

SCIENCE, TECHNOLOGY & ENVIRONMENT

Science and Technology has made a phenomenal impact world over in shaping the life style of the common man. In order to give greater impetus to Science & Technology and environment programmes, a separate Department of Environment, Forest and Wildlife was created in the Government of Delhi in 1985. State Council for Science and Technology was set up to advise and promote Science and Technology activities and oversee the implementation of various schemes/programmes under Science & Technology sector.

A. SCIENCE & TECHNOLOGY PROGRAMME

No scheme is proposed in the Annual Plan 2007-08.

B. ENVIRONMENT PROGRAMME:

I. Grant-in-aid to Delhi Pollution Control Committee(DPCC) : (Rs. 20.00 lakh)

Delhi Pollution Control Committee had been set up in June 1991 so that environment problems of Delhi can be tackled effectively and efficiently.

i. Aims & Objectives of the Scheme

To provide Grant-in-aid to Delhi Pollution Control Committee for:

- i. Implementation of various Pollution Control Acts Rules and orders of Supreme Court on pollution issues.
- ii. Monitoring of various environmental parameters of air, water and noise pollution levels.
- iii. To conduct various studies w.r.t data generation on various environmental & pollution control components.
- iv. Financial assistance for pollution abatement/waste management in Delhi.
- v. Installation of Permanent Automatic online Ambient Air Quality Monitoring Stations with display system at 3 locations.
- vi. Installation of online water quality monitoring stations at 3 locations in Yamuna rivers.
- vii. Installation of online Ambient Noise Level System.

Outlays & Expenditure

[Rs. in lakh]

a.	Approved Outlay 10 th FYP	500.00
b.	Expenditure 2002-03 to 2005-06	45.00
c.	Annual Plan 2006-07	Outlay 20.00
		Expenditure 20.00
d.	Annual Plan 2007-08	Outlay 20.00

II. Environment Department

1. Pollution Disaster and Hazardous Waste Management (Rs. 1200.00 lakh)

Objectives: To manage and handle hazardous waste.

In Delhi, the waste generating units are distributed in the industrial areas whereby the construction of 15 CETPs is in progress. However, field inspections are being carried out by the Delhi Pollution Control Committee to inventories hazardous waste generating unit, which is a continuous process. The Ministry of Environment & Forests, Govt. of India has also clearly mentioned that the sludge generated from the CETPs (Common Effluent Treatment Plants) has to be treated as hazardous waste and needs to be properly disposed off. This scheme is facilitating the work related to Hazardous waste disposal.

This is an ongoing scheme of the department since the commencement of the VII Five Year Plan.

Environment Impact Assessment study (EIAS) was conducted for 3 sites i.e. 1st Bawana relocation site, 2nd Wazirpur CETP site, 3rd Gummanhera site. Now development of Gummanhera site is under active consideration for Treatment Storage and Disposal Facilities. Temporary TSDF developed at Wazirpur has started functioning.

Outlays & Expenditure

		[Rs. in lakh]
a.	Approved Outlay 10 th FYP	400.00
b.	Expenditure 2002-03 to 2005-06	26.60
c.	Annual Plan 2006-07	
	Outlay	150.00
	Expenditure	Nil
d.	Annual Plan 2007-08	
	Outlay	1200.00

2. Public Environmental awareness & other related activities (150.00 lakh)

Aims & Objectives

To create public environmental awareness by educating public in general and different segments of the city such as school students, residential associations, market traders associations, women groups etc. through various means.

Ever increasing population in Delhi has resulted in significant increase in environmental pollution thereby affecting the health of public resulting in loss of avoidable man-days. It is realized that such problems can be tackled more effectively with cooperation of the public for which emphasis to be given to public environmental awareness activities. For this purpose, various publicity media such as newspapers, TV theatre shows, AIR. Distributing publicity materials to the public are used.

It is ongoing scheme of the Department since the commencement of VIII Five Year Plan.

The major components of the scheme are as follows:

- i. To carry out awareness campaigns viz. "Greening Delhi", "Say Yes to Eco-friendly bags", "Save Yamuna", "Anti-Fire Crackers", "Waste minimization", "Play Holi with safe & Natural colours" etc.
- ii. Organizing, sponsoring & participation in environmental related exhibition, Melas, workshop etc.
- iii. Observing various national & international environment related days such as World Environment Day etc.
- iv. To enhance environmental awareness among public by using publicity media such as newspapers, outdoor, T.V., theater show, radio etc.

Outlays & Expenditure

[Rs. in lakh]

a.	Approved Outlay 10 th FYP	800.00
b.	Expenditure 2002-03 to 2005-06	414.95
c.	Annual Plan 2006-07	
	Outlay	150.00
	Expenditure	168.65
d.	Annual Plan 2007-08	
	Outlay	150.00

3. STRENGTHENING OF TECHNICAL SET UP IN THE ENVIRONMENT DEPARTMENT (Rs. 30.00 Lakh)

Objective :

To provide infrastructure facility in the Department of Environment, Govt. of NCT of Delhi to handle the increasing workload on pollution issues.

To coordinate pollution control measures undertaken by various Departments in NCT of Delhi to control pollution.

To implement the Govt. policies and various schemes for conservation of Environment and control of pollution in Delhi.

In view of the increased level of work, separate Secretary (Environment, Forests & Wild life) has been posted. At present, this Department does not have required technical resources/staff and lacking personnel branches like Administrative, Planning, Accounts without which Environment Department cannot perform its functions as per allocation of Business rules. In addition, infrastructure, communication and mobility, facility like vehicles, computers, photocopier and other related materials would be required for staff. Hence, this scheme is of great relevance for strengthening the Department to perform its functions in a better way for which 27 posts of different categories are proposed.

Contents: Presently the existing staff of this department is getting salary under the Centrally Sponsored Scheme "Assistance for abatement of pollution in Delhi" funded by Ministry of Environment & Forest GOI, since 1987. Provision has been made for timely payment of salary of existing staff of Environment Department and posts to be created under the scheme.

Outlays & Expenditure

[Rs. in lakh]

a.	Approved Outlay 10 th FYP	600.00
b.	Expenditure 2002-03 to 2005-06	48.26
c.	Annual Plan 2006-07	Outlay 30.00
		Expenditure 23.76
d.	Annual Plan 2007-08	Outlay 30.00

4. ENVIRONMENT DATA GENERATION, SURVEY, RESEARCH PROJECT AND OTHER ACTIVITIES. (Rs. 35.00 lakh)

Aims & Objectives :

To conduct need based environment surveys, and data generation on continuous basis on Quantum of pollutants generated from sources such as industries, vehicles, thermal power stations and effect of hazardous, toxic waste on ground water and other water bodies. Further some specialized studies such as "Prevention and Control of Heat island effect studies" etc. which are required to be conducted as a part of Asian Network of Mega cities Project are proposed to be undertaken under the scheme.

Rise in population and growth in economic activity has led to overall increase in pollution in Delhi though rate of pollution has shown decline. To assess impact of pollution on human health and for the overall environmental up-gradation in Delhi, it is essential to update the environmental status through need-based survey on various aspect of pollution. This scheme will support such type of activities to generate environmental data from time to time, so as to formulate plans for control of pollution in Delhi.

Programme Contents

Need based projects on Environment will be identified and implemented Environment related studies on Delhi's Environmental issues would be carried out through NGOs, reputed consultancy organizations, Research, Academic institutions. Etc. by providing them necessary financial assistance.

Outlays & Expenditure

[Rs. in lakh]

a.	Approved Outlay 10 th FYP	160.00
b.	Expenditure 2002-03 to 2005-06	35.47
c.	Annual Plan 2006-07	Outlay 30.00
		Expenditure 13.37
d.	Annual Plan 2007-08	Outlay 35.00

Achievements

The following studies were carried out:

1. Life cycle Studies of Plastics Waste Recycling in Delhi.
 2. Waste minimization through recycling of biodegradable & non-biodegradable garbage.
 3. Pre-feasibility study for recycling tetra packs & other packaging material in Delhi through ECOGAS technology.
 4. Rainwater Harvesting: A costing & Extension Study.
 5. Industrial Pollution in Delhi: A study of Policy Option.
 6. Surface Water Quality & interaction of groundwater pollution in & around Delhi.
 7. Pre feasibility study on up-gradation of waste water from Nallahs by using aquatic plants (photoremediation) and extension of this technology.
5. **ECO-CLUBS IN SCHOOLS/COLLEGES (Rs. 180.00 Lakh)**

Aims & Objectives:

To create environmental awareness among the school and college students for environmental improvement and to inculcate the culture of Eco-friendliness among them.

Activities of the Eco-clubs are as under:-

- To motivate the students to keep their surrounding green and clean by undertaking plantation of trees by students.
- To promote eths of conservation of water by minimizing the use of water.
- To motivate the students to imbibe habits and life style for minimum waste generation. Source separation of waste, disposing off the waste to the nearest storage point.
- To compost horticulture waste to use it as a manure for school gardens.
- To induce the students to create awareness among public and sanitary workers to stop the indiscriminate burning of waste which causes respiratory diseases.
- To sensitize the students to minimize the use of plastics/ polythene bags. Not to throw them in public places as they choke drains and sewers. Being non-biodegradable they cause water logging and provide breeding ground for mosquitoes.
- To organize Tree plantation programmes in schools for which Delhi forest Department provides saplings free.

- To create awareness' on harmful effect of noise and air pollution caused by bursting of crackers on Diwali, which are manufactured basically by engaging child labour, exploitation of young children.
- To arrange other awareness programmes such as Quiz, Essays, Painting competitions etc. aiming at various environmental aspects.
- To educate the children about re- use of waste material & preparation of products out of waste.

Major components

1. More number of Eco-club in schools & colleges to be set-up in addition to the 1600 existing Eco-Cubs.
2. Eco-club are to be established in ITI's, Polytechnics, other technical institutes etc.
3. To organize teacher training workshops/seminars.
4. To provide educational and environmental awareness material to the eco-clubs.

Outlays & Expenditure

[Rs. in lakh]

a.	Approved Outlay 10 th FYP	500.00
b.	Expenditure 2002-03 to 2005-06	300.26
c.	Annual Plan 2006-07	Outlay 100.00
		Expenditure 99.03
d.	Annual Plan 2007-08	Outlay 180.00

6. Assistance to NGOs in the Promotion, Conservation and Preservation of environment (Rs. 35.00 lakh)

Aims & Objectives of the Scheme

To promote and assist various Non-Governmental Organization in the conservation, preservation of environment and pollution control activities and to implement various programmes of Environment Department through NGOs.

Programme contents

- Preparation of publicity materials and other necessary informative and educative material for distribution including video films, models exhibits etc.
- Preparation of various guidelines and other safety measures to be taken by the industrialist for the protection of the workers.
- Organizing drams/street plays etc., for educating general public, school children and industrial workers including pollution camp.

- Need based activities especially in the field of waste minimization; Rainwater harvesting will be supported. The existing gaps on Delhi's Environmental issues will be identified through this scheme.

Outlays & Expenditure

[Rs. in lakh]

a.	Approved Outlay 10 th FYP	100.00
b.	Expenditure 2002-03 to 2005-06	23.45
c.	Annual Plan 2006-07	
	Outlay	30.00
	Expenditure	28.02
e.	Annual Plan 2007-08	
	Outlay	35.00

Achievements

Following projects were carried out:

1. Mobilization & Participation of community People of Unauthorized Colonies in Participatory Waste Management of Uttam Nagar Area in Waste management.
2. Water Harvesting.
3. Minimization & Management of Solid Waste in Janata Flats Area of Vivek Vihar, New Delhi.
4. Multi Dimensional Approach Towards environmental friendly cities: Slum Community & Sanitation in Delhi.
5. Training hospital Staff on Issues Related to Bio Medical Waste.
6. Setting up Mini Waste Paper Recycling Units.

New Schemes

7. **Involvement of Weaker sections of society in improvement & upgradation of the environment (Rs. 25.00 Lakh).**

Aims and Objectives: -

This scheme will be implemented in association with Schools, NGOs and RWA. Under this programme, these agencies will be sensitized about the need to train the Rag pickers/waste pickers for proper handling in connection with the garbage collection. This is expected to have a better solid waste management at the local level and also improving environmental condition locally.

1. To involve the weaker section population towards environment improvement programmes.
2. Training as well as social security, hygienic facility, and safe waste handling to Rag pickers etc.

8. Introduction of cleaner extracting/recycling technology for E-waste and creation of E-waste disposal facility (Rs. 25.00 Lakh).

Aims and Objectives: -

This schemes aims to introduce cleaner extracting/recycling technology for E-Waste. For this, land will be acquired to develop a facility for E-Waste disposal. -Disposal of E-waste in landfills or by best-suited technology. To provide training to the personnel for safe handling & proper disposal of the E-waste.

An amount of Rs 25.00 lakh has been proposed for the Annual Plan 2007-08 (Revenue- Rs 5.00 lakh & Capital- Rs. 20.00 lakh)

9. Creation of Carbon Credit Facility (Rs. 25.00 Lakh)

The objective of the scheme is to create awareness regarding a carbon credits, CDMs and green house gas emissions amongst the various agencies engaged in environmental related projects. Under this scheme comprehensive analysis/studies will be conducted about cutting down green house gas emissions and making Delhi eligible for such carbon credit facility. To become eligible for getting carbon credit by various infrastructural development agencies.