# SUCCESS STORY

# Title: Empowering Tribal Farmers through Scientific Groundnut Cultivation under TSP in Chandel District, Manipur

## **Background:**

Chandel district of Manipur, located in the eastern hill region of the state, is predominantly inhabited by tribal communities who rely heavily on agriculture for their livelihood. The fertile soils near the riverbanks of the district headquarters are characterized by sandy loam texture, making them highly suitable for groundnut cultivation. However, despite this potential, most farmers in the region traditionally practiced mixed cropping systems during the kharif season, with little or no scientific input. This led to low productivity and minimal economic returns.

The farmers lacked exposure to improved varieties, scientific practices, and integrated pest and disease management. Consequently, groundnut, a crop with high market value and strong agroclimatic suitability in the region, remained underexploited. Recognizing this gap, Krishi Vigyan Kendra (KVK), Chandel, under the Tribal Sub-Plan (TSP) of ICAR, initiated an outreach and demonstration program aimed at enhancing the income and livelihood security of tribal farmers through groundnut cultivation.

#### **KVK Intervention:**

As part of the TSP initiative, the KVK team conducted a detailed survey to identify areas suitable for groundnut production. The selected villages included Mantripantha, Japhou, Riverlane, Lambung, Hnatham, and Lamphoupasna—all located near the river belt with appropriate soil and climatic conditions for groundnut farming in FY 2014-15.

KVK Chandel organized a series of training and demonstration programmes that covered the entire package of practices for successful groundnut cultivation. These sessions included:

#### Scientific land preparation techniques

- Application of manures, fertilizers, and lime to correct soil pH
- Use of improved seed varieties
- Integrated pest and disease management
- Crop protection techniques against Red Hairy Caterpillar, Tikka Leaf Spot, and Collar Rot
- Proper harvesting, drying, and storage of groundnut seeds
- KVK also distributed inputs and educational materials to the participating farmers and provided regular field-level technical guidance throughout the crop cycle.

# **Adoption and Impact:**

Prior to this intervention, the farmers in the region were largely dependent on traditional, unstructured mixed cropping systems that yielded low returns and poor soil management. With the introduction of groundnut as a sole crop, along with scientific agronomic practices recommended by KVK, there was a remarkable shift in production and profitability.

Farmers achieved an average yield of 21.15 quintals per hectare, which translated to a net return of  $\gtrless$ 1,09,250 per hectare. The benefit-cost (B:C) ratio was calculated at 3.8:1, indicating a highly profitable enterprise. This significant increase in income and productivity encouraged the farmers to expand the area under groundnut cultivation in subsequent seasons.

The success of this demonstration did not remain limited to the initial beneficiaries. Neighboring farmers, upon observing the results, became motivated to adopt groundnut cultivation on a larger scale. As a result, both the production and area under groundnut cultivation have been steadily increasing year after year in the Chandel district.

# Farmer Response and Livelihood Upliftment:

The farmers expressed immense satisfaction with the outcomes and appreciated the hands-on support provided by KVK scientists. Many of them reported that, for the first time, they were able to earn substantial profits from a single crop. The newfound confidence encouraged them to increase the size of their groundnut plots and to continue using the scientific practices imparted during training.

Women farmers also actively participated in harvesting and post-harvest operations, contributing to household income and economic stability. The intervention not only enhanced income but also strengthened food and nutritional security in the tribal farming communities.

## **Conclusion:**

The TSP-supported groundnut cultivation programme implemented by KVK Chandel has proven to be a sustainable, scalable, and impactful model of agricultural development in tribal areas. By unlocking the potential of suitable land resources and equipping farmers with knowledge and resources, the intervention has effectively transformed subsistence agriculture into a profitable enterprise.

This success story stands as a shining example of how targeted extension strategies, scientific interventions, and continuous farmer engagement can drive meaningful livelihood enhancement. The story of groundnut cultivation in Chandel is now inspiring other tribal regions of Manipur to adopt similar models for agricultural prosperity.



Fig. Groundnut var. ICGS-76 at farmer's field under TSP