

CHAPTER - III

APPRAISAL OF PERFORMANCE OF MAJOR PROGRAMMES

GANGA ACTION PLAN (GAP)

PHASE I

The Ganga Action Plan was launched in 1986. The main objective of the programme was to improve the water quality of river Ganga using a multi-pronged strategy and to be financed with 100k Central assistance. The Action Plan envisaged interception and diversion of waste water reaching the Ganga and installation of Sewage Treatment Plants for its treatment. It also included other pollution control activities such as solid waste management, installation of crematoria, river front development and provisions of low cost sanitation facilities. The Plan laid emphasis on public awareness and participation to keep the Ganga clean.

An apex body, namely Central Ganga Authority, was set up under the chairmanship of the Prime Minister to oversee the implementation of Programme and to coordinate the efforts of the various agencies involved at the Central and State levels. A Steering Committee under the chairmanship of Secretary, Ministry of Environment and Forests was constituted to consider the approval of schemes, annual allocation of funds and review of progress of implementation of schemes. A Monitoring Committee was also constituted to monitor progress of implementation of scheme. Ganga Project Directorate was set up as a part of the Ministry of Environment & Forests to service the Steering Committee, the Monitoring Committee and the Central Ganga Authority and to help coordinate the implementation of Ganga Plan.

Under the Ganga Action Plan Phase I, a total of around 261 schemes have been sanctioned of which 242 schemes have been completed. Against the revised cost of Rs.462 crores of GAP Phase I, an expenditure of Rs.425.56 crores as on 1.11.95 has been incurred.

By and large, the progress of the Ganga Action Plan has been satisfactory. However, there have been some delays in respect of some schemes particularly, sewage treatment plants and pumping stations due to problem of land acquisition, court cases, poor response from tenders, adverse law and order situation. As a result, the schemes have suffered cost escalations.

EVALUATION OF GANGA ACTION PLAN PHASE I

The evaluation of the Ganga Action Plan (GAP) Phase I by Experts from the Roorkee University, Aligarh Muslim University, IIT, Kanpur and All-India Institute of Hygiene and Public Health, Calcutta has been completed. The evaluation has concluded that, at the reduction of discharge of organic matter - a necessary first step in restoring the water quality - has been achieved to a fair level and the GAP as conceived and implemented is an appropriate programme for replication in other river basins also. It further recommends appropriate intervention to reduce the microbial pollution of the river, rigorous qualitative and quantitative characterization of the sewage for adopting the

most appropriate technology of treatment completed with resource recovery from the treated waste waters. The findings have been appropriately incorporated in the proposals of Ganga Action Plan (GAP) Phase II and National River Conservation Plan which have been approved by the Cabinet Committee on Economic Affairs. The findings of the evaluation of the rehabilitation of the turtles for biological control of pollution shall be available by the end of this year.

WORLD BANK AIDED INDUSTRIAL POLLUTION CONTROL AND PREVENTION PROJECTS (PHASE I & II)

World Bank Aided Industrial Pollution Control Project-Phase I 1992-97

The World Bank Aided Industrial Pollution Control Project had been prepared by the Ministry of E&F to utilize the support of the World Bank to prevent and alleviate environmental degradation caused by industrial operations. The project involves a line of credit of US \$ 155.6 million and counterpart fund of US\$ 108 million to be provided by GOI, State Governments, Financial institutions, (IDBI & ICICI) and by industrial units availing the loan. The agreement of the project was signed on 8.7.1991 and is expected to be completed during the end of 8th Five-Year Plan. The components of the projects and the status of implementation are as follows:

1. Investment component

a) Loan assistance to large & medium industries for installing pollution control equipment;

Under this component a sum of US \$ 100 million which was earmarked for providing soft loans to medium and large scale industries have been exhausted. This component is being handled by ICICI and IDBI.

b) Establishment of CETPs, for clusters of small scale units;

The Ministry has approved about 35 CETPs of which the IDBI has sanctioned term loans to 18 CETPs. The others are under process. For the financial year 1994-95 a sum of Rs.3 crores have been provided. Under this scheme GOI contribution is Rs 50 lakhs or 25% which ever is less.

c) Establishment of demonstration projects for introducing energy and resource conservation measures in the small and medium scale sectors.

2. Institutional development component

This component is designed to strengthen the monitoring and enforcement abilities of pollution control boards of 4 industrialized states of Gujarat, Maharashtra, Tamil Nadu and Uttar Pradesh. A sum of Rs 36 crores have been provided for this component which was initiated during 1991 and would complete by 1997. The following are the activities:

1. **Equipment** : Acquisition of analytical and monitoring equipment and other laboratory facilities of the Pollution Control Boards both at the Central and regional levels. The locations of the Central and regional level laboratories of the four Boards being strengthened under the existing project.
2. **Facilities**: In addition, the Project will also support the provision or refurbishing of laboratory facilities. This will include selected civil works and equipment to ensure adequate environmental control inside the laboratories, refurbishing of specialized rooms and a nominal provision for construction/augmentation including back-up power facilities, voltage regulator etc.
- 3 **Training** : The Project will assist the Pollution Control Boards of all States with the training particularly in the four major areas:
 - (i) quality assurance and quality control,
 - (ii) maintenance and operation training including safety issues for the proper handling of samples and equipment
 - (iii) specialized technical training;
 - (iv) supervisory training for management of the laboratories work and for development and implementation of pollution control strategies;

World Bank Aided Industrial Pollution Prevention Project Phase II,1995-2001

The objective of the project is to promote cost-effective Pollution abatement from industrial sources.

Project Description

The project will focus on the most polluting industrial sectors, as defined by GOI (17 industrial sub-sectors) and will comprise three components: (i) institutional; (ii) investment; and (iii) technical assistance

Institutional Component

This component is designed to support a program of strengthening of the State Pollution Control Boards in the States of Rajasthan, Madhya Pradesh, Karnataka, and Andhra Pradesh, which as a group constitute the next tier of industrialized states in India. In addition, support to SPCBs in the States of Gujarat, Maharashtra, Tamil Nadu, Uttar Pradesh will continue to be provided complementing the activities already sponsored through the first project, particularly as these relate to equipment and training for promotion and monitoring of waste minimization efforts and use of cleaner technologies. This component is distinct and separate from the activities sponsored under the first project. This component is designed to support: (i) a training program including consultancy services; (ii) acquisition of equipment required to upgrade the technical capabilities of the Boards; and (iii) other laboratory facilities. This component has been tailored to meet the perceived immediate needs of the SPCBs in the targeted States. This component will also support the development of a pilot program for the development of a

Geographical Information System (GIS) to track, monitor and control the release and disposal of hazardous residues at the Gujarat State Pollution Control Board (GPCB).

Training. The project will assist SPCBs with the training in four major areas: i) quality assurance and quality control; ii) maintenance and operation training, including safety issues, for the proper handling of samples and equipment; iii) specialized technical training on topics such as risk assessment, hazardous waste management and environmental chemistry; and, iv) supervisory training for management of the laboratories work and for planning and implementation of pollution monitoring strategies.

Equipment : The project will assist SPCBs with a program of improvements in analytical and monitoring equipment, designed to meet their minimum workloads. The support will be extended to the central and smaller regional laboratories in each state.

Facilities: The project will support the provision for refurbishing of laboratory facilities. This will include: minor civil works and equipment to ensure adequate environmental control in laboratories (humidity, temperature, ventilation); refurbishing of specialized rooms (such as fuming chambers, dust free rooms for trace level sample preparation, glove boxes' . for handling of hazardous waste samples) and the provision of laboratory space; and utilities equipment including back up power facilities, voltage regulators, and data processing equipment.

Geographical Information System: The project will also support the development of a pilot phase for a GIS, based in the Gujarat Pollution Control Board, to assist in the monitoring and tracking of toxic residues. The proposed project will assist in the financing of the hardware software and training requirements for the set up of the system in the central and some regional offices of the Board.

Investment component: This component is designed to support efforts by individual firms for pollution abatement, with a focus on waste minimisation and adoption of cleaner methods of production. Priority would be given to investments designed to adopt cleaner methods of production or reduce waste at the source.

Individual Treatment Facilities: The sub-projects presented by individual firms, can either consist of waste minimization, resource recovery, or pollution abatement and waste treatment schemes. Specifically, these projects would need to meet the following conditions: (i) only projects that address environmental concerns associated with the most polluting industries, as defined by CPCB (1989) are eligible for financing; (ii) priority would be given to innovative approaches not yet financed under the previous project; (iii) priority will also be given to projects with a clear demonstration effect and, significant replicability potential; (iii) all projects would require an environmental impact statement, identifying the nature of the problem to be addressed and the positive impacts of the actions proposed; (iv) projects would require statutory clearances from environmental authorities; (v) when examining projects that seek to control similar pollutants, priority will be given to the most cost effective approach. In addition, the following financial

conditions need to be met: (i) the sponsoring enterprises would have to meet acceptable financial benchmarks with respect to such indicators as debt-equity ratio, debt-service coverage, and liquidity ratio; (ii) all projects will be appraised by IDBI and would be required to meet appropriate tests of financial and economic feasibility, including sub-sector level analysis when deemed necessary.

This component also finances Common Effluent Treatment Plant (CETP) for cluster of small scale industries. Further a proposed project will also support treatment facilities and studies required for setting up of industrial water recycling plants. Under this support will also be provided for several municipal waste water recycling facilities designated to provide water to industrial estates.

A technical assistance component for setting up of clean technology institutional network and waste minimisation circle is also included in the Project.

Project financing: The total outlay of the project is US\$ 330 million equivalent including physical and price contingencies.

Promotion of Common Effluent Treatment Plant: This scheme has been designed to assist in setting up of Common Effluent Treatment Plants for clusters of small scale units. The financial assistance under this scheme is provided as follows:

Central Government	:	25% subject to maximum of Rs.50 lakhs
State Government	:	25% subject to maximum of Rs.50 lakhs
Promoters' share	:	20%
Loan component(IDBI)	:	30% (at concessional rate of interest from the World Bank line of credit)

Under this scheme assistance have been provided to clusters of tanneries, textile units, chemical units , dye and dye intermediates manufacturers and hotels.