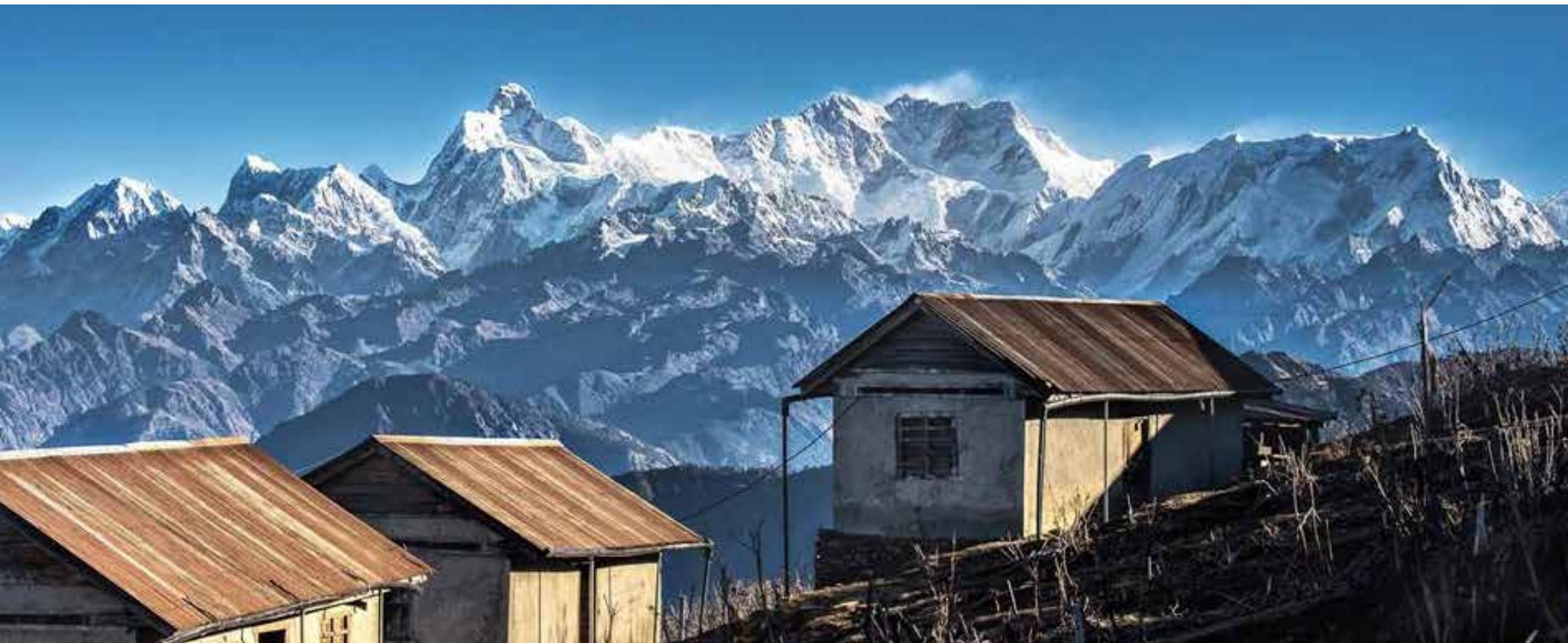




Creating market linkages for large cardamom in Nepal

Market accessibility to small & marginal farmers following climate resilience practices



Context

In the eastern Himalaya, climate change and its impacts are making farming a less predictable livelihood for mountain communities. Generating extra income to make up for potential shortfalls is more important than ever. There are certain **high income, low volume crops** which can be grown only in niche conditions. Large cardamom, one such crop can be grown only under specific conditions – hilly areas on marginal lands having gentle to medium slopes and loamy soil. Not only does it provide an **additional source of income** but large cardamom cultivation helps **restore ecological health** in areas where it is grown.

However, large cardamom farmers have faced numerous challenges to sustain production, primarily from pests and disease, climate change impacts, and fluctuating market prices. Over the last few years, a few large research bodies and developmental partners have been able to create and promote innovative climate resilient farming practices amongst these large cardamom farmers – securing crop production and making way for income diversification.

Despite implementing these interventions, inaccessibility to markets is the most pronounced challenges in the mountain ecosystem. Innovative, profit, or market-driven environmental conservation concepts

that simultaneously address environmental and economic concerns are very valuable in the context of conservation requirements.

Objectives

- Developing procurement market linkages within the value chain
- Develop innovative business models to improve market development
- Strengthen human capacity to attract increased market opportunities

Salient features

- Aiding in building the resilience of the communities in the Hindu Kush Himalayas - one of the most ecologically fragile areas in the world
- There are over **21,000 households** engaged in large cardamom farming in **37 districts** in Nepal - a huge potential
- Promoting the uptake of **climate resilient agricultural practices** by creating a steady market linkage for the farmers



Climate Resilient Practices

The overall objective of developing climate resilient large cardamom production is to **reduce poverty** among mountain communities, promoting more equitable approaches for livelihood improvement and resilient communities. The program was implemented after extensive field data collection and engagement with farmers living in the eastern Himalayan region, practicing cardamom farming for decades. For the pilot in one district, the large cardamom farmers were taken to pilot demonstration farms to view and learn about climate-resilient practices for growing large cardamom. These site visits are complemented by training and on-site coaching from local farmers and technical experts from the local developmental organization.

Weather smart practices

Selecting crop varieties based on weather trends (for example drought and/or frost tolerant). Weeds being left intact until winter passes to prevent field frostbite – particularly on new plantations. Harvesting being delayed when rainfall is predicted. Mulching being used to protect the bases of bushes from snow.

Soil and nutrients

Planting leguminous trees or shrubs for soil nutrients. Applying cow urine as natural

fertilizer and pesticide. Intercropping nitrogen-fixing pulses or beans to enrich the nutrient base. Thinning out alder trees that are more than 15 years old or too close together. Using slashed pseudo-stems, weeds or leftover fodder resident with dung for mulching to conserve soil moisture. Planting marigolds in cardamom fields to control harmful insects.

Water

Digging several pits throughout the plantation to store water during the rainy seasons. Making water ponds above the plantation to improve soil moisture. Creating plastic water ponds to hold water after the monsoon. Using sprinkler irrigation during dry periods at least twice a week.

Energy

Promoting an improved dryer model that consumes less fuelwood and emits less carbon. Using hard wood species such as chilaune and katus that provide more heat when burned. Monitoring flames consistently while drying cardamom pods and reshuffle the capsules to improve the moisture content.

Knowledge

Using mobile phones to promote information on market prices and distribute weather and crop advisory services. Working in groups

and cooperatives. Facilitating buyer-seller meetings and buy-back arrangements, and engage producers' groups in collective business enterprises.

Together, with these climate-resilient practices can strengthen mountain-farming families to anticipate and recover from changes or shocks to their production systems, thus insuring their health and livelihood in the long run.



Location:

Country: Nepal
Region: Taplejung District

Inter-cropping with field pea



Water harvesting above plantation



Creating Market Linkages

This climate resilient practices program also focuses on issues of post-harvest processing, packaging, and providing more efficient paths to markets where these products can find a larger consumer base. The **price of large cardamoms has plunged almost threefold in the last three years** – resulting in farmers need to focus on marketing, instead of selling to middlemen.

In the pilot district alone, more than **400 households** have adopted some of the practices and are reporting positive returns on their investments. In the eastern belt of the

HKH region alone, **over 21,000 households** are engaged in large cardamom farming in **37 districts** – there is immense potential to develop scale and ensure a steady supply once the market linkages are in place. Individual practices can also be easily adapted and adopted by local communities in other areas. The approach can be replicated in any of the value chains throughout the Hindu Kush Himalayas and beyond.

The focus is now to look at issues of post-harvest processing, packaging, and providing more efficient paths to markets where these products can find a larger consumer base.





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