



Indian Council of Agricultural Research
ICAR–Central Potato Research Institute
Shimla, Himachal Pradesh

SUCCESS STORIES 2025

Bridging Lab to Land: Implementation and Outcomes of Flagship Programmes Across India

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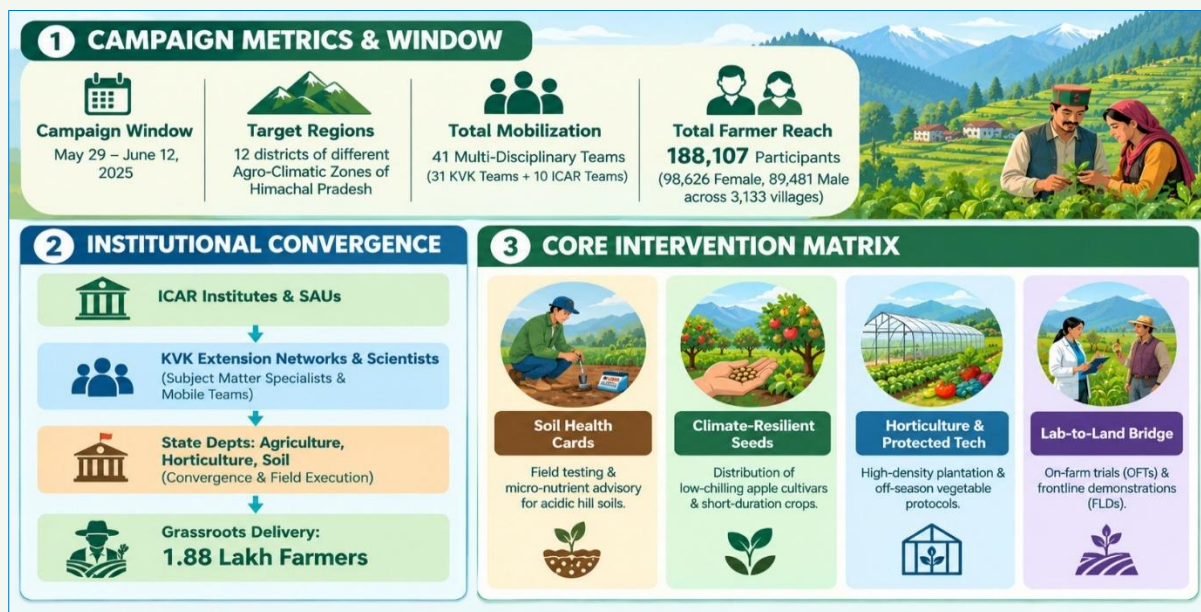
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BRIDGING LAB TO LAND: IMPLEMENTATION AND OUTCOMES OF VKSA-2025 ACROSS HIMACHAL PRADESH



ACTIVITIES & IMPACT

1. Strategic Mobilization Across Hill Ecosystems

During the nationwide Viksit Krishi Sankalp Abhiyan (VKSA) Pre-Kharif campaign executed from May 29 to June 12, 2025, Himachal Pradesh witnessed an unprecedented convergence of agricultural science and grassroots outreach. Operating across the rugged terrains of all 12 districts, 41 dedicated multi-disciplinary teams—comprising ICAR scientists, Krishi Vigyan Kendra (KVK) subject matter specialists, and state horticulture/agriculture officials—connected directly with 188,107 farming participants across 3,133 remote villages. Notably, women farmers represented over 52% of total participants (98,626), highlighting active female leadership in hill farming systems.

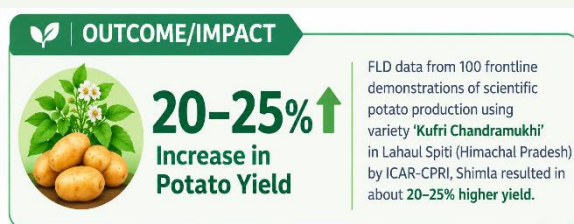


2. Core Scientific Interventions & Technology Diffusion

The campaign focused heavily on resolving region-specific agro-climatic challenges. Scientists from ICAR-CPRI (Shimla), ICAR-IARI regional stations, and state universities deployed targeted solutions, including soil health card distribution to counter micro-nutrient deficiencies in acidic hill soils, and the introduction of climate-resilient, low-chilling apple cultivars. In mid-hill zones, intensive awareness camps promoted protected cultivation of off-season vegetables, high-density orchard management, and natural farming protocols to maximize productivity on small and marginal landholdings.

3. Institutional Synergy & Future Outlook

By institutionalizing pre-season multidisciplinary planning, VKSA successfully bridged the historic gap between institutional research and farming realities. Feedback gathered from progressive farmers in remote blocks (such as Chamba, Kinnaur, and Lahaul-Spiti) will directly shape upcoming research priorities—particularly concerning frost-tolerant crop varieties, irrigation infrastructure, and post-harvest value addition. The campaign firmly established a unified framework for sustainable mountain agriculture across Himachal Pradesh.



TRANSFORMING HILL FARMING IN SHIMLA AND BILASPUR DISTRICTS THROUGH MGMG TEAMS



Campaign Overview & Operational Scope

From May 29 to June 12, 2025, the Viksit Krishi Sankalp Abhiyan (VKSA) Pre-Kharif campaign spearheaded by ICAR-Central Potato Research Institute (CPRI), Shimla, in collaboration with state agriculture and horticulture departments, marked a transformative milestone for hill agriculture across Shimla and Bilaspur districts. Deploying nine dedicated interdisciplinary Mera Gaon Mera Gaurav (MGMG) science teams from ICAR-CPRI and associated regional stations (IARI, NBPGR, IIWBR), the 15-day campaign reached over 25,000 farmers across remote farming clusters.

Major activities conducted by MGMG Teams

Frontline Demonstrations (FLDs):

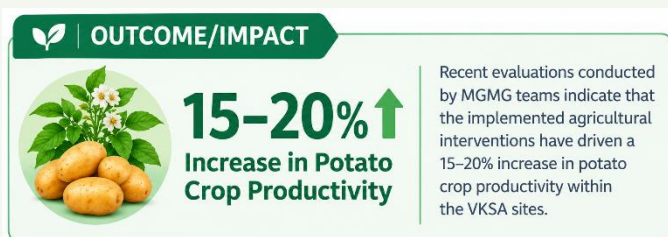
Introduced high-yielding, disease-resistant crop varieties, scientific maize line sowing alongside pulse intercropping, protected cultivation of capsicum, and high-density apple orchard management.

Capacity Building & Trainings:

Conducted specialized sessions on soil health card sampling, IPM & biopesticide spray schedules (Neem Astra, Panchgavya), pruning and training systems for stone fruits and kiwi, and empowering women SHGs through the NaMo Drone Didi initiative.

Timely Input Distributions & Advisory:

Distributed quality disease-free seeds, bio-fertilizers, Jeevamrit formulations, pheromone/yellow sticky traps, and promoted community-based solar chain-link fencing solutions to mitigate severe wild animal conflicts (monkeys, wild boars).



SOWING SUCCESS IN THE HILLS: HOW ICAR-CPRI'S INTERVENTIONS EMPOWERED FARMERS ACROSS NORTH-EAST INDIA



Background & Challenges: Small and marginal farmers across the remote North-Eastern Hill (NEH) regions of India faced severe agricultural constraints, including limited access to quality seed tubers, lack of scientific guidance, and heavy reliance on traditional farming methods. These structural hurdles kept crop productivity low and limited the economic benefits of agriculture for tribal and hill communities.

ICAR-CPRI intervention through NEH Fund

- Frontline Demonstrations (FLDs):** Laid out 167 FLDs across North-East states like Assam, Mizoram, Sikkim, Meghalaya, and Nagaland, introducing high-yielding, climate-resilient potato varieties such as *Kufri Pukhraj*, *Kufri Girdhari*, and *Kufri Himalini* and Apical Rooted Cuttings (ARC) technology.
- Capacity Building:** Conducted 41 specialized training programs for 1,323 beneficiaries—including sessions on Apical Rooted Cuttings (ARC) technology and scientific potato cultivation at KVKs across Aizawl, Kolasib, Tamenglong, and West Khasi Hills.
- Input Support:** Distributed essential agricultural inputs including quality seed tubers, bio-fertilizers, micronutrients, plant protection chemicals, sprayers, and small farm implements to bridge local resource gaps.

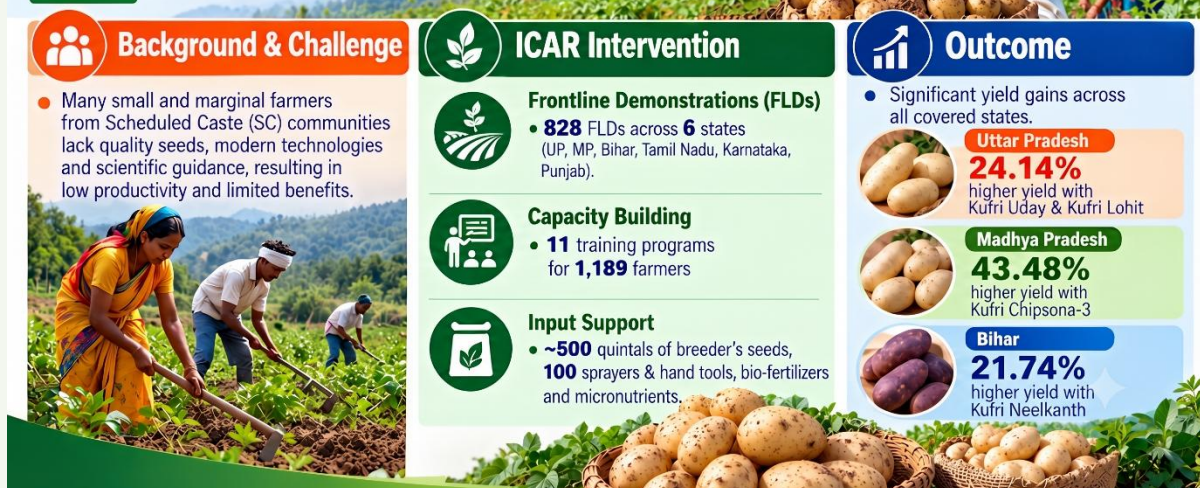


Outcome/Impact

The comprehensive NEH campaign delivered remarkable productivity breakthroughs across the region. Frontline demonstrations in Meghalaya recorded up to 72.73% higher yields with *Kufri Girdhari* and *Kufri Himalini*, while Sikkim achieved an extraordinary 122.22% surge in production using *Kufri Pukhraj* compared to traditional farmer practices.

TRANSFORMING SCHEDULED CASTE FARMING COMMUNITIES THROUGH ICAR-CPRI FRONTLINE DEMONSTRATIONS AND CAPACITY BUILDING

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Background & Challenge

Across India, many small and marginal farmers belonging to Scheduled Caste (SC) communities have historically remained deprived of quality seeds, modern agricultural technologies, and scientific guidance, leaving their crop productivity low and farming benefits limited.

ICAR Intervention through Scheduled Caste Sub Plan (SCSP)

- Frontline Demonstrations (FLDs):** Laid out 828 targeted FLDs across 6 states (Uttar Pradesh, Madhya Pradesh, Bihar, Tamil Nadu, Karnataka, and Punjab).
- Capacity Building:** Organized 11 on- and off campus training programs engaging 1,189 farmers, focusing on improved varieties, balanced nutrition, pest management, and scientific seed production.
- Input Support:** Distributed critical agricultural inputs, including ~500 quintals of breeder's seeds, 100 knapsack sprayers and hand tool sets, bio-fertilizers, and micronutrients.

Outcome/Impact

The targeted SCSP initiatives produced remarkable yield enhancements across all covered states. In Uttar Pradesh, varieties like *Kufri Uday* and *Kufri Lohit* obtained 24.14% higher yields, while *Kufri Chipsona-3* achieved 43.48% higher yields in Madhya Pradesh and *Kufri Neelkanth* yielded 21.74% higher output in Bihar.



CULTIVATING RESILIENCE: HOW ICAR-CPRI'S TRIBAL SUB-PLAN INTERVENTIONS EMPOWERED TRIBAL FARMERS ACROSS HILL AND PLAIN REGIONS



Background & Challenge

Small and marginal farmers from tribal communities across India's diverse hill and plain terrains have historically faced acute structural constraints, including restricted access to quality seed material, limited scientific guidance, and heavy reliance on low-yielding traditional agricultural practices that results in low productivity

ICAR-CPRI Intervention through Tribal Sub Plan (TSP)

- Frontline Demonstrations (FLDs):** Implemented 502 targeted FLDs across Madhya Pradesh, Jharkhand, Uttarakhand, Tamil Nadu, Jammu & Kashmir (Gurez), and Himachal Pradesh (Lahaul Spiti) to showcase scientific potato cultivation.
- Capacity Building:** Organized 6 on and off-campus training programs for 189 beneficiaries, focusing on quality seed production and improved potato technologies.
- Critical Inputs Support:** Distributed comprehensive agricultural inputs including ~200 quintals of seed tubers, 100 sprayers, bio-fertilizers, micronutrients, and small agricultural tools.

Outcome/Impact

The targeted Tribal Sub-Plan initiatives unlocked massive productivity gains, with field results showing a 64.71% higher yield using *Kufri Sangam* in Uttarakhand and a 66.67% higher yield with *Kufri Neelkanth* in Jharkhand compared to traditional farming methods.



FROM QUALITY SEED TO MARKET: ICAR–CPRI EMPOWERING FARMER GROUPS FOR POTATO SEED ENTREPRENEURSHIP IN MEGHALAYA

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SUPPORT TO FARMER GROUPS

Quality potato seed tubers, Apical Rooted Cuttings (ARCs) and technical guidance through institute and external projects and schemes, including:



Mera Gaon
Mera Gaurav



NEH Fund



Farmers adopted improved practices and built capacity for quality seed potato production at the field level.

FARMERS' IMPACT



YIELD INCREASE
>20%
compared to
previous practices



QUALITY SEED
PRODUCED
70 tonnes
of Kufri Jyoti



MARKET SUCCESS



SOLD TO
Department of Agriculture,
Government of Arunachal
Pradesh



PRICE
₹30/kg



REVENUE GENERATED
₹21 lakh
for the farmer group



SUSTAINED RESEARCHER–FARMER LINKAGES

and quality planting material promote seed entrepreneurship and strengthen quality seed availability in the North-Eastern region.

ICAR–CPRI Regional Station, Shillong has been continuously supporting farmer groups in Meghalaya with quality potato seed tubers, Apical Rooted Cuttings (ARCs) and technical guidance for scientific seed production, through various institute and externally funded projects, schemes and programmes such as Mera Gaon Mera Gaurav and the NEH Fund.

Over the years, participating farmers have adopted improved production practices and developed the capacity to produce quality seed potato at the field level. Through these interventions, farmers have obtained not only higher yields, mostly exceeding 20%, but also better prices for their produce. Through these sustained interventions, approximately 70 tonnes of quality potato seed of the variety Kufri Jyoti were produced and sold to the Department of Agriculture, Government of Arunachal Pradesh, during 2025 at ₹30/kg, generating ₹21 lakh in revenue for the farmer group.

This success demonstrates the potential of sustained researcher–farmer linkages and quality planting material to promote seed entrepreneurship and strengthen quality seed availability in the North-Eastern region.