

# **ABATEMENT OF POLLUTION AND CONSERVATION OF RIVER YAMUNA**



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# Importance of Water/ River

- In moon or mars, one searches for water.
- It is because it supports the entire life system or biodiversity.
- All civilisations across the globe had been raised around the river stretches.
- This in itself explains the importance of water.
- Water is technically a renewable resource as it can be used over and over again and has a rain cycle.
- However, it is to be used in sustainable manner so that same opportunity for use is available to the future generations also.

# YAMUNA- THE LIFELINE OF DELHI

- Yamuna is a sacred river and is the most important tributary of Ganga.
- It originates from Yamunotri glacier.
- Important pilgrimage centers like Yamunotri, Paonta Sahib, Mathura, Vrindavan, Bateshwar & Allahabad (now Prayagraj) are located on the banks of the river.
- In Indian mythology Yamuna is referred as the daughter of the Sun and sister of Yama.
- The baby Lord Krishna is believed to have been born on the bank of this river and is said to have freed Yamuna from “Kalia Nag.”

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- The Yamuna's basin is one of the most fertile and high grain yielding river basins in the country and a boon for agriculture.
- River Yamuna is a 1,376-Km long perennial river and traverses through various states such as Uttarakhand, Himachal Pradesh, Haryana, Delhi and Uttar Pradesh.
- Apart from the capital city of Delhi, many large urban hubs and cities like Yamuna Nagar, Panipat, Sonapat, Gautam Budh Nagar, Faridabad, Mathura, Agra and Etawah are situated on the river's banks.
- Yamuna is the lifeline of Delhi as its water is being harnessed from both of its banks for domestic, industrial and irrigation purposes. To meet the ever-growing water demand of the city, the river is tapped at three points-Wazirabad, ITO and Okhla barrages.

## Sources of pollution:

- Untreated sewage
- Domestic waste water
- Industrial effluents,
- Dumping of construction malba,
- Unchecked disposal of solid waste (garbage, plastic, tins, aluminium foil, etc),
- Religious offerings, idol immersion
- Use of chemical fertilizers/pesticides in the flood plains for agriculture and daily activities like bathing, washing clothes, bathing of animals, etc.
- Open defecation

# MITIGATION MEASURES

- Control measures in respect of Idol Immersion: Idol Immersion to be done in artificial ponds instead of river
- To make idols with the natural or harmless ingredients such as the chocolate, jute, and other eco-friendly material.
- Delhi Pollution Control Committee (DPCC) Directions dt. 05.07.2019 regarding idol immersion should be followed. CPCB has issued revised Idol immersion Guidelines in May 2020 which will come in force on 01.01.2021
- Check on encroachment of flood plains and conduct flood plain conservation activities
- Check Dumping of wastes in Drains and river
- Open defecation to be checked and sufficient public conveniences/ mob. toilets to be provided.
- Plantation activities and conservation of biodiversity

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## MITIGATION MEASURES CONTD...

- To ensure installation of rain-water harvesting structures in all buildings having plot size 500 sq. m and above.
- To check flow of untreated sewage into drains/ River Yamuna through sewerage networking.
- To ensure septage management in the unsewered areas as per septage regulations of Delhi Jal Board.
- To take action under Polluter Pays Principle.
- Repair and maintenance of Drains and sewerage network.
- Use of treated waste water for horticulture.
- To ensure that all the water polluting units have installed effluent treatment plants.

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## MITIGATION MEASURES CONTD...

### Good Irrigation Practices:

- To adopt inter-cropping and multiple-cropping to get maximum returns per unit of area and per unit of time with optimum use of water.
- To adopt Sprinkler and drip irrigation system to irrigate their crops for conservation of water.
- Farmers to conserve rain water, by adopting deep ploughing and bunding etc. of their fields for conservation of water.



## FLOW IN RIVER YAMUNA

- There is negligible flow in the river downstream of Wazirabad during lean season/ summers.
- Environmental Flow is required to boost the dilution of the river Yamuna in Delhi.
- River needs water to assimilate our waste.
- Every river has a self cleansing capacity of the river. Flow of the river, sunlight and presence of aquatic flora and fauna, microorganisms naturally cleanse the water of a river.
- Therefore, water for dilution is essential for Yamuna also.
- We all can contribute by practising water conservation.

# DOs & DON'Ts:

## DOs

- Conserve water. Follow the principle of reduce / reuse/ recycle while water usage.
- Use mug instead of running the tap while brushing teeth or shaving.
- Take shorter showers to reduce water consumption.
- Check your water bill to see how much water you are using.
- Encourage rooftop rain water harvesting and recharging wells/tanks.
- Kitchen waste water should be used for watering plants and other non-potable uses.
- Establish community nursery by using waste water.
- Plant trees
- Sewer connections should be obtained by each and every house-hold in areas where sewer network exists.

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## DOs contd...

- Remain vigilant so that no septic tank waste is discharged into the drains and should report any such incident. Septic tank waste is to be discharged at the designated points identified by DJB as per DJB Septage Regulations.
- Promote the use of non-toxic liquid disinfectant and cleaners.
- Practice Waste Segregation at household level. Bio-degradable and non-biodegradable waste should be put in separate bins and no waste should be littered or thrown in drains.
- Practising recycle and reuse. Make compost out of vegetable peels and other food wastes which can be recycled for use as manure. If space does not permit, try this in pots/ containers.
- Stop chemical pollution – if you notice someone throwing chemicals into the drains/ river or water bodies, or hear about such an incident, inform your local authorities about the matter.

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## DOs contd...

- Say no to single-use disposable plastics, Carry a reusable bag (cloth bag) when shopping.
- Plant trees in your locality and ensure their survival. Planting of trees and shrubs in garden, balcony, roof top or a terrace garden provide shelter to birds and helps in conserving urban biodiversity
- Make sure your home is free from water leakage. Maintain and repair plumbing fixtures regularly.
- Follow DPCC directions while performing Idol Immersion during Ganesh Utsav and Durga Pooja.
- Idol immersion to be conducted in artificial ponds with eco-friendly idols.

## DON'Ts

- Do not discharge contaminated water in drains/ water bodies/ river.
- Do not throw plastic, garbage, religious material and other wastes in river Yamuna.
- Do not litter near water bodies including lakes, ponds, drains and river.
- Do not block/stop natural drains by constructing on drain or dumping wastes in the drain.
- Do not waste – WATER, it is a precious life supporting .
- Do not immerse idols made of Plaster of Paris and baked clay or painted with chemical/heavy metals based paints.
- Do not let overhead water-tanks to overflow. Switch off water supply when they are full.
- Do not wash your car with a hose pipe.

# ECO-CLUB MESSAGE

- NOT TO THROW ANY WASTE MATERIAL INTO RIVER OR RIVER BANKS AND DRAINS.
- NOT TO THROW POOJA SAMAGRI MATERIALS IN THE RIVER.
- STUDENTS TO MAKE ECO-FRIENDLY IDOLS.
- CARRY OUT PLANTATIONS IN YOUR VICINITY ATLEAST ONE TREE PER STUDENT.
- CONSERVE WATER THOROUGHOUT THE YEAR. DO ONE THING EACH DAY TO CONSERVE WATER
- REUSE OF TREATED WASTE WATER IN SCHOOLS FOR GARDENING FROM NEARBY SEWAGE TREATMENT PLANT.
- INSTALLATION OF RAIN WATER HARVESTING IN SCHOOLS.
- STUDENTS TO SPREAD THE MESSAGE OF WATER CONSERVATION AMONGST THEIR FRIENDS.

**REDUCE  
REUSE  
RECYCLE...**



**...AND CONSERVE WATER  
EVERY SINGLE DROP COUNTS !**

**THANKS**