

MECHANIZATION TO REDUCE DRUDGERY

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POPULARIZATION OF COCONUT CLIMBING DEVICE TO REDUCE DRUDGERY AND IMPROVE LIVELIHOOD OPPORTUNITIES

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PROBLEMS/CONSTRAINTS

For harvesting, crown cleaning, and spraying operations in coconut palms, farmers require the services of skilled coconut climber, also called *padeli*. As coconut palm is branchless and grows to a height up to 30 meters, manual climbing involves drudgery and occupational hazard. Further, there is also an acute shortage of traditional coconut climbers, making the timely harvest challenging for farmers, especially in the coastal region. Coconut climbing devices reduce the risk of accidental falling with safety device attachment, apart from increasing the efficiency of the process enabling climbers to harvest more palms than the manual process. Though coconut climbing devices are available in markets, the adoption rate was poor in Goa.



INTERVENTIONS

Considering these, ICAR-Central Coastal Agricultural Research Institute, Goa provided coconut climbing devices to 120 persons, which included farmers and *padelis*. Training and demonstrations were organized under the Scheduled Tribe Component (STC), Scheduled Caste Sub Plan (SCSP) of ICAR-CCARI, Goa and HRD component of ICAR-All India Coordinated Research Project (AICRP) on Palms of Goa centre. With a cumulative expenditure of about Rs 3.84 Lakhs for 120 devices, members of Sivasakti Self-Help Group (SHG) Surla (Bicholim), Kunkoelim Shetkari SHG Cuncoeliem (Ponda), Badsare SHG & Bhupar farmers SHG, Gaodongiri (Canacona), *padelis* and farmers including 40 tribal farmers, were provided with these coconut climbing devices free of cost.



IMPACT

With the help of these devices, *padelis* could climb coconut palms more efficiently, safely and without the need for rest days between harvesting because of reduced drudgery, thereby earning an additional annual income of about Rs 44,000. The other newly trained farmers use these devices to harvest coconuts from their and neighbouring fields, earning an additional income of around Rs 22,000 annually. These devices are helpful in harvesting tender coconuts at the right time, which fetch higher prices. Using the devices, women farmers are also harvesting coconuts, thereby contributing to women empowerment. The overall impact from this intervention from 120 farmers is to the tune of about Rs 36.3 Lakhs annually. Further, carrying out timely cleaning and harvesting operations keep the coconut palm healthy and improve productivity. The use of coconut climbing devices enhanced the income levels and improved the livelihoods of farmers. After witnessing the effectiveness and drudgery reduction potential, about 60 more tribal farmers/*padelis*, including women farmers, requested coconut climbing devices. This device can reduce risk and drudgery, create livelihood opportunities, and enhance income for social upliftment.



Skill building on coconut climbing device