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In cooperation with
Verstegen SPICES & SAUCES

CULTIVATING CHANGE: EMPOWERING FARMERS IN THE TRANSITION TOWARDS A CLIMATE-RESILIENT SPICE SUPPLY CHAIN

The challenge

Andhra Pradesh and Karnataka are among India's leading producers of red chilli, yet conventional cultivation in these regions remains heavily dependent on chemical inputs contributing to biodiversity loss, declining soil health, and rising greenhouse gas emissions. In addition, inadequate drying and storage practices frequently lead to aflatoxin contamination, affecting product quality and limiting market access.

While regenerative agriculture presents a more sustainable pathway, its adoption remains constrained by challenges such as initial 20-40% yield reductions, and limited access to locally available quality bio-inputs. At the same time, women constitute nearly two-thirds of the agricultural workforce but continue to face wage disparities and limited participation in decision-making.

To address these issues, the project promotes a transition to climate-resilient red chilli production through IPM++-based regenerative agriculture, supported by farmer training, field demonstrations, and improved access to locally produced bio-inputs. It also strengthens value chain transparency and export-oriented quality compliance while empowering women farmers through skill development and agri-entrepreneurship, contributing to improved livelihoods, gender equity, and a more resilient red-chilli supply chain.

Project name	Cultivating Change: Empowering Farmers in the Transition towards a climate-resilient Spice Supply Chain
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Project regions	Andhra Pradesh and Karnataka
In cooperation with	Verstegen Spices & Sauces BV; Growcoms Private Limited
Duration	2025 - 2028 December

Objective

Farmers along the red chilli supply chain in Karnataka and Andhra Pradesh benefit from improved climate-resilient livelihoods.

(L-R) Red chilli cultivation and drying in Srikakulam, Andhra Pradesh and Raichur, Karnataka

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(L-R) Consultation with red chilli farmers on sustainable pre and post-harvest practices in Srikakulam, Adhra Pradesh and Raichur, Karnataka

Approach

- Facilitating the transition to IPM++-based regenerative chilli cultivation by co-developing science-backed packages of practices, and promote its adoption by field-level demonstration, and strengthening farmer capacities through local champions. It will also integrate digital solutions to build a transparent and traceable EU-compliant supply chain.

- Strengthening agri-entrepreneurship by market orientation of farmers and supporting income diversification strategies. It will also focus on establishing women-led Bio-input Resource Centres (BRC), backed by technical support and facilitating access to various funding instruments including microfinance.

- Reducing GHG emission in red chilli supply chain by developing and implementing a decarbonisation strategy, centred around regenerative agriculture practices, biodiversity conservation and climate resilience, supported by tools and scalable practices for sector-wide adoption.

- Strengthening the Sustainable Spices Community of Practice by co-developing and showcasing decarbonisation tools, demonstrating the BRC model, and develop a strategic roadmap for women-led growth in rural areas by promoting their leadership in regenerative agriculture.

Project contribution to the Agenda 2030

Project implementation states

Figure 1: Project states

Disclaimer: The geographical map is for informational purposes only and does not constitute recognition of international boundaries or regions; GIZ makes no claims concerning the validity, accuracy or completeness of the maps nor assumes any liability resulting from the use of the information therein.

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