

3. NGT Issues Ultimatum to Ban Certain RO systems

Prelims: National Conservation & Mitigation

Mains: GS-III Conservation, Environmental Pollution and Degradation

Why in News?

- The National Green Tribunal (NGT) has given an ultimatum to the Union Environment Ministry to issue notifications pertaining to prohibition on the use of RO (reverse osmosis) systems, which result in wastage of almost 80% of water.

Background:

- The NGT has passed an order this year (May 2019) to Environment Ministry to issue notifications pertaining to prohibition on the use of RO systems. But the ministry is not in compliance of the above order till now.
- NGT has noted that delay in compliance of order is causing harm to public health and environment in terms of an expert committee report to which the environment ministry is also a party.

About NGT's Order:

- The notification should be based on the following directions as issued by NGT:
 1. Wherever RO is to be permitted, condition of recovery of water to the extent of more than 60% is required.
 2. Prohibiting the use of RO where Total Dissolved Solids in water is less than 500 mg/l.
 3. Use of RO reject water for purposes such as utensil washing, flushing, gardening, cleaning of vehicles and mopping.
- NGT has also observed that, since issuing notification is a policy related matter which comprises of features of multi-dimensional character, a region wise detailed consultation should also be conducted before notification.

What is Reverse Osmosis (RO)?

- It is a water purification process that uses a partially permeable membrane to remove ions, unwanted molecules and larger particles from drinking water.
- In reverse osmosis, an applied pressure is used to overcome osmotic pressure, a colligative property, that is driven by chemical potential differences of the solvent, a thermodynamic parameter.

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- Reverse osmosis can remove many types of dissolved and suspended chemical species as well as biological ones (principally bacteria) from water, and is used in both industrial processes and the production of potable water.

About NGT:

- The NGT was established in 2010 under the National Green Tribunal Act
- It is a specialized environmental court that deals with cases relating to environmental protection and the conservation of forests
- It has judicial powers that allow it to exclusively decide civil environmental matters.
- The tribunal is guided by principles of natural justice and is not bound by the mainstream code of civil procedure.
- The NGT has five places of sittings, New Delhi is the Principal place of sitting and Bhopal, Pune, Kolkata and Chennai are the other four.

