

Forestry Is Key to Food Security

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The sustainable development goals for the next 15 years, adopted by countries in September 2015, envision ending hunger by 2030 by ensuring sustainable food production. In the face of rising population and consequently an increasing demand for food, amid worsening climate change, there is an urgent need to perceive agriculture differently.

The 2030 Agenda for Sustainable Development, as well as the Paris agreement on climate change, recognises the imperative need to address food security in correlation with the management of natural resources. The same is also reflected in the latest edition of the State of the World's Forests (SOFO) report, which emphasises on the relationship between agriculture and forestry for a food-secure future.

The SOFO report stresses on the capability of agriculture to feed world's population, but also highlights the fact that agriculture is one of the main causes for deforestation globally. This is due to the current agricultural practices that work in isolation and do not account for efficient management of natural forest resources.

As a result of this, forests are increasingly being cleared in pursuit of increasing agricultural productivity. Forests ensure food security for millions of people worldwide, as they are important sources of food, energy and income. Compromising on forest cover to increase agricultural productivity cannot be a sustainable solution to ensure food security.

Well-managed natural resources, particularly forests have the capacity to achieve many of the sustainable development goals such as attaining food security, energy, clean water and health.

There is an inherent connect between forests and agriculture as forests can support sustainable agriculture by stabilising soils and climate, regulating water flow, providing shade and shelter and providing a habitat for pollinators and natural predators of agricultural pests. When integrated judiciously into agricultural landscapes, trees can increase agricultural productivity.

Moreover, increasing crop productivity, if paired with direct forest protection measures, can increase both agricultural production and forest cover.

Deforestation was most prevalent in temperate climatic domain until the late 19th century and is now greatest in the tropical climatic domain. In fact, the tropics are losing an area of forest the size of Portugal every year.

Temperate countries on the other hand are aggressively protecting their primary forests and have also increased their agricultural productivity while halting and reversing deforestation.

For instance, since 2004, Brazil has reduced deforestation in the Amazon by 80 per cent while increasing soy production by 65 per cent and beef production by 21 per cent. Brazil could achieve this mainly through restrictive measures such as protected areas, strict enforcement of forest laws and moratoria on clearing. Additionally, an increased agricultural productivity also played a significant role too.

Besides playing a supportive and complimentary role for agriculture, forests can have a multifunctional role as they can combat climate change, provided emissions from deforestation and forest degradation are reduced.

According to studies, deforestation contributes more than 10 per cent of greenhouse gas emissions annually, but it only expands the world's agricultural land by around one-tenth of a per cent a year.

Given this, it crucial to have sustainable management of forests and enhancement of forest carbon stocks as this can not only help combat climate change but also ensure food security.

In the present context, India has pledged to increase 25 million hectares of forest cover from the current 17.2 million hectares by 2030 and has been trying to put 33 per cent of its geographical area under forest, but according to current estimates, it is yet to reach the 22 per cent mark.

India must concentrate on increasing food productivity while preserving and, if possible, increase forest cover. In order to ensure this, India must work on bottom-up approach in which the local communities must be involved in initiative such as forest land allocation programme and forest protection contracts entered into with the local households.

The respective State forest departments can also announce initiatives wherein the local farmers are provided with incentives to plant trees and supports forest conservation. These efforts can increase forest banks and prevent loss of forest cover to agriculture.

Natural resources such as water bodies, forests and wetlands have their own unique role to play in the environment. Their influence on the ecosystem and particularly agriculture cannot be replicated; hence, the need to conserve these natural resources in the best interests of environment and for increased agricultural productivity.

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