

Better forest management needed for building sustainable agriculture

The key message of the FAO's flagship publication [The State of the World's Forests](#) (SOFO) is an urgent need to promote more positive interactions between agriculture and forestry in order to build sustainable agriculture systems and improve food security, as agriculture remains the most significant driver of global deforestation.



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Forests play a major role in sustainable agricultural development through a host of channels, including the water cycle, soil conservation, carbon sequestration, natural pest control, influencing local climates and providing habitat protection for pollinators and other species.

"The 2030 Agenda for Sustainable Development, as well as the Paris Agreement on climate change, recognises that we can no longer look at food security and the management of natural resources separately," said FAO director-general José Graziano da Silva in his opening remarks at the opening of the 23d Session of the [FAO Committee on Forestry](#) (COFO). "Both agreements call for a coherent and integrated approach to sustainability across all agricultural sectors and food systems. Forests and forestry have key roles to play in this regard".

"The key message from SOFO is clear: it is not necessary to cut down forests to produce more food," he added.

Agriculture accounts for the lion's share of the conversion of forests. According to today's report, in the tropics and

subtropics, large-scale commercial agriculture and local subsistence agriculture are responsible for about 40 percent and 33 percent of forest conversion, respectively, and the remaining 27 percent of deforestation happens due to urban growth, infrastructure expansion, and mining.

On the flip side of the coin, the report stresses that forests serve many vital ecological functions that benefit agriculture and boost food production. "Food security can be achieved through agricultural intensification and other measures such as social protection, rather than through the expansion of agricultural areas at the expense of forests," said Eva Müller, director of FAO's Forestry Policy and Resources Division. "What we need is better cross-sectoral coordination of policies on agriculture, forestry, food and land use, better land use planning, effective legal frameworks, and stronger involvement of local communities and smallholders."

She added: "Governments should provide local communities not only with secure land tenure but also with secure forest tenure rights. A farmer knows best how to manage his or her own resources but often lacks legal instruments to do so."

Improving food security while halting deforestation

Well-managed forests have tremendous potential to promote food security. Besides their vital ecological contributions, forests contribute to rural livelihoods and poverty alleviation through income generated by engaging in the production of forest goods and environmental services. About 2.4 billion people rely on wood fuel for cooking and water sterilisation. And forest foods provide protein, minerals, and vitamins to rural diets and can also serve as safety nets in periods of food scarcity.

According to SOFO, since 1990, over 20 countries succeeded in improving national levels of food security while at the same time maintaining or increasing forest cover - demonstrating that it is not necessary to cut down forests to produce more food. Twelve of these countries increased forest cover by over 10 percent: Algeria, Chile, China, the Dominican Republic, the Gambia, Islamic Republic of Iran, Morocco, Thailand, Tunisia, Turkey, Uruguay, Vietnam. Their successes all relied on a similar set of tools: effective legal frameworks, secure land tenure, measures to regulate land-use change, policy incentives for sustainable agriculture and forestry, adequate funding, and clear definition of roles and responsibilities of governments and local communities.

Successful case studies

The report cites case studies from seven countries - Chile, Costa Rica, The Gambia, Georgia, Ghana, Tunisia, and Vietnam - that illustrate the opportunities for improving food security while increasing or maintaining forest cover. Six of these countries achieved positive change in the period 1990-2015 in two food-security indicators - the prevalence of undernourishment and the number of undernourished people - as well as increases in forest area.

The Gambia, the only low-income country among the seven, succeeded in achieving the first goal of halving the proportion of hungry people within the same period.

Vietnam, for example, has implemented a successful land reform to provide secure land tenure as a way of encouraging long-term investment. This process was accompanied by a shift from state forestry to multi-stakeholder forestry with the active participation of local communities including a forest land allocation programme and forest protection contracts with local households. The land reform was also coupled with policy instruments to increase agricultural productivity, including land tax exemptions, soft loans, export promotion, price guarantees, support for mechanization and reductions in postharvest losses.

In **Costa Rica**, deforestation reached its peak in the 1980s, mainly due to the conversion of forest cover to pastures. The country has since reversed this trend largely due to the forest law, which now prohibits changes in land use from natural forest, and its system of Payments for Environmental Services (PES), which provides farmers with incentives to plant trees, and supports forest conservation. As a result, forest cover has increased to nearly 54 percent of the country's land area in 2015.

In **Tunisia**, national development plans recognise the beneficial role of forests in protecting land against erosion and desertification. Agricultural production has increased through intensification that makes better use of existing agricultural land through irrigation, fertilisers, mechanization, improved seeds and better farming practice. Incentives for establishing forest plantations in the country include free seedlings and compensation for the loss of agricultural income.

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