MANPOWER SURVEYS
AND EDUCATION PROJECTIONS
IN ECONOMIC DEVELOPMENT

Manpower surveys as related to educational needs and economic growth are a new departure in social science research. Only a few have been made so far, and even most of these are unpublished. During the next few years, however, it is likely that surveys of this kind may be made in twenty-five or more countries, and hopefully the findings may be generally available.

This preliminary selected bibliography of studies which are known to have been made is presented primarily for the benefit of those who are planning to undertake work in this area and who thus need to familiarize themselves with the pioneering efforts which have been made thus far. The Industrial Relations Section would also appreciate information regarding any other studies which have been completed or are in progress.

1. Theoretical and Methodological Studies


Consists of seven formal papers on methodology and techniques delivered at a conference at The Hague, September, 1959 by specialists in manpower forecasting and educational requirements from various countries. Each is followed by discussion during which considerable emphasis was placed on the special problem of the supply of engineers, scientists, and technicians in the less developed countries. The special needs for investment in education within the framework of national economic development were recognized. A final chapter describes briefly the work of the O.E.E.C. in the area of forecasting requirements for scientific and technical personnel. Included is an international list of institutions concerned with forecasting manpower requirements and a bibliography which is derived from international sources.

United States Department of Labor, Bureau of Labor Statistics. *The long-range demand for scientific and technical personnel, a method-

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This report is now in process of revision. Publication in final form is expected later in 1961. Its purpose is the development of a systematic methodology for forecasting long-range demands for scientific and technical personnel. The report describes the methods used for making these projections, presents the statistical data derived, and calls attention to shortcomings of both the data and the method. Also included is an intensive study of future demand in the chemical and electrical equipment industries.


Outlines a preliminary framework, the objective of which is to present a rationale and suggests a focus for the study of patterns of utilization of manpower and the role of education in countries at different stages of economic and political development. The assumption is that a general theory of human resource development may be evolved by comparative investigations of manpower problems in countries at different stages of development and with different patterns of economic activity and that these studies can be made additive, or used in conjunction with one another, for the making of forecasts and projections by comparing experience at different stages of development.

2. National Studies


Data given in this report covered about 90 per cent of wage and salaried employees in non-agricultural employment. From them the conclusion is drawn that Ghana’s remarkable progress in building a corps of “high-level” manpower can be maintained only by careful planning, good management, and efficient use of scarce manpower resources. Hardest to fill jobs include secondary school teachers and physicians, but a corps of African supervisors is one of the urgent needs. Detailed recommendations for meeting manpower needs and increasing productivity are given.


Outlines the “processes and methods followed in manpower development, utilization and distribution” to achieve economic goals. Objectives for each of the program areas and procedures for some are
suggested. Some current Indian programs and policies are commented on in relation to needed economic development and to their adequacy for subsequent stages of development in India. There are particularly useful sections on the development of managerial, scientific, and engineering manpower resources. Secondary education and technical and instructor training are also discussed. Concluding recommendations deal with the development of governmental organization for manpower planning and administration.


Data used in this report are based on a nation-wide survey of higher educational institutions in Iran and of training programs for Iranian students in foreign universities. These are supplemented by information on basic needs and future requirements for high-level manpower taken from the National Manpower Resources and Requirements Survey, Iran 1958 prepared by the Ministry of Labor and Plan Organization of Iran (published by the Governmental Affairs Institute in 1959). A comparison between the supply of high-level manpower which will be available from sources at home and abroad by 1963 with Iranian needs together with detailed recommendations for strengthening the university system of education are included.


Presents quantitative and qualitative analyses of Italian educational facilities as related to the requirements for economic and cultural development with recommendations for their expansion. Hypothetical assumptions regarding growth in national income, productivity, and employment are used for discussion of expected changes. Demand for trained personnel, changes in the occupational composition of the labor force, and teacher and pupil requirements are forecast to 1975. Likewise projections showing the number of students which the educational system will have to graduate annually by 1975 and teacher requirements by type of school are given. The report concludes with recommendations for expansion of facilities and educational opportunities, as well as for adequate reform of the school system in order to meet the projected needs.

The first part of this report covers the whole field of inquiry and gives the general conclusions and recommendations of the Commission. Among these it proposes that educational institutions produce annually that number of young persons having some post-secondary education which, if maintained through ten years, would produce a reservoir of high-level manpower "essential if Nigeria's development is not to suffer." The second part of the document consists of special reports dealing with minimum manpower targets, "sixth-form" work, teacher training, technical, commercial, and agricultural education, and the development of universities.


Outlines in detail the organization and functions of the National Manpower Council, proposed in Pakistan's Second Five Year Plan (Karachi, 1960) as a permanent inter-departmental agency, at the highest level, to undertake a broad program of manpower planning. Preliminary plans for work of various boards and committees to be appointed by the Council are presented. These are the Committee on High-Level Personnel, a National Training Board, a Civil Works Board, and a Committee on Manpower Studies.


Recommendations for the development of manpower resources in Tanganyika with special reference to educational needs. Stress is laid upon training additional agricultural extension workers and on improvement of the effectiveness of the civil service through special job training programs and study of job content in order to adapt to the capacities of less well-trained workers who will be available at first. Basic to the programs is increased public education and additional secondary school teachers.


Presents current employment and estimated supply-demand relationships in five years for four categories of occupations, together with the comments of the Consultant regarding the significance of this data "in relation to the problems of producing the skills needed by the Uganda economy as effectively and economically as possible." It is suggested that the resources of existing trade schools be used to enlarge the supply of secondary school graduates and to promote better in-plant training. The schools should concentrate on helping to meet the demand for a "more educated" labor force by giving their students the basic knowledge and language skills, adaptability, and work attitudes.