

CLIMATE CRISIS: LAND IS THE KEY

Relevant for: Environment | Topic: Environmental Degradation - GHGs, Ozone Depletion and Climate Change

Mar 11, 2020-Wednesday

-°C

Humidity

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Wind

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A recent report by the Union ministry of earth sciences (MOES), *Observed Rainfall Variability and Changes*, has found that seven Indian states — Uttar Pradesh, Bihar, West Bengal, Himachal Pradesh, Arunachal Pradesh, Meghalaya and Nagaland — have witnessed significant decreasing trends in annual rainfall in the last 30 years. Alarming, many other parts of the country have also seen an increase in the number of dry days during the monsoon season. This, the report added, has adversely affected groundwater recharges in these rain-deficit regions. This rain deficit and its impact on groundwater can be attributed to the climate crisis, government officials acknowledge.

The impact of an erratic monsoon on agriculture — and farmers — is direct. This is because between 50% to 60% of the country's agriculture is still rainfed, without access to any form of irrigation. The 2017-18 *Economic Survey* said the climate crisis could reduce annual agricultural incomes in the range of 15-18% on an average, and up to 20-25% for unirrigated areas. Other than having a negative impact on agrarian production, the climate crisis also impairs the land's ability to act as carbon sink. The Intergovernmental Panel on Climate Change's 2019 *Climate Change and Land* report, therefore, warned of massive impact of changing weather patterns on soil fertility, increase in arid and desertified zones, and contraction of polar climate zones and biodiversity. This exacerbates the climate crisis, while the climate crisis, in turn, exacerbates land degradation in different ways.

While micro-planning, as India's state climate action plans are supposed to do, and providing farmers with better seeds, climate information, land quality management and irrigation are critical, it is also important to use the knowledge of farmers on these issues. This is because they hold vital local knowledge and practices on how to avoid, improve or adapt to a changing climate. Catalysing this with climate science could have a real impact on framing effective climate action.

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