

As land is degraded and in some places deserts expand, food production is reduced, water sources dry up and people are forced to move to more hospitable areas. **In this context, the remedial measures that should be taken are:**

- Agricultural practices should be modified by decreasing use of chemical fertilizers and pesticides, adopting micro-irrigation practices, adopting crop production based on soil type, availability of water etc. Further, schemes such as Soil Health Card, Pradhan Mantri Krishi Sinchayee Yojana etc. should be effectively implemented.
- Catchment areas or watersheds must be thickly vegetated. This would hold rainwater and recharge springs, rivers, etc. Further, there should be emphasis on aquifer recharge and water budgeting.
- Windbreaks should be created by planting trees and through ecosystem restoration programmes that can function as 'green walls' and 'green dams' that reduce dust and sandstorms.
- Indigenous population and local communities should be involved in the design, implementation and evaluation of sustainable land management practices.
- Grazing of cattle in forests should be checked. Also, focus should be on reclamation of wastelands for pasture development.
- Strategic spatial planning regarding land use, containment of spread of urban sprawl through government interventions, infrastructure development in a sustainable manner etc. should be prioritised in urban areas.

Reversal of land degradation is important for countries not just for economic gain but also for achievement of SDGs and Paris Agreement goals. In this context, India has reiterated its commitment to achieving Land Degradation Neutrality by 2030 (SDG target year). It also joined the voluntary Bonn Challenge (COP 25, UNFCCC) and pledged to bring into restoration 13 million hectares of degraded and deforested land by 2020, and an additional 8 million hectares by 2030.

5. *Communities are the first respondents to any disaster and hence must be trained to deal with them effectively. Elucidate.*

Approach:

- Giving a brief introduction, substantiate with examples how community is key to effective disaster management.
- Discuss how training of the community will be helpful in dealing with any disasters effectively.
- Highlight the ways in which it can be achieved.
- End with a brief conclusion.

Answer:

Disasters affect people individually and communities collectively. Communities across the world have been facing a series of new challenges due to increased frequency of disaster occurrence. These have proved to be a threat to the developmental gains, target of poverty reduction and achievement of Sustainable Development Goals.

In the above context, community based disaster management has become very important as communities are the first respondents to any disaster. There are numerous examples of successful disaster management by communities in countries like, Peru, Bangladesh etc. During the Chennai floods it was observed that local communities helped the vulnerable people as well as the NDRF teams.

Thus, capacity building of communities through training becomes very important because:

- A bottom up approach would be adopted where communities are the best judges of their own vulnerability and are capable of making the best decisions regarding their well-being.
- It would ensure the formation of an inclusive plan keeping in mind varied risk-perceptions across people belonging to different social classes, age groups, gender etc. and unite the community in their mitigation and preventive actions.