

Cauvery Delta Region Shrinks

Why in news?

\n\n

Recent study concluded that the Cauvery delta region has shrunk and the cultivable lands are increasingly deteriorating into waste lands.

\n\n

What was the grim picture presented?

\n\n

\n

- The researchers have tracked land use and changes to land cover to show that the delta region has **shrunk by 20%**.

\n

- It is due to anthropogenic factors such as diversion of land for non-agricultural purposes, as well as factors linked to climate change.

\n

- The drastic reduction in crop cover and a **13-fold increase in wastelands** between 1971 and 2014 indicate a worrisome phenomenon.

\n

- The study also reported the increase in mangrove cover (14 times since 1971) in the region as **sea water ingress** (entering) has grown in the coastal areas.

\n

- This means more and more cultivable agricultural land is coming under sea water and **the soil is turning saline**.

\n

- Due to sea water ingress, there has been a substantial rise in shrimp farming along the coast, which is detrimental to agricultural practice.

\n

- With 72% of the low-lying land in the State falling under the delta region along the coast, the land is at greater risk of submergence as a result of rising sea levels.

\n

- The Cauvery delta has witnessed a **decline of 80% in sediment deposit** over the last century.

\n

\n\n

What are the major concerns?

\n\n

- \n
- A noticeable consequence of climate change has been **the cycle of drought and flood** that coastal areas have been enduring.
- \n
- The rain occurs within a span of a few days, resulting in heavy flooding.
- \n
- The fields get flooded and the crops are destroyed.
- \n
- On the other hand, there is the prevalence of droughts.
- \n
- All these factors have resulted in a **drastic reduction in land under crop cover**.
- \n
- Also, the delta region has clay soil, of which **52% is cracking clay**, which is very vulnerable if it doesn't receive continuous irrigation.
- \n
- The study also points to **the decline of dairy** as a secondary occupation, with the cattle population registering a steep decline.
- \n
- With the Cauvery delta region accounting for 30% of the food grain production in the State, it is imperative that the crisis needs to be solved sooner than later.

\n

\n\n

What are the government interventions?

\n\n

- \n
- **The Tamil Nadu State Climate Action Plan**, drafted in 2014, anticipates many of the challenges that the report has raised, and envisages a slew of measures to make agriculture sustainable.
- \n
- Promotion of drought- and flood-tolerant varieties of paddy, micro-irrigation to promote efficient use of water and use of bio-fertilizers to improve soil health are among the proposals.
- \n
- However, there is **no clarity** on the extent to which these proposals have been incorporated in government interventions.

\n

- Several schemes have been announced by the State for the farmers' welfare, it remains unclear as to who is benefitting from them.

\n

- State has placed greater focus on promoting efficient use of water in agriculture through the expansion of the **System of Rice Intensification (SRI)**.

\n

- However, wasteland reclamation work is currently concentrated in the dry regions of Tamil Nadu and not in the Cauvery delta regions.

\n

- The **State government's 2017-18 policy** note on agriculture admits that agricultural production has been severely affected due to natural factors such as cyclones and drought.

\n

- Again, it lacks clarity on the specific resources that would be dedicated to developing such 'climate-smart' practices.

\n

- **Collective farming scheme** was proposed, which aims to promote farmer-producer groups with a corpus fund of Rs 5 lakh per group.

\n

- This will help reduce the vulnerability of small and marginal farmers to natural hazards as it allows them to **pool their resources** and scale up farm production.

\n

\n\n

\n\n

Source: The Hindu

\n

