

YAMUNA ACTION PLAN

Yamuna starts from Uttarakhand and travels via Himachal, Haryana, Delhi and U.P and eventually merges into Ganga at Prayag, Allahabad. Several thousand crores rupees have been spent on purification of Yamuna but to no avail. I will try to sum up the whole issue in the coming paragraphs.

- Root cause of Yamuna Pollution.
- Need for comprehensive study and assessment of the extent of pollution in different states.
- Pollution causes and suggested solutions.
- Municipal untreated sewage.
- To Increase and ensure Fresh Water inflow into Yamuna.
- Other remedial measures like constant dredging and aeration of water and developing the River fronts
- Administrative and Control Measures
- Involve Volunteers, Students, Ex servicemen, NGO's

A. Root cause of Yamuna Pollution

The following factors have been responsible for killing the Yamuna River:

- **Apathy of the State Government(s) involved.**
- **Corrupt Water Pollution Board officials.**
- **Callous attitude of industry and mindless profiteering.**
- **Lack of involvement of people.**

The rivers should be declared as a National Resource and this subject should be handled purely by the Centre only. The requisite calibre required for handling this subject is missing in the State Governments.

B. Need for comprehensive study and assessment of the extent of pollution in different states

Right from the beginning, the Centre has been pumping money into cleaning of Yamuna without assessing the needs of Yamuna.

You cannot revive a tree without watering its roots. Uptil now, the efforts have been to wash the leaves of the tree without caring for the roots. The trouble of Yamuna starts much before it enters Delhi. The entire stretch from Paonta Saheb till Delhi is dotted with industries and small cities and towns situated on the banks of Yamuna which add generously to the miseries of the Yamuna.

We also need to study the effect of reckless farming with highly dangerous chemicals which eventually get mixed up in Yamuna thru rain water.

We need to undertake study of Yamuna and its tributaries right from Uttarakhand uptil Prayag. The small or big drains adding to these tributaries and Yamuna must be identified and we should undertake aerial imaging and also satellite imagery of these drains/nallahs to assess the pollutants being added through them. It is easier to deploy high technology and assess the pollutants.

C. Industrial Pollution causes and suggested solutions:

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There are lot of industries like distilleries, paper mills, and metal working units, chemical plants, electroplating units, PCB units, automotive ancillaries, textile dyeing units and leather tanneries which add to the woes of Yamuna.

Causes:

- Greed
- Lack of Training
- Lack of Awareness
- Lack of Treatment Plants

Suggested Solutions:

- State should ensure implementation of pollution norms by large units.
- ZERO DISCHARGE POLICY should be evolved and implemented.
- Working on PPP basis, specialised companies be entrusted the job of treating the outlet water in the common Industrial Areas and all the units should be connected with the ETP through pipeline on pay by use basis.
- Units scattered outside the Industrial Areas should be encouraged to send their pollutants through tanker basis to the common ETP.
- Where none of the above is possible then, units should be closed down and rehabilitation of that unit should be done by providing seed capital and training.
- It should be mandatory for the owner of the polluting company to undergo training for minimum 2 hours every month on pollution treatment.
- The State should ensure implementation of training program on real time basis through software otherwise his pollution clearance should be suspended.
- State should have a battery of trainers on various industries to train the owner's and senior staff on that particular subject.
- In all the concerned states and cities, exhaustive survey should be undertaken with the help of industries department, pollution department, industries association and prominent citizens of the city concerned. This will help in assessing the type of pollution treatment plants needed and the size of the plants can also be determined.
- Further, we can shortlist certain plant suppliers and approve the standard plant rates for different capacities which the industries can buy out as readymade modules. The procedure for pollution approval needs to be simplified.
- Also, independent surveyors and assessors should be deployed to keep checking the pollution levels of the city as a whole.
- We should rope in Celebrities to this cause as '**YAMUNA MITRA**'.

D. Municipal Untreated Sewage

The Municipal Committees, Counsellors and Administrators should be trained and sensitized on the issue of water pollution.

The city, its location and proximity to the rivers and geographical slope and mean sea level of the city must be considered at the time of planning the raw sewage treatment requirement for the city.

It is better to have primary treatment of sewage in the residential sector itself and only the residual sewage should go for common treatment plants. The soak pits etc should be planned for every street individually.

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In the new planning, every house should have dual pipe line for sewage and another one for kitchen and washing areas. Further, this water should be recycled 2-3 times for gardening and general washing areas.

The city sewage treatment plant must take into account future population growth.

The older cities where this type of planning is not feasible should have a sufficient capacity of drain which should pump away this sewage before it joins the main river. The sewage treatment plant should be of continuous treatment type, not of batch type. The city sewage pipelines and rainwater drains should be separate.

Similarly, house owners should be given incentives to install rainwater harvesting system.

Waste to energy plants should be set up with the City Municipal Committees.

E. To Increase and Ensure FRESH WATER FLOW in Yamuna.

At this moment, there is hardly any water left in the Yamuna after eastern Yamuna canal and western Yamuna canal are bifurcated from Yamuna at Tajewala Head works.

There was a proposal sometime back to construct Kissau Dam and Lakhwar Dam upstream of Yamuna and Tons River which is a major tributary to Yamuna. While Kissau Dam proposes to produce 660 MW power and it is a gravity dam, the cost of the dam is around 7000 crores and Lakhwar Dam, the potential is 300 MW. 90% cost of the Kissau Dam is to be borne by Central Government and the project will be operational by 2023. This project would mean that throughout the year, Yamuna will have around 12000 cusecs of water. This will ensure that whatever residual pollution comes to Yamuna will be constantly washed away and whatever treatment is given to the pollutants will be effective in keeping the Yamuna in good health.

F. Other Remedial Measures like constant dredging and aeration of water and developing the River fronts

We need to give a serious attention to give constant dredging efforts to Yamuna. This will ensure that depth of water is maintained at all levels in Yamuna. Further, dredging will ensure that Yamuna can be utilised as a regular in-land waterway for carrying heavy loads

and save lot of fuel. The increase in the depth of Yamuna river, would also mean less flooding since water carrying capacity of Yamuna will increase.

We should plant millions of trees upstream of Yamuna to ensure that sand and gravel erosion of Yamuna in the catchment areas is reduced.

The aeration of Yamuna waters should be done through huge aeration units and fountains. It will have dual purpose of reducing the pollutants, increasing the oxygen level and providing good scenery and landscape near the cities.

We can also think of developing river fronts in all the cities along the way which will give a decent boost to the city skyline and tourism. Further, the real estate along the banks of Yamuna shall give the citizens a decent economic boost.

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G. ADMINISTRATIVE AND CONTROL MEASURES

Separate administrative establishments should be set up to clean and maintain Yamuna.

The Central Administrative setup should have State-wise establishment of its own. The State Pollution Departments have miserably failed in performing the task of cleaning Yamuna. Some functions of the State Pollution Boards should be merged in this Central Establishment which should be present State wise. It should be headed by a Senior IAS or Politician with a Cabinet rank person.

The waters of Yamuna must be constantly analysed through sensors for vital parameters and the same data should be fed to the central website through satellite links.

The sensors should be installed before the city and after the city. If there is any marked deterioration in the waters, then the municipal establishment shall be responsible for that. The law should provide state establishment with sufficient powers for prosecution, penalising and seizure.

We can also take the technical help from countries like UK which have improved the dead rivers like THAMES into a lively river.

I am sure that with these measures in place and water from Kissau dam flowing in Yamuna, we can be reasonably sure of having clean water in Yamuna from Himachal till Prayag. Also, the drinking water problem of Delhi State will be solved.

H. Involve Associations, Volunteers, Students, Ex servicemen, NGO's:

We should involve Volunteers, Student organizations, Ex Servicemen and NGO's as Yamuna Rakshak Dal members.

We can also rope in Technologists, Scientists and foreign Countries in this effort.

Money can never be a hurdle in this Mission, although our capabilities to move forward can certainly be a hurdle.

This enrolment should be done after giving wide publicity to this scheme.

I shall be glad to elaborate on this whenever you desire to have a meeting on this subject.

Regards
Deepak Jain
099907 49200
098100 97267

+91 9990749200,
+91 98100 97267

jain.deepak1857@gmail.com