

Trees play a key role in building sustainable food systems, experts affirm

03 September 2021

Agroforestry will play a significant role in ensuring the security and safety of the global food supply amid a fast-changing climate, boosting food diversity and the earning power of farmers, according to participants attending a digital forum on Thursday.

Experts who addressed the forum to discuss nature-positive solutions for diversifying food systems and increasing access to nutrient-rich food, also said that trees remain central to ensuring that the food supply is abundant and environmentally sustainable as the world faces increased climate change risks.

The forum organized by the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) together with the Global Landscapes Forum — which is jointly coordinated by CIFOR, the World Bank and the U.N. Environment Programme — also called for increased research on nature-driven food production approaches, given that agriculture remains one of the key drivers of land degradation and climate change.

CIFOR-ICRAF Country Director of Ivory Coast, Christophe Kouame, said using tree varieties that provide food and economic benefits to farmers make the best choice for integrating with crops to advance climate-smart agriculture.

"In the cocoa plantation for example, we are promoting agroforestry models that will add value to farming; introducing trees that will diversify revenue, diet and still sustain the production of cocoa for farmers," Kouame said. "This way we can still produce cocoa and use our land in a sustainable manner."

The policymakers, agroforestry researchers and smallholder farmers in attendance at the forum brainstormed on how agriculture, which is now blamed for its central role in driving biodiversity loss and soil degradation, can be practised without the use of fertilizers and chemicals, key drivers for negative impacts on the environment.

In India, government support and collaboration between non-state actors has seen the growth of nature-driven agriculture that have been in use for the last six years.

More than 3 million farmers in 10 states have been practicing natural agriculture, which is free of chemical inputs, yet leads to increased income and yield, according to officials from India who spoke at the forum. These techniques are also increasing microbial activities in the soil and cutting water use by up to 50 percent, making it an alternative approach to agriculture that most researchers have been seeking, they said.

Rajiv Kumar, vice chairman at the Institution for Transforming India (NITI), said that natural farming is the best nature-based alternative upon which researchers must focus to scale up the food supply and rid the world of the chemical-laden agriculture products.

"There are still not enough studies done on this form of agriculture and we need a comprehensive analysis to define its benefits so as to scale it up," Kumar told the forum, which was attended by more than 4,000 participants from various parts of the world.

"This form of agriculture is also knowledge intensive and will require training farmers as well as the need to provide better access to the global market with supply chains that will insist that they will only supply crops produced through natural methods because this is the one stop solution for the various challenges facing the food system today."

Food production was identified as a major driver of deforestation, including in countries like Papua New Guinea, which features one of the world's significant rainforests, currently under threat from expanding agriculture, according to the country's prime minister, James Marape.

According to Robert Nasi, director general of CIFOR and managing director of ICRAF, human interference with the ecosystem has bred crises that have now begun stimulating negative consequences.

"Humans have altered the equilibrium since they are not just adjusting the immediate environment to suit their needs, but their actions are altering the entire ecosystem," he said. "We can still change things and it is not too late because this is a generational responsibility and all of us will be judged by our children if we don't take action now."

After years of poor agricultural practices like mono-cropping, use of chemical fertilizers and a drift from nature-driven approaches to growing crops, the food system has been damaged, the delegates agreed.

Not only are these practices contributing to climate change, biodiversity loss and land degradation, but they are exacerbating inequalities and a range of interconnected problems that are putting life on earth at risk and threatening human health.

Source: https://forestsnews.cifor.org/74394/trees-play-a-key-role-in-building-sustainable-food-systems-experts-affirm?fnl=enen