

3rd Training Programme on Science and Technology for Rural Societies For Scientists and Technologists (December 18– 22, 2017)

Introduction

India has accomplished significant success in varied fields of science and technology (S &T). The development effects of science and technology research as well as its applications have, however, been quite unevenly spread across the urban and rural India. The rural India, which represents almost two-thirds of the population of the country and has a distinct economic and social set up, with its distinct needs and opportunities, holds considerable promise for scientific indulgence. At the same time, specific initiatives taken by scientists and efforts made to engage with people's science movement on the one hand and to involve scientific community in addressing the rural problems and interests have invited the attention of the nation. This necessitates a more active engagement of scientists at all levels with the understanding of rural context, its problems and opportunities available for more rural society-centred science and technology initiatives. This programme seeks to attempt the same.

Objectives

The programme will expose the participants to the innovative interventions in the area of S&T, initiated by both state and civil society institutions. The intention is to engage them into creative exercises to think of new possibilities for rural development using science and technology.

In view of the above, the broad objectives of this training are:

- To expose the participants to the complex problems facing rural societies.
- To expose the participants to the existing Rural Development programmes, including those with special emphasis on S & T.
- To encourage the participants to analyse the scope for science and technology inputs contributing to improvement of development outcomes.
- To expose the participants to the indigenous knowledge systems prevalent in various parts of India and its relevance for rural society, as also, to encourage them to find grounds for an interface of modern and traditional systems for improving the outcomes.
- To examine possibilities of applications of S & T to improve development outcomes for the rural societies.

**11th Capacity Building programme for Technical Personnel of the Science & Technology
Departments, Government of India,
Technical Officer, Technical Personnel, Technician,
Senior Technician, Junior Analyst
(January 08– 19, 2018)**

OBJECTIVES

Capacity building is a process of strengthening the abilities of individuals / organizations to perform core functions sustainably. The goal of capacity building program is to enable the participants to tackle problems more effectively. Keeping this broad objective in mind, this two week program aims at providing a broad overview of general management, project management and financial management. Realizing the specific job requirements of technical personnel, and give them exposure of some relevant acts (like IPR, Patent, RTI etc.). The programme will also enable the participants to develop a citizen centric perspective and strengthen leadership and team building capacity. It will also enhance the potential of participants in writing reports, drafting cabinet notes and making presentations.

CONTENT

The broad areas to be covered under the programme are as under:

- Team building and Motivation
- Communication Skills and Interpersonal Relations
- Financial Statements and their analysis
- General Financial Rules
- Inventory Management
- Total Quality Management
- Project Management
- Economic appraisal of Projects
- Knowledge Management
- IPR/ Patents / Copy Right
- RTI and its implementation
- Conduct Rules and Disciplinary Procedure
- Rate Contract and e-procurement
- Drafting Cabinet Notes
- Report writing and presentations

METHODOLOGY

The methodology of the training programme will be a mix of interactive sessions with eminent scientists, administrators, guest faculty and faculty of IIPA. The emphasis will be on case studies, group exercises, management games and field visits.

**17th Foundation Training Programme for Scientists and Technologists of the S&T
Departments, Government of India,
(Scientist & Technologist, at B & C levels and equivalent)
(January 22, 2018 – March 16, 2018) (8 Weeks)**

PROGRAMME OBJECTIVES AND CONTENT

The Twelve weeks Foundation Training Programme for Scientists & Technologists is designed to provide the young scientist a holistic view of the Inter-relationship between Science, Society and Development. The significance of Socio-political, Cultural and Economic issues in management of science and technology will be examined in depth and detail. An attempt will be made to develop behavioral and problem solving skills, enhance leadership & team building capacity and strengthen innovation & service orientation. The Programme will also develop the capacity of participants to understand and address the problems facing society through an application of Science and Technology. At the same time, it will prepare the participants for future senior positions which will require not only technical but also administrative and communicative skills.

The focus of the Programme would be to enable the participants to:

- Appreciate the symbiotic relationship between Science, Technology, Development and Society and understand Science and Technology Policy with a social perspective.
- Understand the Legal and Administrative Framework pertaining to S&T and examine the nature of relationship between the State, Civil Society and Market and their roles in shaping the development of Science and Technology in the emerging Policy scenario.
- Acquire necessary Behavioral and Communication skills for enhancing decision making and problem solving capacity and overcoming difficult situations in work place through effective management of Time, Stress and Conflict situations.
- Appreciate the contemporary challenges confronting scientists and administrators in handling issues concerning Environment and Sustainable Development.
- Comprehend administrative rules and procedures required for dealing with related Ministries, Departments and Organizations more effectively.
- Apply some of the good practices used in other organizations in implementation of S&T Policy.
- Prepare S&T projects for funding by the concerned departments and Acquire Skills for Appraisal, Implementation, Monitoring, Evaluation and Impact Assessment of Science and Technology Projects.
- Apply the basic concepts of Financial Management and Budgetary Control.
- Apply ICT-enabled Processes of Governance for improving public service delivery systems, Information Security, IPR/Copyright and Ethical issues.
- Evaluate the role of Science, Technology and Innovation in Urban and Rural Development.

METHODOLOGY

The methodology of the training programme will be a mix of interactive sessions with eminent scientists, administrators, guest faculty and faculty of IIPA. The emphasis will be on case studies, group exercises and field visits. The various components of the Programme include lectures, panel discussions, workshops as well as field visits, including **visit to NGOs/ Centres of Excellence**. The **Urban and Rural Field Visits** will provide them an opportunity to examine ground realities.

Note: On successful completion of the Foundation Programme the Participants are taken on a Foreign Study Tour by DST.

**Training Programme on
Knowledge Management & Knowledge Sharing in Organizations
Scientist & Technologist (All Levels)
(February 5–9, 2018)**

The programme endeavours to cover the broad spectrum of Knowledge Management in practice, thereby enabling the scientific and technical personnel in effective management of knowledge in their respective organizations.

The programme would primarily focus on knowledge management covering aspects of organizational design, information and knowledge processes, technology and people.

Broadly the content would focus on:

- Knowledge Management in context of Government and Public Sector organizations & Approach to implementation of KM
- key concepts of KM;
- Introducing knowledge centric behavior in the organization
- Knowledge management framework including knowledge processes with special reference to creating, Identifying, extracting and searching knowledge & its subsequent dissemination.
- Knowledge capture; Acquisition, creation & coding
- Knowledge Sharing in Organizations [Tools as applicable to knowledge based organizations]
- K-Capturing Techniques

The focus would also be here on

- Literature search
- Mechanisms of citing research resources
- Knowledge Networking: In order to promote a strong culture of internal cooperation within the organization and their collaborators, focus will be laid on issues like:
 - Enablers and impediments:
 - Sharing knowledge assets (for creating opportunities through productivity gains)
 - Information Security
 - Intellectual Property Rights/ Copyright
 - KM in rolling out e-governance system
 - Big Data
 - Practical Applications/Cases
 - Case Studies

Contents

- Rural Society: An Overview of its socio-cultural eco-system and diversity
- Policy Framework for Rural Development and scope for engagement with Science and Technology
- Emerging trends in Science and Technology relevant for rural India
- Indigenous knowledge systems prevalent in various parts of rural societies of India
- Case studies: emphasizing science and technology innovation for Rural Development
- Challenges and Opportunities of interface of science, technology and rural societies

Methodology

The programme will use Case Studies, lectures as well as brainstorming of innovative ideas generated through Group/panel discussions. Apart from IIPA faculty, distinguished guest speakers would include eminent experts from academia, scientific community, civil society organizations and government organizations. A local field visit to examine some initiatives in the area would also be organised to provide first-hand experience of the subjects under consideration.

**7th Training Programme on Science, Technology and Emerging Trends in Governance for Scientists and Technologists of the S & T Departments,
Government of India (All Levels)
(February 12-16, 2018)**

The programme aims to provide an in-depth analysis of the complex process of governance, involvement of various institutions and the civil society. The participants can comprehend the various issues and challenges of good governance which will enable them to strategize their role in ensuring good governance.

In brief, the objectives are to facilitate the participants to:

- Get a comprehensive understanding of the concept of governance and its importance in contemporary times.
- Comprehend the complex process of interface of science and technology and governance.
- Acquire necessary skills for facing the challenges posed by sweeping changes in governance.
- Appreciate the process of making governance citizen centric.
- Envision the role of scientists and technologists in strengthening governance and democratic structure of the country.

**6th Training Programme on Financial Management in Scientific Organizations,
(Scientist & Technologist) (All Levels)
(February 19–23, 2018)**

OBJECTIVE

The success of every organization highly depends upon the sound management of financial resources i.e. 'Financial Management'. Financial management is of paramount importance particularly to those organizations which involve huge funds like scientific organizations, research institutes etc. In this reference the present programme attempts to familiarize the participants with some critical financial issues like financial statements, sources of finance, cost control, budgeting, financial appraisal of projects etc. The primary objective of this program is to enable the participants to plan their financial resources and make their best possible use. It attempts to develop a fair understanding of different concepts of financial management to ensure better use of funds.

CONTENT

- Financial information flows and financial reporting
- Analysis of financial statements
- Accounting for depreciation
- Valuation of intangible assets
- Planning for financial inflows
- Cost: Allocation and Control
- Budgeting: Cash budgets and Zero base budgeting
- Project Formulation and financial appraisal

METHODOLOGY

There will be a blend of theory and practice. Suitable numerical exercises, relevant case studies will be used along with the interactive discussions & lectures.

**12th Capacity Building programme for Technical Personnel of the Science & Technology
Departments, Government of India,
(Technical Officer, Technical Personnel,
Technician, Senior Technician, Junior Analyst)
(March 19–30, 2018)**

OBJECTIVES

Capacity building is a process of strengthening the abilities of individuals / organizations to perform core functions sustainably. The goal of capacity building program is to enable the participants to tackle problems more effectively. Keeping this broad objective in mind, this two week programme aims at providing broad overview of financial management, project management and general management. Realizing the specific job requirements of technical personnel, the program will also give exposure of some relevant acts (like IPR, Patent, RTI etc.) and attempt to enhance the potential of participants in writing reports, drafting cabinet notes and making presentations.

CONTENT

The broad areas to be covered under the programme are as under:

- Team building and Motivation
- Communication Skills and Interpersonal Relations
- Financial Statements and their analysis
- General Financial Rules
- Inventory Management
- Total Quality Management
- Project Management
- Economic appraisal of Projects
- Knowledge Management
- IPR/ Patents / Copy Right
- RTI and its implementation
- Conduct Rules and Disciplinary Procedure
- Rate Contract and e-procurement
- Drafting Cabinet Notes
- Report writing and presentations

METHODOLOGY

The methodology of the training program will be a mix of interactive sessions with eminent scientists, administrators, guest faculty and faculty of IIPA. The emphasis will be on case studies, group exercises, management games and field visits.