Adapting to climate change – Farms & Forests

What is the issue?

Investment and policy reform are needed on priority for Indian agriculture and Indian forests to cope with climate change.

How does climate change impact farming in India?

- India is uniquely vulnerable to rising temperatures, with the country ranked 14th on the Global Climate Risk Index 2019.
- The country has over 120 million hectares suffering from some form of degradation.
- According to one estimate, marginal farmers may face a 24-58% decline in household income and 12-33% rise in household poverty through exacerbated droughts.
- With rain-fed agriculture practised in over 67% of our total crop area, weather variability can lead to heavy costs, especially for coarse grains (which are mostly grown in rain-fed areas).
- Also, it is predicted that there would be 70% decline in summer rains by 2050, which would devastate Indian agriculture.

What should be done to mitigate these impacts?

- Conservation farming and dryland agriculture should be promoted by providing each village with timely rainfall forecasts.
- Along with that, weather-based forewarnings regarding crop pests and epidemics in various seasons is necessary.
- A mandate to change planting dates, particularly for wheat, should be considered, which could reduce climate change induced damage by 60-75%.
- Agricultural research programmes need to refocus on dryland research, with adoption of drought-tolerant breeds that could reduce production risks by up to 50%.
- Also, Insurance coverage should be expanded to cover all crops, while interest rates need to be subsidised, through government support and an expanded Rural Insurance Development Fund.

What are the concerns in the protection of forests?

- India is estimated to have lost over 26 million hectares of forest land and 20

million hectares of grasslands/shrublands between 1880 and 2013.

- Insufficient coordination between the Central Pollution Control Board (CPCB) and the State Pollution Control Boards (SPCBs) has led to institutional apathy towards alarming air pollution levels in the metros.
- State-level forest departments routinely lack suitable record keeping, particularly on assessment and realisation of dues on compensatory afforestation activities and catchment area treatment.
- Also, because of limited budgets for anti-poaching, India have little meaningful protection against wildlife crime and forest protection.

How should it be overcome?

- State-of-the-art training to the Indian Forest Service personnel must be provided, and specialisation should be encouraged in wildlife, tourism and protection for new recruits.
- Wildlife heritage towns, which are adjacent to national parks and sanctuaries, need to be converted into green smart cities with upgraded waste recycling processes.
- For this, expansion of joint research and development partnerships should be made, by pairing India's emerging smart cities with green cities in the West.
- The Van Dhan Yojana can be scaled up towards building a green mission to save our non-protected forests (which are outside the existing national parks and sanctuaries).
- Also, wildlife tourism must also be encouraged, particularly through public-private partnerships, to help increase conserved areas while making a difference to backward districts.
- Thus, these prudent investments and policy reform can help make India resilient to climate change.

Source: The Hindu

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