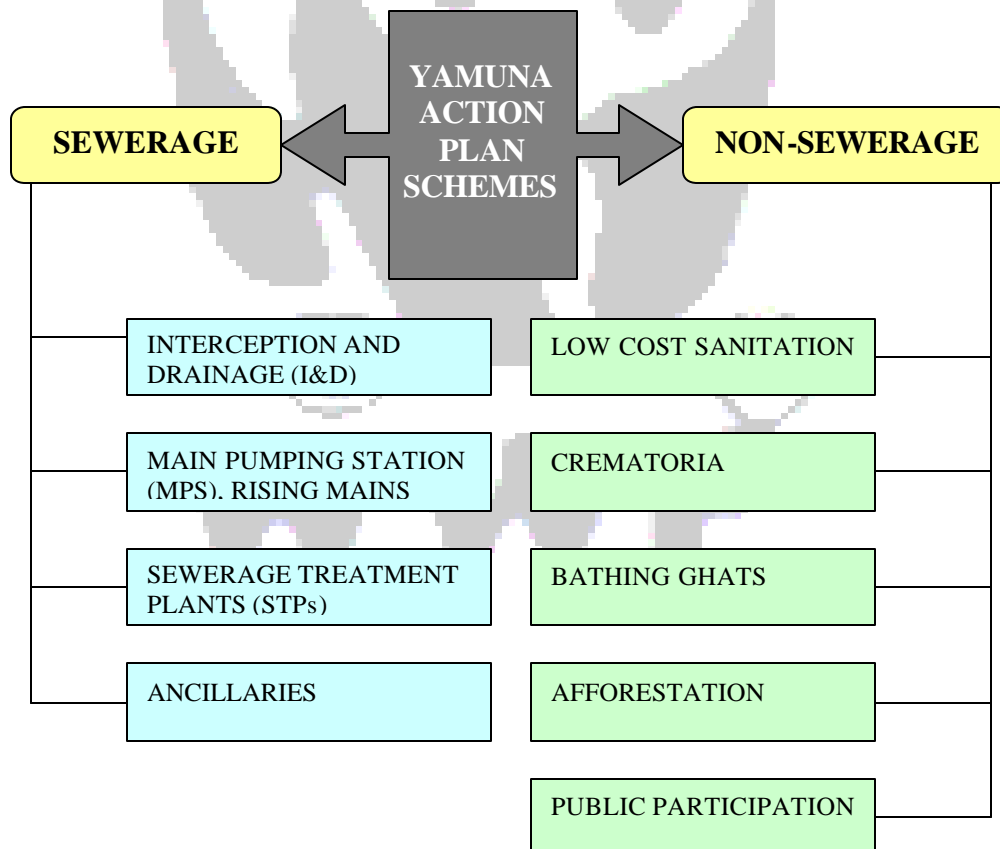


YAMUNA ACTION PLAN

Introduction: This plan envisaged protecting and preserving the River Yamuna from pollution via various schemes and plans. With the completion of the Phase-I, issues surround the project.....

- ❖ Yamuna Action Plan was conceived in early 1990's.
- ❖ Objective of Yamuna Action Plan: To stop drains from dumping wastewater into the 1375-km-long-river and to intercept and divert sewage.
- ❖ Financial assistance: in 1993, loan from the Japanese Government through Japan Bank for International Cooperation (JBIC). The bank gave Rs 480 crore for the entire Phase-I of YAP, of which Delhi received Rs 164 crore.
- ❖ Covered 8 towns in U.P., 12 towns in Haryana and Capital region.
- ❖ Project implementing agency in Delhi: Municipal Corporation of Delhi (MCD).
- ❖ Project duration: July 2000 – March 2003
- ❖ Involved 9 schemes:



Existing Scenario

- ❖ The 22 km stretch of Yamuna in Delhi gets polluted from toxic effluents from factories and power stations, 17 drains, open defecation, half burnt bodies and carcasses, cattle and human bathing etc.
- ❖ According to Central Pollution Control Board (CPCB), river water of category E, making it fit only for recreation and industrial cooling purposes. It is unfit for wildlife, fisheries and drinking.

Daily sewage generation in Delhi: 2871 million litres.

Sewage treated: 1478 million litres

Remaining sewage: goes into the Yamuna through the 17 drains.

Content of suspended solids in Yamuna – 1,000-10,000 mg

Permissible content of suspended solids – 100 mg

Biochemical Oxygen Demand (BOD) – 15 – 30 mg per litre

Normal BOD level – 3 mg per litre

Content of Coliform level in Yamuna – 11.8 crore per 100 ml of water

Permissible content of Coliform level – 5000 per 100 of water

Coliforms cause many serious diseases relating to the digestive system.

Dissolved oxygen level in Yamuna – 0

Normal oxygen level – 4 mg per litre

The dissolved oxygen level is critically important for water plants and fish.

Delhi's drinking water requirement – 1480 cusecs

Available drinking water – 1221 cusecs

Existing forest cover: 10.2% of the total area

Required forest cover: 33% of the total area

Air Pollution: RSPM levels 3 times higher than normal, CO levels are twice the permissible standard.

Existing Scenario of Yamuna Action Plan in Delhi

A. Sewage Treatment:

- ❖ The river was supposed to be cleaned by ensuring no-entry of untreated sewage. 744 million litres/day (MLD) of sewage was proposed to be intercepted and treated before it enters the river.
- ❖ Mini and micro sewage treatment plants (STPs) were envisaged at a cost of Rs 9.81 crore.
- ❖ The 4 mini STPs are functioning at 30-40% efficiency. The 10 micro STPs are yet to begin operations since they haven't been electrified so far.

B. Community Toilet Complexes (CTCs):

- ❖ JBIC gives the Ministry of Environment and Forests (MoEF) Rs 164 crore to build adequate toilets for Delhiites, especially slum-dwellers to dissuade open defecation.
- ❖ 1150 CTCs with 30,000 seats were to be built by MCD. Work began in July 2001 i.e. a year after the project was intercepted.
- ❖ 953 CTCs with 26,870 seats were constructed near JJ colonies on and along the riverbank at an estimated cost of Rs149.38 crore. Less than 40% of these toilets have been opened for public. Also, 40% of the CTCs opened are not connected to sewage lines and empty directly into the Yamuna, thus defeating the very purpose of the YAP. Furthermore, 17000 of these built seats have no water or power connection and are ill maintained.
- ❖ 9000 odd CTCs are supposed to be operated by private firms, NGOs etc but are shut instead as they are loss-making proposition for the organization. NGOs over-bid for the CTCs in the open auction by the MCD and now the people are not willing to pay Re 1 also, thus forcing the NGOs to keep the CTCs shut.
- ❖ Meanwhile, open spaces are still being used for urination and defecation, with toilets right outside the colonies, locked.
- ❖ Many CTCs are constructed arbitrarily without any need-assessment surveys as problems like unbalanced distribution of toilets, unsuitable location of toilets etc prevail.
- ❖ Toilet blocks in Delhi: The Central Zone of the MCD has 35, City Zone has 16, Civil Zone has 112, Karol Bagh has 36, Najafgarh has 215, Narela has 8, Rohini has 85, Sadar Paharganj has 34, Shadara-North has 75, Shadara-South has 40, South Zone has 45 and West Zone has 50.

C. Mobile Toilet Vans (MTVs)

The MCD got 180 MTVs at a cost of Rs 4.10 crore, which was part of the Rs 149.38 crore used for making 953 CTCs.

D. Iron Grills

Were put across the Yamuna bridges, prohibiting people from throwing anything and everything into the river.

E. NGO

A coordinating NGO Accord was given 2.16 crore to create awareness and encourage slum dwellers to use the CTCs.

Issue

Building toilets to reduce pollution in the river is a baseless solution because the key lies in intercepting the sewage for treatment. Latest samples of CPCB from Palla (where river enters Delhi), Nizammudin and Okhla reveal that there has been no change in the quality of Yamuna water since the past 2 years.

Faults

- ❖ Some drains that dump wastewater into the Yamuna are not intercepted and so some new pollution points have come up. Problem areas: Muzaffarnagar, Yamunanagar, Agra and Faridabad.
- ❖ Installed STPs are functioning inefficiently and erratically, as the wastewater to be treated does not reach it.
- ❖ Frequent power cuts stall work,
- ❖ CTCs have problems like not being connected to sewage lines, high charges etc.

Other Plans to Control Pollution in Yamuna

A. Common Effluent Treatment Plants (CETP)

The Delhi government promised to set up 15 CETPs five years back, only 2 have been commissioned so far.

B. Anaerobic Sludge-Blanket Reactor

As an immediate measure to stop pollution in the river this state of the art machine will be used simultaneously with CETPs. These reactors are successfully operational in Germany, Columbia, Norway and the Netherlands, checking the contamination.

C. Dredge utility crafts (DUC)

The Delhi Government spent Rs 26 lakh on the DUCs that are best suited to move the silt in the bed. Each DUC is capable of taking out 180 cum of silt in

6 hours. The silt brought out will be recycled as manure for cultivation purposes.

D. Clearing Of Yamuna Slums

The Delhi High Court directed the concerned authorities (DDA, MCD, PWD, DJB, and Central Government) to remove all illegal, unauthorised constructions, including places of worship on Yamuna bed and its embankment within 2 months from March 2003. The never-ending drama of illegal encroachment needs to be stopped.

E. Clean Yamuna Drive

Announced by Delhi Chief Minister Sheila Dikshit, volunteers help dean up the riverbed. MCD participates by helping dump the dirt to the Bhalswa dumping ground.

F. National River Conservation Plan (NRCP)

The NRCP covers 157 towns and 31 stretches of polluted rivers in 18 States. Approved cost of the project – Rs 4064 crores, of which the Centre's share is 3464 crore. 763 projects worth Rs 2640 crores have been sanctioned under the plan, of which 338 have been completed.

Objective: to maintain the quality of the water of the major rivers through the implementation of various pollution abatement schemes.

The river-cleansing programme was started with the Ganga Action Plan (GAP) in 1985 to GAP-II in 1995 before being merged into the NRCP in 1996. Governing Body: National River Conservation Authority (NRCA)
Target: to clean all major rivers by 2007 and others by 2012.

Budget: Rs 1417 crores approved under the Tenth Plan to be revised to Rs 1825 crore later.

Issues

- The authorised construction of the Akshardham Temple on Yamuna's riverbed in Delhi, when the Delhi High Court wants the clearing of the river bed in 2 months.
- The age-old custom of throwing sacred things into the river Yamuna cannot be suddenly stopped in a country that boasts of its rich cultural heritage and customs.

Outcome of Yamuna Action Plan

Haryana fares better than U.P. as infrastructure work has been completed and is working well, with plants having insufficient sewage to treat. Treated effluents are discarded into drains or canals and biogas utilization is poor. In both states improved wood-based crematoria haven't taken off which were intended to reduce the wood use and time taken by half.

In Delhi, the plan's outcome is yet invisible, even after so much money has gone into it. The feasibility study of the project has played a very negligible role in the whole operation. Due to this, the project defies the very role it was meant to play.

WWF-India as an ENVIS Centre/Node has been keeping a tab on the media activity on environment related issues and carries out analysis on different issues in media.

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