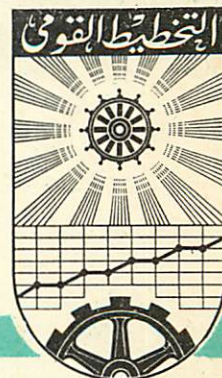


UNITED ARAB REPUBLIC

THE INSTITUTE OF NATIONAL PLANNING



Memo. No. 513

SYLLABUS OF
EDUCATIONAL & MANPOWER PLANNING
COURSE

by

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6 December, 1964

INTRODUCTION

Presentation of the Course

Education and manpower aspects of planned development as they enter into national economic planning. Questions to be answered and problems met by policy makers and planners in this area. The need for a systematic, co-ordinated approach to these questions.

Social Change and Growth

A descriptive discussion of what happens during the growth process under various conditions, with some particular reference to education and manpower; leading to an analytical discussion of change and the growth process, the moving forces and the requirements for growth, including reference to some theories of growth. Social problems created during the transitional period; changing patterns of behaviour and organisation (related to employment, consumption and production) when the traditional sector is modernised or people are moving to the modern sector.

Objectives of a Development Programme

The need for a specific formulation of fundamental aims and intermediate objectives as a preliminary step towards the setting of plan targets. Examples of aims and objectives (cultural and social as well as materialistic). Conflicting aims and objectives, ranking, reconciliation. The need for a special approach to the problems of the traditional sector.

Decision-making, Forecasting and Planning

Current decisions relating to immediate and longer-term objectives. Unconditional and conditional forecasts as a basis for decision-making. Controlled, semi-controlled and uncontrolled processes; margins of control. The emergence of plan targets from forecasts and models of change. The general development plan regarded as (1) the outcome of decision-making process, and (2) a framework for decisions to be taken in the process of implementation.

EDUCATIONAL PLANNING

Rôle of Education in Developing Countries

Cultural, social and economic functions of education. Effects on political and administrative infra-structure, including reference to problems of integrating groups within the nation and in a wider context.

Educational Objectives in Development Planning

The formulation of fundamental aims and intermediate objectives, related to education, and the need for an approach that leads to the setting of educational targets consistent with each other and with other elements of the general plan. Risks of conflict between objectives related to content and quality of education on one hand, and on the other, those related to enrolment and outturn at different levels and in different fields.

Educational Statistics

- (a) Statistics on the educational attainment of the population, collected by means of population censuses, or sample surveys, or estimated on the basis of statistics on educational flaws in the past.
- (b) Statistics on enrolment and outturn from various branches of the educational system, including statistics on transfers between levels of general education and between general education and vocational/professional training.
- (c) Statistics on educational costs and finance.

The Relationship between Education and Occupation

The need to convert manpower requirements; specified by occupation, into educational categories (specified by educational level as well as by field of specialisation); The possibility of developing a classification system for relating occupations to educational categories.

Demands and Priorities for Education

Demand for education as such, as it enters into definition and tentative weighting of fundamental aims of general (perspective) plan; derived demand, arising from intermediate objectives (and ultimately also from fundamental aims). The need for mutual determination of education priorities and over-all investment and output priorities.

Educational Possibilities and Objectives

Influence of demographic, structural and social factors on educational possibilities and objectives. Possibilities of better utilisation of existing educational infrastructure, and of modification, extension and innovation in education. Estimates and projections of enrolment, with calculations of margins of control over intake of students and output of graduates in different branches and at different levels in the education system. In addition, attention would be given here to the study of margins of control over the manpower supply pattern, and the extent to which these margins widen as the length of the planning period is extended.

Costs Aspects of Education

General analysis of actual and projected costs of maintaining and operating the educational system and its component parts, related to demographic and social background and projections and planned structural change. Cost problems related to the nature of overhead and operating costs; the capital intensity of education, periodic nature of some capital outlays, and the length of planning and accounting periods.

Determination of Unit Costs in Education

Per capita costs of education in different fields and to different levels. Cost projections, on a per capita basis (allowing for productivity and wastage), as affected by scale of operations, structural change and length of planning period. The idea of cost functions for particular types of products of the educational system.

Resource Allocation and Target Setting for Education and Manpower

In setting their output targets (for the perspective plan) the general planners will utilise the information made available by the manpower and educational planning specialists, i.e. (a) on demographic, social, etc. factors relevant to the setting of employment and education targets and (b) on manpower requirements implied in hypothetical output targets under different conditions as regards capital/labour input ratio etc. possibilities and cost of making this manpower available. The output targets (of the perspective plan) will thus be, at least, approximately consistent with what is feasible and desirable from manpower and education points of view - and in setting the output targets the general planners will, at the same time, automatically have arrived at a "first approximation" answer to the question of resource allocation and target setting for education and manpower.

Analysis of Manpower and Educational Aspects of the Perspective Plan

A more detailed analysis of the tentative perspective plan as regards (1) its employment creation effect, (2) the resources allocated for meeting demand for education as such, (3) implied requirements for manpower at various skill levels and in various skill fields, compared with (4) resources allocated for meeting these requirements.

Setting of Manpower Formation and other Educational Targets for the Perspective Plan

Setting of targets (for the perspective plan) for enrolment and outturn at various levels and in various fields of education which corresponds to requirements and resource allocation in the perspective plan. This, together with the analysis discussed before will serve as a test from the manpower and educational point of view of the perspective plan; this may have to be modified: another step in the process of successive approximation.

Educational Programme to be Incorporated in the Next Medium Term Plan

A detailed programme for the educational development, to be incorporated in the next medium term plan, i.e. for implementation during the period covered by this plan. The results yielded by this programme - in terms of educated people becoming available on the employment market or otherwise - will be rather insignificant during the next medium term plan period; the programme is largely designed to meet educational need (including manpower requirements) during subsequent medium term plan periods.

Needs and Problems of Education in U.A.R.

Educational needs. Individual needs and community needs. Determination of needs as a step in educational planning. Educational needs including needs for agricultural and industrial education in U.A.R. in the light of findings of surveys and special studies. Educational administration considered as a basic factor. The various aspects of educational administration and their implications in regard to the structure of administration and the qualifications of professional and administrative staff. The problem of finance.

Criteria for Assessment of Existing Educational Systems

Examination of the structure, content and present state of development of education in the light of avowed policy. Quantitative criteria for assessment of an educational system (National effort in educational investment; percentage of children of school age in primary and secondary schools; percentage of youth in Universities and schools of higher education; development of adult education, ratio of urban primary enrolment to rural enrolment; laboratory and library facilities; availability of text books, equipment and school supplies, school plant facilities). Qualitative criteria (level of training of teachers and supervisors; pupil/teacher ratio; level of educational administrators and efficiency of the administration; percentage of pupils completing a full cycle of education at different ladders of the system - problem of wastage - , content of curricula and their adaptation; balanced development of the various levels and types of education and of urban and rural education; diversification of curricula to meet various needs of pupils and community; distribution of enrolment at secondary and higher level in respect of classical and technical studies).

Details of Allocation of Resources within the Education System

A review of procedure and fundamental techniques of educational planning leading to the discussion of problem of needs and available resources and of the question of demands and priorities between types of education. Temporary strategic importance of certain sectors based on existing structure of an educational system and on the immediate requirements of economic development.

Accounting for use of Resources and Funds

In government agencies and in the education system, as in the individual production unit, accounting for the use of resources and funds is an essential link in the continuous process of planned development. Its purposes are: (a) to ensure that responsibilities for resource use (based on use of funds) are efficiently discharged by individuals and groups to

whom they are allotted, (b) to check the results of planned activities and modify the allocation of responsibility or the implementation procedure where misuse of funds arises, and (c) to extend the area of knowledge and increase the precision of information required for future planning.

Measures of Achievement for Purposes of Adjustment and Control

The importance of following closely - through an efficiently working statistical service - the development of such processes that are relevant for the manpower and educational aspects of the plan, i.e. checking the gradual movement towards targets, and watching for any deviations from assumed or forecast behaviour of underlying factors. As examples of relevant statistical series could be mentioned those covering employment (aggregate and by economic sector), underemployment and unemployment; shortages and surpluses in various skill groups; intake, wastage and outturn of various branches of the educational system; occupational dispersion of various educational categories, as well as educational composition of occupation categories; labour productivity and other measures of efficiency; capital-labour input ratio in various economic sectors, etc.

Vocational Guidance and Employment Counselling

Assessment of aptitudes and abilities. Information on occupations, educational facilities and requirements; information on employment trends and occupational outlook in relation to development plans.

Organisation and Administration of the Planning

Against a background of a brief summary of the main functions of manpower and education specialists in the planning process, their administrative integration into the general planning machinery will be discussed. The need for co-ordination, both in decision-taking, in technical preparations and in implementation, as well as the need for division of work and responsibilities. Relations between the planning machinery and related services, e.g. agencies responsible for collection and processing of statistical information.

MANPOWER PLANNING

Investment in Human Resources

Development of human resources as an end in itself, and investment in human resources as a means to this end. Education as important part of human resources development, and the rôle of other measures such as health, nutrition and housing programmes.

Manpower Objectives in Development Planning

The place among fundamental development aims of manpower objectives, related to (1) aggregate employment, (2) utilisation and development of skills, and (3) incomes and conditions of work. Risks of conflict, e.g. between freedom of choice of occupation and maximisation of output: the need for consistency.

Demographic Data - Techniques of Projection

Age and sex composition of population; fertility, mortality, rates of reproduction. Demographic projections required for planning purposes, e.g. population size and age structure. Population policy, family planning.

Interdependence of manpower, Education and other Elements in Development

A discussion of the factors and mechanisms which determine demand for and supply of education shows the complex interdependence of manpower and educational needs and requirements, availabilities of educated people and the general development process - and the necessity to look at manpower and educational planning in the framework of, or as part of, over-all development planning.

Integrating Manpower and Educational Planning in General Planning

A discussion of the theoretical principles of integrating manpower and educational planning into the general development plan. The Question of whether manpower plans should be adjusted to output plans or vice versa, and the ideal method of "simultaneous solution". The possibility of a "successive approximation solution". The need to relate the manpower and educational aspects to the other aspects of development in a long-term perspective.

Practical Steps in Manpower and Educational Planning for Ensuring the Integration

Manpower and educational planning taken as a series of contributions from manpower and educational planners to the solution of problems that arise throughout the development planning process, e.g. (1) manpower and educational aspects of the fundamental aims, (2) the information on manpower and education that should be fed into the general plan to ensure that already the first set of output targets is reasonably consistent with manpower and educational potentials, and (3) the concrete implementation of projects and programmes.

Manpower Statistics

- (a) Concepts and definitions: labour force, unemployment, underemployment. Problems of measurement. Classification of manpower by sector and by occupation.
- (b) Collection of manpower statistics - from censuses, etc. and through labour force sample surveys, establishment enquiries, employment service operational data, etc.

Future Labour Force, and Employment Targets

The use of demographic data and the results of manpower surveys and projections as an approach to the problems of setting employment targets from the manpower supply side. Social and political arguments for a higher level of employment.

Manpower Requirements in Relation to Output Targets

An approach from the demand side to problems of setting employment targets consistent with general plan targets for output. Present capital-output and labour-capital ratios for particular industries and related patterns of labour utilisation (by occupational categories and levels), may be taken as a starting point. Then the problem becomes one of working out, in terms of the level and pattern of demand for manpower, of projected or tentatively planned changes in output and technique, which involve changes in capital-output and labour-capital ratios, in different industries and projects. In each case there may be a range of choice of techniques and outputs.

Crash Programmes to Ensure Manpower Availabilities for the First Medium Term Plan

Final check of manpower availabilities for the next medium term plan output targets. Design of crash programmes to ensure availabilities, e.g. accelerated training schemes, use of expatriate manpower, measures to increase mobility of labour, or to increase labour force participation rate among scarce categories etc.

Manpower Programmes to be Incorporated in the Next Medium term Plan

Detailed manpower programmes to be incorporated in the next medium term plan, i.e. for implementation during the period covered by this plan. These programmes may be of various kinds, e.g. public works and similar projects to supplement the employment creation effect of other parts of the plan, establishment of an employment service and a vocational guidance service, development of methods and machinery for collection of manpower data required for improving the planning, etc.

Management and the Utilisation of Manpower

Problems related to efficient utilisation of manpower, including organisation of work, industrial relations, etc.

Employment, Market Organisation, Employment Service

The organised employment market. Possibilities of administrative regulation of the employment market. Employment service: service to job-seekers and to employers (including advice on effective utilisation of manpower)

Migration and Expatriate manpower

External migration as affecting supply of manpower, aggregate as well as in specific categories. Effective utilisation of expatriate manpower (foreign personnel in foreign firms, technical assistance experts, etc.); political and social problem (e.g. wage problems) of expatriate manpower, replacement of expatriates.

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