. The programs covered the following fields:

Manpower (Employment Resources)

The Dominican Republic has a Skilled Manpower Development Center and other training schools but no apprentice training or skill-upgrading programs. A skill survey is needed to determine requirements for skilled workers in industry (one of the recommendations of the 1965 Human Resources Development Team). Integration and coordination of all institutions for skills training should be promoted. Short-term technicians should assist in specialized areas of the skill development program.

Wage Policy

A wage policy will serve to improve income distribution, increase purchasing power, moti-

vate skill acquisition, and improve productivity. The government has an opportunity to develop a national government-wide wage system which could spread to the private sector. A wage policy board should be established eventually with participation of government, management, and labor. The Ministry of Labor should start immediately to review its wage operations and to accumulate wage data. Short-term technicians should assist in the specialized areas of occupational analysis and wage statistics.

Labor Administration

The safety and health of workers on the job is of primary importance. Short-term technicians, therefore, should advise in developing safety codes for industry, training inspectors in techniques of safety and inspection, and promoting employer interest in safety programs.

1/ U.S. Department of Labor International Technical Assistance Corps.

First National Conference on Training and Development of
Manpower in the Dominican Republic
(1966; 7 pages)

DOLITAC 1/ Staff Paper No. 29; Archie Beaubien

Report of the apprenticeship and training aspects of the
Manpower Conference.

The Conference adopted the following recommendations which were presented to the President of the Dominican Republic for adoption and implementation:

1. Create an institute to be responsible for coordinating the development of human resources in the Dominican Republic. An industry tax plan would support the institution.

2. Create a commission to survey present facilities, courses, and needs of the Nation for education and skill training.

3. Establish a coordinated system of vocational training, upgrade worker skills, and modernize apprenticeship system.

4. Provide a method whereby the educational and training facilities and courses in the schools and training centers are reviewed and updated periodically.

5. Improve education, training, and retraining related to the public service needs of the country.

The current apprenticeship law and its operation were reviewed by the adviser. Several recommendations and comments were made. In essence, the law needs to be updated and supported by the Dominican Administration with adequate money and staff.

Regarding the manpower program in general, a survey of skill needs is the first requirement. Equally important is a survey of vocational and industrial training facilities, including teaching staff, equipment, tools, curricula, etc. A coordinated program would compare the needs against the facilities and attempt to meet the gap. This type of work could be done by the new National Manpower Committee.

1/ U.S. Department of Labor International
Technical Assistance Corps.

Survey of Skilled Manpower Needs
(May-June 1967; 5 pages and 4 tables)

DOLITAC 1/ Staff Papers No. 51 (English) and No. 52 (Spanish);
Howard Kumin, Labor Statistician

Describes the methods used and the results of the survey
of skilled manpower needs.

This survey was conducted as a result of recommendations made by several predecessor AID consultants. Basic data were needed for determining training needs in specialized skills.

Information was collected from samples of establishments employing 10 persons or more in manufacturing industries and in construction, hospitals, electricity, and other industries. The occupational distribution, level of training, replacements, and estimated needs were the primary objectives of the survey.

Data from 186 establishments employing nearly 32,000 workers revealed the following:

1. Nearly three-fourths of the workers were considered qualified for their jobs; the rest needed further training.

2. If business were to increase 10 percent, very few additional workers would be required, according to employers.

3. Only 38 job vacancies were reported.

4. Three-fifths of the establishments reported no difficulty in recruiting workers they needed.

5. Most establishments upgrade their workers as opportunities arise.

6. Three-fourths of the establishments felt their workers could benefit from additional training.

7. Two-thirds of the establishments would give time off for additional training.

8. The difference between peak season and slack season employment averaged 38 percent for all industries and 66 percent for the food industry.

Foreigners occupy most of the few highly-skilled positions which exist. Most semiskilled operatives can be trained in a few weeks or months. Upgrading workers already on the job may be the most promising field for manpower training.

1/ U.S. Department of Labor International
Technical Assistance Corps.

Promoting Industry Involvement in Training Programs
(April-August 1967; 8 pages)

DOLITAC 1/ Staff Paper No. 48;
Eugene Hood, Apprenticeship adviser

A review of the current situation in training for industrial jobs.

The adviser visited industrial establishments in Santo Domingo, local vocational and commercial schools, and labor organizations and made the following observations:

1. Training in industry is usually informal and on-the-job. Many industry officials recognized the need for establishing training programs for their present and future work force.
2. All labor groups were eager to promote on-the-job and related training programs with management.
3. Government officials are not usually familiar with the role that government plays in developing training programs.
4. Vocational school officials seemed eager to improve their present activities.

Current training programs are not meeting industry needs since the vocational schools are not coordinated with each other or with local industry needs. Students are being trained on

antiquated equipment for jobs which are not available. Only about 20 percent of graduates are being placed in jobs for which they received training.

The various social and economic problems arising from the poor orientation and coordination of the present training system are discussed. Also listed are basic barriers to manpower training, including the lack of leadership to carry out an effective, coordinated training program.

Recommendations concentrated on the establishment and development of a training agency to coordinate the various training institutions, programs, industrial needs, and other related topics. Specific suggestions also were made for each of these topics.

1/ U.S. Department of Labor International Technical Assistance Corps.

Improvement of the Statistical Program in the Secretariat of Labor
(1967; 17 pages)

DOLITAC 1/ Staff Paper No. 58; Howard Kumin, Statistical Adviser

A description of the efforts made to improve the statistical program of the Ministry of Labor; special reference is given to the labor force survey and to the family income and expenditure survey.

The current role of the Ministry of Labor as a collector of statistics is reviewed. Labor statistics are a by-product of the program for the enforcement of labor laws. The statistical section has maintained and summarized records of accessions, separations, and occupational changes of establishments. Improving both the coverage of establishments and the accuracy of the reports were outside the term of reference of adviser. Improvement of the statistical program was directed along two lines: to mechanize the tabulation processes and to design tabulations to indicate the economic health of the country. The introduction of the report (4 pages) and section I (4 pages) are devoted to this task.

Section II (8 pages) describes the survey of the labor force in Santo Domingo, 1967, and presents the findings. Questionnaires from out-

side Santo Domingo did not have enough labor force data to make tabulation worthwhile, with the exception of Azua and Rio San Juan, an agricultural area. Labor force participation rates for Santo Domingo and for Azua were practically the same: 28-29 percent; and for Rio San Juan: 23 percent. Because of poor instructions, enumerators neglected to ask about the employment status for household members. As a result, unemployment rates are unreliable.

Section III (1 page) summarizes the plan to survey incomes and expenditures of families in Santo Domingo in 1968. This work will continue through 1969.

1/ U.S. Department of Labor International Technical Assistance Corps.

Manpower and Labor Program Proposal for Ecuador
(1963; 14 pages)

Petroamerica Pagan de Colon, AID Manpower Consultant

Presents labor force data and describes the educational and training facilities. Proposes a Manpower and Employment Service in the Ministry of Social Welfare and Labor to coordinate the activities.

Labor Statistics

Ecuador has a Directorate General of Statistics which, according to law, is responsible for centralizing statistics from all government agencies. However, its labor statistics program is fragmentary and out of date. It is hoped that adequate labor force data will be available from the General Census of November 1962.

Educational System

In 1959, 16 percent of the national budget was allocated to education. Technical schools prepare middle-level technicians for industry, but the number of students is low relative to the need.

A serious lack in vocational guidance permits enrollment in fields which are already over-staffed. Many foreign high-level administrative and managerial personnel must be imported because of lack of training for nationals.

Recommendations

1. Establish in the Ministry of Social Welfare and Labor a manpower program which has authority to plan and administer the development of human resources.
2. Coordinate activities of labor statistics, employment service, and apprenticeship in the Manpower and Employment Service.

Manpower and Educational Planning in the Socioeconomic
Development of Ecuador
(1964; 91 pages)

Stanford Research Institute, Henry F. McCusker, Jr; and Edward A. Podesta

Preparation of a program of manpower planning and
development for the national development plan for
1964-73.

The Junta Nacional de Planificacion y Coordinacion Economica of the Government of Ecuador commissioned Stanford Research Institute to conduct a survey of the role that manpower planning and education should play to achieve its socioeconomic objectives.

The research activities consisted of:

1. Evaluating and revising projections of professional and technical manpower requirements that already were prepared by the Planning Office.
2. Preparing estimates of manpower requirements in economic sectors and for certain skills.
3. Appraising gap between future requirements and anticipated supply.
4. Assessing current education and training programs outlining ways to improve capability.
5. Determining direction of long-term manpower planning to coordinate manpower activities.
6. Identifying specific problem areas for further study.

Findings

1. Quality and content of higher education programs are not adequate to meet needs.
2. Little emphasis is placed on in-service training programs for high-level, technical, and skilled manpower.
3. Insufficient data are collected for analysis.
4. Estimates of demand for and supply of professional manpower in 1968 and 1973 indicate shortages of professors, engineers, administrators, and professional agricultural workers.

Suggestions for Action

Based upon the findings and analyses of alternatives, the following major categories of measures and policies were proposed for consideration by the Planning Office:

1. Better integration of education and manpower planning with socioeconomic development planning.
2. Improvements in quality and relevance of education to meet occupational requirements.
3. Alleviation of projected manpower demand-supply imbalance.
4. Improvements in the efficiency of higher educational institutions.

Manpower Data in Ecuador
An Appraisal of Some of the Current Data Systems
Crucial to Human Resource Development Planning
(1965; 43 pages)

Don H. Roney, AID Manpower Adviser

Evaluates current sources of manpower data and plans
for collecting additional data.

The purpose of this report is to evaluate current statistical data on which manpower planning must rest, appraise the technical and organizational capability to produce the required data, and suggest appropriate AID relationships to these programs.

The 1962 Census of Population did not provide enough detail relating to occupations, levels of skill, industrial attachments, etc., that is needed to develop a manpower-educational plan. Other types of surveys, such as the household survey, occupational and industry surveys, must be developed for manpower planning.

Among the other statistical data or programs analyzed are the following:

1. Consumer price index, monthly for Quito and Guayaquil.
2. Index of employment and wages in mining, quarrying, and manufacturing.
3. National directory of establishments, by province and by 3-digit industry code.

The Bureau of Labor, part of the social security office in the Ministry of Social Welfare and Labor, is concerned primarily with

administration of the labor code. Total staff is 75, of whom 50 are labor inspectors. Within the Bureau, there are several sections:

1. Statistics and Placement Section does some job registration and placement but mostly compiles data on minimum wages, industrial accidents, etc. Some job market analysis work has been started.
2. The Artesan Section legalizes and inspects the training centers administered by four ministries under a program to protect skilled workers.

Recommendations

1. The Division of the Census should proceed with the household survey.
2. The Bureau of Labor's Statistics and Placement Section should be expanded so that adequate labor reporting and analysis systems can be developed.
3. Job market analysis should be assigned to the agency developing the employment service.
4. The initiation of a system of public employment offices should be fostered by AID through participant training, technical assistance, and commodity support.

The Labor Situation and the Work of the Labor Ministry
in El Salvador, with Recommendation for ICA Activities
(1961; 8 pages)

Clara M. Beyer, AID Consultant in Labor Law Administration

Reviews various projects for AID assistance in the labor program and recommends improvement in the work of the Labor Ministry.

The Ministry of Labor has done little so far to improve working and living conditions of the laborers. Its immediate plan was to reorganize and expand the inspection department to enforce the Sunday law (payment for Sunday work for agricultural laborers) and other new regulations. The Ministry also planned to start work on an apprentice training program already approved for AID technical assistance.

Dynamic programs are needed to improve the lives of workers and to bring them into active participation in various programs. The instability of the Government and its failure to understand basic needs of the people pose a real problem in the application of technical assistance programs in the labor field. Numerous recom-

mendations are made for strengthening the Ministry and for protecting the security of workers.

Program recommendations

AID approved projects should include the assignment of a statistician to help the Ministry of Labor in its employment statistics series, and the assignment of an apprenticeship expert to help start a training program.

Other possible AID projects could include worker's education, technical assistance of an Employment Service expert, training of women workers, loans to unions for self-help projects, and aid in establishing credit unions.

Manpower Services for Human Resource Development
in El Salvador and the Central American Region
(1963; 14 pages and 8 appendixes)

Robert J. Clay, AID Manpower Consultant

A review of available manpower services in El Salvador
to formulate a regional manpower development plan.

The four key functions of government essential to the administration of a manpower program are (1) a central manpower planning office, (2) collection and analysis of statistical data, (3) a public employment service, and (4) a central training authority. El Salvador is one of three countries in the Central American common market which maintains a public employment service. Also located in the Ministry of Labor is a labor statistics section. Both of these services have received substantial U.S. technical assistance. An apprenticeship program is currently being developed under the guidance of a U.S. technician. Thus, El Salvador is well on its way to developing the basics for a manpower development program. However, at the present time, a coordinating office of manpower resources and planning does not exist, much statistical data are lacking and the current employment service program is weak.

The consultant presented a country program plan for AID assistance, entitled Manpower Planning, Development, and Utilization. Its

purpose would be to assist in identifying and utilizing manpower to provide maximum productivity and to support key economic development activities in the country.

Specific activities to carry out the development of manpower program include the following:

1. Upgrade, develop, and expand manpower activities of the employment service.
2. Improve, upgrade, and support labor statistics functions in the Ministry.
3. Reorganize all manpower services to provide for a National Manpower Department.
4. Develop within the National Council for Planning and Economic Coordination a human resources development commission which has representation from all the Ministries.

The need for regional integration in planning and implementing technical labor programs is discussed. Relevant papers by other consultants on this topic appear in the appendix.

Labor Statistics in El Salvador
(1964; 18 pages)

John F. Carruthers, AID Labor Statistics Technician

Describes labor statistics programs of the Ministry of Labor.

The Statistics Section of the Ministry of Labor is divided into four subsections, each of which performs specialized statistical functions:

The Cost-of-Living Subsection conducts an irregular and limited consumer price index survey for Santa Tecla. Since the base year is outdated and no use is made of the data, it is recommended that this work be discontinued.

The Work Accident Subsection collects reports on injuries and accidents from employing establishments. Since identical information is collected by the Social Security Office, it is recommended that this subsection refrain from requiring employers to submit identical reports.

The Employment, Hours, and Earnings Subsection collects these data by mail from employing establishments. No recommendations are made to change this activity.

The Special Studies Subsection prepares reports on the incidence and number of labor-management disputes. At one time, this subsection conducted labor force surveys (1957-59). It is recommended that this work be reactivated. A detailed proposal is provided in the appendix.

About seven separate studies have been made by consultants relating to the Statistics Section; six of them were made since 1961. Unfortunately, the Ministry of Labor has not implemented any of the recommendations. Summaries of these studies are presented.

Coordination of the various statistical programs in the different ministries is lacking. The Central Statistical Office in the Ministry of Economy does most of the Government's statistical work but it does not coordinate or plan for other statistical programs. A strong statistical program to provide the necessary manpower data to carry out the country's economic development plan is needed.

Construction Industry Training
(1967; 19 pages)

DOLITAC 1/ Staff Paper No. 34;
Maurice C. Sandes, Manpower Development Adviser

Describes the current apprentice training organization and programs, and presents suggestions for expansion and improvement.

The lack of skilled construction workers seriously hampered repairing the badly damaged capital city after the earthquake of 1965. A proposal was prepared for an intensive program to train construction foremen. It was hoped that this program would continue after the emergency and open the way for formal apprentice training in the construction industry.

A program, consisting of a 50-hour course on modern construction techniques and supervisory training, was devised to train 105 foremen. Class would be held 3 nights a week for 5 weeks; a 5-hour followup session would be given 3 weeks later as a refresher and evaluation.

Several attachments are appended to the report. They include:

1. An assessment of the national apprenticeship system in El Salvador.
2. Apprenticeship legislation as it appears in the Labor Code.
3. The organic law of the Ministry of Labor as it set up the National Department of Apprenticeship.
4. The general standards that regulate apprenticeship in arts, crafts, and other occupations, as formulated by the National Apprenticeship Council in 1964.

1/ U.S. Department of Labor International Technical Assistance Corps.

Labor Skills and Aptitude Testing Feasibility Study
(1966; 17 pages)

DOLITAC 1/ Staff Paper No. 7; Robert Doig

Feasibility of introducing and establishing a labor aptitude and skills testing program.

Guatemala has an abundant supply of unskilled and untrained manpower. Facing an expanding Guatemalan industrial development, the Industrial Development and Productivity Center (CDPI) requested assistance in identifying prospective trainees from this vast pool of human resources.

To analyze the feasibility of introducing aptitude tests, the status of the current situation had to be known. Through plant visits and personal interviews with officials of government educational institutions, personnel managers, and others, it was determined that no aptitude tests suitable for screening and selecting workers were in existence. Also, industry was experiencing difficulty in selecting workers for all categories of jobs.

Recommendations

1. That CDPI plan to introduce and maintain a labor skills aptitude testing service for

Guatemalan industry, using the Spanish Language Version of the General Aptitude Test Battery developed in Puerto Rico.

2. That CDPI introduce and maintain a course on the Selection of Personnel as one of its industry service courses.

3. That CDPI cooperate with other competent authorities so that GATB might be made available for counseling and guidance.

A suggested operational plan for introducing aptitude testing is described; staffing and equipment requirements and training of personnel are included.

1/ U.S. Department of Labor International Technical Assistance Corps.

Employment, Unemployment, and Underemployment
in the Colony in 1956
(1957; 43 pages)

ILO Report to the Government of British Guiana;
Edward McGale (Great Britain)

Results of a sample survey of the labor force and
recommendations for improvement in the collection
of statistical data.

Reliable and current data on employment and unemployment did not exist in Guyana at this time. The 1946 Census of Population was the most recent data available.

To conduct a survey of the labor force, a random sample of voters, representing 4,600 households in the inhabited coastlands, was selected from the Electoral Register and enumerated at two different periods. Supplementary data were obtained from a sample of 544 establishments employing 66,000 workers. In addition, emigration returns were examined to assess the influence of unemployment upon migration from the Colony, and registers of Employment Exchanges were analyzed for data about the unemployed.

The results of the survey indicated that nearly 70 percent of the population were in the labor force. Two-fifths of the labor force were in agriculture and mining, and nearly a fourth were in manufacturing and construction. The survey revealed that, in mid-July 1956, 18 percent of the labor force were unemployed. The largest unemployment rate appeared in Georgetown (22 percent). Agriculture had the most unemploy-

ment of any industry (16 percent). According to ILO's definition for "visible underemployment" (persons employed fewer than the normal number of hours), about 15 percent of the total number employed were persons who worked fewer than 30 hours during the survey week.

An in-depth analysis of these data indicated serious problems in two areas: Heavy unemployment among school-leavers, and surplus labor living on sugar estates. To illustrate: 43 percent of the unemployed of whom nearly two-thirds never had a job were persons under 21 years of age.

Recommendations

Recommendations dealt with details of various ways to improve future employment surveys:

1. The Government Statistical Bureau, when it is established, should carry out periodic employment surveys by sampling methods.
2. Additional surveys should be conducted to throw light on specific problems.

An Assessment of High-Level Manpower Requirements
in Relation to British Guiana's Need for Economic Development
(1962; 21 pages and appendix tables)

Robert L. Thomas, AID Manpower Consultant

Presents results of a manpower survey and projections
of manpower needs for 1967.

The labor force is estimated to grow 3 percent per year and will continue to do so for the next 5 years (1967). The unemployment rate of 18 percent, established by the McGale report, remains the same. The goal for the next 5 years must be to create over 12,000 new jobs annually to take care of those now unemployed and those who will be entering the labor force. The existing Five-Year Program, if fully implemented, will create only 2,500 new jobs annually, falling far short of the required goal.

To aid the government in its manpower planning, an assessment of high-level manpower was undertaken. Information was obtained from employers, government agencies, and training institutions. About 95 percent of the high-level manpower resources were covered in the establishments visited. Using this inventory as a base, 5-year estimates of demand for each occupation were made by calculating withdrawals from the occupation in the next five years and carrying forward current unmet demand (vacancies) plus estimates of increase over the next 5 years. This demand information was matched with estimates of supplies so that significant shortfalls may be identified.

The results reveal that there is a general shortage of most types of high-level manpower and some acute problems are in prospect. The educational base is insufficient from both a quantitative and qualitative standpoint. At each educational level, adequate teachers, facilities, and books are lacking. The major portion of the report analyzes the current situation and future prospects in each of the high-level occupations.

Recommendations

Recommendations appear throughout the text discussions. The major ones are as follows:

1. Establish in the Ministry of Development and Planning a Manpower Planning Office.
2. Establish means to obtain basic job market information.
3. Develop a program of vocational guidance and counseling.
4. Improve quality of technical and non-technical schools, and strengthen the secondary school system.

Report on a Survey of Manpower Requirements and
the Labour Force, British Guiana, 1965
(1966; Four volumes)

O. J. C. Francis, UN Technical Assistance Expert for the Manpower Survey
Office, Ministry of Labour and Social Security

A comprehensive study of the demand for and supply
of manpower in Guyana.

Volume I--Surveys of private establishments, ministries, government departments, public corporations, statutory bodies, local authorities, etc. (400 pages plus appendix tables.) Essentially an inventory of occupations by sector showing present and projected number of employees. Contains detailed description of techniques used to make establishment surveys.

Volume II--Human resources in Guyana. (216 pages plus appendixes.) Results of the household survey on the labor force. Includes information

on the economic and social characteristics of the employed and unemployed.

Volume III--An inventory of occupations in private establishments, with descriptions. (188 pages.) An occupational classification system pertinent to Guyana's economy. Contains a section on the educational and/or training requirements for appointment.

Volume V (No volume IV)--The volume and variety of qualified and trained personnel in the public sector. (434 pages.) Lists qualifications and study courses which officials have taken.

The Problem of High-Level Manpower in Mexico
(1960; 25 pages)

Don Roney, AID Manpower Consultant

An overall view of high-level manpower and some problems in developing adequate supply.

Technical and management skills have not kept pace with the rapid growth of the industrial and commercial sectors in Mexico. A piecemeal approach to alleviate the lack of supply has been attempted; but efforts of the past should be replaced by a broad, frontal attack. Underlying the whole problem is the basic issue of adequacy of training throughout the entire educational structure. The greatest need appears to be for trainers who can teach others how to train.

At present, there is no focal point for manpower development although several agencies have splinter responsibilities. The position of leadership seems to be held by the Bank of Mexico as a result of its interest in economic development.

The most constructive and urgently needed step which the Government of Mexico could take

to solve its trained manpower needs would be to establish a Manpower Planning Office. Only by centralizing manpower information, planning, and action can a broad, coordinated manpower development plan be successful. A detailed description of the various management and technical skill development programs is presented. A comprehensive study of the needs for technicians in industry was made by the Bank of Mexico and is summarized in this report.

U.S. technical aid programs in Mexico have a strong manpower focus. They are well conceived and operated and have received strong local support. Recommendations for additional assistance emphasize expanding participant training and improving labor statistics and job market information.

Scientific, Engineering, and Technical Education
in Mexico, 1964
(1967; 35 pages and bibliography)

Education and World Affairs, Occasional Report #3;
Russell G. Davis (Harvard University)

This paper is based on a report submitted by a special study group to the Ford Foundation in 1964.

During the course of the study, Mexican educational institutions which were training engineers, scientists, and technicians were visited, as were the Mexican firms which employed graduates from these schools.

After a brief discussion of existing educational facilities and conditions, the author outlines some of the problems in making estimates of scientific and technical manpower requirements. Comparisons of available data from two previous studies (1956 ^{1/} and 1962 ^{2/}) were difficult because of the absence of adequate data and because of contradictory definitions. These two studies indicate a surprisingly low ratio of professional to middle-level manpower. Employers expected this ratio would prevail for several years because the schools do not produce enough middle-level technicians.

Most of the report covers the output of technical training facilities at all levels. Although the data are not precise (because of poor statistics and conflicting definitions), the author feels that Mexican educational institutions have not adjusted to the needs of industry. The Mexican system emphasizes professional-level programs at the expense of middle-level technical

programs, resulting in professionals having to do work normally assigned to technicians. The disparity between upper-level and middle-level training is explained by problems in the industrial job market, inaction and insufficient funds in the education system, and the nature of the social demand for education. Industry has remained productive because it has found other sources of manpower. Unless a major effort is made to overcome the main problems currently besetting technical education, the steadily increasing need for middle- and high-level manpower will sharply outstrip supply.

^{1/} Banco de Mexico, Departamento de Investigaciones Industriales, El Empleo de Personal Tecnico en la Industria de Transformacion, 1959.

^{2/} Asociacion Nacional de Universidades e Institutos de Ensenanza Superior, La Ensenanze de la Ingenieria en Mexico, 1962.

Manpower Development in Nicaragua's Socio-Economic Planning
(1962; 25 pages)

Francis X. Gannon, AID Labor Specialist

Suggested proposals for labor administration, training,
and education.

The Nicaraguan Government, through its various ministries and agencies, is embarking upon programs of industrial incentives and agrarian reform. The proposals of the expert are designed to contribute to the success of these economic programs.

1. A National Apprenticeship Program should be created to improve job skills of workers and to provide job training opportunities to new labor force entrants. All forms of skill training activities would be included.

2. The National Employment Service should be strengthened and provided guidelines to assist workers in getting jobs. Its services should be

expanded to serve all the needs of workers and to coordinate with related activities of other agencies.

3. The Labor Statistics Section of the Ministry of Labor should collect, compile, and analyze a wide variety of manpower information to supply the Planning Office with current and reliable data.

4. The various cooperatives should coordinate their activities to avoid duplication and to share in the knowledge each has gained. A National Cooperative Council should be created as part of the Office of National Social and Economic Planning and Coordination.

Population Growth Rates
and Economic Development in Nicaragua
(1967; 169 pages)

Peter Newman and R. H. Allen, prepared for AID
by Robert R. Nathan Associates, Inc., Washington, D. C.

A detailed and technical report using modern techniques of demographic and economic analysis to discover significant relationships between rates of population growth and economic development.

This study projects the major characteristics of the economy nearly 50 years into the future and evaluates the differential effects of alternative fertility rates on the various segments of the economy. Three alternative population projections (designated high, medium, and low) by age and sex distribution, were made from 1963 to 2013.

The major portion of the analysis evaluates the differences among the high, medium, and low population projections in their impact on National income, investment, and consumption over the 50-year span. An economic model was formulated to take account of the effect on total production of variations in size of the labor force,

simultaneously with the effect on the availability of capital for productive investment of varying numbers of consumers and their propensity to save. The implications of the alternative projections also are examined for their effect on education, public health, housing, and foreign borrowing and balance of payments.

The most significant finding is that substantial differences in production, investment, and consumption per equivalent adult consumer appear between the high and medium and between the medium and low fertility rates. The smaller population in each case would fare better in a material sense than the larger population. The advantages of low fertility are described.

Some Guidelines for the Process of Implementing the Activity Target
for Manpower Development and Utilization for USAID/Panama/
(1964; 8 pages and 5 appendixes)

Robert J. Clay, AID Manpower Adviser (ROCAP)

This is one of three reconnaissance studies on manpower requirements, resources, and utilization for the urban sector in Panama.

The purpose of this report is to propose a plan of action to foster a dynamic strategy for human resources development and utilization, and to assist the Government in establishing a manpower service and in developing a progressive labor union movement.

USAID should be ready to offer assistance in any way as the Government needs and requests it.

Recommendations

The Government of Panama should:

1. Ratify ILO convention No. 88 (appendix D in Spanish) relative to the organization of an employment service.

2. Create a human resources development and utilization center to provide broader employment services.

3. Provide a high-level advisory and coordinating body made up of representatives from government, industry, and labor.

4. Adopt measures to encourage a strong labor movement. The American Institute for Free Labor Development (AIFLD) may provide training for labor leaders in preparation for a national labor movement.

5. Adopt measures (e.g., labor-intensive investments) to utilize unemployed and underemployed human capital and to improve existing skills to upgrade work force.

Population, Labor Force, and Employment in Panama
(1965; 66 pages)

Dr. Norman G. Pauling, AID Manpower Planning Consultant

This is one of three reconnaissance studies on manpower requirements, resources, and utilization for the urban sector in Panama.

Using census data and other limited available information, the report attempts to identify the incidence and cause of unemployment, the characteristics of the unemployed, and the relation of unemployment to other major social and economic trends.

Detailed statistics (1960 data) on population and labor force are provided. At the current growth rate of 2.9 percent, the population will double in 25 years. Over 43 percent of the population are under 15 years of age. Nearly 42 percent of the population are in the labor force, and 11 percent of those in the labor force are unemployed. The report also provides detailed statistical data on the characteristics of the labor force and on the unemployed.

Population and labor force growth relative to economic growth are analyzed. Although GNP grew at an average annual rate of 5.85 percent, compared with a population growth rate of 2.9 percent, the resulting per capita gain does not give a clear picture of the actual situation. The average gross product per capita is still very low. Per capita figures tend to be misleading

because they fail to reflect unequal participation of individuals and various economic groups in the benefits of economic growth.

Taking into account all available data, a GNP annual growth rate of 8.5 percent would be needed to absorb the anticipated increase in the labor force. Such a rate of growth implies a doubling of the economy every 8 1/2 years--an unlikely feat.

Many recommendations and suggestions are discussed in detail. Some of the most important are:

1. Panamanians must seek some acceptable means to limit the rapid rate of population growth.
2. Economic growth must be stimulated.
3. An integrated manpower program and coordinating agency must be developed.
4. Educational programs of all kinds must be expanded.
5. A National Employment Service must be introduced.
6. A strong and stable labor movement must be encouraged.

A Survey Report on Vacancy Training Needs
in Selected Occupations in the Panama City Metropolitan Area
(1966; 37 pages)

DOLITAC 1/ Staff Paper No. 44; Allan Broehl, Labor Analyst

Analysis of the results of the vacancy training needs survey. More training is required, and areas of potential employment are identified.

The Education for Development Survey (vacancy training needs survey) was carried out by the Institute for Development and the Center for Industrial Development and Productivity. It was a sample survey of establishments employing five blue-collar workers or more in the Panama City area.

The purpose of the survey was to identify training needs in private establishments. Training needs were divided into three groups: existing job vacancies, projected employment needs, and presently employed workers needing additional on-the-job or work-related training.

The analysis of the data from the survey covers details of occupations for on-the-job and work-related training. Suggestions are also presented for expanding employment opportunities in the private sector and for establishing an Employment Service. Methodology and coverage of the survey are described.

Summary and recommendations

1. The two outstanding observations were:
(a) the very low level of frictional unemployment

indicated by the limited number of unfilled jobs; and (b) the large percentage of skilled and semi-skilled workers (15 percent) who need training. Marginal productivity of existing workers is low. If productivity of existing workers were raised through training, employers probably would hire additional workers.

2. Because the Pan-Canal Company is the most significant potential employer, training programs should be coordinated with Canal Zone authorities.

3. Potential employment in the above areas will not meet all the needs for a higher level of employment. New sources of employment must be sought in manufacturing, construction, and agriculture.

4. Attention should be given to expanding and updating the vocational education system to meet the needs of the local community.

1/ U.S. Department of Labor International Technical Assistance Corps.

Testing and Counseling in Panama
(1967; 9 pages)

DOLITAC 1/ Staff Paper No. 50;
Hendric C. Mugaas, Testing and Counseling Expert

Description of one facet of AID's Manpower Training
and Utilization Project in Panama.

The purpose of the assignment was to assist the Director of the AID Project in the following areas:

1. Analysis of the testing and counseling needs in the country.
2. Establishment of a testing and counseling unit to serve the Institute of Human Resources Development (IFARHU) and the Ministry of Labor.
3. Training of personnel assigned to the unit.
4. Development of a program and procedures for the unit.

IFARHU estimates that 15,000 skilled workers will be needed by 1970; the present school system can provide only 3,000 adequately trained workers. The report describes the various projects which are designed to train additional workers especially in the construction trades, printing trades, and garment and shoe manufacture. Testing and counseling services will have to be developed to select trainees for these jobs.

IFARHU has progressed in using testing devices, such as the G.A.T.B. The expert analyzed the test development work from several countries

to get valid norms for use in Panama. The various testing devices are described. Manuals and guides in various aspects of testing and counseling were prepared and translated.

IFARHU is best situated for demonstrating the importance of testing and counseling and for providing good training experience for future Employment Service personnel.

IFARHU can obtain population data on which to establish an occupational distribution of workers. By applying certain techniques (see Al Cruz report to Venezuela, 1967), a standardization study based on the working population of Panama City can be designed.

If the Manpower Training and Utilization Project activities and those of IFARHU are maintained, technician assistance should be obtained for the test development studies and job analysis work.

1/ U.S. Department of Labor International
Technical Assistance Corps.

Southern Peru Manpower Study
(1959; 27 pages)

William Mason, ILO Manpower Adviser (United Kingdom)

Current supply of and potential demand for manpower in the commercial and industrial sectors are analyzed in this report.

Covering 14 cities in Southern Peru, a survey of 1,600 establishments employing 30,600 workers was conducted. Certain handicaps made analysis of the results of the survey difficult. For example, no previous data (last census was in 1940) were available to make a trend or comparative analysis. In addition, employers distrusted the purpose of the survey and found difficulty in visualizing future prospects. Time and money limitations, in addition to the rainy season, delayed the work of the study group.

An analysis of the study revealed that, since agriculture dominates the economy in the south, cities serve primarily as marketing centers for agricultural output. Commercial activities represent nearly two-thirds of total activities; and manufacturing, nearly one-third. Over 70 percent of the establishments are family owned and operated, of which 61 percent employ fewer than 5 workers.

The nonfarm labor force of southern Peru is not distributed in direct proportion to the number of establishments in each economic activity. Manufacturing and construction each employ about 30 percent of the labor force; and commerce, about 20 percent. Nearly a fourth of the

labor force are women, mostly in commercial activities. The volume of migration to urban areas is high, resulting in a surplus of unskilled labor in these areas.

The survey revealed a lack of manpower training and development plans or programs in establishments. Generally, respondents were not concerned with labor problems or with future needs of their establishments. Only a few indicated they were unable to fill positions because of lack of qualified personnel. About 8 percent showed some concern over future needs.

Illiteracy (70 percent) and language difficulties (only 28 percent speak Spanish) are the major deterrents to a well qualified labor force. University education is limited to the liberal arts, and technical education at all levels is scarce.

Recommendations included (1) a curtailment of out-migration of workers by providing employment opportunities to raise living standards; (2) development of work skills of labor force; (3) integration of Indians into socioeconomic life; (4) continuation of establishment study by Employment Service Office; and (5) use of 1960 Census of Population as a basic statistical tool.

Labor Market Reporting Program of SCEP
(1960; 7 pages)

Homer J. Freeman, AID Labor Market Consultant

Describes various job market surveys and summarizes recommendations stemming from these surveys.

The major recurring surveys now being conducted by eight staff members in the Investigations and Statistics Division of the Cooperative Employment Service (SCEP) are:

1. Quarterly surveys of employment, hours, earnings, and job market turnover.
2. Quarterly surveys of labor disputes.
3. Special survey of mining industry.

Special one-time surveys available for analysis are:

1. Manpower study of Southern Peru (1959).
2. Special study on the banking industry (1959).
3. Study of new firms established during 1959.
4. Directory of labor unions.
5. Number of public employees in each of the government agencies.
6. Study of salaries by occupation (1959).
7. Manpower study on Northern Peru (1960).

Based on the results of these studies, recommendations are provided, along with a time table for their initiation and completion:

1. Obtain estimates of total nonfarm employment for benchmark purposes.

2. Make employment data comparable from one period to another by using link-relative method.

3. Publish finer industrial breakdowns whenever sample is large enough to show detail.

4. Make better use of stratified sampling techniques.

5. Show more comparisons of the current period with other periods to show trends in employment.

6. Prepare more comprehensive analysis of statistical data to explain basic reasons for changes.

7. Introduce better methods to compute wage information.

8. Prepare more detailed written instructions.

9. Consider improving the present system of releasing information.

10. Make better use of payroll information from establishments.

Manpower Information Program (SCEP)
(In Spanish; 1961; 34 pages)

ILO Report to the Government of the Republic of Peru;
OIT/TAP/Peru/R.7; William Mason, Manpower Adviser (Great Britain)

A report on the status of the fact-finding and publishing functions of the Employment Service.

The Cooperative Employment Service (SCEP) started in 1951 under the direction of the Ministry of Labor. The Division of Investigations and Statistics (10 employees) conducts surveys and otherwise gathers statistical information. The Division of Technical Services (8 employees) studies and analyzes these data. In addition, there are several local placement offices in the larger employment centers.

The various surveys conducted by the Employment Service and information from other sources are discussed for utilization in a manpower development program. For example, demographic information can be used to analyze and project the supply of manpower; industry and occupational employment series serves as the basis for studying the demand for manpower at each level of skill. Suggestions are made on how other sources of data relating to manpower can be incorporated in the analysis in order to understand the social and economic development in Peru.

One of the tasks of the consultant was to develop a training program for the professional employees of the Employment Service. Topics included the following: techniques for analyzing job market information, analysis and interpretation of manpower information, and techniques of report writing.

Several recommendations were made to improve Employment Service activities, including data-collection techniques, data analysis, coordination of surveys to avoid overlapping or duplication, and preparation of the reports on manpower. Further recommendations concerned the use of these data as a basis for the manpower development aspect of the country's development plan.

The appendix provides sample questionnaires on job placement, and uses of Labor Statistical Bulletin. An example of a job market report also is provided.

Mission to Peru
Manpower Memo No. 2; General Comments
(1963; 22 pages)

DOLITAC 1/ Staff Paper No. 40;
Eugene D. Vinogradoff, Manpower Adviser

Impressions of Peru's manpower problems are presented and an overall program is outlined.

Despite a relatively high rate of economic growth in Peru, urban unemployment and underemployment may increase because of rapid labor force growth and heavy rural immigration. An accelerated rate of economic growth has been hampered because of shortages of skilled workers; inadequate basic education; low productivity, income, and purchasing power; rigidities in social welfare programs; and inadequate supporting programs in housing, health, and community facilities. These and other problems in both urban and rural areas create pressures on the government. Labor unrest plus potential instability of the government may endanger democratic institutions. The only solution is to accelerate activity in the public sector (in terms of employment and social reform) and to stimulate private initiative.

Specifically, 100,000 new jobs annually are needed in urban areas just to take care of the

increasing labor force. Government and private industry expansion should be reviewed in terms of jobs created per dollar invested. The construction industry is the most likely area for job creation activities in the short term for unskilled workers. About 30,000 jobs are needed annually in rural areas. Funds and staff should be provided to promote measures for labor-intensive activities and to decrease migration to urban areas.

Recommendations also were made regarding social welfare legislation, types of manpower studies, improving skills in labor force, and raising income levels. The several agencies involved in programs affecting human resources should coordinate their activities.

1/ U.S. Department of Labor International Technical Assistance Corps.

Mission to Peru
Manpower Memo No. 3: Specific Suggestions
(1963; 11 pages)

Eugene D. Vinogradoff, Manpower Adviser

Specific steps that the human resources group in the Ministry of Labor should undertake to develop a manpower program.

The economic development plan serves as a base for the manpower development program. Once projections of the whole economy are made, manpower supply and demand data then can be related to the economic development plan. In the absence of an economic investment plan, available preliminary manpower data should be collected and analyzed.

Demand data can be obtained by reviewing current industry-occupational staffing patterns for public and private sectors, analyzing these data, and developing projections of staffing patterns based on economic plans.

Supply data can be obtained by reviewing current labor supply based on employment service information and determining future supply of skills from educational and training institutions.

Benchmark studies are important to determine points of departure for program development. Census data and labor force surveys can provide the necessary benchmarks for labor supply. Rough approximations are adequate for these first-time analyses. An annual review of supply and demand for critically short occupations is necessary to guide training institutions.

Lack of close cooperation among the various agencies involved in manpower activity prevents easy collection and analysis of data and hinders the overall manpower development program. Therefore, it was suggested that a statistical coordinating committee be established and stimulated into action. This committee would set the standards and guideposts to provide factual data needed for planning.

Several recommendations covered details of staff functions and mechanics of getting materials published and into the hands of the user. After the economic investment plan has been developed, estimates of manpower requirements can be refined. The supply and demand balance sheet can be developed in greater detail through surveys of employers and of educational institutions. Supply and demand reports should be prepared for each major metropolitan area. Summary reports should be prepared and distributed to users, and occupational guidance materials should be distributed to young people. Several other reports also are suggested.

Methods of implementing the manpower program are discussed and summarized as a guide for AID's role in assistance.

Improvement of the Employment Information Program
in the Employment and Human Resources Service (SERH)
(In Spanish; 1963; 41 pages)

ILO Report to the Government of Peru, OIT/TAP/Peru/R.8;
Arnold V. Tottle, Manpower Adviser (Great Britain)

Describes the organization of the Employment and Human Resources Service and the employment information program and makes recommendations for their improvement.

Up to the end of 1962, the Cooperative Employment Service in Peru had been operating with the assistance of USAID. At that time, USAID retired from its cooperative agreement which left the financing of the Service fall on the Government of Peru. A new decree substituted the Cooperative Employment Service for a new semiautonomous organization called the Employment and Human Resources Service (SERH). The organizational chart of the new Service (as of 1963) appears on page 38, and its component members appear on page 40. Although the administration is independent, SERH is responsible to the Minister of Labor. A short description of the program of human resources is provided.

The main portion of the report deals with the information program of SERH. The importance

of exchanging information with education and training centers, especially with the Apprenticeship Service (SENATI) is emphasized. The types of manpower studies that have been made are listed. Most of them covered job market area studies and establishment surveys. Some of the problems encountered are described and suggestions are made to overcome these problems by redesigning the questionnaires or making other technical adjustments.

Recommendations cover each phase of SERH activities such as organization, personnel (including duties), area function and activities, and the role of SERH in the economic development program of Peru. Suggestions also are made regarding new surveys and types of information required to analyze the future supply and demand of manpower.

Recommendations for the Development of
Statistical Services in Surinam

Lloyd A. Prochnow, AID Statistical Adviser

Outlines the principal statistical series which appear essential for effective planning in Surinam, current availability of statistics, and recommendations for their improvement and expansion.

In 1953, the Government of Surinam initiated a comprehensive 10-year development program for the improvement of levels of living for the populace. However, because of lack of current, reliable factual information, development projects were difficult to plan, execute, and assess.

At the present time, Surinam has a large quantity of statistical data collected by the General Bureau of Statistics; but there are gaps in coverage and collection. Considerable work is needed on compiling and improving data of importance to planning officials.

The consultant describes the uses and methods of collection for each statistical study and the measures necessary for a program of economic

and manpower development, discusses the limitations of current available data for each series, and outlines a program for improving and expanding current series. Major statistical surveys are listed in order of priority; the recommendation is made that they be initiated as soon as financial and technical resources permit.

Appendix I describes in tabular form the sources of basic statistical data in Surinam. Appendix II lists in tabular form the basic statistical data and series that are essential for a sound statistical program.

The organizational and staffing requirements of a statistical office are described, and recommendations are made for staff training and development.

Labor Statistics in Venezuela; Findings, Recommendations,
and the Alliance for Progress
(1963; 14 pages and 3 appendix tables)

Sherrill W. Neville, Labor Statistics Adviser,
(Utah State Employment Service)

Report describes and evaluates the existing sources of manpower data and makes recommendations for their improvement. A short section describes the role of AID in improving technical manpower services.

The 1961 Census of Population shows evidence of undercount by nearly 6 percent because of faulty birth registrations and Census omissions, especially of children under 10 years of age. As a result, population and labor force projections made by various agencies are not based on a true benchmark. Therefore, the Four-Year Plan (1963-1966) prepared by CORDIPLAN understates labor force growth and school attendance. CORDIPLAN has not planned for these undercounted new entrants who will probably not get a job. However, unemployment rates can be held to a minimum if (1) labor force entry of students were postponed through additional schooling and (2) employment opportunities were expanded.

Several agencies produce statistics which are needed for projection purposes: The Ministry of Labor's statistical office collects data each month on employment, hours, and earnings from 14,000 establishments covering 350,000 workers, about 35 percent of nonfarm workers. The Employment Service prepares a monthly report on job market information. The Ministry of

Fomento (Industrial Development) conducted the 1961 Census of Population and currently surveys manufacturing firms to estimate production. Fomento's Office of National Sampling also conducted a family income and expenditure survey in 1962 and expects to do another in 1963. Banco Central estimates unemployment in Caracas and publishes a cost-of-living index for the whole country. INCE published two surveys of occupational employment in Venezuela. INCE also had surveyed apprenticeship needs in Valencia. The consultant enumerates the many other government and private agency studies on manpower.

Recommendations are directed toward the action necessary for the Government of Venezuela to develop a coordinated and reliable manpower development program. Further recommendations are directed toward the role that AID should take to improve their services to help Venezuela achieve its manpower development goal. A listing of proposed AID technical services for the 3-year period 1963 to 1965 is provided.

INCE--Techniques of Self-Instruction
(1963; 5 pages plus attachment)

Paul J. Grogan, AID Educational Consultant (University of Wisconsin)

The report discusses the possibility of adapting U.S. self-teaching techniques.

Several documents were prepared for use by the National Institute of Cooperative Education (INCE); only one is attached to this report. This report is a proposal to set up internships for INCE personnel in tutorial methods through the university extension system.

INCE has a remarkable opportunity to present fully developed national programs in commercial, industrial, and technical education. The spectrum of opportunity is so broad that a somewhat narrow choice of the various methods should be made for expanding the work of INCE in terms of meeting its training obligations. University extension has great potential for training in the various educational programs.

Followup Recommendations

1. Experiences in correspondence instruction gained in the proposed training program at the University of Wisconsin should be adapted to the widest possible usage within the operations of INCE. For example, all materials and methods in areas appropriate to the mission of INCE should be reviewed, and the content and methodology should be adapted to the particular levels and purposes of INCE.

2. A correspondence instruction media consultant should return to Venezuela with the trainees to help them implement their knowledge and skills.

The Development of Human Resources in Venezuela
An Overview
(1964; 22 pages)

Dr. Eli Ginzberg, Columbia University, at invitation of Instituto Para el Desarrollo Economico y Social (Institute for Economic and Social Development)

An assessment of the range of actions that might be undertaken by nongovernment organizations to further develop and improve the nation's human resources.

The major portion of the report is devoted to observations and impressions on the political, social, and economic development of Venezuela. This country has great natural riches and an active and alert population. Many advances have been made both politically and industrially but its manpower development still faces many handicaps, such as the low level of education and the underdeveloped state of its agriculture.

Under the dictatorship of Perez Jimenez, the government influenced the development of both natural resources and construction activities. To carry out construction activities, men with high-level skills were imported, which undoubtedly retarded the development of skills of the local population. Current manpower programs should be developed to train local people in these skills.

In the last few years, Venezuela has shifted from a predominantly agricultural society to an urbanized one. The causes and devastating results of this rural-to-urban migration are discussed at length. Although the development of industry is necessary to survive, agrarian reform should not be neglected. There are

real potentialities for economic and social gains in the agricultural sector. The fact that Venezuela imports food, that the average nutritional level is below a desirable norm, that the urban areas have not been able to provide employment opportunities for in-migrants, all point to the need for improving conditions of rural life.

The major challenge on the manpower front that Venezuela faces in the short run is to stimulate the expansion of employment. Improvement of human resources over the long run requires a marked expansion in the number and quality of schools, additional health measures, improved housing, adequate nutritional levels, and strengthened family structure. However, none of these gains will be possible without a rapid growth in economic development.

Some actions that a nonprofit private organization could initiate are: (1) collecting information on unemployed youth and reasons for their unemployment, (2) developing guidance counseling programs, (3) promoting improved educational, health, and social services in slum rural areas.

Organization of the National Employment Service
(In Spanish; 1965; 40 pages)

Malcolm Kennedy, AID Manpower Adviser

This report presents in detail the activities and responsibilities of the various offices and staff members in the Venezuelan Employment Service.

In the projected organizational pattern, the Director of the National Employment Service will have an administrative assistant in charge of budget, finances, and personnel. Two divisions, responsible to the Director, will serve as the principal offices to plan and develop programs and operations of the Employment Service. Each of these Divisions will head several specialized Departments.

1. The Division of Programs and Methods will plan and coordinate the various programs of

the Employment Service and develop the methods of carrying out these programs.

2. The Division of Operations will coordinate and supervise the activities of the regional and local offices in the national network.

Most of the report describes the responsibilities of each Division and Department. Detailed job descriptions, including statements on knowledge and skills required for the job, are provided for staff members at all levels.

National Manpower Training and Development
Valencia Pilot Office of the National Employment Service
(1965; 46 pages)

Morris J. Doren, AID Manpower Consultant

Experiences of setting up a pilot local employment
service office in Venezuela.

Under AID auspices, a two-year plan was developed to establish a pilot local employment service office in Valencia which would set the pattern for a network of field offices of the National Employment Service. The basic aim of the Venezuelan Ministry of Labor was to expand the present Manpower Division into an effective National Employment Service, 1/ in which the Valencia office would be a Demonstration and Training Center to develop personnel for the National Office.

Valencia was selected because it is the center of an important commercial and trading area and the location of many large employing establishments (mostly U.S. firms). Valencia has a large and trainable labor force which lacks the necessary skills to meet the expanding requirements of industry. There is also considerable concern in the area about high unemployment, rural-to-urban migration, and the high birth rate.

The functions of the current local office, known as the Placement Agency, were limited to the narrowest concept of an employment service. The office reviewed job orders from em-

ployers and job applicants were referred to these employers for interview. There were no technical supporting services necessary for an effective placement program.

The consultant recommended an appropriate course of action in the following major areas:

1. Improvement of the placement process in the Valencia office.
2. Reorganization of the employer visiting program in the Valencia office.
3. Improvement in the utilization and appearance of the premises of the Valencia office.
4. Preparation at the National Office and in Valencia for the inception of an employment counseling and occupational testing program.

1/ See Malcolm Kennedy report, June 1965, on organization of the National Employment Service.

Apprenticeship and Industrial Training Report
(1965; 15 pages)

John F. Barrett, AID Apprenticeship Consultant

Discusses the operations of INCE as they affect apprenticeship development, the relationships of these operations with the labor laws of Venezuela, and the challenge to INCE under its charter to develop and train the "total" man.

The consultant visited training centers in Maracaibo operated by National Institute for Co-operative Education (INCE) and by private oil companies, and observed that members of their training staffs have never visited each other. He arranged a few meetings and encouraged more exchange visits.

The consultant also assisted in organizing tripartite trade advisory committees in Barquisimeto. Committees were formed in major occupational areas; they proved quite successful. Other INCE directors were encouraged to attend later meetings to observe the methods of establishing INCE work at the committee level.

Although INCE has built up a significant record since 1962, high turnover has occurred at the directory and supervisory levels. To hold a dedicated staff together, INCE should institute a program of Personnel Administration and Career Development.

Ideas and suggestions of the 15 previous consultants assigned to INCE should be reviewed and

consolidated. Such a compilation would stimulate restudy and re-evaluation of the reports and would serve as training and research materials for INCE.

Several recommendations and comments are made on apprenticeship development. The decentralized organization of INCE should prove advantageous in carrying out its stated functions of total education of the worker, compared with the more institutionalized apprenticeship organizations in other countries. So far, trade unions have not participated in INCE's programs, except for some of the building trades. Several recommendations are made to encourage their participation. Other suggestions cover importation of skilled workers, provisions in INCE law, and development of skills in rural areas through use of mobile training units.

Finally, it is recommended that two AID apprenticeship advisers be assigned to INCE for a minimum of 2 years. The duties of the advisers are outlined.

INCE and CINTERFOR
Two Latin American Skill Training Institutions
(1966; 11 pages and 1 attachment)

DOLITAC 1/ Staff Paper No. 8;
Eugene Hood, Apprenticeship Consultant

Provides background information on the organization and functions of two skill training institutions in Latin America.

The National Institute of Cooperative Education (INCE) in Venezuela administers the law which provides for skill training and apprenticeship for the employed and unemployed. INCE an autonomous branch of the Ministry of Education, is directed by the National Administrative Council which includes representatives from government, management, and labor. A tax on payrolls and a grant from government provide the financial resources.

The law requires employers to extend training to one worker between 14 and 18 for every 20 workers employed. Programs range from on-the-job training on various machines to those combining classroom study and work experience. The report lists the various duties and goals of INCE.

A detailed description of the National (Compulsory) Apprenticeship Program is presented. Based on a national manpower survey in 1961, 21 industrial and commercial occupations in 59 establishments were selected for experimental training programs. All establishments employing more than 10 persons, all government agencies,

and all banks and insurance companies are obliged to provide training for selected young workers.

A summary of the report by John F. Barrett on "Apprenticeship and Industrial Training" (see summary elsewhere) provides critical comment on INCE operations.

The Inter-American Vocational Training, Research, and Documentation Center CINTERFOR, ILO, headquartered in Montevideo, Uruguay, was organized in 1962 and lists most of the Western Hemisphere nations as members. It functions through a Technical Committee, which is composed of representatives from member countries meeting once a year. Summaries prepared by the U.S. delegates to the first three meetings are reproduced.

1/ U.S. Department of Labor International Technical Assistance Corps.

Employment Projections, Distrito Caroni 1975
(1966; 18 pages)

A. John Vogt, AID Manpower Consultant

A staff working paper describing techniques of projecting employment by economic activity.

The latest revision of the Staging Study (Plan de la Nacion, 1966) provides the basic employment projections on which this paper is based. Four major points regarding the projections are developed:

1. Employment projections between 1966 and 1975 for Ciudad Guayana should allocate to the infrastructure sectors (Commerce, Transport and Communications, Government, and Other Services) 35 to 40 percent of total employment rather than the somewhat lower share assigned by the Staging Study. Experience in other cities in both Venezuela and the United States, and in the Distrito Caroni itself, has shown that the infrastructure sectors account for more than 35 percent of total employment. It should be assumed that Ciudad Guayana has and will continue to have a modernizing urban economy.

2. Population projections used in previous studies have ranged between 300,000 to 400,000 for Ciudad Guayana by 1975. More recent information on immigration and population growth indicates that population probably will not exceed 225,000 in 1975. The figure of 222,000 as projected by the Staging Study appears realistic and should be the basis for employment projections.

3. Based on revised figures for population and infrastructure sectors (items 1 and 2, above), procedures for employment projections by economic sectors for Ciudad Guayana are provided. This section forms most of the report.

4. Sectoral employment totals produced by item 3 will be used by the Human Resources Section. These data are not final, however, since they will be modified as soon as the computer program of the Economics Section releases "final" sectoral employment projection totals.

INCE-- Special Problems
(1966; 17 pages)

DOLITAC 1/ Staff Paper No. 18;
Archie Beaubien, Apprenticeship Consultant

Functions and training of the National Institute for Cooperative Education (INCE) field coordinators, and special problems related to apprenticeship construction.

A one-page general information report is presented on INCE's Manpower Development Program, 1961-65. Essentially the same information was provided by Eugene Hood in a preceding summary; some statistical data were added. INCE's income totaled U.S. \$22.5 million in 1965. It employed 2,000 people and operated 34 training centers as well as other training facilities (mobile units). During 1965, nearly 72,000 enrollees were in programs ranging from 10-hour courses for supervisors to 1-year programs for apprentices.

Recommendations to improve the work of INCE's field coordinators (technical staff) included:

1. A revamping of INCE's organization should show a distinct clarification and relationship between line and staff personnel and functions.
2. A change in job titles of certain specialized INCE personnel is suggested.
3. An outline for the training of industry contact (line) staff is presented.

Some difficulties hindering the development of a comprehensive apprenticeship program in the construction industry are:

1. The reluctance of a heavy labor industry to take on immature boys.
2. Low ratio provisions on compulsory apprenticeship.
3. The reluctance of many youth to enter construction as apprentices because of the hard work and relatively low pay.
4. The lack of apprenticeship experience and craft tradition in organized labor.

General observations

1. A suggested plan for reorganizing INCE and an organizational chart are provided in attachment 1.
2. The limitations on age (14-18) and on ratio quota (5 percent) should be revised.
3. Efforts should be made to simplify procedures and to reduce paper work.

1/ U.S. Department of Labor International Technical Assistance Corps.

Procedure for Labor Market Analysis of an Area
(1966; 8 pages and 22-page appendix)

Wilfred V. Jones, AID Manpower Consultant;
Memorandum to Malcolm Kennedy, USAID/Venezuela

Presentation of a procedure for analyzing a job market
area.

The procedural steps for analyzing a job
market area include:

1. Measuring and defining the job market
area.
2. Establishing a universe.
3. Listing sample employers and employ-
ment.

A detailed discussion covers the steps in col-
lecting, organizing, and calculating the data.
Several worksheets are presented which are
patterned after the Puerto Rican experience.
Sample formats also are shown to illustrate
how the information can be distributed to the
public.

Technical Assistance to the National Employment
Service Office
(October 1965 to July 1966; 49 pages)

DOLITAC 1/ Staff Paper No. 21;
Merrill E. Weir, Manpower Adviser

A collection of six reports made by the consultant regarding improvements in the local employment service offices in Venezuela.

1. A detailed list of eight recommendations to improve the Caracas local office of the Employment Service is presented. (3 pages)

2. Recommendations for the organization and layout of the Caracas local office were made at the time that local office was being remodeled and enlarged. Suggestions also were made to improve the operations of the office. Details of these suggestions are presented along with organizational, functional, and layout charts. (17 pages.)

3. The operations of the local Employment Service office in Barquisimeto (Venezuela's third largest city) are reviewed. The amount and kind of space occupied by the office appeared adequate except that the third floor location created a handicap for effective operations. Street level facilities were suggested. The operating reports were analyzed and tabulated. They appeared to be well presented and complete with appropriate detailed information. Several recommendations for improving the methods of operation are offered. (10 pages.)

4. A "Manual of Operations" is needed for current operations in the National Employment

Service. The report lists the many advantages that would result from use of such a manual. Several guidelines for its preparation are offered and a three-page outline is presented. (6 pages.)

5. To render effective and efficient service to the public, the Employment Service should develop a program to improve the skills of its employees. The report lists the specific objectives of a training program and outlines the types of training to conduct. The organization of a training program also is discussed. (8 pages.)

6. The final report summarizes the work accomplished during the consultant's 9-month assignment. A major recommendation refers to the necessity of followup supervision to insure continuation of Employment Service programs. A discussion on the principal obstacles to continued growth includes the lack of a Civil Service and the relatively small size of the Employment Service. (5 pages.)

1/ U.S. Department of Labor International
Technical Assistance Corps.

A Report of USAID/Venezuela Manpower Technical Service in
the Ministry of Labor and CORDIPALN for the period 1962-66
(1966; 22 pages and tables)

Malcolm Kennedy, AID Manpower Consultant

A review of AID's various programs for manpower
development in Venezuela.

A short history of AID's technical services to Venezuela and the results of these services are described. Since the establishment of USAID/Venezuela in 1961, its top priority goal has been to develop human resources development. The primary activity targets of AID's Manpower Technical Services program during the five-year period were (a) to establish an effective National Employment Service and (b) to strengthen the manpower planning services in CORDIPLAN.

AID has worked primarily with CORDIPLAN, INCE, and the Ministries of Education and of Labor. Most effort was directed toward developing effective employment service functions. By 1964, a National Employment Service organiza-

tion, including local field offices, was organized. Other areas for which substantive assistance was provided were labor statistics, labor inspector service, and the cooperative movement.

To carry out these and other targets, AID assigned competent manpower advisers to provide technical assistance in various areas and arranged for members of the Venezuelan technical staff to participate in Stateside and Puerto Rican training programs. A list of consultants who were assigned to Venezuela during this period summarizes their activities and programs. Complete 1963-65 and proposed 1967 and 1968 participant training cost estimates also are summarized.

Mission to Venezuela: INCE
(1967; 5 pages)

DOLITAC 1/ Staff Paper No. 32;
Eugene Vinogradoff, Manpower Consultant

Evaluates the INCE manpower demand report and makes suggestions for future surveys of manpower.

The National Institute for Cooperative Education (INCE) Labor Demand Research Project of 1966 was based on a nonagricultural establishment survey which had a universe of more than 22,000 employers. Response was over 90 percent and covered more than 321,400 workers. The tabulated data should be useful in guiding the work of INCE.

A labor research project should be set up to provide the following:

1. Labor demand data similar to that already gathered.
2. Labor supply data, especially unemployment and underemployment, collected by a national sample household survey, such as that being carried out by CORDIPLAN and other agencies.
3. Followup studies of INCE graduates to determine the effectiveness of their training.
4. Special studies on characteristics of training school graduates, such as on turnover.

The labor demand study should be carried out as follows:

1. It should be repeated regularly every year or two on a sample basis.
2. It should draw on all expert agency resources for improvement.
3. It should be more highly publicized to secure full support.
4. It should be responsive to area, regional, and industrial needs.
5. Checks should be made for accuracy by subsample interviews.
6. Projections for one year and beyond should match sample trends based on actual past experience of employers, rather than on employer guesses.

1/ U.S. Department of Labor International Technical Assistance Corps.

Guayana Project
(1967; 8 pages)

DOLITAC 1/ Staff Paper No. 33; Eugene D. Vinogradoff, Manpower Consultant

This memorandum to the USAID Mission is a response to a series of questions by the Educational Consultant to Corporacion Benezolana de Guayana (CVG).

INCE requested an increase from Bs 600,000 to Bs 1,000,000 per year from CVG for training purposes. To be sure that training would be given in shortage occupations, CVG raised several questions. Most of the questions deal with (a) agencies involved in manpower studies, (b) types of information available, listed by agency in charge, (c) types of surveys and methods being conducted, and (d) analysis of quality of results of surveys. These questions were answered in detail.

Several questions related to agency responsibility and capability to gather data. Job market information is the responsibility of the National Employment Service offices. Household samples of the labor force come under the aegis of the of the Statistical Office of the Ministry of Fomento. INCE, through the chief statistician at

the Ministry of Labor, gathers labor demand information. There appears to be duplication and overlap of some statistical gathering functions, but CVG is in a unique position to assist in improving coordination and cooperation, since it will control finances in the Guayana area.

Recommendations were made for the assignment of a manpower consultant in Guayana to improve employment service functions in the Guayana area and to develop detailed procedural techniques of gathering data.

1/ U.S. Department of Labor International
Technical Assistance Corps.

Development of Occupational Test Research Program in
Venezuela's National Employment Service
(1967; 4 pages and 10-page attachment)

DOLITAC 1/ Staff Paper No. 42; Albert R. Cruz, Counseling and Testing Adviser

Report describes the progress of the counseling and testing program of the National Employment Service and the procedure for developing an occupational test research program.

The counseling and testing program began in January 1966 as part of the Division of Programs and Methods under the Venezuelan National Employment Service. The test research program is developing in three steps, as follows:

1. United States GATB test materials are being translated and adapted to the needs of the local population.

2. The Puerto Rican norms (conversion tables) are being used but Venezuela should develop its own standardization. The consultant spent considerable time developing a sample that would be representative of the Venezuelan labor force. A 10-page attachment describes the methodology for the study and the design for developing conversion tables applicable to Venezuela.

3. Based on the results of the standardization study, the National Employment Service will try to initiate test development studies to establish aptitude test norms locally.

The consultant suggests that consultants who speak Spanish should furnish further technical assistance on this topic. In addition, the program of test research should be reviewed after the collection of the data and before the analysis of these data.

1/ U.S. Department of Labor International Technical Assistance Corps.

Manpower Information Training Course
(1960; 34 pages)

ILO Report to the Government of the West Indies; ILO/TAP/West Indies/R.5;
Miss J. Pettijohn (Manpower Division, ILO) and F.W. Mahler (Australia)

Summary of a course for Government officials on the
role of manpower in economic development.

The Manpower Information Training Course was conducted by the ILO at the University College of the West Indies. Participants were officials from the labor administration in the Unit Government of the Federation of the West Indies. The course was designed to provide a general appreciation of the manpower factor in economic planning and development, and to give specific instruction in the methods and techniques of collecting, analyzing, and reporting information about the manpower situation.

Various aspects of a manpower information program were discussed:

1. Availability of and need for manpower information.
2. Measurement and analysis of the manpower supply/demand situation.
3. Preparation of general and special reports on the manpower situation.

4. Administrative organization of the manpower information program.

The situation of each of the Unit Governments was analyzed and certain broad conclusions were reached:

1. Information on present and future manpower supply and demand is lacking in all areas except Jamaica, and Trinidad and Tobago.
2. Each Unit Government needs a continuing program which should be coordinated with each other, using ILO standards for comparability.
3. General reports on the manpower situation should be prepared annually and supplemented with ad hoc reports.

Recommendations were made concerning the role that the Federal Ministry of Labour and Social Affairs should play in coordinating and guiding the efforts of the Unit Governments to implement a West Indies manpower information program.

Proposal and Recommendations on
Manpower Training and Development in Jamaica
(1966; 38 pages)

DOLITAC 1/ Staff Paper No. 12; Vincent R. Faulds, Manpower Training Adviser

Description of existing training programs and a proposal
to coordinate and develop manpower training activities.

High unemployment rates and shortages of trained personnel are seriously handicapping development of production and service industries. Current educational and training institutions are geared to manpower requirements existing in an agrarian economy. Several new training plans, such as the apprenticeship service and youth camps, have been introduced to correct this situation. However, progress has been retarded because of a shortage of technical and professional leadership and the absence of technical services.

Based on information obtained from observation visits and interviewing with representatives from government, labor, and management, a proposal was prepared to create a National Commission on Manpower Training and Development to guide and coordinate all training activities as follows:

1. The Commission should be attached to the Office of the Prime Minister and should be composed of membership from all public and private agencies concerned with training and development.

2. A special fund, provided by a payroll tax, should be established to finance the necessary promotion and development of the national manpower training system.

3. Technical and professional staff should be employed to implement the policies of the Commission.

4. Agreements with foreign agencies should be negotiated to cooperate and assist in manpower training and development.

The major portion of the report deals with details of the specific recommendations of the proposal. Observations also are made of the existing training institutions and of the role the Ministry of Labor plays. This Ministry is cognizant of the requirements for an effective manpower development program. Organizationally, there are a Manpower Research Unit, an Employment Service, and an Apprenticeship Service; but lack of funds and personnel hampers operations.

The 12-page supplement (labeled appendix II) contains check lists on the institutional structure and on the training process.

1/ U.S. Department of Labor International
Technical Assistance Corps.

Development in the Eastern Carribean Islands
Series 4: Manpower Surveys: St. Lucia
(1967; 71 pages)

University of West Indies, Institute of Social and Economic Research;
Alice W. Shurcliff (ILO) and J.F. Wellemeier (Ford Foundation)

Assessment of manpower supply and demand in St. Lucia.

The purpose of this report is to provide the Government of St. Lucia and the private sector with information on manpower requirements for their development plans. Information was obtained from officials of Government, industry, and trade unions and from the 1960 Census of Population. The U.S. Government provided information on the employment of West Indians in the U.S. Virgin Islands and other immigration data. These various sources, combined with opinions of knowledgeable people, provided the bases for estimating future effective demand for labor.

According to the 1960 Census of Population, there were over 86,000 people in St. Lucia, an increase of 16,000 since 1946. Despite the population increase, the size of the labor force decreased because of heavy emigration among people of working age and the withdrawal of women from the labor force. As a result, the increased demand for labor during the early 1960's was the major reason for the decline in underemployment and unemployment. However, a reversal in this trend is expected between 1965 and 1975 when the supply of labor is no longer held constant by emigration.

At the present time, employers report shortages of skilled workers, especially mechanics and repairmen, electricians, plumbers, clerks, teachers, medical personnel, and managers. Because of inadequate training facilities, these shortages are expected to persist during the coming years. The education system does not have the required output. Thus a serious bottleneck is created in upgrading human resources to the degree necessary to meet the requirements of the economy.

Employers in the agricultural sector complain of low level of effort put forth by workers. The lack of incentive to work more than a few days a week or to maintain other work standards should be the subject of a serious study by an interdisciplinary team since reports are contradictory on reasons for this low level of effort and on the actual effect of farm productivity. St. Lucia likely has built up a set of mutually reinforcing factors leading to unsatisfactory worker output, such as poor health, poor land tenure system, limited education and aspirations, low social status of farm workers.

Development in the Eastern Caribbean Islands
Series 4: Manpower Surveys: St. Vincent
(1967; 51 pages)

University of West Indies, Institute of Social and Economic Research;
Alice W. Shurcliff (ILO) and J.F. Wellemeier (Ford Foundation)

Assessment of manpower supply and demand in St. Vincent.

The purpose of this report is to provide the Government of St. Vincent and the private sector with information on manpower requirements for their development plans. Information was obtained from officials of Government, industry, and trade unions and from the 1960 Census of Population. The U.S. Government provided information on the employment of West Indians in the U.S. Virgin Islands and other immigration data. These various sources, combined with opinions of knowledgeable people, provided the bases for estimating future effective demand for labor.

According to the 1960 Census of Population, nearly 80,000 people lived in St. Vincent; the labor force consisted of nearly 25,000 of whom 3,363 (13.5 percent) were unemployed. The population is weighted heavily with young people; the proportion below age 15 was 51 percent in 1965.

Skilled workers and secondary school graduates are in short supply. The Five-Year Development Plan regards tourism as the most promising industry for development. In view of this possibility, barmen, maids, cooks, and receptionists must be trained. Skilled craftsmen are needed for the construction industry

which is expected to expand rapidly. The increase in population and economic activity will stimulate demand for professional workers, especially physicians and nurses. The Government sector will require auditors and administrators.

Growing unemployment poses a serious problem over the forecast period. The closing of the sugar factory and discontinuance of the growing sugarcane contributed to the high level of unemployment. Cane cutters are able to get seasonal employment in other islands, but new workers are flooding the job market. The policy of the Government is not only to provide jobs outside the home market, but also to widen the opportunities within the island itself.

Pressures of population growth and high unemployment rates necessitate that the Government foster emigration. This policy, however, encourages people with initiative and skills to leave the island, thus reducing scarce skills more severely. The problem may be overcome by training a greater number of people and by opening outlets for unskilled persons. The rest of the study discusses supply of and demand for labor in each of the economic sectors.

Establishment of a Manpower Information Programme
(1960; 32 pages)

ILO Report to the Government of Trinidad and Tobago;
ILO/TAP/West Indies/R.1; F.W. Mahler (Australia)

Describes existing manpower services and the state
of manpower information.

Existing Manpower Services

1. Employment Service activities were limited to placements in unskilled and domestic occupations.

2. Vocational training activities consisted of registering 700 apprentices in metal, electrical, and printing trades.

State of Manpower Information

Considerable data were available on size and structure of the population and labor force and on employment in establishments. Educational and training statistics and data on overseas migration also were available. However, no measurements have been made on manpower requirements or on training outside of formal apprentices. Although available to Government authorities, these data have not been used as

extensively as might be because available information had wide gaps and is scattered among many documents.

Administrative Machinery

To carry out a manpower information program, the expert assisted in developing administrative machinery. He established a Manpower Technical Advisory Committee and assisted in the establishment of a Manpower Research Section in the Ministry of Labour. Within the Manpower Research Section, special emphasis was placed on developing standard classification systems, conducting establishment surveys and labor force surveys, analyzing data, and preparing reports. Details of each task are described and recommendations are provided for continuing the work of both the Committee and the Research Section to develop a continuing program of manpower information.

Organization and Operation of the Employment Service
(1964; 21 pages)

ILO Report to the Government of Trinidad and Tobago;
ILO/TAP/Trinidad/R.5; V.G. Munns (United Kingdom)

An examination of the organization and operation of
the Employment Service and recommendations for its
expansion and improvement.

Existing Employment Service Situation

The work of the Service has consisted primarily of registering workers and recording vacancies, primarily for laborers and domestic personnel. Techniques used for this purpose were rudimentary; no written instructions were available on policy or procedure. Both workers and employers were dissatisfied with services provided by the Employment Exchange.

Action Taken

Based on his review of the Employment Exchange, the expert outlined the changes in organization needed to develop the Service into an effective organization. This report was submitted to the Government for discussion. Actions to improve current operations included:

1. Preparing a manual of instructions to guide clerks in performing their duties.
2. Training in techniques of employment interviewing.
3. Visiting employers to acquaint staff on operations in each occupation in the various industries.

4. Preparing establishment cards containing employment and occupational information.

Conclusions and Recommendations

Several broad conclusions were drawn about the need for an Employment Service. These are explained by describing the contribution that an Employment Service makes to improve the economic and social development of the country.

The following recommendations are proposed to implement and improve the various functions and organization:

1. A branch office and additional staff should be added.
2. Operations of the Employment Service should be developed on the basis of the previous ILO report on the Establishment of a Manpower Information Program (1960).
3. Cooperation should be developed with vocational schools to prepare the ground for setting up a vocational guidance service for young workers.

High-Level Manpower for Development
(Pre-Publication Excerpts)
(1964; 66 pages)

UNESCO-LAU Research Program on Higher Education
in Relation to Development in Southeast Asia; Guy Hunter

Probable high-level manpower requirements in selected
Southeast Asian Countries. 1/

In every country in the region, between 60 to 80 percent of the population is engaged in agriculture. Commercial life is centered on the import/export trade and is therefore concentrated in the main ports. Every country has a small nucleus of modern industry based on Government or expatriate investment.

Many countries have a limited capacity to absorb high-level manpower. Therefore, unrestricted educational expansion may result in the creation of unemployment among graduates at a great financial cost. The consultant warns against attempts to expand higher education beyond employment opportunities.

The techniques used to make projections were based on certain assumptions that applied to the area as a whole:

1. High-level manpower will grow at a rate faster than National Income, whereas the total labor force will grow at a slower rate.
2. The technician-to-professional ratio will increase from 3:1 to 5:1.
3. Wastage in original stock over a 10-year period will be about 40 percent.

General issues which apply to most countries surveyed include:

1. Total enrollments in universities are high but output is low. Except for teachers and phy-

sicians, high-level requirements could be met if wastage were reduced and if graduates were better prepared.

2. Wastage in secondary education is high. Post-secondary vocational training should be introduced.

3. University-trained teachers are needed throughout the region. Law faculties are overdeveloped.

4. Every effort must be made to encourage a flow of trained manpower into rural areas.

The major portion of the report is devoted to studies of the individual countries and presentation of available data on manpower and education. Each study covers the following elements:

1. General economic situation and power structure.
2. Key educational statistics.
3. Analysis of four areas of manpower requirements: agriculture, science, medicine, and education.
4. Assessment of current stock and projections to 1970 and 1975.

1/ Burma, Thailand, Malaysia, Indonesia, Philippines, South Vietnam and Cambodia.

The Establishment of a Manpower Information Program
(1964; 18 pages)

ILO Report to the Government of the Union of Burma;
ILO/TAP/Burma/R.29; M. M. Mehta (India)

Organization and development of a continuing manpower information program, including staff training and statistical techniques.

A survey of existing sources of manpower information showed that they were inadequate for the assessment of the current and future manpower situation. The last complete census was conducted in 1931; the 1941 census was lost; and the planned mid-fifties census never was completed. Measurements of labor force activities were inadequate. The lack of manpower data seriously hampered the preparation and fulfillment of the Second Four-Year Plan. No department or ministry had responsibility for manpower planning work.

The Government created two units to operate a continuing manpower information program:

1. Manpower Information Advisory Committee--to direct, supervise, and guide the program.

2. Manpower Information Unit in the Directorate of Labour Affairs--to provide the technical know-how in collecting information and preparing reports.

To achieve the broad objectives of a manpower information program, the following projects were initiated:

1. Assessment of manpower requirements of the Four-Year Development Plan.

2. Detailed plan for the organization of an employment market information program.

3. Development of a Burma standard classification of occupations.

4. Survey of training facilities.

5. Survey of employment status of university graduates.

6. Survey of urban unemployment.

7. Employment opportunities in urban areas.

8. National register of scientific and technical personnel.

9. Manpower requirements in public and private industrial sectors, by detailed occupation.

Based on the information obtained from these projects and from other available sources, a comprehensive manpower report was prepared as a supplement to this report. (See following summary.)

Recommendations

1. The manpower information program that now has been established should be continued and developed.

2. The program should be directed toward providing information for the operation of Employment Service offices and for the evaluation of the manpower situation.

3. The statistical systems should be improved and periodic reports prepared.

Report on the Manpower Situation in Burma
(1964; 90 pages and statistical appendixes)

ILO Report to the Government of the Union of Burma
ILO/TAP/Burma/R.29 (Supplement); M. M. Mehta (India)

Comprehensive manpower report prepared from information collected from surveys and other studies.

The scarcity of reliable statistical information concerning Burma's economic and human resources seriously handicaps efforts to achieve a complete and accurate manpower assessment and makes the findings of this report tentative and assumptive.

The most reliable estimates place Burma's population figure currently between 22 million and 24 million; these figures include a labor force estimated at approximately 9.8 million. Burma is a predominantly agricultural economy; approximately 85 percent of the labor force are in agricultural occupations. Though the labor force appears to be expanding rapidly, opportunities for employment are lagging far behind. In fact, employment levels have declined in recent years in the modern sector and substantial underemployment is evidenced in the very low productivity figures in both industry and agriculture.

In drawing up future economic development plans, consideration should be given to the possibility of increasing investment levels, pro-

moting labor-intensive industries and technologies, and promoting rural employment which, in Burma with its rich land and natural resources, appears to offer an especially attractive opportunity for creating large numbers of new jobs in a relatively short period of time and with comparatively small investment requirements.

In the longer view, current and planned training facilities will be inadequate to meet the expected demand for workers in almost all the occupations requiring vocational training. This inadequacy will be all the more marked in the event of an attempt to provide more jobs through accelerated economic development. Training and educational facilities will have to be expanded greatly to turn out the personnel qualified to occupy the positions that will be required by an overall program of economic development in Burma. The extent and rate of expansion must be coordinated carefully with such a program. In particular, facilities will be required for training skilled workers of all types, including technicians, professional persons, and teachers.

The Role of Educational Planning
in the Economic Development of the Republic of China
(1962; Vol. I, 63 pages; Vol. II, 159 pages)

Henry F. McCusker, Jr., and Harry J. Robinson; Stanford Research Institute.

A study of the ways by which the Republic of China's educational system can contribute more effectively to the achievement of national economic goals.

The Third Four-Year Economic Development Plan of the Republic of China covers the period from 1961 through 1964. Little emphasis, however, has been placed on planning for manpower needed to reach the goals of the Plan. The purposes of the project were to examine the educational system, assess current levels of skilled manpower resources, estimate needs implicit in the Plan, determine discrepancies in supply and demand, and find means to resolve these discrepancies.

Findings

1. Enrollments as a percentage of the population are large compared with other developing countries.
2. The economy is not absorbing students as fast as they graduate.
3. Education is not coordinated with manpower requirements; as a result, an oversupply of certain graduates and shortages of others exist.

4. Little attention is devoted to on-the-job training for middle-level and skilled workers.

5. Wage and salary differentiation at various skill levels is not broad enough to attract qualified people.

6. Course content and examination systems tend to retard the role of education in support of economic development.

Recommendations

1. The Ministry of Education should cooperate with other agencies to plan manpower requirements for fulfillment of development goals.
2. The Government should take steps to upgrade the quality and increase the number of skilled and technical manpower.
3. Since student enrollments are likely to increase rapidly, care should be exercised to prevent a lowering of quality and to achieve a greater relevance of educational programs to economic development.

Manpower Problems and Programs in Taiwan
(1963; 19 pages)

DOLITAC 1/ Staff Paper No. 46; Harry Weiss, Manpower Adviser

A survey of the major manpower problems and the programs designed to meet these problems.

Population on the island is growing at the rapid rate of 3 percent a year. According to agricultural experts, the growing population cannot be supported through agriculture. Since there are no significant opportunities for the increasing population in agriculture, excess farm population should be moved to industry. Industry, in turn, should be expanded to reach large-scale proportions with adequate capital and modern production methods in order to compete with Japan.

The Government needs a manpower planning organization. Currently, it does not know its manpower resources or requirements for the next 5 or 10 years. The best location for a manpower planning unit would be in the newly established Council for International Economic Cooperation and Development. This unit should coordinate the work of the various agencies to develop an overall manpower program for achieving the needs of the economic development plan. The Stanford Research study of manpower

requirements should be continued to make projections of requirements by occupation.

If Taiwan is to become a modern industrial society, an effective Employment Service must be established. Only through this organization can a balance between manpower supply and manpower demand be met.

Approximately 85 percent of the students sent to the United States for graduate work do not return. The causes and effect of this serious loss to the country are discussed. The entire educational system should be reappraised. The weakest link in the training system appears to be the lack of an apprenticeship program. To develop a corps of skilled workers needed in a modern industrialized economy, a well-organized apprenticeship program should be established.

1/ U.S. Department of Labor International Technical Assistance Corps.

Manpower Assessment and Planning
(1965; 42 pages)

ILO Report to the Government of the Republic of China;
ILO/TAP/China/R.8; Alice W. Shurcliff (United States)

The development of a manpower assessment program
and the improvement of manpower statistics.

The first manpower study had been done by the Council for International Economic Cooperation and Development (CIECD) in 1962. In 1964, several Government agencies prepared partial manpower assessments. The formation of an interministerial Manpower Resources Committee had stimulated considerable interest in having manpower assessments prepared on the basis of the Economic Development Plan.

The consultant prepared a series of 33 tables which showed labor force by occupation and industry in 1965 and the distribution to be expected in 1970 according to the growth factors contained in the Economic Development Plan. The various statistical sources for this analysis are described and comments made for their improvement.

The Republic of China has improved the quality of its manpower resources by an expansion of school facilities and by agricultural extension work among farmers. The supply of skilled manpower has increased as fast as effective demand, and unemployment has been held down to a 4-percent level. Seasonal unem-

ployment and underemployment have been lessened in agriculture by expansion of modern techniques (irrigation, crop diversification).

Recommendations

1. Manpower projections should be made for long-term objectives in the next 10 to 15 years.

2. Long-term projections should be made by using high, medium, and low rates of industrialization.

3. A publicity program should be developed to inform the public of changes in the supply of and demand for labor in various occupations.

4. All agencies in areas that have vocational training programs should report periodically to one agency about the output of their programs and the quality of training given.

5. Public employment offices should undertake a continuing program of collecting information on current and future labor requirements of the industries and plants in the area which they serve.

A Survey of Employment and Manpower
in the Republic of China
(1966; 20 pages)

F.W. Mahler, ILO Asian Regional Manpower Adviser

An assessment of current and projected manpower supply
and demand.

All available data from reports prepared by various agencies of the Government of the Republic of China and by international organizations formed the basis on which this report is prepared. Topics covered include employment, labor force trends, employment projections, supply of qualified manpower, and anticipated shortages in certain occupations.

At the time of this report, virtually no planning regarding the manpower skill requirements of employers had taken place. The rapid expansion of education in recent years has been undertaken with only a general reference to manpower requirements. Elementary education has been planned to provide universal education for all children between the ages of 6 and 12 years.

Nearly 97 percent of children in this age group are enrolled in school. Plans are being made to provide universal education beyond 12 years of age to include secondary and vocational school levels.

Recently, there have been significant developments in the establishment of an organization for manpower planning. A Manpower Resources Committee has been set up in the Council for International Economic Cooperation and Development. In addition, seven working groups have been established to deal with various aspects of manpower planning: education, training, recruitment, distribution, motivation, utilization, and stabilization. There is also a committee to coordinate manpower statistics.

Final Report on the Labor Force Survey
in the Republic of China
(1967; 15 pages)

DOLITAC 1/ Staff Paper No. 39;
Matilda Sugg, Statistical Consultant

Description of measures to improve usefulness and
accuracy of data in labor force surveys.

Quarterly surveys of the labor force in the Republic of China are conducted by the Labor Force Survey Research Institute of the Department of Social Affairs. The Secretariat of the Manpower Resources Committee of the Council for International Economic Cooperation and Development (CIECD) requested an evaluation of the survey techniques. The aim was to recommend measures which might be introduced to improve the usefulness and accuracy of the data.

From the point of view of end-users of labor force data, desired improvements are summarized as follows:

1. The results of the surveys should be issued more promptly after the date of reference.
2. More interpretation and analysis of the findings should be included in the reports.
3. Explanations of erratic fluctuations should be contained in the analysis.
4. Data on the employment series should be separated into (a) agriculture, hunting, forestry, and fishing, and (b) nonagricultural industries.

Recommendations are intended to effect improvements listed above. They constitute a long-range program for improving the survey and cover the following topics:

1. Clarify concepts and definitions.
2. Revise questionnaire.
3. Simplify tabular presentation in quarterly report.
4. Improve accuracy of estimates.
5. Process and publish data rapidly.
6. Obtain regional estimates.
7. Introduce one-time supplementary questions on survey.
8. Improve salary schedule of survey staff.
9. Train survey staff.
10. Establish a Research and Analysis Unit to interpret findings.

1/ U.S. Department of Labor International
Technical Assistance Corps.

Terminal Report to the Republic of China
(1964 to 1967; 17 pages)

DOLITAC 1/ Staff Paper No. 45; Chester W. Hepler, Manpower Adviser

Report of a 3-year tour of duty in Taiwan as adviser
to the Manpower Development Committee.

A Secretariat was organized in 1964 to assist the Manpower Development Committee in the research and study of manpower problems. Seven Working Groups were established to study these problems and make policy recommendations. Based on their reports, a Manpower Plan was submitted to and approved by the Executive Yuan in 1966.

Various steps were taken to implement the plan. Four Working Groups were established to keep the manpower program under review and evaluate progress. These groups were as follows: (a) Employment Security, including subgroups on employment service, vocational training, labor standards, and unemployment compensation, (b) Education, (c) Manpower Utilization, and (d) Manpower Statistics. Details of the work of these groups are discussed.

The remainder of the report describes the work that should be given more attention by the

Manpower Development Committee and by the agencies responsible for implementing the program. Most of the comments are directed toward improved coordination and cooperation among the agencies with the recognition that the Manpower Development Committee is the central coordinator. Emphasis is placed on granting more authority to the Committee.

Note: During the consultant's tour of duty, he prepared papers for lectures, magazines, memoranda to Government officials, etc. These papers were collected and published by the Council for International Economic Cooperation and Development (CIECD) as follows: Manpower Planning for Prosperity, 1964-1967, The Republic of China, by Chester W. Hepler, 201 pages.

1/ U.S. Department of Labor International Technical Assistance Corps.

High-Level Manpower for Economic Development
The Indonesian Experience
(1965; 29 pages)

Bruce Glassburner (University of California). Article in Manpower and Education, Country Studies in Economic Development, Frederick Harbison and Charles A. Myers, editors (New York, McGraw-Hill Book Company, 1965) pages 173-201.

A historical review of the educational system in Indonesia and an assessment of the magnitude of high-level manpower problems.

Education under the Dutch Colonial Government and the Japanese occupation is discussed. After independence in 1945, the Government of the Republic of Indonesia expanded the educational system at all levels and encouraged enrollment. Medicine and law remain the two most prestigious degrees in Indonesia, followed closely by economics and sociology.

Indonesia has not developed a systematic program for the development of human resources. The two major economic development plans--the Five Year Plan for 1956 to 1960 and the long-range plan, 1961 to 1969--are essentially lists of projects allocating planned levels of investment. No overall plan for manpower development to fulfill these goals was included in the programs. Specific information concerning high-level manpower needs are treated independently in each sector; this procedure makes it almost impossible to see the

broad implications in overall manpower requirements.

Indonesia should give serious consideration to generating the necessary information for the development of a clear manpower resources and requirements relationship with the economic development plan. Current labor force studies should be refined and extended to provide a series of manpower data. These data should be used as a basis for linking with the anticipated growth in various sections of the economy.

Government policy should continue to encourage expansion of enrollment at the maximum rate that resources will allow. Such expansion should be rapid enough not only to increase the absolute numbers of persons in the high-level category but also to raise the ratio of such persons to the labor force and to the population.

Manpower in Indonesia
(1961; 11 pages)

E. L. Nelson, AID Manpower Adviser

An analysis of Indonesia's manpower situation.

The Eight-Year Economic Development Plan has a large number of projects that will require a vast increase in trained manpower. However, the Plan makes no provisions for providing the human resources needed to carry out these projects.

Statistics are sketchy and based on obsolete data; but it is assumed that 40 percent of the population are in the labor force, mostly in agriculture.

Manpower needs of Indonesia include occupations which require extensive education or manual skill. The various training facilities for developing trained manpower are described. A major need is for vocational and occupational guidance programs to guide young people entering post-secondary schools.

Current plans are to produce, over the 8-year period, more than 400,000 trained workers. Skilled workers are needed urgently in the construction, transportation, communications, and repair service industries. Therefore, training should be emphasized in skilled occupations in

building construction, metalworking, electrical trades, and automotive maintenance repair.

Indonesia's Department of labor has a valuable but underutilized resource in the Employment Service. This organization is national in scope and operates through a structure of regional offices and 82 local offices. It has a staff of 1,500, nearly 40 percent of total employment in the Department of Labor. Its major work is processing large numbers of unskilled applicants for jobs as laborers, whereas Indonesia's real need is to place workers who have skills. Because qualified Indonesian citizens could not be recruited to fill job orders, the Employment Service had to issue work permits for over 127,000 foreign workers in 1960.

Most of the consultant's recommendations were directed toward ways of improving the Employment Service. Technical assistance should be provided to aid in training skilled workers, to strengthen Employment Service functions, and to train Employment Service officials in U.S. Department of Labor participant-training facilities.

The Organization of the National Employment Service
(1961; 32 pages)

ILO Report to the Government of Indonesia;
ILO/TAP/Indonesia/R.16; T. J. Simond (Australia)

Steps taken to improve the organization and functions
of the Employment Service.

From its beginning in 1945, the Indonesian Employment Service was concerned primarily with attempts to find work for job seekers. Later, it began to collect data from local offices--the beginning of a statistical section. An occupational research program, a vocational guidance program, and registration of foreign workers were additional responsibilities assigned to the Service.

The Employment Service is one of two departments within the Manpower Directorate; it has a head office in Djakarta, 5 regional inspection offices, and 37 local offices. Attached to these local offices are 47 branch offices.

The consultant visited several local offices to observe the operations. These visits confirmed the impression that the Service was concentrating on the placement function and that these efforts were meeting with less than moderate success. For example, about 150,000 job seekers register annually and of these only 15,000 to 20,000 are placed each year in employment.

A pilot office in Bandung was established to serve as a model and as a training ground for Employment Service personnel. Based on the experiences of this pilot office, a manual of operations was prepared for use of all offices. It covered step-by-step procedures of applicant registration, vacancies, special placements, vocational guidance, foreign employment, administration, and employment market information.

Information on current and prospective manpower supply and demand has been collected by the local offices of the Employment Service. A survey of establishments that employed 51 workers or more was conducted in 1957 and was repeated in 1958, at which time the firms were asked to forecast their employment levels. Many employers proved unable or unwilling to make a forecast, but it was clear that industrial activities were declining.

Recommendations included advice on such topics as the occupational classification system, vocational guidance programs, staff training, inspection, and the operations manual.

Analysis of the Vocational Training Program
of the Republic of Indonesia
(1962; 12 pages)

S. M. Justice, AID Training Consultant

A review of the various vocational training programs
administered by Indonesia's Department of Labor.

The organizational chart of the Vocational Training Division makes provision for substantially all types of vocational training. In practice, however, some activities are far better developed than others. For example, 9 of 13 planned vocational training centers are in full operation. Recommendations are made for the establishment of the four additional vocational training centers. An attempt also should be made to define the relative roles of the Department of Labor and the Department of Basic Education in the general field of vocational training.

The Vocational Training Division offers courses at the vocational training centers for supervisors. The Productivity Institute of the Department of Labor is responsible also for the administration of a formal training-within-industry program. It is recommended that USAID

continue to support the latter program, but that the roles of the Vocational Training Division and the Productivity Institute be clarified.

The Department of Labor has recently become interested in the establishment of mobile training units, equipped with trucks and portable shelter, to provide training skills in remote areas. USAID was asked to help fund one such pilot unit.

In summary, very little progress has been made in developing a coordinated apprenticeship program. Staff personnel have had to devote their time to mobile unit planning and to supervisory training. A sound apprenticeship system should be developed as soon as possible. All skills training programs should be coordinated closely with other phases of the Department of Labor's manpower activities.

Analysis of Labor Market Information and Employment Service
in the Republic of Indonesia with reference to the Development
of a Manpower Program for Economic Development
(1962; 20 pages)

Joe White, AID Manpower Adviser

A description of the problems that must be resolved
before an effective manpower program can become
operational.

Manpower Planning--A committee composed of officials of the Manpower Directorate and the Employment Service of the Department of Labor refined the draft manpower plan to present to the National Planning Council. This plan provides a framework for a program directed toward the manpower needs implicit in the 8-year plan. Included in the draft were plans for a National Manpower Council, which would have the responsibility for manpower planning. Manpower seminars were planned for key Government officials and private businessmen.

Labor Market Information--Heavy reliance has been placed on the Employment Service to assure efficient use of trained workers. Man-

power data should be collected and analyzed to provide the Service with important information on manpower resources and requirements. Information on occupational supply and demand is especially needed for guiding and training young people.

Employment Service--The current organization and operation of the Employment Service are based on techniques used in the United States. Each program is analyzed in relation to the conditions existing in the country. The manual prepared by a previous ILO consultant was used as a basis for reaching conclusions and making recommendations.

Manpower Information and Planning
(1963; 16 pages)

ILO Report to the Government of the Republic of Indonesia;
ILO/TAP/Indonesia /R.19; Michail Y. Opanasenko, Manpower Adviser (USSR)

A review of the manpower situation, manpower data,
and the manpower information program.

Indonesia's major manpower problem are (a) the current need for qualified workers, (b) insurance that trained workers will be available when needed, and (c) creation of sufficient job opportunities to relieve chronic unemployment. Some preliminary measures have been taken to tackle these problems.

The four main sources of manpower information are (a) the Central Statistical Bureau, (b) the Bureau of Planning, Research, and Statistics in the Department of Labor, (c) the statistical divisions of other Departments, and (d) the Employment Service. The types of data available from these sources are described. In general, these data are insufficient and lack comparability for an effective manpower information program. The most serious problem appeared to be the lack of coordination among the organizations collecting the data.

The present manpower situation in Indonesia is characterized by large-scale unemployment and underemployment, chronic shortages of high-

level manpower, inadequate facilities for education and vocational training, and maldistribution of population in geographic areas.

Recommendations

1. The principle should be accepted that manpower planning is a part of the broad framework of economic and social development planning.

2. An appropriate administrative organization should be established for realization of the general aims of manpower planning.

3. The statistics-gathering functions of all agencies should be coordinated and the organization of the Central Statistical Bureau should be strengthened.

4. A widespread information program should be initiated to acquaint the public at large with the principles of planning programs and their overall objectives of raising living standards, and to emphasize the responsibilities of the various agencies in regard to the supply of information.

Human Resource Development in Indonesia
Problems, Policies, Programs
(1964; 15 pages)

Don Roney, Employment and Manpower Adviser, Labor Division, USAID/Djakarta

Observations on manpower development activities. 1/

Indonesia's manpower situation should be reviewed carefully before USAID invests in a manpower program. Too ambitious a program might doom the undertaking to failure. This report attempts to identify sectors in which critical bottlenecks are likely to develop.

The major problems encountered are the lack of adequate manpower data, the relatively low educational level of the work force, the unbalanced institutional capability, and the lack of a central organization for manpower planning.

Some of the basic manpower tasks that the Government of Indonesia can undertake are as follows:

1. Expand enrollments and school facilities at the senior technical high schools.
2. Develop a network of schools to train technicians.
3. Double the faculty in the physical sciences at the State universities.
4. Integrate management training facilities and programs.
5. Develop skilled manpower for maintaining and repairing capital equipment.

6. Develop a vocational guidance program at the junior high school level.

7. Create a central organization for manpower planning and training.

8. Develop Employment Service functions, especially the manpower information program.

Before USAID continues to invest in programs in Indonesia, the field of human resource development must be viewed against certain fundamental questions: What are the needs? What kind of program is appropriate to meet these needs? To what extent can or should U.S. aid be appropriately provided? A long-range program may be impractical if no reasonable assurance is given that USAID presence and support will be continuing and constant.

1/ Consultant's note: This report is a frame of reference for USAID for discussion and further program decisions; it is not a statement of USAID policy.

High-Level Manpower in Korea
(1960; 11 pages)

J. L. Thurston, AID Manpower Consultant

A general statement of manpower development and information programs as background for describing Korea's manpower problems.

The role of manpower, especially high-level manpower, in a developing country is discussed. Manpower planning is a complex concept since it involves many peripheral considerations, such as the educational system, economic growth, population shifts, industrial patterns, social attitudes, political views, etc. All these sectors have to coordinate and cooperate their efforts to develop a skilled work force capable of carrying out the goals of the overall economic development plan.

Basic questions regarding the success of a manpower program require proper tools of measurement. Labor force studies are essential to uncover job information and personal characteristics of the labor force. Other basic sta-

tistical studies include surveys of establishments and of educational institutions.

Recommendations

1. A single unit of Government should be charged with the responsibility for planning in the manpower field. This should be the Economic Development Council.

2. A cabinet-level manpower coordinating committee should be appointed by the President.

3. A manpower advisory committee should be appointed; it should be made up of representatives from education, labor, business, etc.

4. The National Officials Training Institute should be expanded to include management courses.

Manpower Development and Utilization in Korea
(1965; 31 pages)

DOLITAC 1/ Staff Paper No. 47;
Edgar C. McVoy, Manpower Adviser

A review of the manpower situation in Korea.

In the field of education, Korea ranks with some semiadvanced countries. However, there is an excess of college and high school graduates relative to current employment opportunities. Shortages of middle-level manpower appear among technicians, supervisors, and craftsmen. Industry has very little systematic in-service training to prepare people who have education but not the right skills for jobs. Measures are being taken to establish apprentice training for industrial needs, but they are not yet in effect.

Full use has not been made of available manpower data. For example, the 1960 Census of Population has useful information with respect to employment by occupation and industry. Projections of the population have been made, but none for the labor force, although the necessary data are available. The annual survey of education also provides useful data for planning. These data should be integrated with manpower requirements, when and if projections are made.

A program for the development of manpower policy, coordination, and administration is de-

scribed and recommended for implementation by the Government of Korea.

In planning education and training programs to provide manpower for development, more attention should be given to quality and content of such training to insure that it actually corresponds to the needs of the economy. The cost of education should be given careful consideration to determine on which levels of education to concentrate. About 10 recommendations are provided for guidance in types and levels of education.

In the process of moving into a modern industrial economy, Korea must give more attention to the Employment Service for manpower distribution and utilization. Considerably more budget and technical development are needed to bring the small and weak local offices into an effective national system. Related to this is the need to expand and improve vocational guidance and counseling services.

1/ U.S. Department of Labor International
Technical Assistance Corps.

The Role of Manpower in Korean Economic Development
(1966; 85 pages)

Edward D. Hollander, AID Manpower Consultant

An examination of manpower resources, requirements, and institutions in Korea, particularly in reference to the Second Five-Year Plan (1966-71).

Nearly two-thirds of the employed labor force is engaged in agriculture, forestry, hunting, and fisheries. The literacy rate is over 80 percent. Because of the relatively highly developed educational system, the proportions of professional, technical, and white-collar workers are high.

Far from being confronted with a general manpower shortage, Korea is faced with the problem of finding productive employment in order to achieve effective utilization of its skilled labor force. Some shortages may occur among managers and technical manpower, but these shortages can be avoided if the Government carefully estimates needs and supply and takes the requisite steps to meet the deficiency.

The consultant estimates that the total number of additional jobs created under the plan will be significantly less than that projected by the

Economic Planning Board. An analysis of the projections is provided.

Recommendations concerning organizations and institutions required for manpower planning and programming:

1. An Office of Manpower should be created in the Economic Planning Board to serve as the focal point for all manpower planning.

2. The Government should establish a cabinet-level Ministry of Labor. Labor matters are now under the jurisdiction of the Office of Labor Affairs in the Ministry of Health and Welfare.

3. An Employment Service Office should be developed within the Ministry of Labor and should include employment market information and occupational research functions.

Manpower Information
(1962; 21 pages)

ILO Report to the Government of the Federation of Malaya;
ILO/TAP/Malaya/R.16; Richard R. Zoeckler (United States)

A review of available manpower data in Malaysia.

The Second Five-Year Plan (1961-65) of Malaya anticipated that the 15-percent increase in the population of working age would generate the need for 340,000 additional jobs during the period if the development targets could be attained. Because the First Five-Year Plan (1956-60) of Malaya did not absorb all the increase in the labor force during that period, the Government felt it was necessary to refine their data in order to anticipate problems in the current Plan.

Sources of manpower data

1. 1957 Census of Population.
2. 1960 Census of Manufacturing Industries.
3. Annual Employment and Wage Statistics.
4. 1959 Unemployment Survey.
5. 1962 Survey of Employment and Unemployment.
6. Monthly Report of the Ministry of Labour.
7. 1960 Report of the Education Review Committee.

Data from these sources were analyzed, and concepts and definitions were checked for comparability. It was not possible to draw up a statistical analysis of the current manpower supply-demand situation from the information available. A few general observations were made about the need for training teachers to increase the educational and skill levels of the population.

Recommendations

1. Develop the Employment and Wage Statistics Reports into a periodic employment information series.
2. Improve the reliability of the Employment Exchange reports.
3. Formulate uniform standard definitions and classification criteria for occupations, industries, and employment status.
4. Develop annual benchmark tabulations on total employment from the Employees' Provident Fund Board reports.
5. Create a new position of Coordinator of Specialized Manpower in either the Ministry of Labour or the Economic Planning Unit.

Manpower Survey 1965: States of Malaya
Technical Report
(1966; 246 pages)

N.S. Choudhry, U.N. Sampling Expert; and David Christian, Ford Foundation Manpower Adviser

Results of the first comprehensive manpower survey
in Malaysia.

The Economic Planning Unit required an assessment of manpower as a part of the formulation of the First Malayasian Plan (1966-70). The survey was planned to provide data on employment in all sectors of the economy as a basis for analyzing manpower skills, shortages, requirements, and the industry-occupational matrix. The Department of Statistics and the Ministries of Labor and Education cooperated in carrying out the survey. The sample covered about 60 percent of the total number of employees in the States of Malaya.

Most workers with skills are likely to be employed in government or manufacturing. Government services, including education, cover 35 percent of all available jobs, and account for 52 percent of the professional and managerial jobs, 89 percent of the subprofessional jobs, 49 percent of the clerical jobs, and 50 percent of the skilled jobs. Mining and manufacturing, which cover 15 percent of the total available jobs, employ 25 percent of the skilled jobs. In contrast, the estates sector of agriculture employs 40 percent of the total available jobs of which nearly two-thirds are semi- or unskilled jobs.

Out of the 3,400 foreign workers employed in the States of Malaya, over 95 percent were occupying professional and subprofessional positions. Most of these are in the nongovernment sector.

At the time of the survey, there was a shortage of 18,000 qualified workers, mostly in the government sector. At the professional level, the vacancy rate was about 20 percent. Vacancy rates also were serious in other occupations requiring education and skill. Acute shortages were in occupations in education, medicine, engineering, administration, and management.

Recommendations

Training in nongovernment establishments should be stepped up to meet existing shortages and needs for replacement and expansion in the next 5 years. Government should expand in-service training and send more people abroad for training. Foreign specialists should be recruited on a temporary basis to meet some of these needs.

Proposed Sample Design for a Labor Force Survey
Report to the Central Statistical Office of Thailand
(June 1962; 21 pages)

Dr. Margaret Gurney, AID Statistical Sampling Adviser,
U. S. Department of Commerce, Bureau of the Census.

An abbreviated outline of the first steps in the design of a sample for measuring the characteristics of the labor force in Thailand.

It is proposed to start the program modestly with a sample of municipal areas. The program later would expand the sample to cover the balance of the country. As experience is gained and funds become available, it is hoped that the sample eventually will provide separate regional estimates, on a monthly or quarterly basis.

The 1960 census of population contains the basic data needed to draw a sample for the survey of the labor force. For the initial program covering municipal areas only, a sample of 5,000 households containing 30,000 persons is proposed. Based on present population estimates, this number represents a sample of about 1 in 120.

Out of 120 municipal areas in Thailand, 93 will be covered in the first round. All

large municipal areas will be included and most small ones; probability of inclusion will be proportionate to size. Within the municipal areas, at least three census enumeration districts will be included, from which five to six households will be selected. Approximately 150 interviewers will be required, each of whom will interview from 15 to 40 households.

For the remaining 3.6 million households outside municipal areas, a sample of 10,000 households may be sufficient; that is, a ratio of 1 in 400. A staff of 160 interviewers will be needed; each interviewer will cover 60 households.

The report also covers such topics as reliability, estimation procedures, estimation of variances, quality of survey, costs and timing of the survey, and rotation of sample.

Report on the Manpower Situation in Thailand
(1962; 7 pages)

Joe White, AID Manpower Adviser

Describes the present manpower situation and future outlook, identifies problems, and recommends possible lines of action of a comprehensive manpower program.

Thailand has made only a beginning toward the development of a full-fledged manpower program. A National Economic Development Plan was prepared; but, with few exceptions, the implications of the plan for manpower skill needs have not been examined.

A National Manpower Board was created in 1961 under the chairmanship of the Minister of the Interior. The Board is responsible for recommending manpower policy to the Government. However, as of the date of this report, the Board had met only at its organizational meeting.

A National Employment Service has been in operation for some time. Since its operations are confined largely to Bangkok, the Service is not a national organization in scope or character. Its ability to contribute to a national manpower program or to cope with problems and responsibilities is limited.

On the positive side, the recent 1960 census is expected to yield information that will be valuable in analyzing the manpower situation. A periodic sample labor force survey is expected to provide detailed occupational information which is lacking in the census. (See preceding

summary.) These sources will provide labor supply information.

Immediate attention is needed on labor demand. Short-range estimates of future requirements are obtained semiannually from employers. These data, however, are not sufficient to determine whether current educational and training efforts will meet future requirements.

Recommendations

1. The National Economic Development Plan should be analyzed to determine manpower requirements by occupational skill level, location, and year of need.

2. The administrative machinery for manpower planning and operations should be strengthened.

3. The programs and staff of the National Employment Service should be expanded and improved.

4. A central training authority should be established and made responsible for planning and coordinating educational and training programs.

Development of a Manpower Assessment Program
(1963; 59 pages)

ILO Report to the Government of Thailand;
ILO/TAP/Thailand/R.23; A. G. Read (Great Britain)

Presents recommendations for the organization and administration of the National Manpower Board and for the improvement and expansion of manpower statistical programs.

In 1961, the Government of Thailand requested ILO assistance in gathering and appraising manpower data for the development of manpower policies consistent with the economic development plan. The existing organization for the development of manpower resources was the National Manpower Board, which was created in 1961, under the guidance of the Manpower Executive Committee. The Labor Division of the Department of Public Welfare, Ministry of the Interior, was expected to provide technical and administrative support. However, because of lack of funds and staffing resources, the Labor Division was not able to assume such responsibility.

The inability of the National Manpower Board to function as planned is explored in Mr. Read's report. In late 1962, he was requested to advise the Secretary General of the National Economic Development Board on the basic principles concerning the organization and conduct of a manpower assessment program suitable to the needs of Thailand. As a guide for understanding these principles, a series of detailed memorandums was prepared outlining the

organizational aspects, steps and methods involved, and type of data used for analyzing manpower supply and demand. Assistance also was provided in drafting the first report on the manpower situation in Thailand.

Existing manpower services in the Labor Division included an employment service, employment information program, occupational information, and vocational training. These programs were not very effective, however, because of lack of staff, coordination, authority, and other hindrances. Relatively few data were available to evaluate, and the results of the 1960 census of population were not processed completely. Semiannual data on employment in establishments that had 10 workers or more in the Bangkok-Thonburi area were available. Some statistics on student education and training were available from the Ministry of Education. Recommendations were made to improve the quality of existing manpower services and to promote the collection and analysis of additional manpower information necessary for the assessment of human resources.

Preliminary Assessment of Education
and Human Resources in Thailand
(Revised edition, October 1963;
Volume I : pages 1-85; Volume II : pages 89-456)

Joint Thai/USOM Task Force on Human Resources Development
in Thailand; AID consultants:

Eugene W. Burgess, Cole S. Brembeck, and William J. Platt

Analyzes and projects manpower for educational planning. The report is basic to many subsequent studies.

This report is the outgrowth of a recommendation made by A.G. Read, ILO adviser to the National Economic Development Board in 1962; the recommendation concerned the organization and conduct of a manpower assessment program suitable to the needs of Thailand. (See preceding summary.) Since Mr. Read's study, manpower responsibilities were transferred from the Ministry of Interior to the National Economic Development Board.

In 1963, the Board, in cooperation with the Ministry of Education, created a task force to carry out a preliminary assessment of manpower. The objectives of the project were to (1) assess Thailand's human resource requirements for national development, (2) identify educational priorities, and (3) undertake educational planning for the most effective development of human resources.

The AID contracted with Michigan State University for three direct-hire technicians to serve on the task force to complete the first two phases of these objectives. This report represents their activities during the 2-month study.

Volume I of the report describes the major findings of the task force and presents recommendations. Volume II is a detailed account of the sources and methods used to arrive at the conclusions.

Major Findings

Manpower projections to 1980 indicate that a high incidence of secondary school graduates (middle-level manpower) will be required if all manpower targets are to be met. Under the present educational structure, however, the output of secondary school graduates will not be sufficient to meet the demand.

Major Recommendations

1. The National Economic Development Board should continue manpower projection efforts begun by the task force.

2. An analysis of the secondary educational system should be made with the assistance of a task force of U.S. consultants. No long-range commitment of funds should be made until this step is done.

3. Manpower and Education Planning Offices should be established to assist their respective Ministries. (A Manpower Planning Office and an Education Planning Office were later established.)

4. The Labor Division in the Department of Public Welfare should be elevated to Departmental level. (This was accomplished in October 1965.)

Educational Planning in Thailand
Paper presented to Summer Conference on
Educational Planning, Syracuse University
(July 1964; 30 pages)

Cole S. Brembeck, Michigan State University
Institute for International Studies in Education

A companion—piece to Dr. Platt's Manpower Planning in Thailand. Major findings and recommendations concerning education, which were submitted by the Joint Thai/USOM Task Force on Education and Human Resources in Thailand (to which the author was assigned), are supported by a detailed analysis of the available data.

In summary, the Joint Task Force Study reemphasizes the need for education at all levels. At this stage in Thailand's development, however, secondary education is of critical value for the development of middle-level manpower. Such people are needed in trade, services, management, supervision, and other tertiary sectors of the economy. The Task Force Study recommends redesigning the vocational, technical and other secondary school programs to meet these needs.

The major portion of the report assesses the structure and capacity of the educational system in Thailand. It analyzes current and projected (1970) demand for and supply of graduates at each educational level to determine the estimated shortfall. The most serious deficit appears in the secondary education group.

To produce the number of secondary graduates needed to meet the economic development requirements for 1970, the number of graduates would have to be quadrupled. There are potentially enough students to fill this demand, but many of them are enrolled in academic courses in preparation for college. However, figures show that only one in four of the academic school graduates enter college; thus, the majority of the graduates are unprepared for the world of work. It was recommended that, in addition to the academic and vocational school systems already in existence, a third system be initiated. This system would cover general subjects that prepare young people for semi-skilled jobs in trade, services, and other white-collar jobs. The source of students for this "general" course would come from the overflow of the academic and vocational school systems.

Manpower Planning in Thailand
Paper presented to Summer Conference on
Education Planning, Syracuse University
(July 1964; 37 pages)

William J. Platt, Stanford Research Institute

A companion-piece to Dr. Brembeck's Educational Planning in Thailand. It develops the method of projecting manpower demand to 1980, as presented by the Joint Thai/USOM Task Force on Education and Human Resources in Thailand to which the author was assigned.

Lacking the lead time to wait for results from new surveys, the Joint Task Force analyzed existing data. The most important sources were an economic development plan for 1960-66, the 1960 census, a demographic projection to 1980, and semiannual job market surveys of establishments in the Bangkok-Thonburi area. The years of 1966 and 1980 were selected as target years for planning.

Analyses of the educational attainment by occupation and economic sector for 1960 were prepared. The number of people expected in each occupation or sector was extended by the appropriate educational attainment coefficient to generate a required future stock or inventory of manpower needed for the specified economic output. The difference between future and present stock, in addition to allowance for outflows, represent the demand placed on the educational system. Certain refinements were made with regard to the changing educational attainment coefficients over the projected period.

For 1966, output estimates by economic sector were available from the economic devel-

opment plan in monetary terms. Using 1960 output and employment as a base, the Task Force made assumptions as to changes in productivity in each sector between 1960 and 1966. Shortrun projections of manpower stock in 1966 were made to determine whether current trends in output of graduates were keeping pace with the economy.

Long-range estimates to 1980 required a variety of projections based on different assumptions and a study of the patterns of demand generated by such variations. Labor force and industry/occupational structures were projected. A comparison of changing international trends was made to refine the projections.

The report concludes with a discussion of the machinery for carrying out the functions of manpower planning and utilization. Specific recommendations for the new Manpower Planning Office were made; they pertained to its functions, responsibilities, and role in relation to other agencies.

Manpower Assessment and Planning
(1965; 22 pages)

ILO Report to the Government of Thailand;
ILO/TAP/Thailand/R.25; William A. Langbehn (United States)

Report emphasizes the need for a strong manpower planning organization within the National Economic Development Board.

Following the recommendations of A.G. Read (see page 182), the Government of Thailand requested assistance in developing an effective organization to guide manpower planning and policy aspects within the whole economic and social development plan. A Manpower Planning Unit, attached to the National Economic Development Board, was in operation on an ad hoc basis. (This unit later became the Manpower Planning Division.) An organizational plan was proposed and adopted; it called for operating sections on research, assessment, and publicizing work on the manpower situation.

The effectiveness of the work of the consultant was dimmed by the lack of full-time counterpart personnel. To make up for this gap, the consultant prepared over 130 documents covering concepts, principles, and activities of manpower assessment and planning. It

was hoped that these papers would serve as training materials, background data, and survey methods when appropriate staff were available.

Sources of statistical data that could be used in manpower assessments were investigated. Requests were made for tabulations on the industrial census; however, these data were not available by the end of the mission. A step-by-step method was prepared for the Manpower Planning Unit to continue studies on manpower demand based on the Joint Thai/USOM Education and Human Resources study.

Recommendations concentrated on the establishment of an administrative organization for manpower planning and on a comprehensive plan of short- and long-term activities of that organization. Other recommendations dealt with the development of clear-cut policies and objectives on employment and training.

Function and Program of the Department of Labor
of the Government of Thailand
(1965; 17 pages)

DOLITAC 1/ Staff Paper No. 10; Edgar C. McVoy, Far East Area Specialist

The Labor Bureau was upgraded to Departmental level in 1965, as a result of the recommendations of the Joint Thai/USOM Task Force on Education and Human Resources in Thailand (1963). This report describes the problems under the new Department of Labor.

Manpower programs

The programs and activities of the Labor Department, which include (1) employment exchange, (2) vocational guidance, (3) vocational training and (4) occupational promotion, are described and suggestions for their improvement are presented.

Special comments and observations are made regarding the coordination of the work in the Labor Department with the Manpower Planning Office in the National Economic Development Board. The respective roles of the Labor Department and the Ministry of Education need to be clarified, especially in the field of apprentice training.

Labor Relations and Labor Standards

A labor law was passed in 1965 which establishes new procedures for settling disputes. Future plans call for improvement and expansion of labor inspection activities and safety and health programs, revision of the Labor Code, and preparation of a handbook on settlement of disputes. Several suggestions are made about the improvement of current labor laws and standards.

The labor law of 1965 prohibits the formation of unions but permits the right to bargain collectively ad hoc through a representative. Within

the context of Thailand's history and culture, the new law may be regarded as a responsible first step toward normal labor-management relations. It is hoped that the government will encourage labor to develop identity and leadership which is independent of management.

Labor Statistics Research

The major statistical surveys and reports produced by the Department of Labor include an annual establishment survey in the Bangkok-Thonburi area; occupational wage surveys in selected industries; annual reports on conciliation, work stoppages, work injuries, and employment service activities; and reports on the patterns of employment status of vocational school graduates, on migration, and on working conditions in mines.

New projects for 1966 include studies of the employment situation of university graduates, underemployment in the Northeast, and working conditions in Bangkok. Specific recommendations are made to develop and improve sample surveys of establishments.

1/ U.S. Department of Labor International Technical Assistance Corps.

Internal Migration
(1965; 150 pages)

ILO Report to the Government of Thailand;
ILO/OTA/Thailand/R.26; Robert Poupart

Report provides, for the first time in Thailand, comprehensive basic information on the movement of rural workers. Includes numerous statistical tables and maps.

Migration has been associated with a number of deleterious effects, notably the growing problem of unemployed migrants in urban areas. An increasing rate of rural migration into Bangkok has given rise to governmental concern. To obtain a clear picture of the situation, the Government of Thailand requested ILO assistance in conducting a survey of internal migratory movements.

The mission's objective was to determine the principal migratory movements of rural workers. The emphasis was on qualitative aspects such as causes of migration, living and working conditions, and effect of rural migration on economic progress. The project was intended as a pilot study to be continued by the Labor Department.

Available data consisted of information from the 1960 Census of Population and from a few reports prepared by the Department of Agriculture. To obtain more intensive information, surveys were conducted in 45 out of 71 provinces. Interviews were conducted with anyone who had a knowledge of local conditions: government officials, teachers, employers, farmers,

and local and migrant workers. In Bangkok-Thonburi, over 2,000 migrant workers were interviewed during various seasons at the Employment Service offices and at bus and railway stations.

Economic factors, according to the survey, are the primary cause of migratory movements. Population pressure and the scarcity of suitable farm land are the prime factors causing migration among farmers. Other factors include excessive rainfall, lack of water, and crop pests. The report also analyzes other social and economic conditions in rural areas which cause migration and discusses the problems connected with permanent and temporary migration.

The Mission recommended that the Government of Thailand consider certain remedial measures for the alleviation of migratory problems. To keep abreast of the situation, an administrative unit should continue the study of migratory movements. Government policy on migration should be outlined clearly and the various agencies involved strengthened. Several recommendations cover the protection and welfare of migrant workers and control of migratory movements.

Current and Projected Secondary Education Programs for Thailand
A Manpower and Educational Development Planning Project
(1966; 257 pages)

Educational Planning Office, Ministry of Education, Thailand, Publication No. 9

This report is based on one of the recommendations of the Joint Thai/USOM Task Force. This recommendation related to a more intensive study of secondary education, both vocational and academic, with special reference to manpower needs. A team from Michigan State University, supported by AID funds, assisted in the preparation of this study. The team included Dr. Raymond N. Hatch, Chief, Dr. Stanley P. Wronski, and Dr. David K. Keenan.

Contents of report

1. Background of secondary education in Thailand.
2. Organization and administration of the Ministry of Education.
3. Present and future demand for manpower in Thailand.
4. Social and philosophical bases of secondary education.
5. The objectives of education for the youth of Thailand.
6. Enrollment status and trends, projected to 1986.
7. The curriculum, covering subject matter, instructional aids, and teaching methods.
8. Quality of the instructional staff.
9. Education productivity, measured by quality of the educational product and the efficiency with which it is produced in terms of time and money expended.
10. Summary and recommendations.

Manpower Development in Thailand's Private Sector
(Memorandum, July 1967; 7 pages)

Henry F. McCusker, Manpower Adviser, Stanford Research Institute,
assigned to the National Economic Development Board of Thailand

An overview of the manpower situation in the private
sector of Thailand's economy.

The Manpower Planning Division of the National Economic Development Board conducted research in preparation of Thailand's Second National Economic and Social Development Plan, 1967-71. Information regarding employment and training programs was obtained from a survey of 20 companies that represent a cross-section of Thailand's major economic sectors.

Major findings of the survey

1. Employment in large-scale private enterprise will increase on an average of 40 percent in the 1967-71 period.

2. Competition for engineers, technicians, managers, and supervisory personnel is very keen and their salary level is rising rapidly.

3. Salaries in private enterprise have a wide range and are, on the average, considerably higher than those paid to government employees. Among professional and supervisory workers, the differential may be three or four times as great.

4. Fringe benefits are broad and far exceed those offered to government workers.

5. Most companies have some form of training programs, generally unplanned, informal on-the-job training. The major exceptions are the petroleum companies which have well-planned, formal in-service training programs tailored to their specific needs.

A list of persons and companies visited is provided, together with types of training programs offered by the various companies.

The Work Force in Saigon
A Survey of Some Economic and Social Characteristics
of Employees in Medium-Sized Industry
(1960; 178 pages)

James B. Hendry, Michigan State University, Vietnam Advisory Group

An examination of the social and economic characteristics associated with employment in medium-size industrial establishments in Vietnam.

The main purpose of the survey was to understand what happens to people when rapid industrialization in a formerly rural economy takes place. Since no data on the labor force in Saigon were available, it was decided to sample the work force employed in industrial firms.

A sample of four "typical" establishments was selected; they represented pottery manufacture, drugs and plastics, soap, and printing. Three of the firms employed 100 people, the fourth employed 300. One-half of the employees in the three small firms were drawn into the sample and one-fourth in the large firm. The response of those selected represent some of the conditions of and the attitudes toward industrialization in Saigon in 1958.

Information was obtained on the following general areas of interest:

1. Description of the work force--age and sex distribution, income range, duration of employment, former employment.

2. Living conditions and family structure--type of housing, recreational facilities, marital status, family size.

3. Movements of workers--extent to which migrants and displaced persons have been absorbed into the labor force; education and experience of recent migrants compared with long-term city residents.

4. Unionization--composition of unionized labor force in terms of skill, length of employment, sex, type of plant.

5. Work satisfaction and attitudes toward management--examination of job preferences and job satisfaction according to such variables as job skills, education, workplace, etc.

The appendixes describe the methods used and the interview experience, and contain a copy of the 32-question questionnaire. There are 54 tables in the text and 24 in an appendix.

Report on Manpower Advisory Project, USAID/Vietnam
(March 19 to June 2, 1966; 10 pages)

DOLITAC 1/ Staff Paper No. 13;
Richard R. Zoekler, Manpower Adviser

A report on current progress in assessing urban manpower needs.

Considerable attention was focused on the demand-supply situation in Vietnam in late 1965, when construction contractors and other large employers indicated their manpower requirements would be increased. Arrangements were made for the importation of American and third-country nationals to fill key positions and to meet shortages of critical skills. Speculation soon arose regarding the impact of such hiring on the Vietnamese economy and on labor-management relations. A U.S. Civilian Manpower Committee was formed to evaluate the situation.

Existing population and employment data are inadequate for purposes of analysis. An establishment survey is currently (1965-66) being conducted by the Ministry of Labor in the Saigon-Gia Dinh area and in An-Giang Province. A similar 1964 survey is still being processed. Establishment reporting will be emphasized from now on. The adviser recommended that data be developed by area rather than on a national basis.

The National Institute of Statistics is planning a complete census of industrial and commercial establishments on its own. It will in-

clude data on production, power consumption, and capital investment.

The Ministry of Labor is being reorganized. This reorganization involves many personnel shifts and reassignment of certain functions. The agency added a research planning and labor statistics division in its new reorganization. The Employment Service is engaged principally in recruiting workers for construction projects. Little service is being provided other employers.

The Manpower Directorate's Committee on Manpower Planning was given the assignment of drafting long-range manpower policy suggestions. For 1966, special attention is to be given to the development of vocational training. The aim for 1967 is to improve employment placement operations. The adviser suggested that emphasis be placed on obtaining accurate and dependable labor force information before making far-reaching policy proposals.

1/ U.S. Department of Labor International Technical Assistance Corps.

Human Resources Development
and Manpower Utilization in Afghanistan
(1967; 69 pages)

Meredith B. Givens, AID Manpower Consultant

An evaluation of Afghanistan's educational and training activities in relation to current and projected manpower needs.

At present, Afghanistan has no systematic program or central organization concerned with the development of human resources nor an effectively organized central statistical office. However, some rudimentary components for a manpower program exist:

1. A Manpower Directorate in the Ministry of Planning, which collects employment information from establishments and is responsible for allocation of university-trained personnel to posts with Government.

2. A Civil Service Department in the Prime Ministry.

3. A National Employment Bureau in the Ministry of Mines and Industries, which consists of two officials attached to the Personnel Office. The work is limited to a few placements each year.

4. A National Register of Skilled Personnel. Questionnaires have been issued to government personnel but very few have been returned.

5. A Division of Vocational Guidance in the Department of Vocational Education in the Ministry of Education, which consists of two em-

ployees who also have duties elsewhere. Very little work has been accomplished.

The first National Census ever to be taken in Afghanistan will occur in 1968/69, with advisory services from the United Nations. Up to now, manpower estimates and projections have been made by various advisory teams from ILO, U.S.S.R., and the United States (Robert Nathan Associates). These data are inadequate for developing a manpower program.

Education is the Nation's fastest growing industry. The number of schools and the number of pupils at each educational level have increased rapidly during the last 5 years. The educational system is heavily dependent on foreign aid, especially from the United States and U.S.S.R. Unemployment and underemployment of liberal arts graduates from the University of Kabul are signs of overinvestment in this area. In order to avoid this waste, studies on manpower needs should be made to guide educators on the content of courses and the level of education that are required to meet these needs. Formal education should be linked with work-based training in the development of middle-level manpower.

Observations on Visit to Ceylon
(1961; 8 pages)

S. M. Justice, AID Apprenticeship Consultant

A report on apprenticeship activities in Ceylon, based on a 5-day observation tour.

Participant followup

A meeting was arranged for 12 of the 15 former participants who received training with the Bureau of Apprenticeship and Training, U.S. Department Labor. In general, they showed satisfaction with the programs that had been arranged for them in the United States.

Contact with Ministry of Labour

A visit was made to the Central Employment Service Exchange and new vocational training center. Some of the topics discussed included:

1. Wage Board ordinances. In the field of motor engineering, certain workers may receive supplemental instruction at the Ceylon Technical College for which they are granted release time and pay by their employers.

2. Vocational and trade testing center. Occupational capacities of Employment Exchange registrants are tested for placement of machinists, welders, and similar occupations.

3. Miscellaneous problems of Employment Exchanges including early school leavers and large numbers of hard-to-place unskilled workers.

Visit to the Ceylon-German Workshop

This workshop provides technical training of mechanics to overhaul and maintain the nationalized bus system in Ceylon. Sixty men are selected each year from the over 4,800 applicants to undergo a 3-year training program. The consultant considered this to be the best training center observed during his trip to several countries.

A Survey of Employment, Unemployment and
Underemployment in Ceylon, 1959-60
(1963; 11 pages)

International Labour Review, Vol. 87, March 1963, pp. 247-257.

Summary of the methods used and the results of a labor
force survey.

A household survey of the labor force was conducted by the ILO Expanded Programme of Technical Assistance with the cooperation of Ceylon's Department of Labor and Department of Statistics. The survey covered four quarterly periods of the year ending March 1960. A sample was selected from the 1953 census for three rural areas and two urban areas. Sample households were divided further to provide independent subsamples so that estimates of characteristics would be available at the four separate quarters.

Ceylon has a young population. Out of a population of 10.3 million, nearly 44 percent were children under 15 years of age. Nearly 80 percent of school-age children, 5 to 15 years old, were attending schools, an unusually high proportion for a developing country.

About a third of the population was in the labor force, either working or looking for work. Sex participation rates were 45 percent for males and 16 percent for females. Agriculture, forestry, and fishing activities employed 58 percent of the labor force; and manufacturing, mining, and public utilities accounted for 14 percent.

Despite the great dependence of the economy on agriculture, a relatively large proportion (63 percent) of the workers in Ceylon were wage and salary earners. Even in rural areas, as much as 61 percent of employed persons were wage and salary earners, a feature which distinguishes Ceylon's economic organization from that in many other developing countries.

Nearly 13 percent of the labor force were unemployed persons. Unemployment in Ceylon is concentrated among youth and young adults. Among workers under 15 years of age, 44 percent were unemployed, chiefly in the rural areas where school attendance is low. More serious, however, was the high proportion of unemployment among young adults; over 30 percent of the 15 to 19 age group and 20 percent of the 20 to 24 age group in the labor force were unemployed.

Using the ILO definition, the survey measured underemployment to include persons who worked fewer than 5 days or 40 hours during the past 7 days and who were available for more work. About 45 percent of the rural employed and 30 percent of the urban employed worked fewer than 40 hours a week. However, relatively few of these people wanted extra work.

Employment Service Organization and Operations
(1962; 23 pages)

Report to the Government of the Republic of Cyprus;
ILO/TAP/Cyprus/R.2; Gerald R. Parrish (U.S. Department of Labor)

Report reviews the current Employment Service operations and describes the conduct of establishment surveys.

In 1960, the new Government of Cyprus faced a serious problem of unemployment and underemployment. Placement services of the Employment Exchange system, which had been in existence since 1945, were found to be deteriorating. In order to proceed with planning for economic development, the need for current information on employment and manpower became urgent.

To estimate the current manpower situation, two establishment surveys were conducted 6 months apart. The first survey in February 1962 covered all public and private employers with five workers or more in the Nicosia-Kyrenia District. The second survey was conducted in September 1962. At the same time, an initial survey was undertaken in the Limassol District. Employment Exchange officers gained considerable experience which should form the basis for continuing surveys of manpower and employment information.

Certain technical problems were yet to be resolved, however. For example, benchmark data were needed for total employment in each industrial sector and in each establishment. It was hoped that the 1960 Census of Population and the 1962 Census of Industry would provide the necessary benchmark data. However, technical difficulties delayed the use of the 1960 Census of Population by the consultant, and the 1962 Census of Industry had not been completed.

The consultant evaluated the organization and operations of the Employment Service, including its functions (employer relations, registration interviewing and special service), staffing, accommodations, staff training, and preparation of the manual of operations. Recommendations on these topics were made consistent with ILO Convention No. 88 concerning Employment Service Organization. A time schedule was devised to effect these recommendations.

The Employment Service should play an important role in combatting the serious problems of employment and unemployment by taking steps in the following areas:

1. Until the conditions of rural life can be improved, stop-gap relief from rural underemployment can be afforded through public works programs, assisted by equitable placement services.
2. Chronic unemployment of educated youth can be alleviated by introducing more intensive and realistic vocational guidance programs.
3. Raising the skill level of the labor force can be done by improving the interviewing techniques of the staff and by providing the staff with current occupational information based on projections of manpower requirements.

Manpower Assessment and Employment Service
(1964; 18 pages)

ILO Report to the Government of the Republic of Cyprus;
ILO/TAP/Cyprus/R.6; Richard R. Zoeckler (U.S. Department of Labor)

A review of the progress of the Employment Service since
the 1962 ILO Mission.

The principal objectives of the project were to advise the Ministry of Labour and Social Insurance on the development of a continuing program of manpower information and on the organization and operation of the Employment Service.

Information on the manpower supply-demand situation was needed to implement the Five-Year Plan (1961-66). The three principal sources of manpower data were examined:

1. 1960 Census of Population--a valuable guide to the characteristics of the labor force but of questionable validity in the areas of unemployment because of inadequate definition.

2. 1962 Census of Industry--valuable information but not complete because of inadequate coverage in several industrial sectors.

3. Data from Employment Service activities--basically sound information on persons actively registered for work. Data from the establishment surveys could not be linked to the Census for trend analysis.

Supplementary manpower information for planning purposes came from the various administrative control systems in the Employment

Service office, from the annual survey of school graduates reporting labor market intentions, and from student registrations.

The consultant tried several methods to improve the current statistical information reporting systems. For example, the semiannual establishment survey which was set up successfully by the previous mission was interrupted temporarily to correct certain inconsistencies and to expand coverage to other towns.

Recommendations for improving the manpower statistics program include:

1. Conduct a household survey of the labor force to fill in gaps of missing information from the Census.

2. Use unemployment insurance data as an indicator of the volume and trend of unemployment.

3. Improve techniques of establishment surveys regarding size of sample, geographic coverage, etc.

4. Improve various operations of the Employment Service, such as administration, personnel, job vacancy information, occupational classification system.

Organization of the Employment Service
(1962; 26 pages)

ILO Report to the Government of Greece;
ILO/TAP/Greece/R.17; A. Y. W. Cowie (United Kingdom)

A description of the administrative organization and work
of the Employment Service.

Responsibility for Greek employment matters and for vocational guidance and training rests with separate Directorates in the Ministry of Labour. Responsibility for unemployment benefits, family allowances, and conscripts' benefits belongs to the Organization for Employment and Unemployment Insurance which is governed by a board appointed by the Minister of Labour. The Institute of Social Insurance acts as a collection agency for social insurance contributions. Costs of operating these various organizations, including 49 local Employment Service offices, come from social insurance contributions.

The Mission noted many problems arising from dual control of employment offices by the

Ministry of Labour and the Organization for Employment and Unemployment Insurance. Specifically, personnel staffing and duplication of work seem to be the major problem areas. The Mission concludes that the only satisfactory solution is to place the employment offices under unified control and to allocate the employment and vocational guidance work among the various organizations involved.

In all, 30 detailed recommendations are presented as necessary to implement and improve the services of employment offices. Most of these recommendations deal with organization, staffing, and local office control.

Education for Economic and Social Development--Greece
(1964; 237 pages)

Organization for Economic Co-operation and Development
Directorate for Scientific Affairs, The Mediterranean Regional Project

This report is one of six prepared by research teams for the Mediterranean Regional Project with the financial support and technical assistance of the Organization for Economic Co-operation and Development (OECD).

The research team assigned to Greece assessed educational and manpower needs and resources in light of long term targets for economic and social development.

The first half of the book is devoted to assessing the current educational system and potential resources for educational expansion. Educational input and output, and their related factors, are analyzed in great detail supported by many statistical tables. Expenditures on education are presented for both private and public sectors. Attempts also are made to appraise the quality of the educational system by analyzing teacher/pupil ratios, school classrooms and buildings, and other measures of quality.

The second half of the book deals with projections of manpower needs and educational requirements. Working within the economic development plan for the three 5-year periods to 1979, the research team analyzed projected changes in the occupational structure of nonagricultural industries, and estimated manpower replacement requirements due to death and retirement. The team then translated the adjusted manpower estimates into educational requirements to 1979. The necessary expenditures for buildings, teachers, operating costs, etc., required to meet the long term demand for skilled manpower, are estimated to be 3.2 percent of the 1974 Gross National Product, compared with 2.1 percent in 1961.

Apprenticeship Training
(1960; 25 pages)

ILO Report to the Government of India;
ILO/TAP/India/R.3; S. A. Norton (Canada)

Report on the apprenticeship program in the State of
West Bengal.

Under the National Apprenticeship Scheme (NAS), the all-India target was to train 7,000 apprentices between 1957 and 1961. West Bengal had been allotted 3,000 places which were later reduced to 1,000. By 1959, the mid-point of this 4-year period, only 273 apprentices had completed training. By the time of the consultant's departure, 410 places had been filled. One of the reasons for the relatively few apprentice trainees appeared to be the lack of adequate publicity.

A conference of training officers from industry in the Calcutta area was held. Many topics were discussed and a program was prepared; for example, standardizing skill-training syllabuses, developing work schedules, establishing duration of study, and maintaining records. A pilot project was conducted in one engineering plant to develop an apprenticeship program.

On the basis of his work and experiences in West Bengal, the consultant formulated certain views on the National Apprenticeship Scheme. Some of the topics discussed included a code of discipline, duration of training, ratio of apprentices to skilled workers, apprenticeship records, and periodic and final tests.

Recommendations

1. State apprenticeship advisers should play a key role in the implementation of the National Apprenticeship Scheme.
2. A State Apprenticeship Committee should be established in each State and composed of representative from Government, industry, and labor.
3. In the larger establishments, a Plant Apprenticeship Committee should be organized to help establish in-plant training.

A Manpower Program for Economic Development
Observations and Suggestions Concerning India's Manpower Program
(1960; 153 pages)

Leo R. Werts, Manpower Consultant, The Ford Foundation

Methods of developing, utilizing, and distributing manpower to achieve economic development goals.

The most serious problem facing most developing countries is how to expand the experienced and skilled work force needed for economic progress. Since many skills can be learned on the job, the responsibility for developing trained manpower belongs to both public and private enterprises. The report suggests various methods of encouraging establishments to develop their own skill training programs.

Material, equipment, power, money, and manpower resources can be utilized effectively only if high-level managerial and professional technical skills are developed. Such talent is best developed through formal training at universities. Once trained and working on the job, managers and high-level technical personnel should be given the opportunity to utilize their capacities as fully as possible.

Developing and preparing new generations of manpower can be done by providing educational institutions with information on future occupational requirements so that enough young people can be adequately prepared to fulfill these requirements. In addition, educational institutions should provide opportunities for the development of attitudes which serve the national and community interests, as well as their own individual aspirations.

As urban areas and industrial enterprises rapidly increase in size and number, the labor market becomes large and complex. Under these conditions, the country requires an Employment Service organization to assure the orderly movement of workers, to provide a placement service for high-level manpower, and to provide job counseling to young people.

Modernizing societies must cope with the problems of surplus unskilled labor and of shortages of skilled manpower. The Third Five-Year Plan includes programs to utilize surplus labor and to promote employment opportunities. Several additional suggestions are offered.

Responsible leaders from Government, industry, and labor should review and examine the various programs already in existence in India and introduce a fully coordinated manpower administrative and planning organization for the development of manpower. An All-India Manpower Policy Advisory Committee should be established to advise the Government on manpower policy and program. State and area subcommittees should provide necessary information to the National Committee. All educational and training institutions should be included in the manpower administration.

Observations on Visit to India
(1962; 6 pages and 3 appendixes)

S. M. Justice, AID Apprenticeship Consultant

A report on apprenticeship activities in India, based on a 5-day observation tour.

Contact with Ministry of Labour

Discussions with the Director General of Employment and Training in New Delhi included the following topics:

1. Provision of the new 1961 Apprenticeship Act, outlined in appendix I.
2. Training materials extensively in use, listed in appendix II.
3. Request for AID Apprenticeship Consultant for 6-month tour of duty.

4. Visit to the Pusa Industrial Training Institute, one of seven crafts training centers in New Delhi. Trades and number of apprentices are listed in appendix III.

Contact with the National Productivity Council

This organization has sent several participants to the training programs of the Bureau of Apprenticeship and Training, U.S. Department of Labor. Seven former participants were contacted.

**Progress of the Occupational Information
and Vocational Guidance Programs
(1962; 14 pages)**

ILO Report to the Government of India;
ILO/TAP/India/R.15; S.O. Doos (Sweden)

A report of a second followup mission to evaluate progress of vocational guidance programs instituted several years earlier. 1/

In 1955-56, ILO assisted the Government of India to develop, within the Directorate General of Employment and Training (DGET), a group of related programs: occupational information, youth employment service, vocational guidance, and employment counseling. A first progress report was made in 1958. This is the second progress report.

Occupational Research and Information

Efforts to meet all of the different demands for occupational information will only lead to a diffusion of resources. Therefore, available resources should be devoted to a very limited number of activities. Additional work can be started when resources permit and when it does not interfere with work already going on.

Programs which should be given high priority include:

1. Completing the National Classification of Occupations.
2. Training Employment Service officers.
3. Revising Guide to Career pamphlets.
4. Updating handbook on training facilities.
5. Expanding research on assessment of educational and training requirements.
6. Preparing posters and wall charts.

7. Preparing reading materials on occupational information for distribution to schools.

Vocational Guidance

Vocational guidance in the Employment Service has developed very rapidly. The number of guidance officers is expected to increase over the current Five-Year Plan period. Guidance talks are provided to large numbers of groups and individuals. Emphasis should be placed on providing realistic vocational guidances. Vocational guidance programs should be speeded up in the school system in order to guide young people while they are still in school.

1/ Report to the Government of India on Development of Programmes of Occupational Information and Youth Employment Service, Vocational Guidance and Employment Counseling (ILO/TAP/India/R.4) 1957.

Report to the Government of India on the Progress of the Occupational Information and Youth Employment Service and Vocational Guidance Programmes (ILO/TAP/India/R.6) 1958. First followup mission.

The Operation and Extention of
Vocational Guidance Activities
(1965; 35 pages)

ILO Report to the Government of India;
ILO/TAP/India/R.17; G. E. T. Whiting (United Kingdom)

A report on the current status of vocational guidance programs and on the assistance provided to expand these programs.

In addition to the Vocational Guidance Unit at the Directorate General of Employment and Training, local units were set up at some Employment Exchanges to guide young and inexperienced school leavers and to counsel job-hunting adults. In addition, the Education Department was attempting to provide guidance programs in all secondary schools. According to a 1962 survey, however, only 5.5 percent of the 1,600 secondary schools offered a guidance program.

The consultant prepared a pilot project on vocational guidance for school leavers. The purpose was to provide guidance for pupils through a joint program by the educational authority and the National Employment Service. Of the 400 pupils interviewed, 55 percent required a change of occupational goal, mostly because the pupils tended to be over ambitious or tended to choose occupations unrelated to their capacities and inclinations.

On the basis of the results of the pilot project, revised vocational guidance procedures at Employment Exchanges were recommended.

Most of the proposals covered improvement in the number and quality of the guidance officers and some changes in their duties. The consultant further recommended that Vocational Guidance Units should not be linked or concerned with selection or placement work. These units should be in premises separate from Employment Exchanges in order to have a wider appeal to job seekers. Approval for this plan was withdrawn, however, because of problems of logistics and finances.

An excellent analysis of the basic problems and fundamental difficulties besetting India's vocational guidance program is provided in detail. Some of the topics covered are: meaning of vocational guidance, need for employment, prestige attached to jobs, job satisfaction, function of the interview, basic research, and financial limitations. Based on this analysis and on the outcome of the pilot project, recommendations are presented; they deal primarily with details of organization and of day-to-day operations.

High-Level Manpower Development in Iran
(1960; 83 pages)

Dr. T. Hilliard Cox, Manpower Adviere, Governmental Affairs Institute

A study to provide a basis for the expansion and improvement of high-level manpower development in Iran.

Data used to prepare this report are the result of a nationwide survey of higher educational institutions in Iran and student training programs in universities abroad. Information on basic needs and future requirements for high-level manpower was obtained from a 1958 establishment survey. ^{1/} The major emphasis of this study was to analyze high-level manpower problems and to suggest programs of action for their solution through the expansion of present facilities, establishment of new activities, and improvement or revision of existing programs.

The results of the study indicate that present programs for developing high-level manpower are inadequate to meet Iran's industrial development requirements. Minimum additional manpower needs for 1963 are estimated at 25,000 persons. However, only 11,000 of these requirements will be met through training at home and abroad. The net shortage of 14,000 will occur in professions considered to be of critical importance to economic development: administrator, physical scientist and engineer, agricultural scientist, and medical professions. (Ironically, a surplus of nearly 5,000 is expected in the fields of liberal arts, law, literature, and philosophy.) Net shortages of middle-level personnel, such as teachers, nurses, and supervisory personnel, are also analyzed.

An examination of the utilization of employed high-level manpower shows that about half are utilized only partially. It is estimated that, if it were possible to attain full utilization, the need for producing additional trained manpower could perhaps be cut by one-third to one-half.

Recommendations for the development and utilization of high-level manpower included the following:

1. Establish a national register of high-level personnel.
2. Improve and expand curricula in all types and levels of technical and science schools.
3. Revise the salary structure of teachers at all levels.
4. Establish a training-within-industry institute.

^{1/} National Manpower Resources and Requirements Survey, Iran 1958, Government of Iran, Ministry of Labor and Plan Organization, 1959, 90 pp. Technical assistance provided by Governmental Affairs Institute, including a 28-page manual on survey methods and procedures.

Near East and South Asia
Iran

Population and Labor Force of Iran
A Statistical Summary
(1960; 38 tables)

Compiled by the Program and Economics Office, USAID/Iran

A reference document for use of researchers.

Statistical data contained in the various tables were taken from published reports of the Ministries of Interior and Labor, Plan Organization, and the Governmental Affairs Institute. Information on the population appears in tables 1 to 15. Tables 16 to 32 present data on the characteristics and size of the labor

force. The remaining tables indicate the skills of the labor force and some occupational information. These latter tables are summaries of the manpower shortages that were compiled for the High-Level Manpower Development Study. (See preceding summary.)

Manpower Planning
(1965; 26 pages)

ILO Report to the Government of Iran; ILO/TAP/Iran/R. 13; Nils T. Strom (Sweden)

An appraisal of the current and the developing manpower situation in relation to economic planning.

In 1962, a General Department of Manpower Studies and Statistics (MSS) was created in the Ministry of Labour and Social Affairs to carry out manpower studies and to collect statistics on labor market problems. The MSS currently is (1965) conducting a household survey of the labor force. The General Department of Employment collects employment market information through its regional employment offices. Some job studies have been conducted by this office. Data from other sources also are listed.

Based on these and other data, several reports on manpower and vocational training for the years between 1963 and 1972 were prepared. These reports contain many recommendations for the improvement of skills of the labor force. The broad conclusion drawn by this appraisal is that labor statistics, employment market information, and manpower planning are far from sufficient to meet the requirements of economic and social development planning. Statistical data on existing conditions are scarce; and collecting, processing, analyzing, and publishing of such data have been initiated only recently in many

fields. Because these data are scarce, a realistic evaluation of future manpower supply and demand is met with great difficulty.

Recommendations

1. The 1966 Census of Population should be conducted.
2. Detailed studies of the labor force should be made.
3. Human resource policy should be coordinated with the overall economic development plan.
4. Studies should be made of the manpower needs of the major economic sectors.
5. The employment service organization should be enlarged and its operations improved.
6. ILO recommendations on the occupational classification system should be adopted.
7. Employment counseling should be organized in the General Department of Employment.
8. Vocational training should include more specialties, especially for metal and construction work.

Iran's Experience with Manpower Planning
Concepts, Techniques, and Lessons
(1965; 32 pages)

George B. Baldwin (Harvard Advisory Group in Tehran). Article in Manpower and Education, Country Studies in Economic Development, Frederick Harbison and Charles A. Myers, editors (New York, McGraw-Hill Book Company, 1965) pages 140-172

Background of manpower planning in Iran and its prospects for the future.

Manpower planning started just after the beginning of the second Seven-Year Plan in 1955, with the establishment of a Manpower Development Division in Plan Organization. Weakened by politics, the Division had no role in the first national manpower plan of 1960-61 and was abolished in 1961. Long before 1961, the Economic Bureau of Plan Organization became interested in human resource development. This group rapidly became the main power center in Plan Organization and was assigned primary responsibility for drawing up the country's third plan. By 1962, Iran had a manpower plan of 100 pages and an education plan of 250, more space in the 1,500-page plan than any other topic. Political reverses, competition from rival interests, and duplication of effort prevented much of the manpower plan from being

carried out. However, the plan provides a strategy and a standard which the country can follow when the situation changes.

The major portion of the article describes the various surveys conducted and analyzes the results of the data collected. Tables of the occupational structure of nonfarm employment are provided and the output of schools for the next several years is discussed. The shortage of teachers appears to be the most serious bottleneck limiting expansion of the educational system.

In the long run, education will be the main inspiration for throwing off the traditional culture and for creating an atmosphere in which more will be possible than any one can now expect. In the short run, all that can be hoped for is the avoidance of gross mistakes.

Reorganization and Development of the National Employment Service
(1962; 29 pages)

ILO Report to the Government of Iraq; ILO/TAP/Iraq/R.7; J.A. Rizvi (India)

An analysis of the operations of the Employment Service
and recommendations for its improvement under the new
Labour Law.

The Employment Service is one of the sections under the Directorate General of Labour in the Ministry of Social Affairs. The establishment of the Employment Service is based on provisions of the Labour Law of 1958, which now is (1962) being revised. The consultant was to provide advice concerning changes in the new Code which may affect the Employment Service.

The Employment Service in Baghdad has two sections: The Identity Card Section which issues the necessary identity cards to enable workers to seek and hold jobs, and the Employment Section which keeps book registers on job applicants and job placements. The work of the mission concentrated on establishing priority activities for strengthening the work of the Baghdad office. Emphasis was placed on reorganizing the office so that the Employment Service could serve as a model and training ground for future offices.

Staff members attended daily training sessions which covered all aspects of employment organization procedures and practices.

Recommendations for the improvement of the Employment Service under the new Labour Law:

1. The Service should be given independent statutory basis and financial provision.
2. An appointed Central Employment Board should be constituted as soon as possible and local Employment Committees created as the Service expands.
3. The Manual of Instructions and the standard forms prepared by the consultant should be printed and used by the staff of the Employment Service Offices.
4. Available employment data should be analyzed and made public at regular intervals.

Methods of Forecasting Manpower
Requirements and Resources
(1961; 43 pages)

ILO Report to the Government of Israel;
ILO/TAP/Israel/R.14; Harold Goldstein (United States)

Techniques of projecting short- and long-term requirements for occupations important to economic development.

Israel has the basic statistical resources, research experience, and competent personnel to make possible an effective research program on manpower resources and requirements. Data needed for projections have been developed in the Central Bureau of Statistics, the Bank of Israel, the Independent Falk Project for Economic Research, and the economic ministries. Manpower studies have been made in the Ministry of Trade and Industry.

A central staff is needed to bring together the various studies made by these agencies. This staff should be a single organization and recognized as the Secretariat of the National Manpower Council, which is chaired by the Minister of Labour. ¹/ Policies and programs should be adopted and the facts and findings of the coordinated studies should be publicized to help develop public understanding and support for the programs.

An analysis of all the available data is made and recommendations for their improvement are presented. For example, coverage of the establishment survey should be extended to

include additional important economic activities, and information on employment by occupation should be obtained through periodic surveys.

Detailed recommendations on the techniques of making short- and long-term projections are made. The method described combines the analytical approach with employers' projections of their own needs.

Projections of manpower requirements should be based on those made by the Bank of Israel because they represent the official appraisal of the outlook. The staff of the Ministry of Labour should work closely with the staff of the Bank of Israel to develop the 10-year projections of manpower requirements. These projections should also consider alternative assumptions on immigration in view of the erratic nature of the origin and the occupational composition of immigrants.

¹/ A Manpower Planning Authority was created in 1962 to serve as Secretariat.

Organization of the Employment Service
(1963; 24 pages)

ILO Report to the Government of Israel
ILO/TAP/Israel/R.15; A.G. Hart (United Kingdom)

A review of the current administrative organization of the National Employment Service and suggestions for its improvement.

The Employment Service Law of 1959 created a free National Employment Service under the general supervision of the Ministry of Labour. More than 700 people are employed in the Service. The organization consists of a main office to manage the activities of the Service, a special office to provide placement and information service to professional people, an office to place seamen, 29 district offices, 21 local offices, 65 branch offices, and 62 staff offices. The functions and operations of these offices are described in detail.

The findings and recommendations are primarily comments aimed at improving the administrative organization and Employment Service policies. For example, the compulsory nature of the law, regarding vacancies and registrations, has had a detrimental effect on

the operation of the Service. It was recommended that action be taken to limit the scope of the compulsory registration provisions or repeal them as soon as possible.

Similarly, the law regarding the point system of placing applicants in jobs should be modified or repealed. Points are given registrants according to number of dependents and duration of unemployment. Those with the highest points are placed in vacancies regardless of their physical or mental attributes or experience for the job. This practice places an unnecessary expense and delay on the employer who is obliged to give the person a trial. Furthermore, the point system acts as a dangerous impediment to the effective development of manpower. Such development is one of the key factors in the process of economic growth.

Manpower Assessment and Planning
(1965; 66 pages)

ILO Report to the Government of Israel;
ILO/TAP/Israel/R.20; Sam A. Morgenstein (United States)

An analysis of the 1964-69 manpower projections and suggestions for developing an effective manpower information program.

Since its creation in 1962, the Manpower Planning Authority has served as the central body for the coordination of research essential to manpower assessment and planning and as secretariat for the National Manpower Council. Informal but effective relationships have been established with all Ministries and agencies involved in manpower. The jurisdictional responsibility for manpower research remains to be worked out with the Central Bureau of Statistics.

The Manpower Planning Authority completed the 1964-69 manpower supply and demand projections. Methods used in these projections are analyzed and the educational output (supply factor) is described in detail. By the end of the 1960's, Israel will be facing shortages in those occupations which require the longest period of education or training.

Types of data needed for a continuing employment market information program are explained. The various organizations already collecting most of these data should be coordinated to avoid duplication and overlap of work. The National Manpower Council should perform this service.

Recommendations were arranged in groups by order of implementation capability. Group A recommendations can be implemented immediately; for example, redefining the authority and functions of the manpower machinery. Group B recommendations require either further investigation or a longer time to put into effect; for example, developing a system to collect accurate data on vocational training programs.

Organization of a Manpower Assessment
and Planning Program
(1964; 23 pages)

ILO Report to the Government of the Hashemite Kingdom of Jordan;
ILO/TAP/Jordan/R.7; O.B. Railey (United States)

An appraisal of the current and projected manpower situation and advice on the organizational requirements of a continuing manpower program.

The Jordan Development Board, which is responsible for economic and social planning, is attempting to include manpower aspects in its development plans. The Board had conducted a study in 1960, but the data on which the study was based were inadequate. A population census was conducted in 1961, but complete tabulations were not expected until 1964.

The Department of Labour is concerned primarily with the administration of the Labour Code. It does not operate an Employment Service or conduct research into the manpower situation.

Jordan's greatest need is for a permanent organization to establish a program of manpower assessment and planning. Within the Planning Division of the Development Board, a Manpower Planning Section was created on an ad hoc basis. The organization and functions are outlined in this report.

About half of the population is under 17 years of age. Less than a fourth of the population is in

the labor force. This very low proportion results from the preponderance of young people and from the small number of women in the labor force (about 3 percent). Occupational and industrial distributions are provided in the analysis.

In order to fill gaps in the available manpower information, an establishment survey was conducted. The survey covered nearly 760 establishments in which almost 17,000 persons were employed. Questions relating to occupations and future plans were asked. These data were used to analyze current and projected manpower needs.

Shortages of skilled workers and a surplus of untrained manpower will affect Jordan's economic and social planning. Recommendations are directed mainly toward the various means of providing for a continuing study of manpower under the auspices of a permanent Manpower Planning Section.

Manpower in Jordan
(1965; 8 pages)

Report to USAID/Jordan; E.L. Keenan, Manpower Consultant

Nature and extent of manpower problems in Jordan and types of manpower programs that should be initiated or continued.

Population in Jordan is increasing at the rate of 3 percent a year, and labor force at the rate of 4 percent a year. It is estimated that 17,000 new workers joined the labor force in 1964. According to the draft Seven-Year Plan, however, only 12,000 new jobs are planned for the entire period to 1970. As a result, there will be serious unemployment in Jordan.

The Government of Jordan should establish a manpower development unit within the Planning Division of the Development Board. At the same time, a manpower function in the Department of Statistics, Ministry of National Economy, should be established to gather and summarize data on a continuing basis. To assist the Government in creating these units and advising on their functions and operations, AID should provide a broad gaged manpower specialist.

There are at least three facets of the manpower situation in Jordan that deserve attention:

1. Manpower in Government is wasted because of the early retirement system and liberal pensions.

2. The pay scale for top level and technical personnel in Government is low compared with salaries that they receive in Saudi Arabia or Kuwait. The situation can be improved through development of job qualification standards, job performance evaluation, and more equitable pay scales.

3. The labor force is growing faster than new jobs. At the present time, trained Jordanians are finding employment opportunities outside the country. There should be a major expansion in the unplanned sectors of the economy; for example, tourism will increase employment opportunities in hotels, restaurants, buses, etc.

The Further Development of the Manpower Assessment Programme
(1966; 12 pages)

ILO Report to the Government of the Hashemite Kingdom of Jordan;
ILO/TAP/Jordan/R.9; O.B. Railey (United States)

A follow-up review of progress made since consultant's
previous visit in 1964.

The Government of Jordan recently ratified ILO Convention No. 122 concerning the establishment of an active employment policy. To implement the provisions of this Convention, an organized manpower assessment and planning unit is needed. The functions of a Manpower Planning Section are described. (See summary of ILO report ILO/TAP/Jordan/R.7).

Recommendations

1. Manpower Planning Section should be permanently established in the Planning Division of the Development Board.

2. Manpower Council should be established to formulate manpower policies. It should be

composed of high-level officials from Government, industry, and unions. It should review, evaluate, and recommend manpower policies and studies, and otherwise give direction to the field of manpower development.

3. Manpower Information Advisory Committee should be appointed by the Council to insure technical cooperation. The Committee should help in the technical coordination of manpower and related data.

4. Full use should be made of the information supplied by employers in the 1963-64 Manpower Survey.

5. Every effort should be made to complete the Register of Professional and Technical Manpower which was started in 1964.

Manpower Survey
(1956; 176 pages)

ILO Report to the Government of Pakistan; ILO/TAP/Pakistan/R.10;
C.W. Hepler (United States) and W.H. Mason (United Kingdom)

An analysis of current and projected manpower resources
and requirements.

In preparing an Economic Development Plan at the end of 1953, the Pakistan Planning Board recognized the need for current and detailed information regarding manpower. The Board decided that the Ministry of Labour should conduct manpower surveys, with the advice and assistance of a manpower expert from ILO, in order to develop the necessary information.

Several surveys were made to determine the supply of and demand for manpower:

1. A survey of about 5,000 establishments was conducted to collect information on the levels of employment, occupational distribution, forecasts for 6 months hence, and estimates of occupational shortages.

2. A household survey was conducted to determine the supply of labor. Information was collected on the age, sex, and wage of household members; employment and occupational status; hours worked; and seasonal variations in work.

3. A survey was conducted by the Ministry of Education to determine the existing facilities for technical, professional and vocational training.

Data collected from these surveys and from available information were analyzed and supply/demand projections were made. A comparison between the reported occupational shortages and the available training facilities gave some indication of the extent to which present facilities are adequate to meet currently expanding needs and projected needs. Each high-level professional and skilled occupation was so analyzed.

Major Recommendations

1. There is an urgent need for the regular collection and release of information about the manpower situation, particularly in connection with the progress of the Development Plan. This information should be provided by means of a continuing employment information program.

2. To avoid wasteful overlapping of effort in planning, collecting, and distributing manpower information, the Department of Manpower and Employment should be recognized as the appropriate channel for these functions.

3. In formulating plans for the expansion of technical and vocational training, priorities should be determined by the needs identified in the survey.

Report on Thailand, Pakistan, Australia and the Philippines
in Connection with the SEATO Skilled Manpower Report
(1958; 9 pages and 3 attachments)

Fred W. Erhard, AID Manpower Adviser

The SEATO Report of the Study Group on training needs for skilled manpower recommended strengthening vocational and technical schools, instructor training, and on-the-job training. This report deals with implementing these recommendations in Pakistan.

Attachment 2 presents specific proposals to USAID for the initiation and development of a national apprenticeship program and other forms of training in Pakistan. The proposals include the following topics:

1. Training should be job-oriented to the actual needs of private industry and government.
2. Instructors from both government and private industry should be broadgaged enough to develop training skills as need arises.
3. Two U.S. training specialists should be assigned to assist in developing programs.
4. Responsibility for on-the-job training should remain in the Department of Labor. Off-job training responsibilities will have to be clarified by Government authorities.

Development of an Employment Information Program
(1958; 22 pages)

ILO Report to the Government of Pakistan;
ILO/TAP/Pakistan/R.17; W.H. Mason (United Kingdom)

Report examines the progress made since the manpower report of 1956 1/ implementing the Employment Information Program.

The progress made since 1956 has been good in staffing arrangements and in the training of the personnel. The Department of Manpower and Employment in the Ministry of Labor successfully completed additional surveys of private households and employing establishments. Preparations for a fourth round of establishment inquiries were preceded by courses for the field staff given by the ILO consultant and his Pakistani counterpart, who had been trained abroad. However, progress in issuing employment market reports and developing their uses has been slow.

Recommendations to solve some of the administrative problems:

1. Budget should be increased to allow for price index changes.
2. Local employment market reports should be function of local office.
3. Calculating machines should be used to speed data processing.

4. Vacancies should be filled by promotion from within.

Recommendations regarding the technical problems:

1. A specified cycle of establishment surveys based on type of industry (timetable in appendix A) should be made.
2. Employment market reports should be prepared as described in sample in appendix B.
3. Proposed national sample labor force surveys by the Central Statistical Office should replace current household studies now undertaken by the Ministry of Labor.
4. Employment market reports should be circulated widely throughout government.

1/ Report to the Government of Pakistan on a Manpower Survey, ILO, 1956, ILO/TAP/Pakistan/R.10.

Development of an Apprenticeship Scheme, 1957-1962
(1963; 35 pages)

ILO Report to the Government of Pakistan;
ILO/TAP/Pakistan/R.28; H.X. Pootjes (Netherlands)

A description of the apprentice training program in Pakistan during the period 1957 to 1962 and recommendations for its improvement.

Prior to the consultant's arrival, very little training of a systematized and regularized nature existed in Pakistan. The Department of Manpower and Employment directed five technical training centers. In 1957, a National Apprenticeship Council was established to review apprentice training in general and to make recommendations for improvement. A National Directorate of Apprenticeship Training was created and regional directorates were sanctioned in Dacca and Lahore. Later, a Directorate of Technical Training was established. In 1960 and 1961, advisory committees suggested that these two directorates be operated within the Ministry of Health, Labour, and Social Welfare. The consultant recommended, in addition, that all councils, boards, and other training organizations coordinate their various facilities and operations under a National Training Board.

The ILO consultant's initial task was to awaken interest among the industries in the need for apprentice training. This work resulted in 40 factories starting apprenticeship programs which included about 2,000 apprentices by the end

of his mission. These programs were in the metal and engineering trades, the textile industries, and the printing industry. Apprentice training of marine engineers also was started at the request of the Karachi Port Trust.

The ILO consultant experimented with an American mechanical aptitude test, adapted to Pakistani conditions, for the selection of applicants for training. He prepared theoretical lectures for courses given in the Karachi Polytechnic Institute, where 275 apprentices received training by 1962. A course was also instituted by the Dawood Cotton Mill and the Pakistan Swedish Institute.

In 1962, an ordinance requiring industry to take a role in training workers for skilled occupations was passed. The legislation states that those establishments which employ 50 workers or more (of whom five or more are in apprenticeable trades) should train, at their own expense, at least 20 percent of the total number in these trades. Expenditures incurred in this training would be allowed as deductions on income tax returns.

Manpower Assessment and Planning Program
(1963; 21 pages)

ILO Report to the Government of Pakistan;
ILO/TAP/Pakistan/R.30; G.D. Bishop (Canada)

Report describes the various branches of the Pakistan administration concerned with manpower.

Pakistan officials recognized the need for a manpower planning program to coordinate the vigorous program of investment under the Second Five-Year Plan (1960-64) and that proposed for the Third Five-Year Plan (1965-69). The Planning Commission operated a Manpower Section with a staff of two professionals. Most of their work consisted of utilizing existing data to estimate employment changes by economic sectors and to project population and labor force. Because of inadequacy of the data, in-depth studies were not possible.

The Central Statistical Office formulated a comprehensive statistical program to coordinate local and central Government statistical activities to provide the Government with proper measurements for social and economic planning. The following plans were outlined:

1. A directory of all establishments employing five employees or more.
2. The transfer of household labor force surveys from the Ministry of Labour to the Central Statistical Office.

3. A quarterly establishment survey of employment, earnings, and labor turnover.

4. An annual survey of vocational, technical, and professional training institutions.

5. An agricultural rural labor survey.

The manpower information program of the Research and Statistics Branch of the Ministry of Labour was based mostly on results of annual establishment surveys. Data were published about 2 years after the survey and were distributed on a very limited basis. The most recent survey (1961) included the occupational composition of each firm. Because of the importance of this information arrangements were made to tabulate results in the Central Statistical Office. However, it was not possible to develop a trend series with data from the establishment surveys because of frequent changes in coverage and definitions.

Recommendations

The consultant confined his recommendations to the organization, staffing, and priority research studies in the Manpower Section of the Planning Commission.

Review of the Trades Training Center Plan
(1963; 167 pages)

Raymond D. Larson, Manpower Adviser,
U.S. Department of Labor Survey Team

Report reviews the feasibility of establishing a Trades Training Center in Pakistan to serve as a model for other developing countries.

Since middle-level skills were in short supply, it was hoped that the Trades Training Center would sharply speed up training of these needed workers. The plan focused on training workers for employment in, and related to, the construction industry since this industry is basic to all other sectors. Significant features of the plan are as follows:

1. Reduction of training time by eliminating nonessential theoretical instruction.
2. Peace Corps volunteer craftsmen to serve as instructors.
3. The gradual replacement of Peace Corps volunteers with local instructors.

The survey Team suggested that a reasonable goal for training would be to increase the proportion of skilled workers in the construction work force from its current 12 percent to 50 percent; that is, a goal of training more than 200,000 skilled workers. Specific occupations, type of training, and equipment cost for each occupation are described.

The cost of building adequate training facilities is discussed in detail. It was estimated that a total of 91,520 square feet for the Center could be built for \$3.3 million. First-year operation would cost about \$300,000. It was estimated also that 54 people, aided by two U.S. advisers, would be required to operate the facility. About 110 instructors would be needed to train 780 students in 18 construction trades.

Survey of Labor Management Relations and Related
Labor Programs in Pakistan
(1964; 46 pages)

Adrian Roberts, AID Labor Management Relations Consultant

Study concentrates on proposed revisions of ordinances, the need for more study of protective labor laws, suggestions for reorganization of provincial Labor Department functions, and means for training labor union leaders.

Industrial growth in Pakistan has created new problems in employee-management relations, and laws to promote industrial peace have failed to settle grievances. Legislation to encourage the trade union movement has stimulated membership but failed to develop union leadership at the local levels. Under the 1962 constitution, the provincial governments were given responsibility to administer most labor legislation, while the central government retained coordination control to assure uniformity. The consultant suggested that a small corps of liaison officers be established to advise provincial secretaries and directors.

Suggestions for revisions of the three major labor laws were as follows:

Industrial Disputes Ordinance of 1959: A limitation should be imposed on the jurisdiction and types of cases which may be referred to the industrial courts. Too many cases have gone to the courts rather than to conciliation. In addition, a revision of the works committee rules should

be made to provide for greater equality in committee operations and to guarantee freedom from reprisals.

Trade Unions Ordinance of 1960: A policy statement to encourage growth of labor unions for collective bargaining purposes should be included. All unions should be registered and the waiting time for union recognition should be reduced. Study should be made of inconsistencies favoring employers in penalties handed down by industrial courts.

Industrial and Commercial Employment Ordinance of 1960: A positive statement of purpose is needed. An amendment should specify that no worker can be discharged with just cause.

Suggestions were also made for establishing a Labor-Management Relations Division and a Conciliation Service in the provincial Labor Departments, and for training union officers and members at the plant level.

Proposed Technical Training Pilot Project for the
Rural Works Program of East Pakistan
(1964; 24 pages)

S.M. Justice, AID Apprenticeship Adviser

Report provides recommendations concerning the proposed Rural Trades Training Project to be developed by USAID and the Peace Corps.

The Rural Works Program is directed toward the economic development of the rural area which includes 85 percent of East Pakistan's 55 million people. The proposed pilot training project is related directly to the Program and would help meet the need for rural skill development. The skills to be developed include those pertaining to irrigation, flood control and drainage, roads, construction, and similar activities. (Skills listed in appendix I.) These activities represent the most immediate and urgent needs for rural development.

Specific recommendations cover the staffing patterns for AID consultants and Peace Corps volunteers who serve as instructors; the crea-

tion of an apprenticeship planning and coordinating committee; the appointment of a Pakistani to serve as Director of the project; the use of Comilla as an experimental proving ground for techniques and approaches used in the project; training of supervisors before attempting to organize courses for workers. In addition, the qualifications and functions of the senior AID adviser are outlined.

Reference

"The Impact of the Rural Works Program on East Pakistan," report by Sol Ozer, USAID/Pakistan, 1964. No copies available for summary.

Pakistan's High-Level Manpower and Human Resource
Development Planning
(1965; 65 pages)

Nicholas DeWitt, AID Manpower Consultant

If the targets of Pakistan's Third Five-Year Plan are to be met, expansion of education is needed, especially at the secondary level.

Human resources planning and human capital studies should have commanded priority attention long ago. The 1956 ILO report on Manpower Survey in Pakistan (ILO/TAP/Pakistan/R.10), page 39, stressed the urgent need for the regular collection and release of information about the manpower situation. A list was made of the types of information required, but no data have been collected to date. The various Five-Year Plans have included statements on manpower and education, but no measures have yet been implemented. Because of the paucity of data, the first priority should be given to collecting and processing statistical information on a regular basis.

The data presented in this report constitute the first attempt to study employment and productivity based on gross value of output. The details of the method used are discussed and the results are presented in 19 tables. Topics include estimates and projections of total and nonagricultural employment and of high-level manpower by industry sectors; occupational composition

changes, 1951-61; and educational attainment of the population, labor force, and occupational groups.

The final section of this report deals with planning for human resources development. Research priorities for manpower and educational planning are listed, and a conceptual framework and model is described in detail.

References

Measuring the Effects of Population Control of Economic Development, Pakistan as a Case Study, Edgar M. Hoover and Mark Perlman, University of Pittsburgh, Center for Regional Economic Study, January 1965.

Projections of the Population of Pakistan by Age and Sex: 1965-1968, A Measure of the Potential Impact of a Family Planning Program, U.S. Department of Commerce, Bureau of the Census, June 1965.

Human Resources Programs and Economic Planning in Pakistan
(1965; 44 pages)

DOLITAC 1/ Staff Paper No. 28; Eugene Vinogradoff, Manpower Adviser

Description of various manpower problems in Pakistan
and suggestions for action by the Manpower Council.

The major portion of the report discusses the problems involved in developing human resources in Pakistan, followed by suggestions and recommendations for the guidance of the Manpower Council and for AID assistance. Some of the topics dealing with employment market problems are:

1. Imbalance between jobseekers and jobs in both urban and rural areas.
2. Shortages in certain skilled occupations.
3. Low income and low productivity of average workers, especially in farm and trade occupations.
4. Waste of human resources as result of "educated unemployed."

The programs for human resource development include the following major areas:

1. Educating and training current and potential labor force participants.
2. Improving health and socioeconomic environment of workers.
3. Safeguarding human resources through on-the-job safety devices and programs, minimum-wage legislation, insurance welfare programs, and other economic security measures.
4. Supporting programs, such as housing, water, sewage, roads, and other community facilities and public services.

In addition to providing suggestions for each of the topics on labor market problems and on human resource development, the consultant makes specific recommendations regarding the administration and role of the Manpower Council in the economic development of Pakistan. There is a strong need for a thorough occupational manpower survey and especially for high-level and middle-level supply and demand projections to estimate occupational shortages. Current occupational staffing information can be obtained from a sample of urban employers, and supply projections can be obtained from the Ministry of Education. These projections would provide the Manpower Council with enough information to make its own recommendations and to set its own work priorities.

Recommendations for AID action are aimed at strengthening the Manpower Council through the assistance of a full-time manpower specialist and through short-term assignments as specialized problems arise.

1/ U.S. Department of Labor International Technical Assistance Corps.

Manpower Assessment and Planning
(1964; 17 pages)

ILO Report to the Government of the Syrian Arab Republic;
ILO/TAP/Syria/R.9; C.B. McAlpine (United Kingdom)

An assessment of current and projected manpower resources and requirements by skill levels.

In 1963, the Ministry of Planning consisted of five Directorates of which the Directorate of Economic and Social Planning was responsible for manpower planning. Estimates had been made of manpower requirements of many of the projects included in the Second Five-Year Economic Plan (1965-69), but details on manpower needs by occupation were lacking.

Existing manpower services consisted of several Employment Service offices. The Labour Law of 1959 provided for obligatory notification of vacancies by employers and the registration of jobseekers. Manpower information required for the effective operation of an Employment Service was inadequate.

Information on the labor force was available from the 1960 Population Census and from a labor force sample survey. Some data on manpower were available from several industrial production surveys and the 1960 Census of Industrial Establishments. Information regarding professions was obtainable from registers of professional societies. Estimates of future demand had not been collected from employers.

The consultant prepared an outline for a comprehensive report on the manpower situation in Syria. The report itself was not prepared because results of the census and labor force surveys were not available at that time.

Recommendations

1. Guided by the proposed Manpower Section in the Ministry of Planning, the Government should establish a program of manpower information.
2. A Manpower Advisory Committee should be created and composed of representatives of all Ministries.
3. The comprehensive manpower report should be completed as soon as data are available.
4. The Syrian Classification of Occupations should be completed and kept up to date.
5. An establishment survey should be conducted to determine current employment by occupation and to estimate future demand.

Employment Market Information Program
(In French; 1961; 26 pages)

ILO Report to the Government of Turkey;
OIT/OTA/Turkey/R.15; H.M. Dreyer, ILO Expert

Progress report of the information program in the Em-
ployment Service.

The manpower information program was initiated in 1956 with ILO guidance. In 1959, monthly reports on the levels of employment in industry and quarterly reports on the operation and administration of the 31 local offices were initiated. Special manpower studies have been conducted in Istanbul and in several other regions. The central office established a register of the principal employers in the country, classified by industry and region. The ILO occupational classification system was adopted and a job analysis program has started. Over 1,500 job analyses, out of an estimated 5,800, have been completed.

Recommendations

1. Bureau chiefs of the regional offices should cooperate in the development of administrative and operating procedures of the Employment Service.
2. Information collected in the various areas should be shared among the regional Employment Service offices, the different Government agencies, labor unions, and industrial enterprises.
3. Research should be started on the rural underemployed in order to develop a program for the improvement of this group of workers.

Organization and Function of a Manpower Planning Program
(1962; 18 pages)

ILO Report to the Government of Turkey;
ILO/TAP/Turkey/R.21; J.F. Wellemeyer (United States)

A review of available manpower data for a manpower
development program.

In 1960, a State Planning Organization was established in the Office of the Prime Minister. The State Planning Organization is composed of the Central Planning Organization and the High Planning Council. The Central Planning Organization prepares plans for review by the High Planning Council. It analyzes data necessary for planning purposes and occasionally may collect data. Also within the State Planning Organization is a Department of Social Planning which assembles data necessary for manpower projections.

The consultant assisted in the preparation of a 1-year (1962) manpower development plan and advised on the types of manpower information to be included in the Five-Year Plan (1963-67). For example, he supervised the preparation of projections by industry and occupation, the tabulation of a special study of the public sector,

and the analysis of unfilled vacancies as reported by the Employment Service.

Recommendations consisted of suggestions for supplementing and strengthening the work already started:

1. The various types of information needed for manpower planning and analysis were discussed. The manpower information program should describe manpower problems in general and should concentrate specifically on manpower conditions in those sectors of the economy which the development plan intends to influence.

2. The administrative organization of a manpower planning office and its working relations with other organizations were outlined in detail. The organization should participate in setting manpower goals in the economic and social development plans.

Manpower in Cukurova
(1964; 20 pages and 16 appendix tables)

Alice W. Shurcliff, AID Manpower Adviser

Summary of the manpower situation in Cukurova (Province) and projections of the labor force.

Population in Cukurova is increasing at a faster rate than in Turkey as a whole because of a higher rate of natural increase and a high rate of net in-migration. Unemployment has not occurred, however, because of the general prosperity of the region. The rural-to-urban movement is a result of greater job opportunities in the cities rather than of rural poverty. By 1985, half of the population of Cukurova will be living in the 13 major cities.

In 1960, 58 percent of the male labor force was engaged in agriculture. It is estimated that 1 percent of the rural labor force and 3 percent of the urban labor force are unemployed. Unemployment is higher during the winter months. For example, the Mediterranean Village Survey of February 1959 found 10 percent of the men unemployed in villages, and 30 percent employed in jobs outside of their villages.

Relatively few children receive education beyond the primary school level principally be-

cause of the poor distribution of facilities. Seven cities in Cukurova have no academic, commercial, vocational, or technical schools.

A large proportion of employment in manufacturing is in small family-owned enterprises in which skills are handed down from father to son. Most large manufacturing establishments are in traditional industries, such as spinning, weaving, and milling, which require relatively short periods of on-the-job training. Current demand for higher level skills come from the construction industry and from installation and repair services.

The techniques of making projections of the population and labor force are described and accompanied by tables. Population is projected to 1990 and the labor force to 1975. Estimates of employment by industry and occupation are provided for 1955 and 1960.

Manpower Planning in Turkey, 1962-1964
(1964; 16 pages and 4 tables)

Edgar C. McVoy, AID Manpower Adviser

A discussion of manpower problems in Turkey and programs to alleviate these problems.

Manpower planning in Turkey is related to two basic problems: (a) the supply of trained manpower to meet increasing demand of economic growth, and (b) overpopulation and unemployment. Manpower policies and measures in the Five-Year Plan (1963-67) are discussed. Implementation of the manpower programs has proceeded by increasing employment in all skill levels. This has been accomplished by developing nonfarm activities in rural areas, by exporting surplus labor, and by expanding labor-intensive projects. Manpower studies have been made and placement services have been improved.

Several Government agencies are involved in manpower programs. The Ministries of Labor, Education, and Industry; the State Institute of Statistics; and the State Personnel Board all play an important role in manpower programs.

Recommendations

1. Concepts of the economically active population, employment, and unemployment should be revised to provide more accurate and comparable data.
2. A household sample of the labor force should be initiated on a current and regular basis.
3. An area employment survey should be conducted.
4. Information on specific groups of workers should be collected, such as wage and salary workers and scientific, technical, and administrative personnel.
5. Projections of manpower requirements should be revised.
6. Various measures for improving manpower utilization and for increasing levels of employment are provided.
7. The various offices and ministries should coordinate their efforts in the development of manpower programs and training.

SELECTED READINGS

Technical Manuals, Seminar Proceedings,
and Manual Orders on Manpower, published or sponsored
by the Agency for International Development

Establishment of National Employment Services in Developing Countries (also available in Spanish)

Demographic Techniques for Determining Manpower Planning in Developing Countries (also available in Spanish)

Role of a Labor Department in Developing Countries

Role of Social Security in Developing Countries

A Guide to the Preparation of a Labor Inspectors Manual

The Forecasting of Manpower Requirements

Conducting a Labor Force Survey in Developing Countries

How to Make an Inventory of High Level and Skilled Manpower in Developing Countries

Techniques for Determining Manpower Skill Needs and Training Requirements

Manpower Programs and Planning in Economic Development

Manpower in Economic and Social Growth - Proceedings, 6th International Manpower Seminar
(also available in French)

Manpower and Employment Policies for Developing Countries - Proceedings, 7th International
Manpower Seminar (also available in Spanish)

Manpower and Active Employment Programs for Developing Countries - Proceedings, 8th, 9th
International Manpower Seminars

Symposium on Forecasting of Manpower Requirements

Symposium on Manpower and the War on Hunger

Manual Order 1612.40.3, Strengthening Labor Ministries

Manual Order 1612.40.4, Manpower and Employment Development