

**Department of Educational Planning**

**Training Programme on Use of Quantitative  
Techniques in Educational Planning  
(July 08-19, 2013)**

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**Information Guide**



**National University of Educational Planning and Administration  
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# **Training Programme on Use of Quantitative Techniques in Educational Planning**

**(NUEPA, New Delhi: July 8-19, 2013)**

## **1. Introduction**

Educational planning as a discipline has been evolving since 1960s. Although not very successful in their attempts, developing countries like India are trying integrating educational planning with economic planning. Major theoretical principles guiding the planning practices in education in these countries are mainly derived from the social demand approach. The planning framework, therefore, is more oriented towards meeting social demand at various levels of education rather than planning education for national development, though sporadic attempts have been made to reform education to meet socio-economic aspirations. It is, indeed, necessary to contextualize planning frameworks in country settings taking into account the development goals, institutions and available resources. However, planning practices in the education sector are mostly delinked from other sectors (i.e. no explicit relationship between development needs and educational/skill requirements) thereby failing, to a large extent, to scan the context and trajectory of national development. Moreover, with the introduction of fragmentation into the macro planning practices in the form of large-scale programme/project planning frameworks, for example, that of SSA and RMSA in India (mostly decided by political processes), the existing planning frameworks in the school education sector have failed to provide empirical evidence of the likely contribution of education to national development.

Locating education appropriately in the national development pathways, therefore, requires an understanding of the changing perception and empirical evidences of its contributions. From a mere social service in the initial years of development planning, education is now considered a critical input (human capital) in national development, an instrument for altering structural sources of poverty and inequality, a major driver of human development and a basic human right. Accordingly, the educational planning models/frameworks have undergone changes since 1960s. Initially, traditional educational planning framework focused on 'linear problem solving model' (i.e. determine requirements, develop a solution/strategy and implement) that was more of supply oriented (often assuming that the supply will create its own demand and produce desired results). Such planning frameworks were more of top-down and technocratic having little consideration of the changing environment. When the utility of such traditional planning models could not be established after decades of their implementation, the emerging 'new economics of education' in the 1970s recognized the social function of education and also tried to complete the chain of service delivery by adding the demand function in the education planning models. Education was recognized as a socio-economic equalizer, and accordingly, planning models factored in those interventions that aimed at meeting the education needs of the marginalized sections of society and improving equity. This was the time when planning frameworks were decentralized and local level planning tools and techniques developed making planning models contextual and demand oriented. What followed thereafter was a number of significant shifts in the directions in educational planning – i.e. from planning for improving allocative efficiency, to addressing disparities (in the 1970s), to improving relevance to managing scarce resources (in the 1980s), to meeting the demand for skills in the globalizing economies, to accommodating private sector as major service provider (neo-liberal models in the 1990s), to improving process

based decentralized service delivery, and more recently, to return of the state as the main source of educational opportunities (at the compulsory level of education – i.e. the right based approach; and also state as the major provider at the post-compulsory level of education).

Now, macro planning in the education sector is more or less limited to development policy planning and inter-sectoral and intra-sectoral allocation of resources (mostly on the basis of political processes, or at times, inertia). The education policy (the results of the macro planning exercise) is then implemented following the decentralization strategy. The resulting planning models have become more strategic and iterative to give enough consideration to changing environment. Planning is no more considered a technocratic exercise resulting in a plan document; rather planning now encompasses the implementation phase and has become more result-oriented than input-oriented. Today's planner is no more a technocrat but has characteristics of both a technocrat and a development expert. What has not changed over the last half a century even with profound changes in directions in educational planning? It's how to get things technically correct in the plan formulation exercise irrespective of the planning framework/model.

Application of basic planning techniques and getting decision-making rooted on empirical evidence based on analysis of the facts and figures are necessary conditions both in traditional and strategic planning models. This implies rigorous analysis of the socio-economic context of planning, including the macroeconomic environment and relationship between the education development policies and national development strategies. Strategic decentralized planning also calls for analysis of the structure of population and projection of school age population. Forecasting and projection exercises (population and enrolment) are required to be undertaken to assess the future development prospects of education. Similarly, quantitative skills are required to undertake education sector diagnosing by estimating key indicators of access, participation, internal efficiency, quality, equity and external efficiency. Local level planning techniques like school mapping and micro planning need to be undertaken for analyzing the school networks and provisions as per norms and standards as well as the household demand for schooling. Analysis of student flows help assess the internal efficiency of the system and provides clues for designing interventions for improving teaching-learning processes; it also helps design interventions aimed at making education more inclusive.

Sector diagnosis holds the key to identifying development concerns (i.e. constructing problem trees), setting plan targets and designing priority programmes. Once the development strategies are spelled out, it is important to establish relationships between intake (i.e. enrolment), staff (teaching and non-teaching), and physical and TLM facilities on the basis of given norms and standards. This requires quantitative skills to apply norms in estimating additional requirements for maintaining minimum standards in education. Planners also need to be familiar with techniques that help them design priority programmes – viz., Logical Framework Matrix (LFM), Results Based Management. Strategic planning is not complete without proper planning for implementation (i.e. translation of the plan interventions into operating time tables with allocation of required resources) and controlling of the implementation of the plan (i.e. monitoring and evaluation). It is, therefore, necessary to have the knowledge of network-based techniques such as PERT (Programme/Project Evaluation and Review Technique) and RFD (Results Framework Document). Finally, quantitative skills are also required for costing the plan and undertake budget analysis for assessing the financial feasibility of the planned interventions. Basic knowledge of statistics and quantitative planning techniques is required to carry out the above-mentioned functions

to make plans more strategic and evidence based. However, experiences of decentralized educational planning and appraisal in the last two decades show that there is still a huge gap at the sub-national levels between the existing and required quantitative skills of education personnel not only for undertaking planning exercises but also to evaluate the outcomes of planned interventions. Hence, there is the need for conducting this programme. The overall objective of the programme, therefore, is to improve the quality of district plans in school education by making them more analytical, technically sound and evidence based.

The present programme on '*Use of Quantitative Techniques in Educational Planning*' is being organized by the Department of Educational Planning from July 8-19, 2013.

## 2. Programme agenda

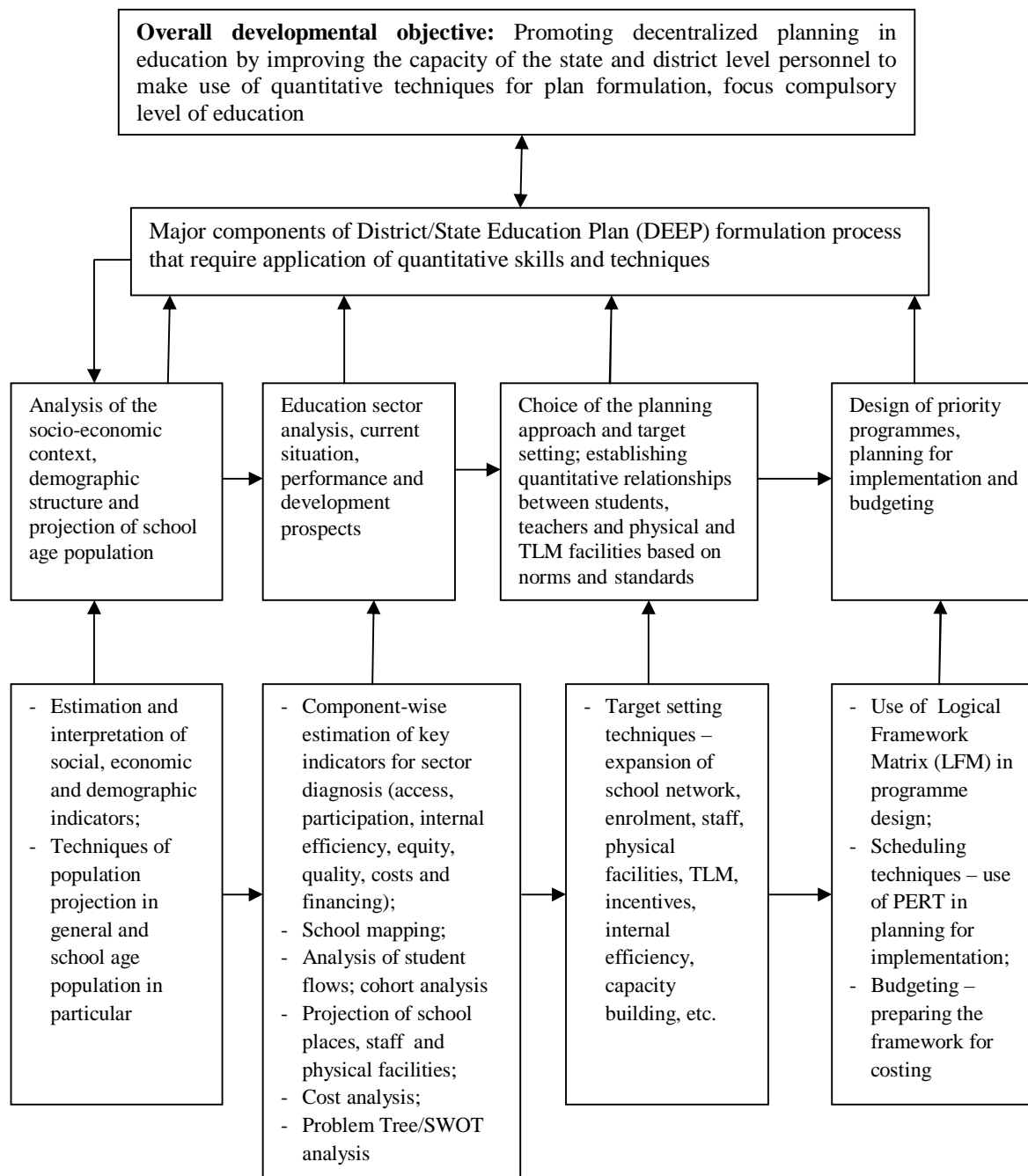
While the developmental objective of the training programme is to promote decentralized planning in education by improving the capacity of the state and district level personnel to make use of quantitative techniques for plan formulation, the immediate objectives are as follows:

- (i) To orient the participants about the changing directions in educational planning with focus on decentralized educational planning practices in school education in India and the shifting approaches to plan formulation;
- (ii) To introduce the participants to the existing EMIS and other sources of demographic and socio-economic data and acquaint them with the techniques of population and enrolment projection and estimation and interpretation of socio-economic, demographic and education indicators; and
- (iii) To develop skills for making use of various quantitative techniques in the formulation of district plans in school education with focus on sector analysis and programme design.

## 3. Programme design

It may be underlined that this programme is not about application of statistical methods & techniques for empirical research in education; it is about application of quantitative planning techniques (some of which, of course, make use of statistical methods and techniques) in plan formulation. Moreover, the scope of the programme is limited to quantitative techniques used for developing district plans in school education, with focus on elementary level of education. Given the number of available planning techniques and the vast scope for improving the quantitative knowledge and analytical skills of the education personnel, the scope of the present programme has been kept limited to address key areas of skill development for plan formulation.

The vertical logic of the skill development strategy of the programme is given in Figure 1. The skill development logic identifies the areas where quantitative skills need to be improved and the specific quantitative planning techniques and tools to be covered in the training programme. The skill development needs have been logically structured keeping in view the overall developmental objective of the training programme.

**Figure 1: The vertical logic of skill development strategy of the training programme**

Note: Participants would also be introduced to available computer software/templates (such as COHORT ANALYSIS, EFATABS, ACCESS, etc.) for educational planning in the related lecture discussion sessions.

The target group of the programme is the state and district level education personnel engaged in planning and management of school education, preferably elementary level of education. The participants of the programme need to have firsthand experience of plan formulation to gain the most from the training programme. They should have the desired quantitative aptitude and basic knowledge of computers.

Keeping in view the objectives of the training programme, the methodology for transacting the curriculum would consist of lecture discussions, practical exercises, simulations, group work and use of DISE/UDISE data of a district for application of various diagnostic and target setting techniques. Besides, the summary of the findings of the primary education

sector analysis of a hypothetical country would be provided for group work on SWOT analysis and use of LFM in designing development programmes/projects.

#### **4. Programme methodology**

The programme methodology has been briefly discussed in section 3. Besides, the programme is expected to be highly interactive and participatory in order to provide a forum for discussion on the use of various quantitative techniques for sector diagnosis, student flows, setting plan targets, designing priority programmes, planning for implementation, costing and budgeting. Participants will be asked to work in groups with real data sets to internalize the application of quantitative techniques in educational planning. A set of select reading material, including the modules developed by NUEPA and the framework for implementation of SSA will be provided to the participants. Efforts would be made to provide the soft copy of the basic reading material and related ppt presentations and practical exercises. The list of reading material is given in Annex IV.

#### **5. Programme schedule and participation**

The training programme will be held at NUEPA, New Delhi from July 8-19, 2013. The tentative programme schedule is given in Annex I. It is expected that about 35 officers from various States and Union Territories will participate in the programme. These officers will be mostly from Planning and Statistics Wing of Directorate of Education in the states/UTs and SSA State/District Project Offices. The list of participants is given in Annex II.

#### **6. Management of the programme**

The Department of Educational Planning of the National University is organizing the programme. Under the overall guidance of Prof. R. Govinda, Vice-Chancellor, NUEPA and Prof. SMIA Zaidi, Head, Department of Educational Planning, a team comprising Dr. K. Biswal (Mob: 09811082022) and Dr. N. K. Mohanty (Mob:09873193391) will be responsible for academic management and overall coordination of the programme. Apart from the faculty members of NUEPA, resource persons from outside the University will be invited to interact with the participants.

Mrs. Kanchan Sharma, Sr. Stenographer, Department of Educational Planning, NUEPA will provide secretarial and organizational assistance during the programme days. The staff of NUEPA Hostel, the EDPR Unit, Training Cell, Library and Documentation Centre and Finance and Accounts Section of NUEPA provides necessary support services in the conduct of the programme. The list of resource persons is given in Annex III.

The stay and related arrangements for the participants have been made at NUEPA Hostel. The participants would be provided free lodging and boarding facilities. Besides, TA of the participants would be met by NUEPA as per its rules. It may be noted that medical care for minor ailments would be made available to the participants at NUEPA Hostel (Ground Floor) from 1700 to 1900 hrs daily except Sundays and national holidays.

For further information and assistance, participants may contact any one of the members of the programme management team.

## 7. Focus areas/themes

The following major themes will be covered in the programme:

- (i) Shifting approaches to educational planning and district planning in education;
- (ii) Data requirements for educational planning: EMIS, Census of India, NSSO, and other sources of data;
- (iii) Population and enrolment projection techniques and target setting;
- (iv) Methodology of plan formulation ;
- (v) Estimation of key performance indicators and their application in sector diagnosis;
- (vi) School mapping;
- (vii) Student flow analysis and assessment of internal efficiency of education systems;
- (viii) Measures of inequalities in education;
- (ix) Cost analysis in educational planning;
- (x) Use of Problem Tree/SWOT analysis in educational planning;
- (xi) LFM for programme design;
- (xii) PERT for scheduling; and
- (xiii) Costing/budgeting of district education plans.

## 8. Brief outline of the thematic areas

### (i) Shifting approaches to educational planning and decentralized district planning in education

This introductory session aims at setting the context of the training programme by providing an overview of changing approaches to educational planning, with a focus on strategic planning and right-based approach to plan formulation at the elementary level. The session will briefly discuss the concept and forms of decentralization in education, the current model of decentralized educational planning in India and its enabling conditions. One of the first steps in decentralization is related to the identification of a unit for decentralized planning and decision-making. It also implies identification of areas and functions that can legitimately be brought under the purview of decentralized planning. Unlike a centralized planning system, the planning process under a decentralized framework will essentially be participatory in nature. Participatory process ensures wider consultations to formulate realistic plans. Decentralization attempts to create local level planning machinery and develop planning competencies at the local level. In other words, capacity building at the local level becomes a necessary condition for developing and implementing decentralized plans. This lecture will elaborate on these dimensions of educational planning.

### (ii) Data requirements for educational planning: EMIS, Census of India, NSSO, and other sources of data

The session will deal with the sources of socio-economic, demographic and educational data and their use in plan formulation. Different stages of planning – viz., sector; review of past educational plans, programmes and policies; projections of education development trends; plan formulation; and plan implementation, monitoring and evaluation – generally require

data and information from several sources. Generally, cross-sectional data for analyzing the existing situation and time-series information for capturing trends are required; time period of which depends upon the nature of variables which are to be extrapolated. The next important question which may crop-up is the level at which information needs to be collected which depends upon the unit of planning. These sessions will deal with all the aspects of data requirements for planning for development of elementary education. The scope and coverage of the existing EMIS/UDISE will also be discussed.

### **(iii) Population and enrolment projection techniques and target setting**

It is essential to undertake projection (school age population and enrolment) both for sector diagnosis and developing alternative scenarios for setting plan targets, particularly enrolment targets. It may be noted that the norms relating to estimation of several important schooling provisions like classrooms, teachers, toilet blocks, drinking water facilities, demand side financing such as scholarships, transport allowances, textbooks, school uniforms, etc. are related to the intake/enrolment in school schools/sections. It is, therefore, important to set SMART targets on the basis of examination of alternative development scenarios of school education. These sessions will, therefore, focus on various alternative population and enrolment projection techniques and developing alternative scenarios for expansion of school education.

The techniques of setting plan targets vary across levels of school education. While demographic trends and institutional factors largely determine the target setting exercise at the compulsory level of education; projection of voluntary social demand mainly influence the target setting method at the post-compulsory level of education. This session will discuss the methods for setting enrolment targets and establishing relationships between enrolment, teachers and physical facilities. The methods of presenting component-wise plan targets would also be discussed..

### **(iv) Methodology of plan formulation**

The session will discuss the steps involved in the formulation of educational plans at the state and district levels, i.e. starting from sector diagnosis and identification of development priorities and constraints to setting plan targets, specification of action programmes/designing priority programmes, planning for implementation, appraisal and budgeting. Particular emphasis will be on discussing what a plan must have (in terms of data, evidences, targets, major interventions, etc.). The differences in the methodology of planning at the elementary and secondary levels will also be highlighted in this session.

### **(v) Estimation of key performance indicators and their application in sector diagnosis**

Given the wide variations in the baseline status of school education across and within districts, sector analysis is critical for contextualizing formulation of elementary/secondary education development plan at the district level. This step in the plan formulation assumes critical importance as it helps identify the development priorities and constraints in secondary education. Suggested strategies to deal with the development concerns in the sub-sector can also flow from the sector analysis. These sessions will make use of different techniques for estimating key performance indicators of access, participation, internal efficiency and quality for diagnosis of the status of school education at the state and district levels, besides looking



into the socio-economic and institutional setting. Particular emphasis will be on estimation methods of education indicators and their interpretation. Real data sets of a district will be used for group work on sector diagnosis.

#### **(vi) School mapping**

Given the uneven secondary schooling provisions across and within districts, it is essential to make use of school mapping, a local level planning technique, to plan for equitable access to schooling provisions across geographical areas and socio-economically disadvantaged groups. The session will not only focus on the methodology of carrying out school mapping at the elementary education level to eliminate gaps in the school network (in terms of distance and minimum intake norms) but also the techniques to rationalize facilities across existing and new schools/sections. The procedures for estimation of additional classrooms and teachers in the existing and new institutions/sections will also be discussed in the session. The distance matrix methodology developed by NUEPA for school mapping would be discussed in the session, besides reflecting on the alternative methods of carrying out school mapping such as GIS. The session will orient the participants about the optimal use of resources for planning for equitable access to elementary education. This session will be followed by practical exercise on school mapping.

#### **(vii) Student flow analysis and assessment of internal efficiency of education**

Any system which is in working order has the three main components of input, process and output. While considering the efficiency of any system we concentrate more on knowing how well the system is working in delivering desired results. If efficiency is defined as maximization of output for a given input level or the minimization of input for a given output level, the input-output ratio becomes a useful tool to measure the efficiency of the system. In the education system, the inputs are the active resources which include facilities like building, equipment, teaching-learning material etc. and personnel like teachers, supervisors, administrators, clerical staff and instructional assistants as also the children for whom all these inputs are provided. As a result of inputs the educational system functions and teaching-learning process takes place which is ensured through active supervisors, management and administration. The result of this process is that children learn some skills and move from one grade to another grade. Attempts would be made in these sessions to estimate student flow rates (promotion, repetition, dropout rates) and system efficiency related indicators (coefficient of efficiency and input-output ratio) using various cohort analysis techniques. The participants will be introduced to the available software for cohort analysis. These sessions will, therefore, focus on techniques for measuring efficiency of the education system. There will be group work on analysis of internal efficiency of the education system

#### **(viii) Measures of inequalities in education**

In order to understand the concept of inequalities or disparities with respect to education, one needs to explain the concepts of equity and equality. In education, we find various types of disparities, viz., social, regional, spatial and gender. The educational disparities can be seen in terms of various indicators of educational development like literacy rates, enrolment ratios and expenditure on education. The session will focus on estimation of equity related indicators (by gender, social categories and place of residence).

### **(ix) Cost analysis in educational planning and costing/budgeting of district plans**

Cost analysis has become an important educational decision-making tool in recent years, as educators are being asked to do more with less funding and provide tangible evidence of the effectiveness of educational programs. The term cost generally refers to the value of all the resources that a given program could use. In other words, costs are those resources that could potentially be put to other uses. This meaning of costs relate to opportunity costs, a term commonly used by economists that implies that the use of resources for one purpose prevents their use for another, potentially more profitable purpose. The session will briefly discuss the taxonomies of costs (with focus on classification of education costs) and their use in sector diagnosis, programme design and appraisal. Key indicators of financing of education would also be discussed in the session.

Although a cost analysis may take multiple forms, it certainly involves more than simply an accounting or budget analysis. Budget analysis alone is inadequate for the purposes of cost analysis because budgets generally do not specify all of the cost information pertaining to all of the elements of a given educational program. One of the simplest approaches to cost analysis is the programme ingredients approach, where most program costs can be divided into five categories: (i) personnel costs, (ii) facility costs, (iii) equipment and materials costs, (iv) other program inputs, and (v) required client inputs. Once identified and valued, the ingredients can be added, and the total cost of the educational intervention established.

An exclusive session would also be devoted for costing and budgeting of education plans. It may be noted that the main objective of costing and budgeting in educational planning is not only to know how much a plan would cost but also to see that the present level of efficiency is improved and financing of the plan is sustainable. Budgeting and budgets, therefore, should be given more attention in educational planning than what they are currently getting. In fact, in the whole area of financial planning and administration, budgeting is a major component. More specifically, cost indicators and analysis should be used in the process of budgeting. Budget in an annual plan is then appropriately related to budget estimates of the related medium-term prospective plan. Thus, there is a two-way relationship between costing and budgeting on the one hand and planning and budgeting on the other. Only when costing, budgeting and planning go together will it be possible to get a highly efficient system of education. The lecture-discussion sessions will elaborate on these dimensions of cost analysis and costing of educational plans.

### **(x) Use of Problem Tree/SWOT analysis in educational planning**

The lecture-discussion sessions will focus on construction of problem tree based on the results of the sector analysis and identification of priority programmes. Attempts would also be made to discuss the ways of translating the problem tree into objective tree. Knowledge of the use of problem tree in planning would help apply vertical logic in developing priority interventions. Around three sessions will be devoted for discussing key features of SWOT analysis and how to make of this technique to summarize the results of sector analysis and projection of future development prospects in education.

SWOT analysis is a structured planning tool, which is commonly used as part of strategic planning. In the planning exercise, development goals and plan targets should be set after performing the SWOT analysis on the basis of education sector studies/analysis. SWOT analysis looks into (i) Internal strengths; (ii) internal weaknesses; (iii) opportunities in the external environment; and (iv) threats in the external environment. Identification of SWOTs is important as they inform later steps in educational planning to achieve the plan targets. The lecture-discussion sessions will focus on these aspects of SWOT analysis. Group work on SWOT analysis would help develop the skills of participants in applying SWOTs in educational planning.

### **(xi) LFM for programme design**

In any planning exercise, it is critical to design priority interventions appropriately both for effective implementation and monitoring. Logical Framework Matrix (LFM) is one of the techniques to elaborate and present the essence of an intervention/programme. The LFM is the main output of the Logical Framework Analysis, mostly used in strategic planning exercises. The LFM or simply the logframe helps to make the logical relationships between activities, results, purpose and objectives of a programme more transparent. The logframe is seen as an aid to thinking. The logframe must also be seen as a dynamic tool, which should be re-assessed and revised as the education development programme itself develops and circumstances of its implementation change. It should be used to provide structure and purpose to programme design and budgeting without being perceived as an inflexible and constraining blueprint. The logframe itself consists of a matrix, which has four columns and (in its most basic form) four rows. The vertical logic identifies what the programme intends to do, clarifies the causal uncertainties beyond the planners' control. The horizontal logic relates to the measurement of the effects of, and resources used by, the programme through the specification of key indicators of measurement, and the means by which the measurement will be verified. This session will discuss in detail how to use the logframe in designing programmes.

### **(xii) PERT for scheduling**

Planning for implementation is one of the important stages of plan formulation. The plan document is incomplete if it does not contain a detailed plan for implementation of the proposed programmes/interventions. Planning for implementation serves two basic purposes: (i) it facilitates the process of implementation of proposed interventions by providing a sound mechanism of monitoring (i.e. in the form of an implementation schedule); and (ii) it increases the efficiency of the system by minimizing the costs of implementation of a given intervention/programme. Scheduling of the proposed interventions forms the most important exercise in the planning for implementation. Scheduling refers to the process of converting an educational plan into an operating timetable, which establishes start and completion time of all the activities of individual interventions/programmes of an education plan. There are several ways of preparing the implementation schedules, such as the most commonly used Bar Chart method. However, an effective implementation plan makes use of the network-based techniques such as the Programme Evaluation and Review Technique (PERT). The PERT is a network-based procedure that facilitates planning, scheduling and controlling of proposed interventions/ programmes of a plan. It provides methods for measuring actual progress of the plan against expected progress, for comparing consequences of proposed

alternative strategies, for predicting future programme status, and for optimizing utilization of resources. The session will focus on application of PERT in scheduling the proposed interventions/programmes of a district elementary education plan.

## Annex I

### Tentative Programme Schedule (July 08-19, 2013)

Session N <sup>o</sup>	Time (In hrs.)	Topic and Resource Person/Facilitator(s)
<b>Monday (8<sup>th</sup> July, 2013)</b>		
	<b>0930</b>	<b>Registration</b>
1.	1000	Opening session
	<b>1100</b>	<b>Tea Break</b>
2.	1130	An overview of planning for school education in India  SMIA Zaidi
	<b>1300</b>	<b>Lunch Break</b>
3.	1400	Expectancy session on skill development for planning for school education <sup>1</sup>  SMIA Zaidi, K. Biswal and N. K. Mohanty
	<b>1530</b>	<b>Tea Break</b>
4.	1600	Decentralized planning in school education  K. Biswal
<b>Tuesday (9<sup>th</sup> July, 2013)</b>		
5.	0930	Socio-economic and educational data for planning for school education and their sources (viz., EMIS, Census of India, NSSO, Economic Survey, Statistical Handbooks, etc.)  A.N. Reddy/N.K. Mohanty
	<b>1100</b>	<b>Tea Break</b>
6.	1130	Data requirements for planning for school education ...  A.N. Reddy/N.K. Mohanty

<sup>1</sup> In this session, participants would be requested to work in groups to identify skill development requirements for facilitating formulation of district primary and secondary education plans. The groups would be required to share their expectations (i.e. training needs) to help focus on the required quantitative and other related planning techniques in the training programme. The basic idea is to align the training curriculum (as far as possible) to the capacity development requirements of the participants.

	<b>1300</b>	<b>Lunch Break</b>
7.	1400	Population projection techniques, including use of Sprague Multipliers for estimating single age population from grouped population data  N. K. Mohanty/Suman Negi
	<b>1530</b>	<b>Tea Break</b>
8.	1600	Group work on population projection  N. K. Mohanty/Suman Negi
<b>Wednesday (10<sup>th</sup> July, 2013)</b>		
9.	0930	Presentation and discussion of the group work on population projection  N. K. Mohanty/Suman Negi
	<b>1100</b>	<b>Tea Break</b>
10.	1130	Enrolment projection techniques for setting plan targets  K. Biswal/N.K. Mohanty
	<b>1300</b>	<b>Lunch Break</b>
11.	1400	Group work on projection of enrolment at primary and upper primary levels  K. Biswal/N.K. Mohanty/Suman Negi
	<b>1530</b>	<b>Tea Break</b>
12.	1600	Presentation and discussion of the group work on enrolment projection  K. Biswal/N.K. Mohanty/Suman Negi
<b>Thursday (11<sup>th</sup> July, 2013)</b>		
	0930	Review of the knowledge and skills acquired and their use in planning for school education  K. Biswal/N.K. Mohanty

13.	1000	Education sector analysis: Objectives, analytical framework and key socio-economic and education development indicators  K. Biswal
	<b>1100</b>	<b>Tea Break</b>
14.	1130	Education sector analysis: Socio-economic context, development policy and norms & standards for assessment of current situation in school education  K. Biswal
	<b>1300</b>	<b>Lunch Break</b>
15.	1400	Education sector analysis: Diagnosing education system performance (indicators of access and participation)  SMIA Zaidi
	<b>1530</b>	<b>Tea Break</b>
16.	1600	Group work on education sector analysis (indicators access and participation)  SMIA Zaidi/N. K. Mohanty/Suman Negi
<b>Friday (12<sup>th</sup> July, 2013)</b>		
17.	0930	Presentation and discussion of the group work on education sector analysis (access and participation)  SMIA Zaidi/N. K. Mohanty/Suman Negi
	<b>1100</b>	<b>Tea Break</b>
18.	1130	Education sector analysis: Diagnosing education system performance (indicators of internal efficiency)  SMIA Zaidi
	<b>1300</b>	<b>Lunch Break</b>
19.	1400	Education sector analysis: Diagnosing education system performance (Student flow analysis/Cohort analysis)  K. Biswal
	<b>1530</b>	<b>Tea Break</b>

20.	1600	Group work on education sector analysis (estimation and interpretation of indicators of internal efficiency of education)  SMIA Zaidi/N. K. Mohanty/K. Biswal
<b>Saturday (13<sup>th</sup> July, 2013)</b>		
21.	0930	Presentation and discussion of the group work on internal efficiency of education  SMIA Zaidi/N. K. Mohanty/K. Biswal
	<b>1100</b>	<b>Tea Break</b>
22.	1130	Education sector analysis: Cost analysis in education (use of cost indicators in sector diagnosis)  Y. Josephine
	<b>1300</b>	<b>Lunch Break</b>
23.	1400	Group work on cost analysis in education (use of cost indicators in sector diagnosis)  Y. Josephine
	<b>1530</b>	<b>Tea Break</b>
	<b>1600</b>	<b>Own time</b>
<b>Sunday (14<sup>th</sup> July, 2013)</b>		<b>Own Time</b>
<b>Monday (15<sup>th</sup> July, 2013)</b>		
24.	0930	Measures of inequalities in education  SMIA Zaidi
	<b>1100</b>	<b>Tea Break</b>
25.	1130	Group work on measures of inequalities in education  SMIA Zaidi/N. K. Mohanty
	<b>1300</b>	<b>Lunch Break</b>
26.	1400	National Achievement Survey (NAS), 2012: Methodology and key findings  Santosh Kumar Department of Educational Survey and Data Processing, NCERT



	<b>1530</b>	<b>Tea Break</b>
27.	1600	Development of EDI at elementary level and its use in sector analysis  Naveen Bhatia/Ashila, M.
<b>Tuesday (16<sup>th</sup> July, 2013)</b>		
28.	0930	SWOT analysis, a tool for summarizing results of education sector analysis and identifying priority areas for programming  Rashmi Diwan
	<b>1100</b>	<b>Tea Break</b>
29.	1130	Group work on SWOT analysis  Rashmi Diwan
	<b>1300</b>	<b>Lunch Break</b>
30.	1400	Group work on use of SWOT analysis in education sector diagnosis  K. Biswal/N.K. Mohanty
	<b>1530</b>	<b>Tea Break</b>
31.	1600	Some reflections on planning for elementary education following the right-based approach  R. Govinda
<b>Wednesday (17<sup>th</sup> July, 2013)</b>		
32.	0930	School mapping  K. Biswal
	<b>1100</b>	<b>Tea Break</b>
33.	1130	Group work on school mapping  K. Biswal/N.K. Mohanty
	<b>1300</b>	<b>Lunch Break</b>
34.	1400	Presentation of group work on school mapping  K. Biswal/N.K. Mohanty

	1500	Review of knowledge and skills acquired in the programme SMIA Zaidi/K. Biswal/N.K. Mohanty
	<b>1530</b>	<b>Tea Break</b>
35.	1600	Methodology of planning for school education at the district level K. Biswal
<b>Thursday (18<sup>th</sup> July, 2013)</b>		
36.	0930	Logical Framework Matrix (LFM) for designing education development programmes/interventions K. Biswal/N. K. Mohanty
	<b>1100</b>	<b>Tea Break</b>
37.	1130	Group work on use of LFM for programme design ... K. Biswal/N. K. Mohanty
	<b>1300</b>	<b>Lunch Break</b>
38.	1400	Presentation of group work on use of LFM for programme design K. Biswal/N. K. Mohanty
	<b>1530</b>	<b>Tea Break</b>
39.	1600	Use of Programme/Project Evaluation and Review Technique (PERT) for scheduling plan interventions K. Biswal
<b>Friday (19<sup>th</sup> July, 2013)</b>		
40.	0930	Costing/budgeting of the district education plan Y. Josephine
	<b>1100</b>	<b>Tea Break</b>
	1130	Programme evaluation
41.	<b>1200</b>	<b>Closing session</b>

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## Annex IV

Reading Material<sup>2</sup>

- Centre for International Development and Training (n.d.), A Guide for Developing a Logical Framework. University of Wolverhampton, UK. Available at: [http://www.hedon.info/docs/logical\\_framework-CentreForInternationalDevelopmentAndTraining.pdf](http://www.hedon.info/docs/logical_framework-CentreForInternationalDevelopmentAndTraining.pdf), last accessed on 05/07/13.
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- Mehta, A. C. (2012), *Module on Information Requirements for Formulating District Elementary Education Plan*. NUEPA, New Delhi, (mimeo)
- MHRD (2011), *SSA Framework for Implementation*. Department of School Education and Literacy, Government of India. Available at: [http://www.upefa.com/upefaweb/admin/myuploads/SSA\\_Frame\\_work\\_\(revised\)\\_9-6-2011.pdf](http://www.upefa.com/upefaweb/admin/myuploads/SSA_Frame_work_(revised)_9-6-2011.pdf), last accessed on 05/07/13.
- UIS (2009), *Education Indicators: Technical Guidelines*. Montreal. Available at: <http://www.uis.unesco.org/Library/Documents/eiguide09-en.pdf>, last accessed on 05/07/13.
- UNDP (1999), *Decentralization: A Sampling of Definitions*. Working paper prepared in connection with the Joint UNDP-Government of Germany valuation of the UNDP role in decentralization and local governance. Available at: [http://web.undp.org/evaluation/documents/decentralization\\_working\\_report.PDF](http://web.undp.org/evaluation/documents/decentralization_working_report.PDF), last accessed on 05/07/13.
- Varghese, N. V. (Ed.), (1997), *Modules on District Planning in Education* (12 modules). NIEPA, New Delhi.
- Varghese, N. V. and Biswal, K.(1999), *Concept and Methodology of School Mapping*, NUEPA (mimeo)
- Zaidi, S. M. I. A. (1999), *Gender Disparities in Education*. NUEPA, New Delhi, (mimeo)
- Zaidi, S. M. I. A. (1999), *Measures of Inequalities*. NUEPA, New Delhi, (mimeo)

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<sup>2</sup> Out of this list, hard copy of select reading material would be distributed. However, soft copy of additional reading material and ppt presentations and group reports/practical exercises would be provided to all participants in a pendrive.

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