Dams and Damages

Why in news?

The recent Uttarakhand flash flood is not a natural disaster as it claimed to be.

What is the cause for the flash floods?

- Two hydropower projects- 13.2 MW Rishiganga and NTPC's 520 MW - which are located close to Reni are found to be the cause.
- The use of explosives for dam construction, construction of other infrastructure projects such as roads in the fragile Himalayan State is the root cause.
- In June 26, 2019 Uttarakhand High Court order questioned the use of explosives on the Rishiganga site — that too for illegal mining in the name of dam construction.
- Moreover deforestation takes place when dams are constructed & compensatory afforestation norms are often flouted.
- The construction material which is supposed to be dumped on separate land is often dumped into the river which blocks the stream's nature path.

What does Chopra Committee say about in 2013 floods?

- The committee was formed in October 2013 after the Supreme Court ordered the Union Environment Ministry to constitute an expert body to assess whether dams exacerbated the 2013 floods
- The report mentions that dams aggravated the 2013 floods as riverbeds were already raised from the disposed muck at the dam construction sites.
- Hence it could not contain the sudden increased flow from floodwaters.
- It proves that dams are not only damaged in floods but also cause immense damage in downstream areas due to increase in the destructive capacity of the water.
- It suggested that 23 of the 24 proposed dam projects which it reviewed needs to be cancelled due to the potential damage they could cause.
- In an affidavit submitted on December 5, 2014 in the Supreme Court, Ministry of Environment acknowledged the adverse impact of dams in the 2013 floods.
- However, even after all these years, the matter remains pending in the Supreme Court and environmental norms for dam construction continue to

be flouted in Uttarakhand.

How does climate change impact the ecosystem?

- Himalayan glaciers are receding and disintegrating due to climate change and the snow cover in the Himalayas is thinning.
- Research shows that there will be increasing number and volume of glacial lakes due to increase in temperatures.
- This means there will be rapid increase or decrease in the reservoir water level in the dams & the projections on the life of a dam reservoir may not stand due to erratic events such as floods.
- This could rapidly fill a reservoir with muck and boulders brought along with the floods.
- And there is also the threat of earthquakes as Uttarakhand lies in Seismic Zone-IV (severe intensity) and Seismic Zone-V (very severe intensity).

What can we infer from this?

- Ignoring these threats many dams are constructed as a source of revenue in zones that are under high risk of witnessing severe earthquakes.
- Now the State plans to construct up to 450 hydropower projects of 27,039 MW installed capacity ignoring the disastrous impacts of rampant dam-building.
- It is clear that dams worsen disasters which is ignored by the State authorities is unfortunate one.

Source: The Hindu