Chennai Floods: TN's Long-term Solutions to avoid Monsoon Woes

What is the issue?

Tamil Nadu is reeling under the fury of the northeast monsoon with heavy floods forcing a near shutdown in Chennai and fears over the floods of the scale it experienced in 2015.

What is the similarity between the events leading to the 2015 floods and the current northeast monsoon?

- Filling up of reservoirs.
- Clogging up of drains preventing the percolation of rainwater.
- A low depression across the Bay of Bengal.
- Heavy rainfall - The city received 399 millimetres rainfall in five days in 2015 while this year it recorded 200 mm in one night.

What reasons were attributed for the present situation?

- An extreme weather event has been pointed out as the major cause for Chennai flood.
- Tamil Nadu’s coastal districts get 60% of the annual rainfall and the interior districts get about 40-50% of the annual rainfall from the North East monsoon.
- **Inadequate and unscientific construction of stormwater drains** - For instance, a SWD project came under criticism as it was constructed on the seaward side of the East Coast Road, where the easy natural percolation of water prevents the need for artificial systems.
- **Encroachment of water bodies** - Pallikaranai wetland is where residential colonies, institutional areas and even a large garbage dump have been built.
- Over 300 lakes, tanks and canals have disappeared in the past decades and, according to the administration, over 1.5 lakh illegal constructions choke the cityscape.
- **Poor reservoir management** – Absence of desiliting of reservoirs, por water management, etc. added to the cause
- **Unplanned growth of the city** - For instance, the shopping hub of T

Nagar was built on a lake bed and the city airport came up on the floodplains of Adyar.
- A mass rapid transport system has severely restricted the flow in Buckingham Canal, which was designed also as a protective barrier against floods and sea ingress.

What efforts have been taken?

- **Preparedness** – IMD has issued recurrent alerts and its early forecast warning has significantly reduced the losses unlike 2015 floods when over 400 people died.
- The corporation seems to have revised the 2017 City Disaster Management Plan and posted an improved version as the City Disaster Management Perspective Plan (CDMPP) 2021.
- **Efforts of Greater Chennai Corporation (GCC)**- GCC has been more proactive than the responses during the 2015 floods.
- Contact details have been posted in GCC website to allow access to information and responses rather than solely depending on Rippon building (GCC office).
- A flood grievance redress mechanism has been established by GCC
- **Leadership** - Both the chief minister and GCC Commissioner have been taking stock of the situation from ground-zero as well as reaching out to vulnerable communities in distress.
- **Relief** - Over a hundred relief centres in 15 risk zones for sheltering affected people as well as rendering immediate rescue and relief services are provided.
- All schools under GCC are being opened for accommodating flood-affected people.
- Rescue boats are kept on standby at all risk zones and NDRF teams have been deployed for the rescue operations.
- Food and medical supplies are being arranged and several community kitchens have been made operational.

What has to be done to reduce the losses from such events in the future?

- Chennai will have to reclaim at least a part of its lost water spaces and preserve whatever is left in order to better withstand the extremities of climate-change-induced weather events.
- The State Government should look for durable solutions to the city’s long-standing woes and executing them in a short span of time.

- The people should be responsible enough in ensuring that the waterbodies and drains are not turned into dumps.
- The case of Chennai should be a reminder and evidence of the statement made in the Sixth Assessment Report by the IPCC that "**unpredictability of climate moods is the only predictable truth**".

References

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