High-density multi-species cropping system helps in boosting net income of farmers: CPCRI

Updated - June 10, 2025 09:19 pm IST - MANGALURU

THE HINDU BUREAU

A cropping model of combined cultivation of coconut, black pepper, banana, and pineapple developed by Central Plantation Crops Research Institute in its premises at Kasaragod, Kerala. | Photo Credit: SPECIAL ARRANGEMENT

A cropping model of combined cultivation of coconut, black pepper, banana, and pineapple developed by the Central Plantation Crops Research Institute (CPCRI), Kasaragod, Kerala, has shown a net return of ₹3.5 lakh to ₹4 lakh per hectare per year, a release issued by director K. Balachandra Hebbar stated.

"When this model was adopted, the net return was two to three times higher than that from a sole coconut crop. At present, it is adopted in 10% of the 22 lakh hectares of area under coconut cultivation. But there is huge scope to expand it to other areas," the release, issued on the occasion of Vikasit Krishi Sankalp Abhiyan observed in the country from May 29 to June 12, said.

The release said that the CPCRI, under the Indian Council of Agricultural Research (ICAR), has developed several effective coconut and arecanut-based cropping/farming system models that significantly enhance farm productivity, profitability, and climate resilience.

Another successful model developed by the institute, as per the release, is the combined cultivation of arecanut, black pepper, cocoa and banana system.

"It provides a steady income throughout the year, with net returns reaching ₹4.4 lakh to ₹10 lakh per hectare per year," the release mentioned.

The CPCRI, having its regional station at Vitla and a research centre with International Coconut Genebank - South Asia and Middle East (ICG-SAME) at Kidu near Kukke Subrahmanya in Karnataka, is actively leading efforts to empower the farming community for enhancing crop productivity, farmer profitability, and environmental sustainability through field-level engagement and science-backed interventions, the director stated in the release.

With the adoption of scientific technologies, it is possible to increase the yield of plantation crops to the tune of 10%, which would ultimately position India as the 'food basket of the world'.

"In coconut alone, with 22 lakh hectares under cultivation, even a 10-nut increase per palm from the current average of 60 could yield 385 crore additional nuts annually, translating to an estimated ₹3,850 crore boost in farmer revenue," the release said.

The release stated that a major thrust of the CPCRI's initiative is encouraging farmers to replace low-yielding varieties with high-yielding, climate-resilient varieties of coconut, arecanut, and cocoa. Improved varieties Kalpa Ratna, Kera Keralam, Chandra Kalpa, Kalpa Mitra, Kalpa Dhenu, Kalpatharu, and hybrids: KalpaSamrudhi, Chandra Laksha, Kera

Sankara in coconut, Shatamangala, Madhuramangala, Swarnamangala in arecanut, and VTLCH 3, VTLCH 4, VTLCC 1 in cocoa are being promoted for their superior yield potential and stress tolerance.

It further said that the abhiyan, launched under the Union government's broader vision to transform agriculture into a climate-resilient, technology-driven sector, involves collaboration between CPCRI scientists, nearby ICAR institutes, State agriculture department, ATMA, other line departments and KrishiVigyanKendras (KVKs).

Published – June 10, 2025 08:37 pm IST