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Government India



# **Training Programme on Industrial Project Preparation** and Appraisal



With Special Focus on **Building Materials Sector** 

November 20 - December 8, 2000

Jointly organised by:



**Entrepreneurship Development Institute of India** Ahmedabad, Gujarat, India



**International Centre for Advancement of ICAMT** Manufacturing Technology Bangalore, India



**Building Materials and Technology Promotion Council** Ministry of Urban Employment and Poverty Alleviation Government of India







# **Programme Rationale**

The building materials scenario in developing economies is characterized by:

- The demand for infrastructural facilities, especially housing, outstripping the supply
- Ever increasing cost of conventional building materials
- Strain on the national economy due to high cost of imports of such materials
- Inadequately equipped human resources to identify investment opportunities in the sector, prepare project proposals, source & select appropriate technologies, appraise the projects and to promote the same.

Against this backdrop, the advancement in building material technology and methodological tools to equip investment decision makers in pursuing a systematic approach to project development cycle offers scope to improve the building materials scenario.

Responding to the situation, a training programme on Industrial Project Preparation and Appraisal (IPPA) with a special focus on building materials sector has been planned.

The programme is offered by the Inter-Regional Centre (IRC) for Entrepreneurship and Investment Training sponsored jointly by the United Nations Industrial Development Organisation (UNIDO) and the Government of India (GOI) at Entrepreneurship Development Institute of India (EDI). This is the eleventh programme in the series and the third one with sectoral focus.

The programme will be implemented in close cooperation with the International Centre for Advancement of Manufacturing Technology (ICAMT) - another UNIDO project supported by Government of India. Building Materials and Technology Promotion Council - an interministerial body under the Ministry of Urban Employment and Poverty Alleviation - will provide necessary technical inputs during the programme.

# **Programme Objectives:**

- Enhance knowledge and skills of participants in preparation and appraisal of Industrial Investment Projects in the construction sector in general and building materials sector in particular.
- Facilitate experience sharing among participants in the area of 'Project Development Cycle'.
- Generate awareness on issues involved in marketing of building material products.
- Increase awareness level of the participants in the area of appropriate technology/equipments.
- Equip the participants with an understanding of techno-commercial aspects of the sector.
- Help the participants identify and understand critical issues involved in promoting, formulating and appraising projects for building materials.

# **Participants**

The training programme will accommodate 20 participants.

Existing and potential entrepreneurs, corporate planners/managers planning to expand/diversify/initiate enterprises in the building materials sector are welcome to participate in the programme.

Further, nominations are invited from officials in *institutions engaged in promoting projects* in the sector. Such institutions could include:

- Development Financial Institutions
- Commercial Banks
- Private and Parastatal Project Consultancy Organisations
- Government Institutions engaged in Industrial and Infrastructure Project Preparation and Appraisal
- Specialised agencies responsible for housing projects

Each of the above institutions can nominate 2 or 3 officers possessing a University Degree in Engineering/Economics/ Business Administration/ Commerce/ Professional Qualifications and atleast 3 years of hands-on-experience in the field of Industrial Project Preparation, Appraisal and Investment Decision-making.

The participants need not possess technical qualification in the construction sector. Working knowledge of English is a must.

The selected participants are required to prepare country papers presenting the issues encountered in the respective countries during the process of promoting building materials sector. Further, their expectations from the programme could be clearly outlined.

# **Benefits to the Participants**

On completion of the training programme, the participants will be able to:

- Establish networking with technology providers, machinery suppliers and enterprises.

  Immediately on conclusion of the Training Programme, efforts will be made to facilitate one-to-one interaction between participating companies and institutions and technology providers/ machinery suppliers/ enterprises. Advance intimation is required for this purpose.
- Understand the emerging trends in the building materials sector; market-related issues pertaining to marketing of building material products; and parameters of technology choice keeping in view the emerging scenario and regional availability of resources in the sector.
- Apply such knowledge in the process of decision making to various aspects of project life cycle.
- Identify data requirements and analyse their suitability for preparation of industrial feasibility studies
- Discuss the stages of feasibility report preparation, understand and practically apply various techniques.
  - Integrate the data gathered into a full-fledged feasibility study.
- Carry out computer supported comprehensive appraisal of financial viability of projects through Computer Model for Feasibility Analysis and Reporting (COMFAR *III Expert*), a UNIDO-developed software.
- Understand the process of assessing a promoter on entrepreneurial competencies; and
- Take rational industrial investment decisions to promote the sector.

The programme offers a unique opportunity to the participants in understanding critical issues involved in project preparation, appraisal and promotion of manufacturing ventures in the building materials sector. The knowledge and skills acquired during the programme - especially those pertaining to financial analysis and COMFAR III Expert are applicable to any industry.

A special exhibition on building materials will also be organised for delegates to understand practical application and technological advancements in the sector.

# **Programme Duration and Venue**

The programme is scheduled during November 20 - December 8, 2000. The programme will be organised at Entrepreneurship Development Institute of India. The Institute has a sprawling campus set in pleasant surroundings 5 Kms away from Ahmedabad Airport on Gandhinagar Highway. Ahmedabad is well nected by rail and air with Mumbai and Delhi.

#### **Course Content**

#### Module I: Project Development Cycle

- An overview of
  - Project Development Cycle
  - Opportunity mapping in building materials sector
  - Preparation of feasibility studies and their appraisal

The module would encompass an introduction to project identification, screening, selection, report preparation and appraisal within the conceptual framework developed by UNIDO. It would then explore project opportunities covering conventional & non-conventional building materials that could be produced through applying appropriate technologies as also investments in Industrial Projects for manufacturing relevant plant and machinery. The module will then present an overview to the preparation and appraisal of feasibility studies.

#### Module II: Market Analysis

- Introduction
  - Market Analysis for building material Projects: An overview
  - Concept of demand
  - Seasonal and cyclical characteristics in demand
  - Information needs for market assessment

- Current status of sector
  - Adequacy of indigenously produced building materials in relation to demand in the developing countries
  - Comparative advantage of industries engaged in manufacturing building materials
  - Importation of building materials: Merits and Demerits
  - Consumer perception about currently available materials
  - Consumer needs both fulfilled and unmet by available building materials
  - Scope for import substitution and export promotion
- ◆ Competition
  - Key market segments and their characteristics (with reference to pre-identified product groups)
  - Nature/basis of competition
- Market environment
  - Trade regulations
  - Dynamics involved in world trade in building material products
  - Key issues in export market access
- Product mix decisions: Factors to be considered
- Pricing: Strategies, prevalent practices, factors to be considered
- ♦ Market Assessment (MA):
  - Key steps in MA
  - Forecasting Sales Revenue: An overview
  - Information sources (web-based)
  - Identifying, assessing and briefing market research organisations for primary data collection
  - Key areas of concern in MA

This module will explore the tools and techniques for systematic market analysis. The nature of demand and its determinants will be evaluated upon profiling the sector from the industrial and infrastructure perspective. Demand and supply side dynamics will be presented in a global perspective with evaluation of regional competitive advantages. Market research and pricing and product-mix decisions and formulation and evaluation of marketing strategies given the intermediate nature of the product will be considered. Input-output linkage models for estimation of market demand prospects will also be covered. Simple econometric models for establishing causality between variables will also be introduced.

### Module III : Technical Analysis

- Technical appraisal of industrial investment projects in the sector: Critical issues
- Issues involved in project and product selection
- Parameters for technology assessment
- Factors influencing productivity
- Checklist on technical appraisal for use by an Appraisal Officer
- Quality parameters
  - What they are
  - Current practices (in setting standards and measuring them)
  - Factors to consider from the appraisal angle
- ◆ Project Implementation
  - Selection of Consultants and contracting
  - Scheduling and monitoring

Standard tools and modalities for establishing technical feasibility will be imparted over this module. Further, Programme Evaluation and Review Tools and Critical Path Method Techniques in project implementation will also be accorded priority for the benefit of project formulators and implementers. This is especially since some projects are forward-linkaged and also implement construction and infrastructure projects on turnkey basis.

Specialised sector-specific inputs covering the following will be offered:

- Commercial viability of production of composite building materials based on local resources
- Innovative building materials for low cost housing
- Potential for utilisation of agro-industrial waste and natural fibres in production of building materials
- Eco-friendly and energy-efficient alternatives to traditional building materials
- Emerging technologies relevant to the sector

#### Module IV: Environmental Impact Assessment (EIA)

- Introduction
  - EIA and its importance in the context of preserving the environment
  - Types of wastes/ pollutants in a typical building material industry
  - Disposal of wastes (Pollution control measures)
  - Checklist on EIA

Statutory norms and regulations related to environmental protection will be presented.

#### Module V: Financial Analysis

- Project cost and means of finance
- Cost of capital
- Working capital assessment
- Financial statements
- · Financial appraisal techniques
- Breakeven and Sensitivity Analysis
- Impact of inflation and changes in macro-economic variables on financial appraisal

This module will highlight the financial nuances of appraisal. Given the unique characteristics of downstream user industries and infrastructure projects, the necessary items for incorporation in viability and sensitivity analysis will be isolated. Ideal financial techniques of project formulation and appraisal cluding that of cost and capital structuring of projects and probability and risk analysis will also be considered. Evaluation of cash flow streams in both the building material manufacturing projects and in user projects will be considered in tandem as to develop a comprehensive idea of the sector.

## Module VI: Computer Model for Feasibility Analysis and Reporting (COMFAR III Expert)

- ◆ An overview of COMFAR III Expert
- ◆ Structure of COMFAR III Expert
- Data entry system
- ◆ Sensitivity analysis using COMFAR III Expert
- Report generation and graphic presentation
- Demonstration and practice sessions

#### Module VII: Entrepreneurial Assessment

- Entrepreneurial Competencies: Awareness and importance of assessing promoter's capabilities
- Assessing Entrepreneurial Competencies : Exposure to Focused Behavioural Event Interview (FBEI)
  Technique

# Financial and Administrative Arrangements for the Participants

- The cost of participation is US\$ 2250 (US Dollars Two Thousand Two Hundred and Fifty only)
   payable once the nomination is accepted. This subsidised fee covers:
  - Tuition fee, cost of course material and computer facilities
  - Full board & lodging facilities (single occupancy, air-conditioned) on EDI campus
  - Out-of-pocket allowance @ Rs.384/- per day to cover incidentals

Travel costs between the participants' home country and Ahmedabad (India) are to be borne by participants or their sponsoring organisations.

Fellowships are available on a highly selective basis for participants from Least Developed Countries
(LDCs) to cover only the cost of participation. The travel costs will have to be borne by them/ their
sponsoring organisations.

Those desirous of seeking this facility must apply in a prescribed form (in addition to the attached nomination form) available from UNIDO/ UNDP country office.

#### The LDCs are:

Afghanistan Cambodia Maldives Nepal Tanzania Zambia
Bangladesh Ethiopia Mozambique Somalia Uganda
Bhutan Lao People's Demo Rep. Myanmar Sudan Yemen

• Full Fellowships for the training programme may be available through development projects sponsored by international or regional funding bodies, bi-lateral technical co-operation agencies and Governments. Candidates are encouraged to contact these organisations/agencies in their respective countries.

- ◆ The United Nations Industrial Development Organisation and the host institution will not assume any responsibility for:
  - Costs incurred by participants with respect to any insurance, medical bills or hospitalisation fees as well as costs incidental to travel (Passport, VISA, local travel in home country).
  - Compensation in the event of death, disability or illness of participant.

Note: Participants are specifically advised not to have any of their family members accompany them since it will not be possible to provide accommodation for family members. The sponsors of the training programme will not be liable for any expenses incurred by dependents.

Candidates must duly fill-in the attached nomination form and send it to UNIDO, **not later than 3<sup>rd</sup> September 2000** to Mr Joseph Moongananiyil, Project Manager, ITPD/IS, UNIDO, Vienna at the following address. A copy may please be sent to EDI, Ahmedabad. The nominations will be processed at UNIDO, Vienna

#### Enquiries may be addressed to

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# **About the organisers**

## Inter-Regional Centre (IRC) at EDI

Entrepreneurship Development Institute of India (**EDI**) is an autonomous, not-for-profit institution sponsored by all India financial institutions. It is now an acknowledged National Resource Institution committed to investment promotion, entrepreneurship education, training and research. Its efforts in spearheading entrepreneurship movement in India and in other developing countries has led to emergence of a range of training programmes and workshops in the area of investment promotion and entrepreneurship development.

Recognising the contribution, the Institute has received support from the World Bank, UNIDO, ILO, Commonwealth Secretariat and several other international agencies. The Institute's international activities cover a range of entrepreneurship and investment promotion related training programmes and workshops. Ever since 1983, the Institute has interacted with 30 developing countries helping them build institutional capabilities for industrial development. So far, over 500 professionals from developing countries henefited from EDI's capacity building programmes including the one on Industrial Project Preparation and Appraisal co-sponsored by UNIDO.

The EDI Inter-Regional Centre (IRC), jointly set up by UNIDO and Government of India, is the result of UNIDO's strategic thinking that innovative methodologies should be transferred to the developing world through regional institutions with proven skills in the area of entrepreneurship and investment promotion. IRC's mission is to develop and strengthen indigenous capacities of selected developing countries in Asia & Africa and Arab countries for investment promotion and entrepreneurship development leading to accelerated industrial development and globalisation of economies.

International Centre for Advancement of Manufacturing Technology (ICAMT) is an international centre established by UNIDO in Bangalore (India) in cooperation with the Government of India. The mission of ICAMT is to facilitate developing countries in the field of manufacturing technologies by tracking the latest worldwide developments in leading-edge technologies and bridging the gap between the emerging market demands and the existing technology base.

# **Building Materials and Technology Promotion Council (BMTPC):**

BMTPC is an interministerial body under the Ministry of Urban Employment and Poverty Alleviation, Government of India. The Council strives to promote innovative, cost-effective building materials and technology. It aims at strengthening continuing interaction with Industry, Financial Institutions, Construction Organisations, Research and Development Institutions and NGOs nationally & internationally.