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Outreach Programmes of ICAR-IIPR

(2020-25)

Anup Chandra, Debjyoti Sen Gupta, Yogesh Kumar
TN Tiwari, DP Patel, Katiyar PK, Uma Sah and GP Dixit

भाकृअनुप
ICAR

ICAR- Indian Institute of Pulses Research
Kanpur-208 024

INDIAN INSTITUTE OF PULSES RESEARCH
IIPR
भादअस

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PREFACE

The Indian Institute of Pulses Research (IIPR), under the umbrella of the Indian Council of Agricultural Research (ICAR), is unparalleled in a way it is solely dedicated to research on pulses.In order to vitalize the basic and strategic research, it was upgraded to the present institutional level in 1993 from the then Directorate of Pulses Research. Besides research, the institute is also engaged in a count of outreach programmes to encourage, strengthen and uplift the farmers, especially from the underprivileged community and region of the country. The Government of India has a stern priority for the north east region of the country (NER Sub-Plan), Scheduled Tribes Component (STC) and Scheduled Caste Sub-Plan (SCSP), aiming targeted benefit to the farmers belonging to these groups. These Sub-Plans are perceived as to fulfill the government's commitment of equality, social justice and inclusive growth.

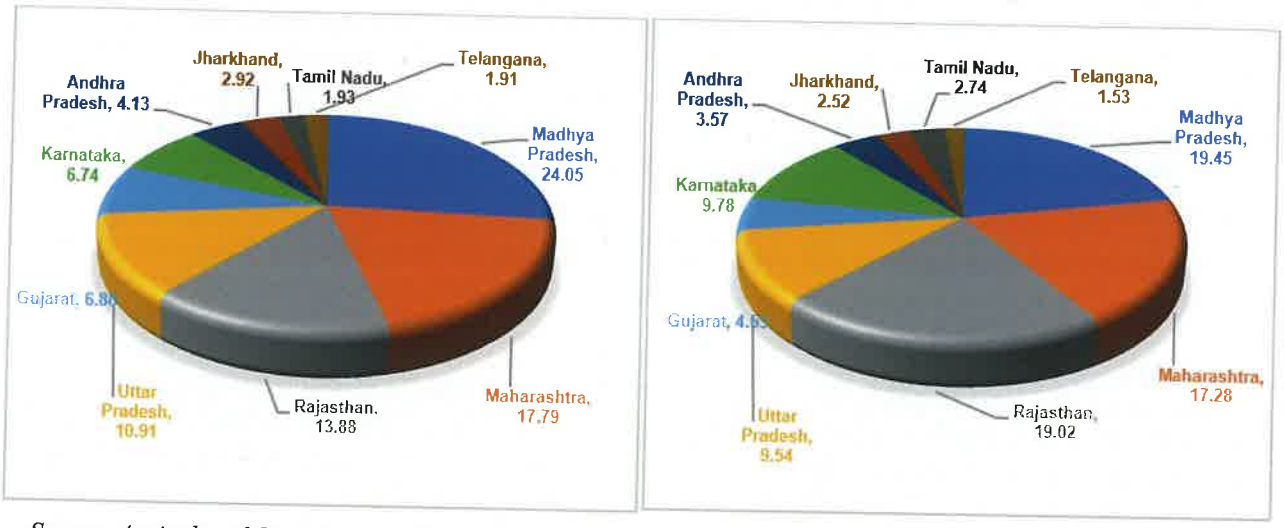
In the context of pulses, the food habit of north east people is changing to include pulses in their daily diet. This change can be attributed to the growing nutritional awareness, external influences, improved connectivity and business transactions with the mainland. This region of India is known for its craggy and undulating terrain with unique climatic conditions. Taking up pulse cultivation, in these situations, faces several challenges. To overcome these issues, it is pertinent to make suitable interventions in the form of capacity building programmes, demonstration of suitable technologies, making availability of quality seeds, fertilizers, plant protection chemicals and small agricultural implements. Trainings, awareness and exposure visits are helpful in orienting farmers' mindset to take up pulse cultivation as a profitable entrepreneurship. Farmers from NE region are now coming forward showing their interest towards improved technologies of the institute.A number of demonstrations of best-suited technologies have been able to make a difference in the level of their acceptance. Input distribution programs have augmented the availability of quality seeds and other required materials. The need of bio-fertilizers is also fulfilled in the pro-organic states of the region. A number of IIPR Mini *Dal Mills* have been established in different NE centers, aiding in the post-harvest processing. The IIPR NER Sub-Plan is being implemented in every nook and corner of all the seven sisters including Sikkim.

The Tribal Sub-Plan, now rechristened as 'Development Action Plan for Scheduled Tribes' (DAPST), was first adopted during the fifth five year plan (1974-78). The institute, under this sub-plan, has made remarkable efforts in order to elevate the socio-economic conditions of tribal farmers, especially of Madhya Pradesh and Chhattisgarh. Likewise, a number of activities have been done benefitting farmers from scheduled caste community under the Scheduled Caste Sub-Plan in several districts of Uttar Pradesh, Rajasthan, Madhya Pradesh and Karnataka. IIPR has also been instrumental in seed production through farmers' participation and in coordinating 150 seed hubs all over the country. Under these Sub-Plans, the institute has been working at transferring technologies, capacity buildings, human resource development, participatory seed production and vital input support for the sole purpose of expanding pulse cultivation, thereby, driving them towards better socio-economic heights. This document spotlights the quantum of support rendered and the number of beneficiary the institute has abled to reach in the last five years.

Apart from these, the *Viksit Krishi Sankalp Abhiyan*, a recent initiative (28 May to 12 June, 2025) by the Government of India is seen as first-of-its-kind for its massive nature where nearly 2000 teams of scientists have directly interacted with more than a crore farmers beyond 700 villages all over the India.IIPR too has taken an active part by dedicating its full strength in the nation-wide programme, the details of which has been tried to set out herein. The book is expected to be helpful to scientists, extension workers and personnel of state agricultural department in implementing these outreach programs at their end.

(G.P. Dixit)
Director

The total pulse production in India comes from approximately 35 million ha area which accounts for the 37% of global pulse area (94.14 M ha). Out of this acreage, the country contributes nearly 28% of the global pulse production and designated as the largest pulse producer among all the other countries. Majority of the pulses produced in India comes only from top ten pulse producing states, with giant sharing of Madhya Pradesh, Maharashtra and Rajasthan to the total national production (Fig. 2).



Source: Agricultural Statistics at a Glance, 2023

Fig 2. Area (M ha) (left) and Production (MT) (right) of the top pulses producing states (2022-23)

However, despite its significant production capacity with large area, yield remains lower than the global average due to several hindrances like limited reach of quality seeds. Farmers often rely on farm-saved seeds and access to quality seeds remains limited. Lack of technical know-how and reluctancy of farmers to choose pulse crops (particularly pigeonpea) over the other easily cultivable, lucrative and quick-cashable crops are also inhibiting in achieving the goal. India has historically struggled to achieve complete self-sufficiency in pulses, often depending on imports to meet domestic demand. The production also faces erratic rains pushing it to either drought or flood where the larger part of cultivation area is rainfed. India yields around 900 kg/ha which is significantly lower than those in countries like Russia, Ethiopia, Canada, China and Australia, and the world average of 1015 kg/ha. However, the productivity of total pulses for 2023-24 was estimated as 881 kg/ha, underlining significant enhancement in the recent years.

Over the past few years, increasing demand has led to the import of pulses, creating a trade imbalance. In the recent years, the import of pulses has increased to 5-6 mt.

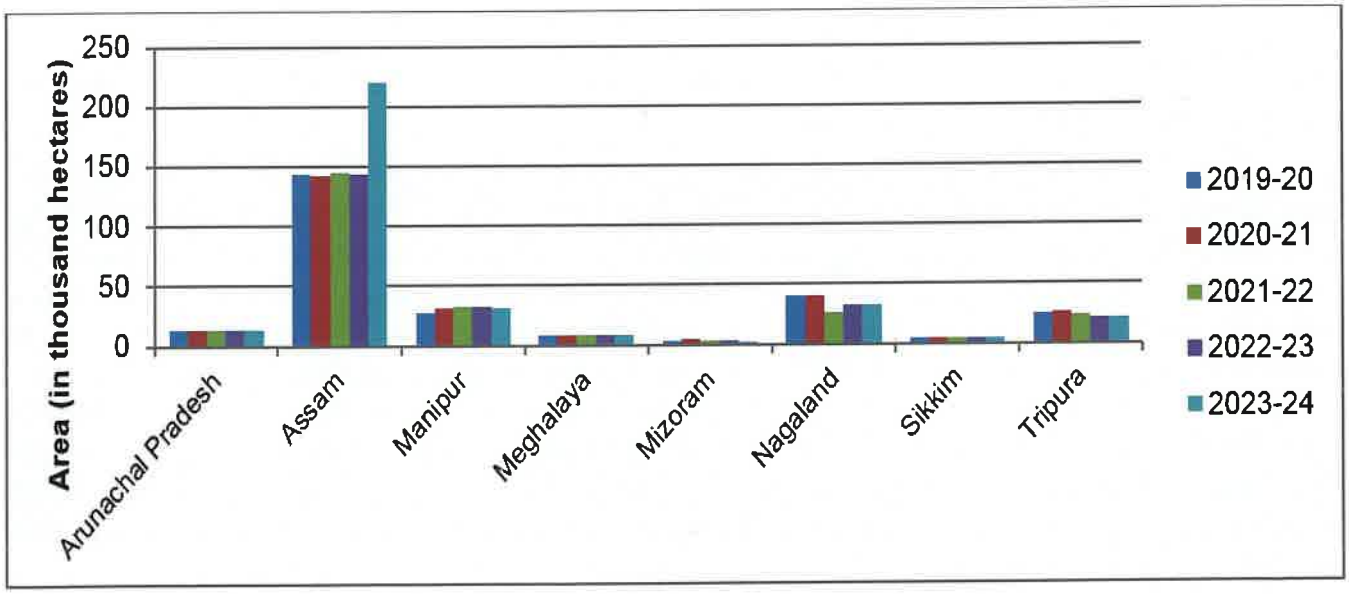
Visualizing the above impediments, the ICAR-Indian Institute of Pulses Research, Kanpur has made significant strides in this direction. The Institute is unique across the globe having mandated for basic and applied research-extension, solely on pulse crops. It plays a vital role in uplifting and enhancing pulse production of the nation through its innovative technologies, zone-specific high yielding varieties, drought-resistant and early-maturing pulse varieties. It has also made noticeable progress in the field of biotic stress management, food processing, and mechanization. Development of improved farming practices and weed management is yet another area where the Institute has marked its excellence. Focussing on the qualitative aspects, it has also developed a count of biofortified varieties in chickpea, lentil, blackgram *etc*. Apart from these, the Institute has also collaborated with the private sector and licenced a number of high yielding/quality traits varieties and many other technologies in order to make their farmers' reach at a larger scale. It has also served the private sector in facilitating a dozen of contractual research and services in the last three years. Finally, incessant efforts of the Institute will be continuous towards sustainable pulse production system, thereby, transcending self-sufficiencyand fulfilling the dream of '*Atmanirbhar Bharat*'.

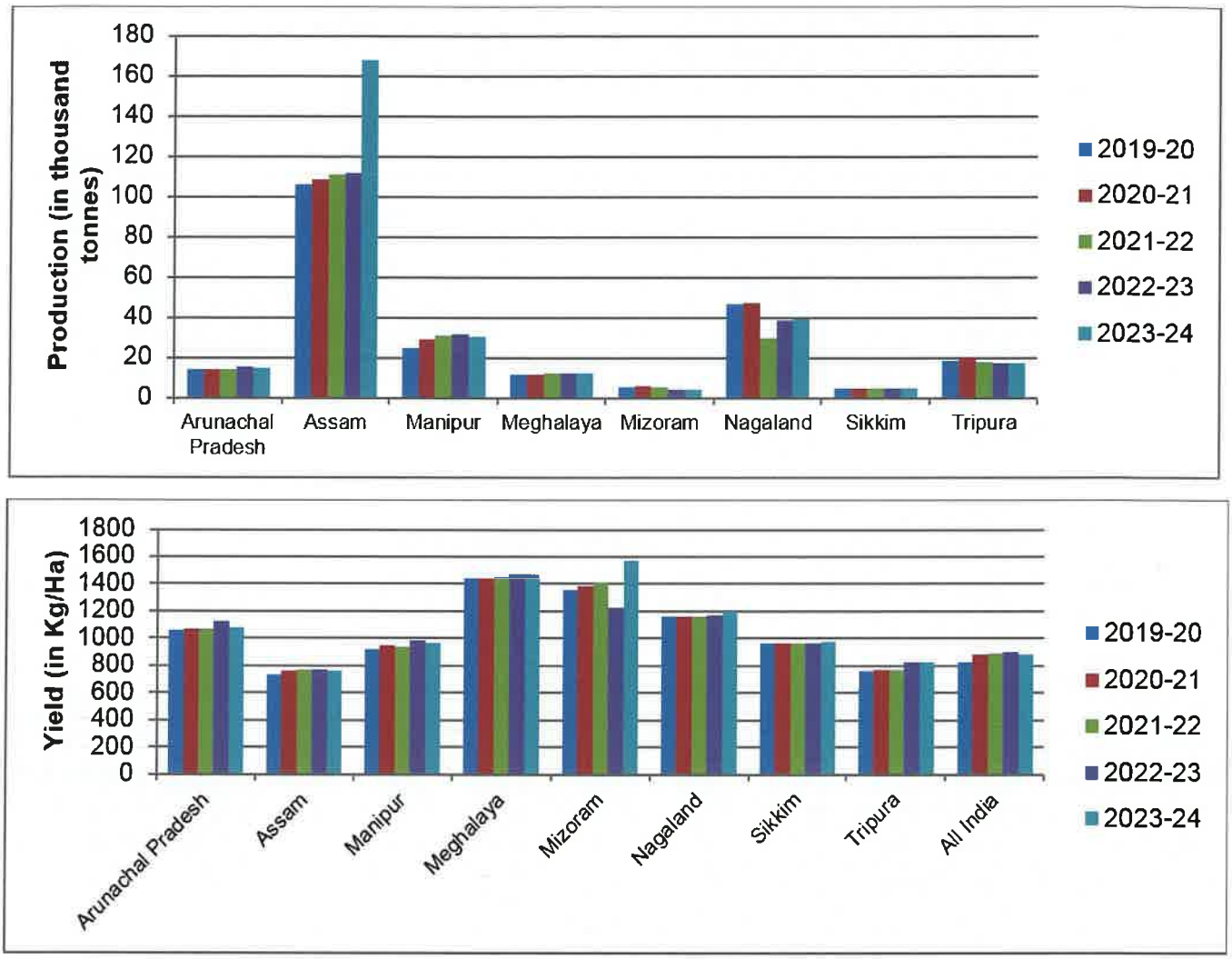
Promotion of Pulses in NE Region
(IIPR NER Component)

The North-East region of India holds significant physio-geographical importance due to its unique location, diverse terrain, and ecological richness. The region is predominantly mountainous, with the Eastern Himalayas, Patkai, Naga, and Lushai hills shaping its topography. The mighty Brahmaputra River and its tributaries flow through this terrain, creating fertile plains in Assam and forming a vital riverine ecosystem.This region is one of the world's biodiversity hotspots, hosting rich flora and fauna due to varied altitudes and climates. In the food habits of the people of North-East India, pulses play a relatively minor role compared to other regions of the country. The traditional diet is largely centred on rice, fermented foods, leafy greens, bamboo shoots, and animal protein such as fish, pork, and poultry. The low pulse consumption reflects limited cultivation, though changing lifestyles and external influences are gradually increasing their presence.

The region offers considerable scope for pulse production due to its diverse agro-climatic conditions and fertile soils. Despite being largely dependent on rice cultivation, the region has untapped potential for increasing pulses cultivation to meet local demand and improve soil health through crop diversification. The mainland states like Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh, Gujarat and Karnataka are the top contributors of total pulses produced in India; never-the-less, the states in the North-East region of India present sufficient scope for opening up new avenues for expanding pulse area. Owing to its unique terrain, the NE region can accommodate crops with wide variability of climatic and soil requirements.

Amongst the North-East states, Assam represents the highest area as well as production of total pulses in the region (significantly enhanced in 2023-24) (Fig. 1), however, as seen in the last five years, the





Source: Ministry of Agriculture and Farmers Welfare, Govt. of India

Fig 1. Area, production and productivity of total pulses in North-East states

states like Meghalaya and Mizoram have shown better productivity but still below the national average and calls for intensive support to the pulse farmers of the region.

ICAR-IIPR, Kanpur, in recent years, has made significant strides in this direction, aiming for strengthening of pulse Growing farmers through input and technological support and thereby, expanding pulse area in the North-East region. The Institute, through its programme, "Promotion of Pulses in NE Region", under the NER Sub-Plan of the ICAR Scheme, is actively engaged in making interventions in terms of capacity building and skill development programmes, demonstrations, exposure visits to specialized institutions/firms, in order to inculcate scientific attitude of farming, in the pulse growers. It also strives to ensure timely availability of quality seeds, fertilizers/bio-fertilizers, plant protection chemicals, petty farm equipments, required inputs to the farmers and boosts institutional infrastructural development (IIPR Mini *Dal* Mill) through its efficient fund utilization (Fig. 2) for the sole purpose of encouraging pulse production in the region. This would not be achieved without active participation of various collaborating centres (Table 1) in the NE region.

Table 1. List of centres in the North-East region collaborated for different states under IIPR NER Programme during 2020-25

S. No.	Name of the centre
1.	ICAR Research Complex for NEH Region, Umiam 793 103, Meghalaya
2.	ICAR-Agricultural Technology Application Research Institute, Zone-VI, Indian Council of Agricultural Research, Kahikuchi, Ganakpara, Guwahati, Assam 781017
3.	ICAR-Agricultural Technology Application Research Institute, Zone-VII, Indian Council of Agricultural Research, Umiam (Barapani), Ri-Bhoi, Meghalaya-793103
4.	Assam Agricultural University, Jorhat, 785013, Assam
5.	College of Horticulture and Forestry (Central Agricultural University, Imphal), Pasighat 791102, Arunachal Pradesh
6.	College of Agriculture (Central Agricultural University, Imphal), Pasighat-791102, Arunachal Pradesh
7.	District Agriculture Office, Daporijo 791122, Upper Subansiri District, Arunachal Pradesh
8.	District Agriculture Office, Basar 791101, Lepa Rada District, Arunachal Pradesh
9.	District Agriculture Office, Anini 792101, Dibang Valley District, Arunachal Pradesh
10.	College of Agriculture, Iroisemba, Central Agricultural University, P.O. Box 23, Imphal 795004, Manipur
11.	College of Post- Graduate Studies in Agricultural Sciences, (Central Agricultural University, Imphal), Umiam 793103, Meghalaya
12.	Directorate of Agriculture & Farmers Welfare, Kaisara Road, Tuikual South, Aizawl, Mizoram 796001
13.	School of Agricultural Sciences, Nagaland University, Medziphema 797106, Nagaland
14.	Kohima Science College, Jotsoma, Phezhu 797002, Kohima District, Nagaland
15.	Krishi Vigyan Kendra, Phek (ICAR-NRC Mithun), Nagaland
16.	School of Life Sciences, Sikkim University, 6th Mile, Tadong, PO: Samdur, Gangtok 737102, Sikkim
17.	Krishi Vigyan Kendra, West Sikkim, Gyalshing, Sikkim
18.	Krishi Vigyan Kendra, South Sikkim, Namthang, Sikkim
19.	Krishi Vigyan Kendra, North Sikkim, Mangan, Sikkim
20.	College of Agriculture, Tripura, Lembucherra, West Tripura, 799210, Tripura

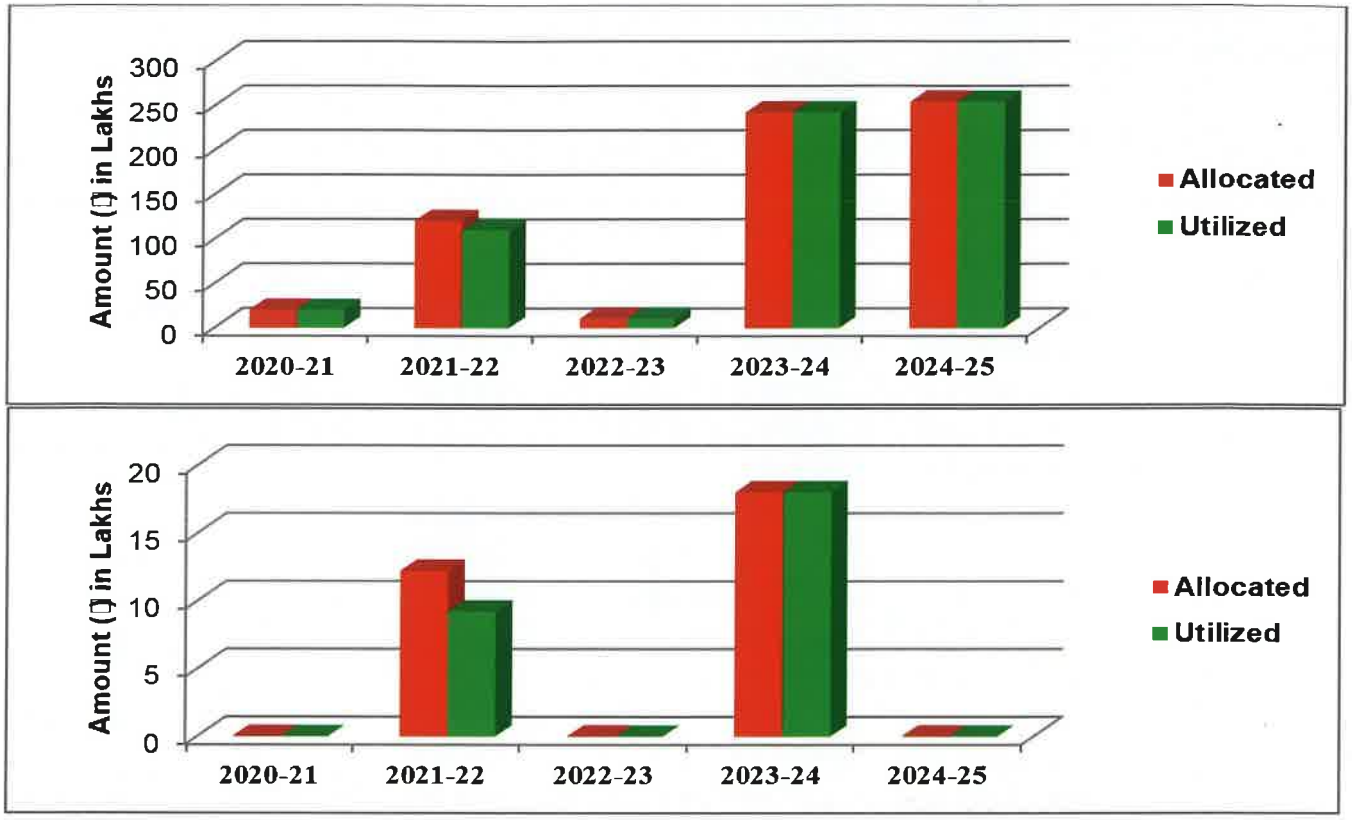


Fig 2. Financial support under IIPR NER Programme in General (upper) and Capital (lower) heads

IIPR has also made a significant progress in spreading its network in the North-East and mobilizing the count of collaborating centres in the region. With only a few collaborations seen during 2020-22, presently it is coordinating with more than a dozen centres without excluding a single state in entire region.

The Institute, under its NER Programme, has made a significant contribution in facilitating Trainings (Capacity building/ Skill Development *etc.*), Demonstrations, Awareness Camps, Exposure Visits, *Kisan Melas*, *Kisan Diwas*, Exhibitions along with distribution of vital inputs benefitting a number of farmers across the far off locations of the North-East region, in collaboration with the coordinating centres. During the period of 2020-21 to 2024-25, a total of 292 nos. of Capacity Building Programmes (Trainings), 396 nos. of demonstrations of improved technologies and 114 nos. of Exposure visits/Awareness camps / *Kisan Melas* / *Kisan Diwas* / Exhibitions were conducted in different locations of the North-East region benefitting altogether 7176, 7546 and 4344 nos. of farmers, respectively (Fig. 3).

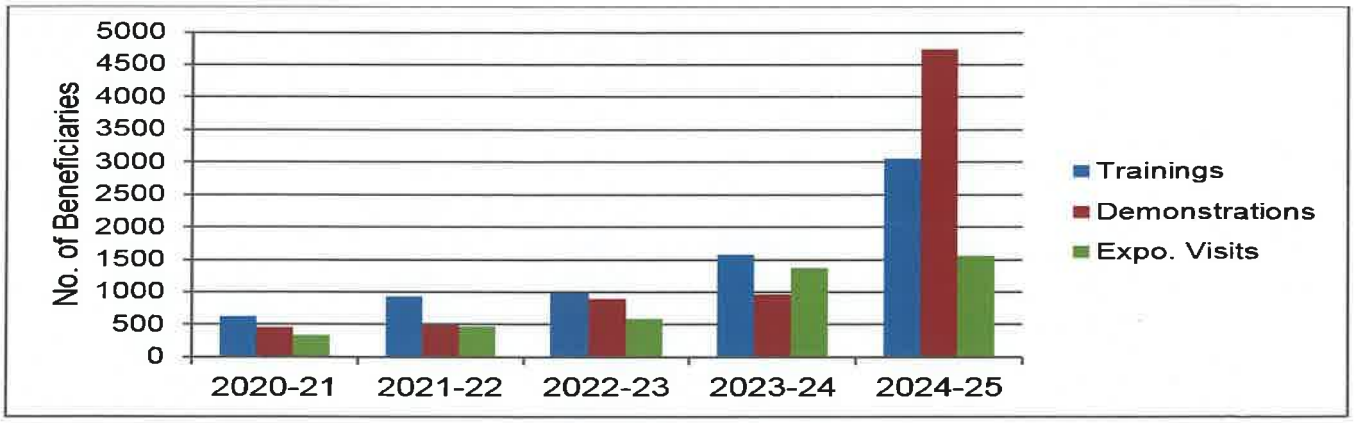


Fig 3. Number of farmers benefitted under trainings, demonstrations and exposure visits during 2020-21 to 2024-25

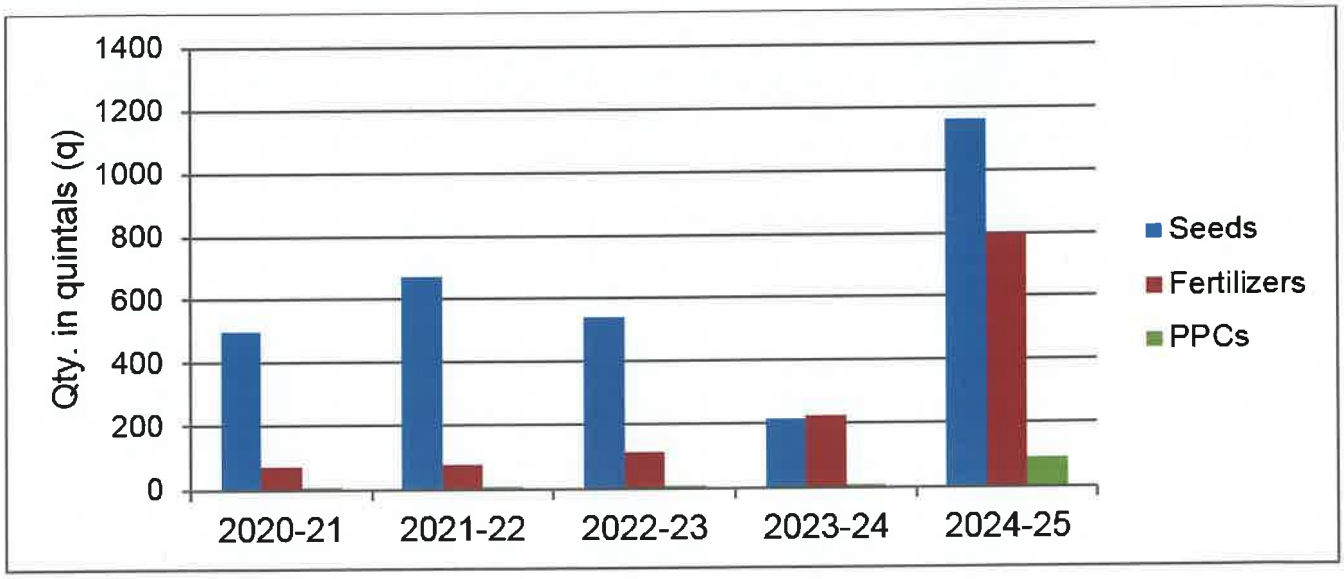


Fig 4. Quanity of seeds, fertilizers and plant protection chamicals (PPCs) supplied under the input distribution activities of IIPR NER Programme

Under the input distribution programme, altogether 3093.19 q of seeds of different pulse crops, 1290.25 q of fertilizers/bio-fertilizers and 115.33 q of Plant Protection Chemicalswere distributed during the period of 2020-21 to 2024-25 (Fig. 4). In all, 9566 nos. of farmers got benefited from the seed input, 8200 from the fertilizer input and 4840 from the plant protection chemicals (Fig. 7) whereas 5755 nos. of small farm tools were distributed to a total of 4053 beneficiaries during the said period.

Aside from these, IIPR Mini *Dal* Mills were established at various centres like KVK Goalpara, Assam; RARS Shillongani, Assam; KVK Kamrup, Assam; KVK Thoubal, Manipur and CAU Imphal, Manipur, to facilitate the post-harvest processing of the produce, thereby, making them self-sufficient in farming to marketing.

IIPR, under its NER Programme, endeavoured to make it available across every location in the states of the North-East region by offering collaborations to the maximum number of ICAR centres, Universities and State Agricultural Departments. Below is the table showing villages and their district under different states, the Institute has made it.

Table 2. List of villages/district in different NE states, covered under the extension activities of IIPR NER Programme during 2020-25

S. No.	States	Village/Districts
1.	**Arunachal Pradesh**	Mirbuk village, Yapgo (East Siang), Hime (Lower Siang), Bordumsa village, Gidding village, Soha village (Changlang),Kaisu (Namsai), Maro, Tapi, Tode(Upper Siang District), Anini, Aropo, Etalin, Etabe, Mihundo, (Lower Dibang Valley), Seram (Namsai), Sigar (East Siang), Riddi, Yatekripa, Hokom, Tamaripa (Upper Subansiri District), Beye village (West Siang District), Riga village(Siang District), Kiyit village(East Siang District), Kuporijo (Upper Subansiri), Sisang village (Lower subansiri)
2.	**Assam**	Madaltana, Nathapara, Japadong, Pakhamara (Baksa); Balajan, Josihati, Islampur, Balajan (Barpeta); Ulubari, Pub Makra, Daranga, Lakhijharo (Chirang); Bankuwal, Mithachapori, Jathipatia. Butolikhowa (Golaghat); Kochrajhar, Barthekerabari, Bandia, Kaniatari (Darrang); Singitoli, Bihaguri,

		Johamari, Rajbhoral, Puthimari Likhokgaon, Panchmile, Puthimari, Rajbhoral, Bihagiuri (Sonitpur); Sissiborgaon, Gogamukh, Jonao Simen Chapori, Gali (Dhemaji); Gutipara, Boyzeralga & Koimari (Dhubri); Panditarpam (Kamrup); Ghahi Bhaikuri, Chakalaghat, Tetelixora (Nagaon); Purni, Kardoitola, Loharkatha, Sotemari, Dagapara, Angradi, Aupara, Bhangnamari, Bhelamari, Sungarbori (Nalbari). Jajimukh, Moukina, Goalgaon, (Jorhat).
3.	**Manipur**	Khumbong Khumbong Maklang Lamsang Awang Leikai Maklang Awang Leikai Mayang Langjing Patsoi Part II Sangaithel Uripok Kameng Mayai Leikai Sangaithel Laitonjam Mayai Leikai, Haorang, Khunou, Maklang, Awang, Khunou, Lamsang Awang Leikai, Loitang, khunou, Potsangbam, Khoirou, Iram Siphai (Imphal West district); Andro Chanam Sandrok, Itam Numgoi Awang Leikei, Itam Nungoi Khunou, Itam Nungoi Makha Leikei, Moirang Purel, Yairipok Top Chingtha, Yaripok Changamdabi Makha Leikai, Yaripok Changamdabi Mayai Leikai, Lamboi khul Makha Leikai, Nungbrang Awang Leikai, Nungbrang Mayai Leikai ,Kamu Leirak, Thiyam Konjil, Ucheckon Khunou, Ucheckon Takhok Mapal, Yairipok, Yaripok Yaripok Changamdabi Mayai Leikai, Itam, Khewa Phurju, Lamboi Khul, Lamlai Mayai Leikai, Moirangpurel, Pangei Yangdong, Phaknung, Phaknung Awang, Pukhao Ahallup, Sagolmang, Takhel, Uyumpok, Wakhong ,Potsangbam Khoirou Sagolmang , Yumnam Patlou) (Imphal East district); Oinam Awang Leikai, Oinam Ward no 4, Ngakha Lawai (Bishnupur district); Wangjing Charangpat Kakching Khunou Lamding Chherpur, (Thoubal district).
4.	**Meghalaya**	Thadnongiaw, Nalapara, Umbang, Sumer (Ri-bhoi),Thadmuthlong (West Jaintia Hills)
5.	**Mizoram**	Tuichhuahen, Kolasib District, Buhchangphai, Kolasib District,Bukvannei, Kolasib District, Zawlpui,Serchhip District,Zuangleng,Serchhip District, Chamdur,Serchhip District,Sihpui,Aizawl District, Ruangva,Aizawl District, KaniPhai,Aizawl District,Nghasih,Lunglei District, Huisih,Lunglei, District, Siachang zau,Siaha District, Ngur zau,Champhai District, Archhuang Lawngtlai District, Zawlpui Zau, Mamit, District, Zaupui zau, Mamit District, Saphak, Hnahthial District, Tuiphal zau,Saitual District.
6.	**Nagaland**	Pangti (Wokha); Phomching, Yuching, Tangyu (Mon); Yoangyimti, Kubza (Mokokchung); New Chalkot village, Samsuiram village (Peren); Alaphumi (Zunheboto); Kiphire, Pungro, Cedeyevong, Phelungre (Kiphire); Chessore (Tuensang); Jotsoma, Phesama, Kiruphema, Peducha, Mima, Kigwema, Chedema (Kohima); Yeveto (Niuland); Aoyim (Dimapur)
7.	**Sikkim**	Heegaon, Geyzing; Tumin, Gangtok, Pakyong, North Sikkim, West Sikkim, South Sikkim Maniram (Namchi)
8.	**Tripura**	Bamutia, Ananganagar, Borjosh, Narsinghagarh, Unakoti- Bilaspur, Koulikora, South Tripura-Amarpur, Sabroom,Mirza,Kakrabon, Gomati-Bagma, Atharobola, Tepania, Maharani, Killa, North Tripura Jubrajnagar,Boithongbari, Lankamura, Tripura. Unakoti- Bilaspur, Koulikora, South Tripura-Amarpur,Sabroom,Mirza, Kakrabon, Gomati-Bagma, Atharobola, Tepania, Maharani, Killa, North Tripura- Boithongbari, West Tripura-ankamura, Barjor, Bamutia, Sipahijala-Raghunathpur, Pathalia.

The ICAR-Indian Institute of Pulses Research, Kanpur, under its NER Sub-component, has made its reach to far off locations in most of the districts of NE states. In last five years (2020-25), it has made significant efforts in strengthening the pulse growers in terms of creating awareness, demonstrating technologies and supporting through vital inputs and infrastructure (Fig 5), all for expanding area and productivity, enhancing farmers' profitability and bringing self-sufficiency in pulses in a sustainable manner. State-wise details of the activities have been detailed in the upcoming chapters.

Fig 5. Equipment established in NE Centres under the IIPR NER Programme

Remarkable Initiatives

Success-story mirrors the fruitfulness of an initiative. The Institute, through its IIPR-NER Sub-Plan, has been abled to count few cases which have brought a difference in an individual's life-standard. Below are the few success-stories from North-East region of India, achieved under the programme.

Transforming Non-Cropped Land into Productive Organic Farming - The Journey of Mrs. E. Tasing

Mrs. E Tasing, a 32-year-old progressive farmer from Oyan village in East Siang district, Arunachal Pradesh, has set a remarkable example by converting one hectare of non-cropped land into a thriving organic farming system. With only a 12th pass qualification, her dedication and openness to innovation led her to adopt the interventions introduced under the project "Promotion of Pulses in NE Region" under IIPR-NER Component. In 2024–25. She implemented an intercropping system of high-yielding variety of greengram (SBC-40) with dragon fruit on her land, which was previously uncultivated. Utilizing Integrated Pest Management (IPM) and Integrated Disease Management (IDM) technologies, including *Rhizobium* and *Trichoderma*, she achieved a yield of 12 quintals per hectare from greengram in the very first year, with dragon fruit plants in their pre-bearing stage. This conversion not only brought barren land under cultivation but also demonstrated the viability of sustainable and integrated farming practices. Her venture resulted in a cost-benefit ratio of 1:2.50, indicating significant economic returns. Mrs. Tasing's success serves as an inspiring model for women and smallholder farmers across the region, proving that with the right support and innovation, organic pulse cultivation can thrive even in non-traditional areas.

Empowering Rural Women through Pulse-Based Enterprises - The Journey of Mirbuk Ane SHGs, Pasighat

The Mirbuk Ane Self Help Groups (SHGs) from Pasighat, Arunachal Pradesh, have emerged as a powerful example of women-led value addition and rural entrepreneurship under the "Promotion of Pulses in NEH Region" initiative. Leveraging locally available pulses such as blackgram and greengram, the SHG members have been trained and empowered to produce a variety of value-added food products, including *bhujia, besan*, and cookies. These products, processed and packaged with quality and hygiene standards, have not only gained popularity in local markets but also created a sustainable source of income for the women involved. Through collective effort, skill development, and market-oriented processing, the SHGs have transformed traditional farming into a profitable enterprise. The economic impact has been substantial, with the group achieving an impressive cost-benefit ratio of 1:3.50, showcasing the profitability of agro-based micro-enterprises when supported by capacity building and value-chain integration. This initiative has not only improved livelihoods but also enhanced the confidence and social standing of women farmers, reinforcing the role of SHGs as engines of economic empowerment in the region.

With timely input support of quality seeds, fertilizers, plant protection chemicals under IIPR NER Programme, farmers from Unakoti, South Tripura, West Tripura,Khowai and Sepahijala districts of Tripura have proved their progressiveness in scientific farming of blackgram, rajma and lentil, which gained them remarkable earnings (Table-6).

Table 1. Success details of Mr. Kunjababu Sinha

District	Unakoti
Name of GP	Bilaspur
Name of Programme	Promotion of pulse in NEH Region (Tripura) under IIPR-NER Programme
Implementing office	College of Agriculture, Tripura
Name of Crop and Variety	**Black Gram (Var IPU 10-26)**
Area Covered	0.16 ha
Production Cost (Rs.)	7,675/-
Benefits from Scheme	Seed, Bio-Fertilizer (*Rhizobium*), Bio-Pesticide (*Trichoderma*), Fungicide, Insecticide, Herbicide, Micro-nutrient formulation, Seed Drill
Production	135 kg/0.16 ha
Productivity	8.44 q/ha
Actual Income (₹)	16200/-
Net Profit (₹)	**8,525/-**
Farmer's View	HYV seeds, reduction in cultivation cost, less disease & pests, Difficulties in post-harvest processing & storage

Table 2. Success details of Mr. Rajen Das

District	South Tripura
Name of GP	Doulbari
Name of Programme	Promotion of pulse in NEH Region (Tripura) under IIPR - NER Programme
Implementing office	College of Agriculture, Tripura
Name of Crop and Variety	Rajma (Var Hur 301)
Area Covered	0.8 ha
Production Cost (₹)	60,000/-
Benefits from Scheme	HYV Seed, Bio-Fertilizer (*Rhizobium*), Bio -Pesticide (*Trichoderma*), Micro- nutrient formulation,
Production	1500 kg/0.8 ha
Productivity	18.75 q/ha
Actual Income (₹)	1,35,000/-
Net Profit (₹)	**75,000/-**
Farmer's View	HYV seeds, reduction in cultivation cost, less disease attack

Table 3. Success details of Mr. Ratna Debnath

District	South Tripura
Name of GP	Doul bari
Name of Programme	Promotion of pulse in NEH Region (Tripura) under IIPR-NER Programme
Implementing office	College of Agriculture, Tripura
Name of Crop and Variety	Rajma (Var Tripura Rajma Sel-1)
Area Covered	0.64 ha
Production Cost	₹ 40,000/ -
Benefits from Scheme	Seed , Bio- pesticide (*Trichoderma*), Fungicide, Insecticide, Micronutrients formulation
Production	1080 kg/0.64 ha
Productivity	16.8 q/ha
Actual Income	₹ 97,200/ -
Net Profit (₹)	**57,200/-**
Farmer's View	HYV seeds, reduction in cultivation cost, less disease and pest attack

Table 4. Success details of Mr. Kshitish Das

District & Area	Khowai
Name of GP	North Ramchandra Ghat
Name of Programme	Promotion of pulse in NEH Region (Tripura) under IIPR-NER Programme
Implementing office	College of Agriculture Tripura
Name of Crop and Variety	Black gram [var -IPU 10 - 26]
Area Covered (₹)	0.16 ha
Production Cost (₹)	8155.00
Benefits from Scheme	Seed, Fertilizers like Urea, SSP & MOP, bio-fertilizer (*Rhizobium*), Bio- pesticide (*Trichoderma*), Micronutrients formulation
Production	200 kg/0.16 ha
Productivity	12.5 q/ha
Actual Income (₹)	18000/-
Net Profit (₹)	**9856/-**
Farmer's View	HYV seeds, reduction in cultivation cost, less disease & pest attack, difficulties in post-harvest processing & storage

Table 5. Success details of Mr. Abu bakkar Siddique

District	Sepahijala
Name of GP	Raghunathpur
Name of Programme	Promotion of pulse in NEH Region (Tripura) under IIPR - NER Programme
Implementing office	College of Agriculture Tripura
Name of Crop and Variety	Lentil (var L-4717)
Area Covered	1.0 ha
Production Cost (₹)	35,000/-
Benefits from Scheme	Seed, Fertilizers like Urea, SSP & MOP, Bio-fertilizer (*Rhizobium*), Bio-pesticide (*Trichoderma*), Fungicide, Insecticide, Herbicide, Micronutrients formulation, Winnower
Production	775 kg/ha
Productivity	7.75 q/ha
Actual Income (₹)	75,000/-
Net Profit (₹)	**40,000/-**
Farmer's View	HYV seeds, Suitability in rice fallows, reduction in production cost, difficulties in post-harvest processing and storage

Table 6. Success details of Mr. Sripad Debnath

District &Area	West Tripura
Name of GP	Nutannagar
Name of Programme	Promotion of pulse in NEH Region (Tripura) under IIPR-NER Programme
Implementing office	College of Agriculture Tripura
Name of Crop and Variety	*Rajma* [Var HUR 301]
Area Covered	0.16 ha
Production Cost (₹)	₹ 9,000/-
Benefits from Scheme	Seed, fertilizers like Urea, SSP & MOP, Bio - fertilizer (*Rhizobium*), Bio - pesticide (*Trichoderma*), Fungicide, Insecticide, Herbicide, Micronutrients formulation, Winnower
Production	280 kg / 0.16 ha
Productivity	17.50 q/ha
Actual Income (₹)	28,000/-
Net Profit (₹)	**18,000/-**
Farmer's View	HYV seeds, high demand in local Agartala Market, reduction in cultivation cost

Media Clippings

Promotion of pulses in NE region: Field day cum input distribution prog held

KOHIMA, OCTOBER 14 (MExN): A field day cum Input Distribution Programme under 'Promotion of pulses for North East Region (NER)' was organized by AICRP on Kharif pulses, SAS:NU, Medziphema campus in collaboration with ICAR-IIPR Kanpur at Pangtong village, Wokha district on October 12.

Special guest for the programme, Dr. Anup Chandra, Senior scientist (Entomology), ICAR-IIPR, Kanpur highlighted the importance of pulses, with special emphasis on pulse crops like Arhar which is among one of the major pulse crops imported by our country. He also mentioned that ICAR-IIPR Kanpur is the only pulse research station in India that solely focuses on pulses production in our country.

The programme was followed by field visit alongwith the farmers where Dr. Anup Chandra, Senior Scientist (Entomology) showed the destructive nature of Podfly, Leafhopper and Apion sp. and its prevention by using different biopesticides and chemicals. Interaction with the pulse growing farmers was done with all the scientists regarding different diseases, package technology and breeding aspects of the crop during the field day. A total of 30 beneficiaries of arhar growers were selected and farm inputs were distributed for improving the production.

The Programme was chaired by Dr. Lowrence Kithan, Scientist (Agronomy) and welcome speech was delivered by Dr. Akumla Longchar, Scientist (Plant Breeding). Farmers feedback was delivered by Ekhyothung and Mhontsen. Vote of thanks was delivered by Kavi sumi, Scientist (Plant pathology).

Workshop on seasonal Dal cultivation held

Times News

Charilam, Mar 18: A day long workshop on cultivation of seasonal lentils held here at Raghunathpur village under Bishalgarh agricultural subdivision on Tuesday. At least 50 farmers participated in the workshop to get training and insights of the cultivation. Tripura Agricultural College, Lembuchra and Indian Pulses Research Centre, Kanpur Uttar Pradesh in collaboration with Agriculture Supervisor of Bishalgarh subdivision has organised the training programme for the farmers. Sepahijala Zilla Parishad Agriculture Standing Committee President Gauranga Bhowmik, Bishalgarh Panchayat Association Standing Committee Agriculture Chairman Shankar Saha, Tripura Agricultural College Professor Dr. Abhijit Saha, Dr. Durga Prasad Abasthi, Dr. Ranjana Prasad, Senior Assistant Director of Agriculture Department were present in this training workshop. 50 kani (8 ha) of land has been targeted for cultivation of summer pulses (mung, mashkalai). Hands-on training workshops were conducted on pulse cultivation through scientific method, control of diseases and insects, application of various organic/microbial fertilizers to protect soil health, seed

Farmers in Gomati and South Tripura Empowered through Pulses Cultivation Training Programme

Agartala (Tripura). SThe College of Agriculture, Tripura, in collaboration with BagmaAgri Producer Company Limited (BAPCL), organized a 'One-Day Farmers' Training cum Input Distribution cum Demonstration Programme' aimed at promoting the cultivation of pulses, particularly green gram and black gram, in Gomati and South Tripura districts. This initiative is part of an ICAR-Indian Institute of Pulse Research-sponsored project titled "Promotion of Pulses in NEH Region (Tripura)."""The event, held on September 13, 2024, saw the participation of key dignitaries, benefits of pulses, emphasizing their importance in sustainable farming practices.""The technical session led by Dr. Saha focused on the 'Scientific Cultivation Techniques of Green Gram and Black Gram.' Following the training, essential agricultural inputs 20 per cent while lowering cultivation costs.""The programme was attended by 55 progressive farmers, both male and female, from various regions including Amarpur, Sabroom, Killa, Maharani, and Kakraban. Farmers were particularly grate-

Farmers in South Tripura Reap Benefits of High-Yield Rajma Cultivation Initiative

Agartala (Tripura). Doulbari village in Sabroom, South Tripura, is witnessing a transformative shift in agricultural practices as local farmers embrace high-yield rajma cultivation, reaping the rewards of an ambitious initiative aimed at revitalizing fallow paddy and maize fields.

The "Promotion of Pulses in NEH Region Tripura" project, spearheaded by the College of Agriculture, Lembucherra, in collaboration with ICAR-Indian Institute of Pulses Research, Kanpur, and Bagma Agri Producer Company Limited (BAPCL), has been instrumental in boosting pulse production in the region. This initiative is focused on enhancing soil health, increasing farmer incomes, and ensuring greater food security.

From November 2024 to February 2025, a total of 5 hectares of land were cultivated with HUR-321 and Tripura Rajma-1 varieties. The seeds were provided under the ICAR-IIPR Pulse Promotion Project, ensuring farmers had access to high-quality inputs. The initiative incorporated modern farming techniques such as mechanized row sowing, micronutrient application, top dressing of fertilizers, and split application of urea.

The Morung Expr...

Collaborative meeting on 'Promotion of pulses in NE Region' held in Kohima

Dignitaries and others during collaborative meeting on promotion of Pulses in NE Region.

KOHIMA, OCTOBER 17 (MExN): A collaboration meeting on "Promotion of Pulses in North East Region" was held at Kohima Science College, Jotsoma (KSCJ) with the Principal, HoD, PI, scholars and Scientist from ICAR-IIPR Kanpur, UP and AICRP on Kharif Pulses, SAS, NU Medziphema Campus on October 11.

During the meeting, Dr Samadangla Ao, Associate Professor and Dezielhunuo Kiso Ph.D scholar of KSCJ updated on the chickpea research and trainings provided to the farmers of Kohima for promotion of chickpea production in Kohima, Nagaland.

Dr Temjenwabang, Principal and Dr Wenyitso Kapfo, Head Department of Botany, KSCJ highlighted the essentials of Pulses research and expressed appreciations for the recognition and funding support provided by the ICAR-IIPR Kanpur.

Dr Anup Chandra, Senior Scientist (Entomology), ICAR-IIPR Co-modal officer for promotion of Pulses in NE Region apprised on the importance of Pulses crops and opportunities to work for promotion of Pulses in Northeast Region.

Dr Lawrence Kithan, Scientist (Agronomy), Dr Akumla Longchar Scientist (Plant Breeding) and Kavi Sumi, Scientist (Plant Pathology) from AICRP, SAS, NU Medziphema emphasized on the collaborative effort among researcher to develop Nagaland specific varieties of pulses and criticality of connecting with farmers for successful implementation of pulses production in Nagaland.

ARUNACHAL PRADESH

Pulses cultivation is gaining importance in agriculture of Arunachal Pradesh, providing food security, improving soil health, and supporting the livelihoods of local farmers. It is grown in various districts of the state. The major pulses grown in Arunachal Pradesh are green gram, black gram, lentil, and kidney beans *etc*. The state contributes a relatively small percentage to India's total pulse production. The average yield production of this region is significantly deficit in pulse production, exceeding 50%. Arunachal Pradesh's pulse production meets only a fraction of its demand, with the state struggling to fulfil its pulse requirements. The state's average yield of pulses is below the national average. Pulse cultivation in Arunachal Pradesh is primarily done by small and marginal farmers, who face several challenges, including quality seeds and lack of modern farming techniques. Despite these challenges, the state's unique agro-climatic conditions, favourable soil and rich biodiversity present opportunities for growing a variety of pulses. There is immense scope to increase the area and production of pulses in Arunachal and to reduce the gap of productivity as compared to national average. With these considerations, the activities were conducted under "Promotion of Pulses in NE Region (Arunachal Pradesh)".

The activities aimed to:

- Enhance the cultivation area and productivity of pulses
- Train and empower farmers through skill-building programmes
- Provide quality seeds and farming inputs
- Conduct awareness and exposure visits to spread improved cultivation practices

The activities were executed across multiple districts; Namsai, Changlang, East Siang, West Kameng, Siang, Upper Subansiri, Dibang Valley *etc*. with targeted input distribution, demonstrations, and farmer training initiatives. The details are given below :

Table 1. Details of inputs distributed during 2024-25

	Quantity (kg)	No. of Beneficiaries			Village with District covered
Seed Input					
Crop		Male	Female	Total	
Blackgram	1100 kg	74	55	129	Changlang district, Bordumsa village Gidding village, Soha village
Greengram	850 kg	86	64	150	Changlang district, Bordumsa village, Gidding village, Soha village
Cowpea	1000 kg	46	54	100	Kiyit village, Sigar village (East Siang district), Kaisu village (Namsai district), Bordumsa (Changlang district)
Total	**2950 kg**	**206**	**173**	**379**	

PLANT PROTECTION CHEMICALS					
Name of chemicals	**Qty. (L/Nos.)**	**Male**	**Female**	**Total**	
Multineem	6 L	30	35	65	East siang (Mirbuk village), Lower subansiri (Sisang village), East Siang (Yapgo)
Copper oxychloride	66 Nos.	28	38	66	Sigar village, Seram village, Kiyitvillage (East Siang district), Bordumsa (Changlang district)
Carbendazim + Mancozeb Imidachloroprid	65 Nos.	26	39	65	
Total		**84**	**112**	**196**	
Small Farm Implements					
Name of the tool	**Qty. (Nos.)**	**Male**	**Female**	**Total**	
Hand cultivator FCH-305	20	15	20	35	East siang (Mirbuk village), Lower subansiri (Sisang village), East Siang (Yapgo)
Weeding fork FNF- 102	20	10	25	35	
Hand weeder FW	20	10	15	25	
Sealing machine	6	20	45	65	
Sprayer	6	30	50	80	
Digging trowel	20	10	30	40	
Khurpi	20	30	20	50	
Garden rake	20	27	30	57	
Vegetable fly Lure	4	19	25	44	
Spade	150	70	90	160	Lower Siang, Hime village, Kaisu village (Namsai district), Bordumsa (Changlang district), Seram village (East Siang district)
Gum boots	20	10	40	50	
Knapsack Sprayer	62	28	34	62	
	Total	**279**	**424**	**703**	

Table 2. Details of Inputs distributed during 2023-24

INPUTS	Qty. (Kg)	No. of Beneficiaries			Village with District covered
Seed Input					
Crop		**Male**	**Female**	**Total**	East Siang (Remi village, Kiyit village), Siang district (Riga) West Siang (Aalo), Seram village, Mebo village, Pasighat (East Siang district), Dalbing village, Siang district and Upper Siang
Blackgram	781	33	90	123	
Greengram	1811	46	100	146	
Cowpea	1500	40	58	98	
Total	**4092**	**119**	**248**	**367**	
Fertilizers/Biofertilizers					
Name of the Fertilizer	**Qty. (kg/l)**	**Male**	**Female**	**Total**	
DAP	394 kg	34	41	75	Riga village (Siang district), Kiyit village (East Siang district), Roing (Dibang Valley district)
CAU-Bioenhancer	60 L	29	36	65	
Rhizobium	119 kg	15	60	75	East Siang (Remi Village, Kiyit Village), Siang district (Riga) West Siang (Aalo)
Azotobacter	115 kg	10	50	60	
Azospirilium	115 kg	10	60	70	
	Total	**98**	**247**	**345**	
Plant Protection Chemicals					
Name of chemicals	**Qty. (ml)**				
1. Biopesticides	125 ml	20	37	57	Seram village, Kiyit village, Ngopok village (East Siang district)
2. Metalaxyl	300 ml	28	40	68	
3. Emamectin benzoate	250 ml	24	33	57	
Total		**72**	**110**	**182**	

Table 3. Details of Training Programms conducted during 2024-25

S. No.	Title of the Training	Date	Locations	No. of Beneficiary		
				Male	Female	Total
1.	One day workshop programme on pulses promotion in Arunachal Pradesh	18 Oct, 2024	East siang (Mirbuk village), Lower Subansiri (Sisang village), East Siang (Yapgo)	15	30	45
2.	One day training programme on "Input distribution-cum training programme on pulses cultivation and value addition"	06 Jan, 2025	East Siang (Mirbuk Village), Lower Subansiri (Sisang village), East Siang(Yapgo)	7	30	37
3.	One day awareness programme on production, processing, distribution and development of value- added products of pulses	23 Jan, 2025	Lower Siang, Hime village, Arunachal Pradesh	30	20	50
4.	Field day on pulses promotion in North East India	20 Mar, 2025	Changlang district, Bordumsa village, Gidding village, Soha village	23	27	50
5.	Training on Augmenting the dietary value of local farming by value added pulse product at College of Agriculture, Pasighat	8-10 Aug, 2024	College of Agriculture, Pasighat, East Siang district	22	26	48
6.	Three days Skill development training programme on Pulses Processing and Marketing Skills at Sigar village	19-21 Oct, 2024	Sigar village, East Siang district	29	41	70
7.	Training programme on Scientific cultivation of pulses and input distribution at Namsai	7 Jan, 2025	Kaisu village, Namsai district	5	48	53
8.	Awareness programme on Promotion of pulses at Riga village	12 Aug, 20 24	Riga village, Siang district	22	28	50
9.	Awareness programme on Promotion of pulses at Seram village	18 Aug 2024	Seram village, East Siang district	20	32	52
10.	Awareness programme cum Seed distribution on Promotion of pulses at Rupa, West kameng	24 Aug, 2024	Rupa, West Kameng district	40	60	100
11.	Three days Awareness cum input distribution	18-20 Sep,	Namsai district, Sigar and	52	64	116

	and demonstration programme at Namsai, Sigar and Kiyit village	2024	Kiyit village, East Siang district			
12.	One day Farmer-Scientist Interface meeting in collaborations with CHF-Pasighat	18 Oct, 2024	Pasighat, East Siang district	68	102	170
13.	Soil Health Card distribution programme under Promotion of Pulses in collaboration with RAWE students	6 Nov, 2024	Sigar village, East Siang district	28	22	50
14.	Awareness Programme on Promotion of Pulses in NEH Region at Sigar village	27 Dec, 2024	Sigar village, East Siang district	25	21	46
15.	Exposure tour of farmers to IARI, Gogamukh and KVK, Dhemaji	13 Mar, 2025	IARI, Gogamuk and KVK, Dhemaji	0	20	20
16.	Workshop-cum-Awareness Programme on Promotion of Pulses in NEH Region in Bordumsa-Changlang	19 Mar, 2025	Bordumsa, Changlang district	68	63	131
			Total	**454**	**634**	**1088**

Table 4. Details of Training Programmes conducted during 2023-24

S. No.	Title of the Training	Date	Locations	No. of Beneficiary		
				Male	Female	Total
1.	Five days training programme on Value addition of Pulses for Livelihood improvement of Tribal farmers of Arunachal	23-27 Mar, 2024	Kiyit Village, East Siang district, Arunachal Pradesh	12	18	30
2.	One day stakeholder-cum-training programme on Promotion of Pulses in NEH Region at CoA, Pasighat	14 Mar, 2024	College of Agriculture, Pasighat, East Siang district	34	41	75
3.	Workshop-cum-Training on Promotion of Pulses in NEH Region at CoA, Pasighat	15-16 Mar, 2024	College of Agriculture, Pasighat, East Siang district	40	58	98
4.	Awareness programme-cum-seed distribution on Promotion of Pulses in NEH Region at Dalbing Siang district and Upper Siang	26 Mar, 2024	Dalbing, Siang district and Upper Siang district	20	37	57
5.	Awareness programme-cum-seed distribution on Promotion of Pulses in NEH Region at Lower Dibang valley	27 Mar, 2024	Roing, Lower Dibang valley	29	36	65
			Total	**135**	**190**	**325**

The project made significant strides in enhancing the adoption of pulse cultivation among smallholder farmers in Arunachal Pradesh. The inclusive approach, covering diverse districts and demographics, successfully built awareness, improved production inputs, and fostered farmer-scientist collaboration. The programme would bring positive impact on productivity, farmer confidence, and agro-enterprise capacity. Continuation of the programme in subsequent years would help sustain the momentum, scale innovations, and integrate more regions into the pulse revolution in the North Eastern Himalayan region.

Glimpses of activities

ASSAM

Pulses are important crops after rice for the people of Assam. The major pulses grown in Assam are blackgram, greengram, field pea, lentil, beans *etc*. Assam's share in India's pulse production is quite negligible. The average yield of most of the pulses in the state is lower than the national average. In 2024, the pulse production in Assam was 108 thousand tonnes, with a cultivated area of 146.6 thousand hectares with a productivity of 7.37 q/ha. However, this production only meets 20-25% of the state's demand which causes higher price of pulses. The state's average yield of pulses is slightly below the national average, and the majority of pulse cultivation occurs during the *Rabi* season. Pulses like chickpea, black gram and lentil have significant consumption but comaparatively low local production. There is immense scope to increase the area and production of pulses in Assam to reduce the productivity gaps compared to the national average. Rice fallow areas, which can be utilized for enhancing pulses cultivation, as well as varieties suitable for the soil and climatic conditions of Assam, need to be identified. Considering the above facts, a programme on 'Promotion of Pulses in NE Region' under the 'IIPR-NER Component' was conducted in order to boost the cultivation of pulses in the region.

The programme were taken up in 10 districts of Assam covering an area of 85 ha encompassing 211 beneficiaries of which 169 were male and 42 were female participants. Blackgram, Greengram, lentil and pea crops were demonstrated covering an area of 260, 220, 189.63 and 50 ha, respectively in 14 districts of Assam with the help of KVKs under AAU *viz*. Baksa, Barpeta, Chirang, Darrang, Dhemaji, Dhubri, Golghat, Jorhat, Kamrup, Lakhimpur, Nagaon, Nalbari, Sonitpur and Udalguri. The productivity of *kharif* greengram and blackgram were recorded as 8.25 q/ha and 8.61 q/ha, respectively. Various extension activities such as awreness programmes, trainings, field-day, *kisan melas etc*. were conducted during *kharif* pulse programme. A total of 1,164 farmers were benefited from this programme, out of which 953 farmers were male and 211 were female. The details of the programme are given below (Table 1 to 6) :

Table 1. Details of Input Distributed in Assam under IIPR NER Programme during 2024-25

Input	Quantity (kg/Nos./l)	No. of Beneficiaries			Village with District covered
SEED INPUT					
Crop	**Qty. (kg)**	**Male**	**Female**	**Total**	
Blackgram	5850.00	304	70	374	Barbari, Garamdew, Anandabazar, Pakhamara, Puransripur, Gelpejar (**Baksa**); Kahibari pum,1 no Chasra,2 no Chasra,Dubi,Satra kanara (**Barpeta**); No1 Barpothar, Dohalagaon, Bangaldoba, West Ankorbari, Durgapur, Khagrabari, Daragaon, Salbari, Subhaijhar, Ranipur, Pub Makra, Uttar Dakhingaon, Molandubi **(Chiang);** Barthekerabari, Kanaichuba,Chereng chapori, lengerimari, algachar chapari **(Darrang);** Kerkoni, Kheroni, Naharbari, Gali, Sissiborgaon **(Dhemaji);** Bonkulal, 1 no. Porongonia, 3 no koibartta **(Golaghat);** Kalbari, Neul gaon, Mohkina, Gual Gaon, Balichapori, Jugunidhari Bormukali, Sonariati, Maharichuk, Bhalukmara, Barunchuk (**Jorhat**) Hardiapaam, Hajo **(Kamrup);** Mazigaon, Bordoibam, Mahbal, Na-pam, Chutiakari, Lalpani **(Lakhimpur);** Loharkatha, Sotemari, Laupara, Tiladia, Howlyghat, Borbala **(Nalbari);** Rupkuria, Bihaguri, Batamari, Rajbhoral, Bapubheti, Johamari, Pungpani, Panchmile under Sonitpur district (**Sonitpur**) Borboripathar, Bhergaon, Borigaonjonghol, Gerua, Tongla, Batabari, Balipara, Pachnoi, (**Udalguri**);
Greengram	4000.00	248	52	300	Pakhamara, Tokankata, Barbari, Santipur **(Baksa);** Kahibari pum,1 no Chasra,2 no Chasra,Kandapara **(Barpeta);** No1 Barpothar, Dohalagaon, Bangaldoba, West Ankorbari,

					Durgapur, Bengtol, Salbari, Subhaijhar, Monglagaon **(Chiang);** Gadhowa chapori, lengerimari **(Darrang);** Naharbari **(Dhemaji);** *Aironjongla, (***Dhubri***);* Siristika Sadar, Dergaon **(Golaghat);** Kalbari, Neul gaon , Mohkina, Gual Gaon, Balichapori, Jugunidhari, Bormukali, Sonariati, **(Jorhat)** Sarioni, Mazigaon, Mahbal, Na-pam, Deoliagaon, Boginadi **(Lakhimpur);** Senchowa, Phulaguri, Bhugbari, Darangialgaon, Rangamatti and Senchowa Part-I **(Nagaon);** Loharkatha, Sotemari, Laupara, Tiladia, Howlyghat, Borbala, Angradi **(Nalbari);** Singitoli, Bihaguri, Bhalukekhuwa, Jamuguri, Likhok Gaon, Johamari, Batamari, Panchmile under Sonitpur district **(Sonitpur**); Biskhuti, Dogang, Pasnoi, Balipara, Kuramor, **(Udalguri);**
Pea	3000.00	121	41	162	Madaltana, Nathapara, Japadong (**Baksa**); Maneswari, Ranipur, Salbari, Dababil, Shantipur,, Dwiasgusu, Batabari, Baghmara, Tekaimari, Panbari, South Bamungaon, Subhaijhar **(Chiang);** Purni, Kordoitola, Loharkatha, Sotemari **(Nalbari);** Bonkuwal, Mithaamchapori, Jathipotia, 2 No. Butolikhuwa **(Golaghat)**
Lentil	5688.89	280	48	328	Japadong, Pakhamara (**Baksa**); Odalguri, Sanyasibari, Hatimara, Ulubari, Dumargaon, Saragaon, Bhawaragurri,, Khagrabari, Dohalapara, Dwisagusu, Santipara, Bhwanipur, Pub Makra, Daranga, Pakriguri, Dakhin Makra, Hainery, Laukriguri, Chourang, Barpothar, Lakhijhora, Sonalikhola **(Chiang);** Gutipara Pt. 3, Boyzeralga Pt.9 and Koimari **(Dhubri);** Ghahibhatikuri, Chakalaghat, Tetelixara, Garubandha, and Mahariati **(Nagaon);** Purni, Sotemari, 1 No. Narua, Dagapara, Angradi, Loharkatha, Laupara, Bhangnamari, Bhelamari, Sungarbori **(Nalbari)**
Total	**18538.89**	**953**	**211**	**1164**	
Fertilizers/biofertilizers					
Name of the Fertilizer	**Qty. (kg)**	**Male**	**Female**	**Total**	
Vermicompost/	**99100**	953	211	1164	**-do-**

Enriched Compost					
Biofertilizers	**861**	953	211	1164	**-do-**
Plant Protection Chemicals					
Name of chemicals	**Qty. (l)**				**-do-**
Actara, Thiamethoxam	19.0				
Metalaxyl	1.0				
Propiconazole	1.0				
Thiomethoxam	1.0				
Chlorantraniprolle	1.75				
Blitox	3.0				
Imidacloropid	1.0				
Contaf 5E	6.0				
Tracel	7.0				
Pendamiethalin	6.0				
Neem oil	6.5				
Dimethoate 30 EC	0.6				
Cypermethrin 10% EC	0.7				
Fipronil	19.154				
Total	**73.70**	**953**	**211**	**1164**	

Table 2. Details of Input Distributed in Assam under IIPR NER Programme during 2023-24

	Quantity (kg/Nos./l)	No. of Beneficiaries			Village with District covered
SEED INPUT					
Crop	Qty. (kg)	Male	Female	Total	
Blackgram	1733.00	144	53	197	Tamulpur, Rampur (**Baksa**); Kahibari pum,1 No Chasra,2 No Chasra, Dubi, Satra Kanara, Kandapara (**Barpeta**); Bandia, Gadhowa Chapari (**Darrang**); Mukalmua, Sungarbori, Laupara (**Nalbari**); Singitoli, Pungpani, Pithakhowa, Bhalukekhuwa (**Sonitpur**); No. 1 Borpathar (**Chirang**); Nogura Gaon, Mithaam Chapori, Mamoroni, Khumtai (**Golaghat**); Simen Chapori, Jonai & Sissiborgaon (**Dhemaji**); Hardiapaam, Kandalpara, Khalihamari (**Kamrup**); Borboripathar, Bhergaon, Borigaonjonghol, Gerua, Tongla, Batabari, Balipara, Pachnoi (**Udalguri**)
Greengram	180.5	14	0	14	No. 1 Borpathar (**Chirang**); Nogura Gaon, Mithaam Chapori, Mamoroni, Khumtai (**Golaghat**); Bandia, Gadhowa chapari (**Darrang**)
Total		**158**	**53**	**211**	
Fertilizers/Biofertilizers					
Name of the Fertilizer	**Qty. (kg)**	**Male**	**Female**	**Total**	
Urea	208	14		14	No. 1 Borpathar (**Chirang**); Kahibari Pum,1 No Chasra, 2 No Chasra, Dubi, Satra Kanara, Kandapara (**Barpeta**); Nogura gaon, Mithaam Chapori, Mamoroni, Khumtai (**Golaghat**)
SSP	1230	14		14	
MOP	170	14		14	
Vermicompost	10512	68	8	76	Tamulpur, Rampur (**Baksa**); Kahibari pum,1 No Chasra, 2 No Chasra, Dubi, Satra Kanara, Kandapara (**Barpeta**); Bandia, Gadhowa Chapari (**Darrang**); Mukalmua, Sungarbori, Laupara (**Nalbari**); Singitoli, Pungpani, Pithakhowa, Bhalukekhuwa (Sonitpur)
Rhizobium	45	125	40	165	Simen Chapori, Jonai & Sissiborgaon (**Dhemaji**); Hardiapaam, Kandalpara, Khalihamari (**Kamrup**); Borboripathar, Bhergaon, Borigaonjonghol, Gerua,

PSB	45	125	40	165	Tongla, Batabari, Balipara, Pachnoi (**Udalguri**); Singitoli, Pungpani, Pithakhowa, Bhalukekhuwa (Sonitpur)
Total	**12210**	**360**	**88**	**448**	
PLANT PROTECTION CHEMICALS					
Name of chemicals	**Qty. (L/Kg)**	**Male**	**Female**	**Total**	Bandia, Gadhowa Chapari (**Darrang**); Simen Chapori, Jonai & Sissiborgaon (**Dhemaji**); Mukalmua, Sungarbori, Laupara (**Nalbari**); Tongla, Batabari, Balipara, Pachnoi (**Udalguri**)
Neem Oil	15	14	0	14	
Pendamethalin 30 EC	5	4	3	7	
Fipronil	2.5	26	0	26	
COC, Thomethoxam	7.5	22	3	25	
Total	**30**	**66**	**6**	**72**	

Table 3. Details of Capacity Building Programmes conducted during 2024-25

S. No.	Title of the Training	Date	Venue	No. of Beneficiary		
				Male	Female	Total
1.	Training Programme on *Kharif* Pulses	13-09-2024, 19-09-2024	Gelpejar, Tokankata, Baksa	34	21	55
2.	Awareness Programme on *Rabi* Pulses	28-02-2025	Pakhamara, Baksa	31	14	45
3.	Training Programme on *Rabi* Pulses	26-02-2025, 08-03-2025	KVK, Baksa, *Baksa*	24	56	80
4.	Method demonstration on application of Biofertilizer	19-09-2024	Tokankata, Baksa	30		30
5.	Field day	18-03-2025	Pakhamara, Baksa	19	12	31
6.	Scientific production technology of Blackgram and Greengram	19-09-2024	1 no Chasra, Barpeta	10	21	31
7.	Post-harvest management technology of Blackgram and Greengram	06-12-2024	Kandapara, Barpeta	22	3	25
8.	Post-harvest and storage management of *kharif* pulse crops	02-01-2025	No1 Barpothar; Chirang	24	2	26
9.	Integrated crop management of lentil	15-02-2025, 24-05-2025	Pub Makra, Ananda Bazar, Chirang	35	22	57
10.	Scientific cultivation and post-harves technology of field pea	28-02-2025	Village: Baikunthapara District: Chirang	25	5	30
11.	Training on Scientific cultivation practices of pulses (Blackgram & greengram)	03-09-2024, 04-11-2024	KVK, Darrang Campus, Darrang	55	10	65
12.	Importance of pulses and their post-harvest management	30-09-2024	KVK, Darrang Campus, Darrang	20	6	26
13.	Method Demonstration on Seed treatment with biofertilizers	05-09-2024	KVK, Darrang Campus, Darrang	20	-	20
14.	INM in Blackgram and Greengram	15-10-2024, 19-11-24	Naharbari, Naokota Dhemaji	24	37	61
15.	Farmers training on scientific cultivation practices of *kharif* pulses	08-10-2024, 23-10-2024	Simlabari Pt.1, Aironjongla, Dhubri (Dhubri)	44	17	61
16.	Training programme on post-harvest management of lentil	03-03-2025	Koimari, Dhubri	20	08	28
17.	Scientific cultivation practices of Black gram	18-10-24	Bonkuwal, Golaghat	25	19	44
18.	Scientific cultivation practices of Green gram	24-10-24	Siristika , Golaghat	23	0	23
19.	Scientific cultivation practices of Pea	19-03-25	Mithaamchapori, Golaghat	18	7	25
20.	Scientific production technology of Blackgram and Greengram	28-10-24, 19-11-24	Kalbari, Guwal Gaon, Jorhat	24	6	30
21.	Scientific cultivation of pea	19-11-24	Kalbari, Guwal Gaon, Jorhat	19	14	33
22.	Improved *kharif* production technology	12-6-2024	Muktapur (Kamrup)	9	14	23

23.	Scientific production technology of Blackgram and Greengram	01-10-2024	Bordoibam (Lakhimpur)	42	8	50
24.	Integrated pest and disease management in Blackgram and Greengram	23-10-2024	Salmora (Lakhimpur)	22	2	24
25.	INM in Greengram under IIPR	07-09-2024	Mukali Nastra, Nagaon	15	4	19
26.	Integrated Nutrient and Pest management in Greengram under IIPR	21-10-2024	Rangamati, Nagaon	25	10	35
27.	Integrated Nutrient and Pest management in Greengram under IIPR	06-11-2024	Phulaguri, Nagaon	18	8	26
28.	Harvesting and preservation technology of Greengram under IIPR	13-11-2024	Darangialgaon, Nagaon	13	9	22
29.	Economics of Lentil production	18-1-25	Chakalaghat and Niz Hatichung, Nagaon	2	48	50
30.	Scientific cultivation practices of pulse crop (Greengram)	25-10-24	Sotemari, Nalbari	36	0	36
31.	Scientific cultivation practices of pulse crop (Blackgram)	09-12-24	Howlyghat, Nalbari	25	0	25
32.	Scientific cultivation practices of pulse crop (Lentil)	09-12-24	Bhelamari/ Howlyghat, Nalbari	24	0	24
33.	Scientific cultivation practices of pulse crop (Lentil & pea)	26-12-24	Laupara, Nalbari	14	17	31
34.	Scientific cultivation practices of Blackgram and Greengram	25-10-2024, 05-11-2024	Bhujkhowa Chapori and Training Hall, KVK Sonitpur	28	18	46
35.	Post-harvest management of *kharif* pulses	12-11-2024	Training Hall, KVK Sonitpur	13	08	21
36.	Scientific cultivation practices and post-harvest management of Lentil	22-01-2025	Bihaguri, Sonitpur	25	0	25
37.	Scientific cultivation practices of blackgram and greengram	10-09-2024, 11-09-2024 and 13-09-2024	Pasnoi, Songabodhi Kachari and Dimakuchi (Udalguri)	57	3	60
			Total	**914**	**429**	**1343**

Table 4. Details of Capacity Building Programmes conducted during 2023-24

S. No.	Title of the Training	Date	Venue	No. of Beneficiary		
				Male	Female	Total
1.	Production technology of sumer blackgram	15-06-2024	Silochipathar (Barpeta)	30	0	30
2.	Post-harvest and storage management of *kharif* pulse crops	02-01-2025	Village: No1 Barpothar District: Chirang	24	2	26
3.	Integrated crop management of lentil	15-02-2025	Village: Pub Makra District: Chirang	25	0	25
4.	Integrated crop management of lentil	24-02-2025	Village: Ananda Bazar District: Chirang	10	22	32
5.	Scientific cultivation and post-harvest technology of fieldpea	28-02-2025	Village: Baikunthapara District: Chirang	25	5	30
6.	Training on scientific cultivation practices of greengram and blackgram	30-04-2024	Bandia: Darrang	19	6	25
7.	Training on importance of seed production in pulses	30-04-2024	Ga Dhowwa Chapori: Darrang	21	4	25
8.	Scientific cultivation practices and post harvest management of blackgram	01-06-2024	Training Hall, KVK Sonitpur	29	0	29
9.	Field day on blackgram Var. SBC 40	06-06-2024	Singitoli, Sonitpur	17	8	25
10.	Exposure visits under IIPR-NEH programme	12-06-2024	AAU-ZRS Shillongani (Sonitpur)	11	19	30
11.	Scientific cultivation practices of blackgram	03-05-2024	Darrangipara, Udalguri	7	18	25
12.	Scientific cultivation practices of blackgram	19-03-2024	Bagaribari, Udalguri	0	25	25
			Total	**218**	**109**	**327**

Table 5. Details of Demonstrations conducted during 2024-25

S. No.	Title of the demonstration	Crop	Location	Area covered (ha)	No. of Beneficiary		
					Male	Female	Total
1.	Performance of *kharif* pulse crop in Assam	Blackgram	Barbari, Garamdew, Anandabazar, Pakhamara, Puransripur, Gelpejar **(Baksa)**	20	20	7	27
2.	Performance of *kharif* pulse crop in Assam	Greengram	Pakhamara, Tokankata, Barbari, Santipur **(Baksa)**	10	10	1	11
3.	Performance of *rabi* pulse crop in Assam	Lentil	Japadong, Pakhamara **(Baksa)**	5	6	4	10
4.	Performance of *rabi* pulse crop in Assam	Pea	Madaltana, Nathapara, Japadong **(Baksa)**	5	12	3	15
5.	Performance of *kharif* pulse crop in Assam	Blackgram (Var: SBC-40)	Kahibari PUM,1 no Chasra, 2 No Chasra, Dubi, Satra Kanara **(Barpeta)**	30	17	0	17
6.	Performance of *kharif* pulse crop in Assam	Greengram (Var: SGC-16)	Kahibari pum, 1 No Chasra, 2 No Chasra, Kandapara **(Barpeta)**	15	14	0	14
7.	Performance of *rabi* pulse crop in Assam	Lentil	Balajan, Josihati, Islampur, Balajan (**Barpeta**)	30	27	6	33
8.	Performance of *kharif* pulse crop in Assam	Blackgram	No 1 Barpothar, Dohalagaon, Bangaldoba, West Ankorbari, Durgapur, Khagrabari, Daragaon, Salbari, Subhaijhar, Ranipur, Pub Makra, Uttar Dakhingaon, Molandubi **(Chirang)**	15	26	10	36
9.	Performance of *kharif* pulse crop in Assam	Greengram	No1 Barpothar, Dohalagaon, Bangaldoba, West Ankorbari, Durgapur, Bengtol, Salbari, Subhaijhar, Monglagaon **(Chirang)**	5	9	4	13
10.	Performance of *rabi* pulse crop in Assam	Lentil	Odalguri, Sanyasibari, Hatimara, Ulubari,	30	70	17	87

			Dumargaon, Saragaon, Bhawaragurri,, Khagrabari, Dohalapara, Dwisagusu, Santipara, Bhwanipur, Pub Makra, Daranga, Pakriguri, dakhin Makra, Hainery, Laukriguri, Chourang, Barpothar, Lakhijhora, Sonalikhola **(Chirang)**				
11.	Performance of *rabi* pulse crop in Assam	Pea	Maneswari, Ranipur, Salbari, Dababil, Shantipur,, Dwiasgusu, Batabari, Baghmara, Tekaimari, Panbari, South Bamungaon, Subhaijhar **(Chirang)**	5	45	21	67
12.	Performance of *kharif* pulse crop in Assam	**Blackgram**	Barthekerabari, Kanaichuba, Chereng Chapori, Lengerimari, Algachar Chapari **(Darrang)**	30	58	-	58
13.	Performance of *rabi* pulse crop in Assam	**Lentil**	Kochrajhar, Barthekerabari, 2 No. Barthekerabari, Bandia, Kaniatari (**Darrang**)	20	31	4	35
14.	Performance of *kharif* pulse crop in Assam	Greengram	Gadhowa Chapori, Lengerimari **(Darrang)**	10	10	-	10
15.	Performance of *kharif* pulse crop in Assam	Blackgram	Kheroni, Kerkoni, Gali, Naharbari, Sissiborgaon **(Dhemaji)**	20	22	18	40
16.	Performance of *kharif* pulse crop in Assam	Greengram	Naharbari **(Dhemaji)**	5	5	6	11
17.	Performance of *rabi* pulse crop in Assam	Lenti	Sisiborgaon, Gogamukh, Jonai**(Dhemaji)**	10	14	2	16
18.	Performance of *rabi* pulse crop in Assam	Pea	Simen Chapori, Gali: **(Dhemaji)**	5	12	1	13

19.	Performance of *kharif* pulse crop in Assam	Greengram	Aironjongla, Simlabari, **(Dhubri)**	20	26	0	26
20.	Performance of *rabi* pulse crop in Assam	Lentil	Gutipara Pt 3, Boyzeralga Pt.9, Koimari **(Dhubri)**	5	12	0	12
21.	Performance of *kharif* pulse crop in Assam	Black gram	Bonkuwal, 1 No Porongonia, Rangamati Koibartta; Golaghat **(Golaghat)**	15	18	0	18
22.	Performance of *kharif* pulse crop in Assam	Green gram	Siristika sadar **(Golaghat)**	5	12	0	12
23.	Performance of *rabi* pulse crop in Assam	Pea	Bonkuwal, Mithaamchapori, Jathipotia, 2 No. Butolikhuwa **(Golaghat)**	5	17	0	17
24.	Performance of *kharif* pulse crop in Assam	Blackgram	Kalbari, Neul gaon, Mohkina, Gual Gaon, Balichapori, Jugunidhari Bormukali, Sonariati, Maharichuk, Bhalukmara, Barunchuk**(Jorhat)**	15	12	13	25
25.	Performance of *kharif* pulse crop in Assam	Green gram	Kalbari, Neul Gaon, Mohkina, Gual Gaon, Balichapori, Jugunidhari, Bormukali, Sonariati, Maharichuk, Bhalukmara, Barunchuk **(Jorhat)**	40	12	13	25
26.	Performance of *rabi* pulse crop in Assam	Pea	Jhanjimukh, Mohkina, Gual GaonBali Chapori **(Jorhat)**	20	12	10	22
27.	Performance of *kharif* pulse crop in Assam	Blackgram	Bongalpara **(Kamrup)**	30	40	0	40
28.	Performance of *rabi* pulse crop in Assam	Lentil	Panditarpam**(Kamrup)**	30	30	0	30
29.	Performance of *kharif* pulse crop in Assam	Blackgram	Mazigaon, Bordoibam, Mahbal, Na-pam, Chutiakari, Lalpani **(Lakhimpur)**	10	16	0	16
30.	Performance of *kharif* pulse crop in Assam	Greengram	Deoliagaon, Sarioni, Mazigaon, Mahbal, Na-pam, Boginadi **(Lakhimpur)**	20	15	4	19

31.	Performance of *kharif* pulse crop in Assam	Greengram	Senchowa, Phulaguri, Bhugbari, Darangialgaon, Rangamatti and Senchowa Part-I, **(Nagaon)**	10	41	0	41
32.	Performance of *rabi* pulse crop in Assam	Lentil	Ghahi Bhatikuri, Chakalaghat, Tetelixara, Garubandha and Mahariati **(Nagaon)**	9.63	47	7	54
33.	Performance of *kharif* pulse crop in Assam	Blackgram	Loharkatha, Sotemari, Laupara, Tiladia, Howlyghat, Borbala, Angradi **(Nalbari)**	40	37	0	37
34.	Performance of *kharif* pulse crop in Assam	Greengram	Loharkatha, Sotemari, Laupara, Tiladia, Howlyghat, Borbala, Angradi **(Nalbari)**	40	21	0	21
35.	Performance of *rabi* pulse crop in Assam	Lentil	Purni, Sotemari, 1 No. Narua, Dagapara, Angradi, Loharkatha, Laupara, Bhangnamari, Bhelamari, Sungarbori **(Nalbari)**	40	32	6	38
36.	Performance of *rabi* pulse crop in Assam	Fieldpea	Purni, Kordoitola, Loharkatha, Sotemari **(Nalbari)**	5	11	2	13
37.	Performance of *kharif* pulse crop in Assam	Blackgram	Rupkuria, Bihaguri, Batamari, Rajbhoral, Bapubheti, Johamari, Pungpani, Panchmile under Sonitpur district **(Sonitpur)**	20	22	10	32
38.	Performance of *kharif* pulse crop in Assam	Greengram	Singitoli, Bihaguri, Bhalukekhuwa, Jamuguri, Likhok Gaon, Johamari, Batamari, Panchmile under Sonitpur district **(Sonitpur)**	20	25	18	43
39.	Performance of *rabi* pulse crop in Assam	Lentil	Singitoli, Bihaguri, Johamari, Rajbhoral & Puthimari Panchmile, Puthimari, Rajbhoral & Bihgiuri**(Sonitpur)**	10	25	4	29

40.	Performance of *rabi* pulse crop in Assam	Fieldpea	Likhok Gaon, Panchmile, Puthimari, Rajbhoral & Bihgiuri **(Sonitpur)**	5	12	4	16
41.	Performance of *kharif* pulse crop in Assam	Blackgram	Biskhuti, Dogang, Pasnoi, Balipara, Kuramor **(Udalguri)**	15	32	10	42
42.	Performance of *kharif* pulse crop in Assam	Greengram	Borboripathar, Bhergaon, Borigaonjonghol, Gerua, Tongla, Batabari, Balipara, Pachnoi **(Udalguri)**	20	48	6	54
			Total	**689.63**	**953**	**211**	**1164**

Table 6. Details of Demonstrations conducted during 2023-24

S. No.	Title of the demonstration	Crop	Site name with district/Venue	Area covered (ha)	No. of Beneficiary		
					Male	Female	Total
1.	Performance of summer pulse crops in Assam	Blackgram	Tamulpur, Rampur (Baksa)	3	7	3	10
2.			Silochipathar (Barpeta)	3	7	0	7
3.			Barpothar village (Chirang)	1	3	0	3
4.			Bandia, Ga Dhowachapori (Darrang)	5	5	-	5
5.			Simen Chapori, Jonai & Sissiborgaon (Dhemaji)	3	4	3	7
6.			JORHAT	5	8	2	10
7.			Hardiapaam, Hajo (Kamrup)	27	62	26	88
8.			Mukalmua, Sungarbori, Laupara (Nalbari)	10	26	0	26
9.			Singitoli, Pungpani, Pithakhowa, Bhalukekhuwa (Sonitpur)	10	11	5	16
10.			Kahibari, Rowtapothar, Gopchachuba, Bagaribari, Khairajungle, Majuli, Angragaon (Udalguri)	10	22	3	25
11.		Greengram	Bandia, Ga Dhowachapori (Darrang)	5	10	0	10
12.			Nogura gaon, Mithaam Chapori, Mamoroni, Khumtai District: Golaghat	3	4	0	4
			Total	**85**	**169**	**42**	**211**

Glimpses of activities

MANIPUR

Pulse production, especially in the hill and tribal areas of Manipur, has historically remained low. This under performance is primarily due to a combination of factors such as limited access to quality seeds, poor adoption of improved cultivation practices, inadequate extension support, and weak market linkages.To address these challenges and promote sustainable pulse cultivation, the Central Agricultural University (CAU), Imphal, implemented the programme"Promotion of Pulses in NER Region" under the NER component of ICAR-Indian Institute of Pulses Research, Kanpur. This initiative aims to diversify and strengthen the existing cropping systems in the region by introducing high-yielding pulse varieties and climate-resilient technologies. As part of the project, urdbean was introduced during the *Kharif* season of 2024 as a promising pulse crop for rainfed areas due to its short duration, drought tolerance, and soil-enriching properties. For the *Rabi* season, pulses like chickpea, fieldpea, and lentil were promoted to harness residual soil moisture and utilize rice fallows more productively. A significant focus of the project has been on Demonstrations conducted on farmers' fields to validate and disseminate improved crop management practices. These demonstrations aimed to build farmers' capacity, increase productivity, and enhance farm income while promoting crop diversification.

In Manipur, paddy is cultivated over a large area during *Kharif* season which remains uncropped during the subsequent *Rabi* season.This is primarily due to lack of irrigation facilities, poor soil moisture retention, socio-economic constraints, and limited awareness of alternative crops. These rice fallows, however, offer a valuable opportunity to intensify cropping systems by introducing short-duration Rabi pulses. Pulses are highly suited to these conditions due to their low water requirements, ability to utilize residual soil moisture, and capacity to fix atmospheric nitrogen. Their inclusion not only improves soil structure and fertility but also supports long-term ecological sustainability by enhancing microbial activity and nutrient cycling.

Despite their suitability, the cultivation of pulses in rice fallows remains limited. Major constraints include unavailability of improved seed varieties suited to residual moisture conditions, pest and disease pressures, and limited access to extension and credit services. Overcoming these barriers through region-specific agronomic interventions, timely input delivery, and policy support can unlock the untapped potential of these lands. Promoting *Rabi* pulses in rice fallows will help achieve multiple goals: increasing cropping intensity, boosting farmers' incomes, and supporting climate-resilient agriculture in the fragile ecosystems of the North East.

Input Distribution and Demonstrations

Urdbean demonstrations (*Kharif* 2024)

As part of the 'Promotion of Pulses in NER Region' under the ICAR-IIPR NER component, demonstrations on urdbean were conducted during *Kharif* 2024 across the selected districts of Manipur. The objective was to promote pulse cultivation through improved practices, thereby increasing productivity and farmers' income. A total of 25.5 hectares were covered under the demonstration programme, engaging 26 farmers from various districts.

Crop Details

- Crop: Urdbean (var. PU-31)
- Season: *Kharif* 2024
- Date of Sowing: Between 24th and 29th July, 2024
- Total Area Covered: 25.5 hectares

Farmer Participation and Yield Performance

A total of 26 farmers participated in the demonstration programme. Each farmer received guidance, critical inputs, and technical backstopping from CAU, Imphalunder NER Programme of ICAR-Indian Institute of Pulses Research, Kanpur. The average yield across the demonstrations ranged between 720 and 840 kg/ha.

Highlights:

- Highest yield: 840 kg/ha (Th. Subashini, Imphal East)
- Lowest yield: 720 kg/ha (Md. Riyajuddin, Bishnupur & S. Maimu, Imphal West)
- Average yield: Approx. 782 kg/ha

Table 1. District-wise Summary of urdbean demonstrations

District	No. of Farmers	Area (ha)	Yield Range (kg/ha)
Imphal East	19	19 ha	720 – 840
Churachandpur	1	1 ha	820
Bishnupur	2	1.5 ha	720 – 750
Imphal West	2	1.5 ha	720 – 820

Observations

- Imphal East showed consistently high yields, with several farmers exceeding 800 kg/ha.
- Interventions such as timely sowing, varietal selection, and field management significantly influenced the yield.
- Some villages such as Andro (Imphal East) and Moirangpurel recorded multiple high-performing plots.
- Farmers with prior experience and access to training demonstrated better performance.

Recommendations

- Expansion of urdbean cultivation in favorable zones like Imphal East should be prioritized.
- Training programmes should be strengthened in districts with relatively lower yields.
- Continued support through quality seeds, biofertilizers, and mechanization would enhance future adoption.
- Promote collective marketing strategies to ensure better price realization for farmers.

Glimpses of blackgram demosntrations in Manipur

Lentil demonstrations (2024-25)

Total Coverage: The lentil demonstration reached 111 farmers across 10 districts in Manipur, covering a total area of 43 hectares. Demonstrations were conducted across a wide agro-ecological range, including hill areas (Saikul, Kangpokpi, Tengnoupal) and valley regions (Bishnupur, Imphal West, Thoubal, Sawombung).This ensured testing and adaptation of lentil in both upland and lowland residual moisture conditions.

Yield Performance: The most of the farmers achieved yields above 900 kg/ha, indicating good adaptability of lentil under residual soil moisture. The high yields in Waikhong, Lamding Cherapur, and Keirao Bitra indicate favorable conditions and successful management practices.

Table 2. Number of farmers and area covered under lentil demonstration

District	*Taluka*	No of farmers	Area covered (ha)
Bishnupur	Moirang	4	1.25
	Bishnupur	3	1.25
	Nambol	4	2
Chandel	Chandel	1	0.25
Imphal West	HaorangSabal	6	1.5
	Lamsang	1	1
	Wangoi	3	0.75
Senapati	Island	4	1
Kangpokpi	Kangpokpi	6	1.5
	Saikul	5	2.25
Imphal East	KeiraoBitra	30	12
	Sawombung	26	8.875
Tengnoupal	Tengnoupal	3	0.75
Thoubal	Thoubal	11	6.375
Kakching	Waikhong	4	2.25
Total		**111**	**43**

Overall, the lentil demonstration programme in Manipur reached a significant number of farmers and covered a larger area, contributing to the promotion of lentil cultivation in the region.

Field pea Demonstration (2024-25)

Overall Participation

A total of 146 farmers participated in the field pea demonstrations. The demonstrations covered a combined area of 64.75 hectares.

District-wise Distribution:

Imphal East exhibited the highest level of participation, with 80 farmers and 38.9 hectares dedicated to the demonstrations. This indicates a strong focus or interest in field pea cultivation within this district. Bishnupur district also showed significant activity, with demonstrations spread across multiple Talukas (Bishnupur, Moirang, and Nambol). Imphal West and Senapati districts also had a notable participation. Demonstrations were also conducted in Chandel, Kangpokpi, Thoubal, and Kakching districts.

***Taluka*-wise Distribution:**

The demonstrations were spread across multiple talukas within each district, ensuring wider reach and impact. There is a considerable variation in the number of participating farmers and the area covered

across different districts and Talukas, suggesting varying levels of adoption and interest.

Yield Performance:

The highest individual yield of 1020 kg/ha was recorded by a farmer who sowed the crop on 22nd November, marking the earliest sowing date among the sampled data. The highest average yield was observed for the 28th November sowing, at 1012 kg/ha, suggesting that the last week of Novemberoffers particularly favorable conditions for fieldpea cultivation. A gradual decline in yield was noted for sowings carried out in early December, implying that delayed sowing beyond November may lead to sub-optimal yield outcomes, despite acceptable performance levels. Overall, sowings conducted between 22nd and 26th November consistently recorded high yields, identifying this period as the most suitable sowing window for maximizing fieldpea productivity under the NEH Programme conditions

Chickpea Demonstration (2024-25)

Total Participation: Fifty two farmers across multiple districts participated in the chickpea demonstrations.

Area Coverage: The demonstrations covered a total area of 20.15 hectares.

District-wise Distribution:

Imphal East had the highest participation, with 28 farmers and 10.88 hectares covered. Bishnupur also had significant participation, with demonstrations in both Bishnupur and Moirang *Talukas*. Other districts with demonstrations include Churachandpur, Imphal West, Senapati and Thoubal.

***Taluka*-wise Distribution:** The demonstrations were spread across multiple talukas within each district, ensuring wider reach and impact.

Overall, the chickpea demonstrations in Manipur reached a significant number of farmers and covered a large area, contributing to the promotion of pulse cultivation in the region.

Table 3. Chickpea demonstration under IIPR NEH Programme in Manipur

District	*Taluka*	No of farmers	Area covered (ha)
Bishnupur	Bishnupur	8	2.625
	Moirang	4	3.4
Churachandpur	Churandchanpur	4	1
Imphal West	HaorangSabal	2	0.75
Senapati	Island	5	1.25
Imphal East	Keiraobitra	9	4.75
	Sawombung	19	6.125
Thoubal	Thoubal	1	0.25
	Total	**52**	**20.15**

Yield Performance

During the implementation of Chickpea Demonstration under the IIPR-NEH Programme for the year 2024–25, the sowing of chickpea was carried out across various locations within the period ranging from 22nd November 2024 to 7th December 2024.

The yield recorded from the demonstration plots varied significantly across different dates and locations. The yield range observed during the programme was from a minimum of 815 kg to a maximum of 1020 kg per farmer.

Table 4. Trainings and awareness programmes organized for the farmers/rural youth/entrepreneurs

S. No.	Title	Date & Duration	Place	No. of Beneficiaries			
				M	F	Total	SC/ST
1.	Off-Campus Training-cum-Awareness Programme on *Rabi* Pulses cultivation in rice fallows	28th February 2025 (one day)	Yairipok Changamdabi, Imphal East, Manipur	18	12	30	0
2.	Off-Campus Training-cum-Awareness Programme on *Rabi* Pulses cultivation in rice fallows	1st March 2025 (one day)	Loitang Khunou, Imphal West, Manipur	7	23	30	0
3.	Off-Campus Training-cum-Awareness Programme on *Rabi* Pulses cultivation in rice fallows	4th March 2025 (one day)	Andro, Imphal East, Manipur	21	11	30	30
4.	Off-Campus Training-cum-Awareness Programme on *Rabi* Pulses cultivation in rice fallows	5th March 2025 (one day)	Yumanm Patlou, Imphal East, Manipur	24	3	27	0
5.	Off-Campus Training-cum-Awareness Programme on *Rabi* Pulses cultivation in rice fallows	6th March, 2025 (one day)	Maklang, Imphal West, Manipur	17	16	33	0
6.	Advances in pulse production technologies for strengthening food and nutrition security	21st March-29th March, 2025	College of Agriculture, Iroisemba, CAU,Imphal	20	5	30	5
7.	*Rabi* Pulses Production Technologies	30th March, 2025	Nungkot, Imphal East, Manipur	20	10	30	30

Table 5. Other Input distributed under IIPR NER Programme during 2024-25

Sl.No.	Name of Item	Date	Quantity/ No.	No. of Beneficiaries			
				M	F	Total	SC/ST
1.	Manual knapsack sprayer (15 litres)	28 February, 2025	20 nos.	10	10	20	0
2.	Manual knapsack sprayer (15 litres)	1 March, 2025	20 nos.	7	13	20	0
3.	Manual knapsack sprayer (15 litres)	4 March, 2025	20 nos.	10	10	20	0
4.	Manual knapsack sprayer (15 litres)	5 March, 2025	20 nos.	17	3	20	0

5.	Manual knapsack sprayer (15 litres)	6 March,2025	20 nos.	10	10	20	0
6.	Chickpea seed var GNG 2299	27 October, 2024	15 q	45	6	51	8
7.	Lenti seed var IPL 220	28 October, 2024	14 q	94	17	111	16
8.	Field pea var HFP 1428	28 October, 2024	34 q	128	18	146	18
	Total			**321**	**87**	**408**	**42**

Table 6. List of Extension Publications

S. No.	Title of Extension Booklet / Leaflet / Folder / Success Stories	No. of copies published	Language
1.	Good agricultural practices for chickpea cultivation in NEH Region	100	English
2	Good agricultural practices for field pea cultivation in NEH Region	100	English
3	Good agricultural practices for lentil cultivation in NEH Region	100	English
4	Good agricultural practices for green gram cultivation in NEH Region	100	English
5	Good agricultural practices for blackgram cultivation in NEH Region	100	English

Glimpses of activities

MEGHALAYA

Pulses play a vital role in ensuring food and nutritional security, especially in agrarian regions like Meghalaya, where a large portion of the population depends on agriculture for their livelihood. Situated in the North Eastern part of India, Meghalaya is endowed with diverse agro- climatic conditions and atradition of organic farming, making it well- suited for the cultivation of various pulse crops. However, despite this natural advantage, the state's pulse production remains relatively low due to challenges such as limited farmer awareness, reliance on traditional practices, and inadequate infrastructure.

In recent years, there has been a growing focus on boosting pulse cultivation in the state to meet the increasing demand for plant-based proteins, enhance soil fertility through nitrogen fixation, and promote sustainable agricultural practices. With appropriate interventions in terms of improved seed varieties, training, irrigation, and market linkages, Meghalaya can significantly increase its pulse production. Recognizing this potential, a dedicated programme "Promotion of Pulses in NE Region (Meghalaya), was launched under ICAR-Indian Institute of Pulses Research (IIPR-NER Programme), to improve pulse cultivation and raise farmer awareness across the state.

Implementation

Under the programme, project activities commenced simultaneously at the College of Post-Graduate Studies in Agricultural Sciences, Umiam and in selected farmers' fields of different districts across Meghalaya. The initiative focused on the promotion of major pulse crops such as French bean, Lentil and Field Pea.

CapacityBuilding

To promote effective outreach and encourage adoption, seven (7) Farmers' Training Programmes were organised in different villages across the Ri-Bhoi and West Jaintia Hills Districts during 2024-25. These sessions, conducted in multiple locations, focused on enhancing farmers' understanding of pulse cultivation techniques, pest and disease management, and post-harvest management practices.

The activity conducted under the projects had a significant impact on the farming community of Meghalaya. Total of 302 (106 Male and 202 Female) farmers received training on the importance of pulses cultivation. Farmers interacted with the subject experts on the following-

- sustainable farming of pulses
- pest and disease of pulses and its management,
- marketing strategy and
- its importance on human health.

Farmers were also demonstrated on seed priming with bio-enhancer and application of neem oil-based pesticides. Quality Frenchbean and Fieldpea seeds were distributed to the farmers for growing in the field. Farm inputs like Knapsack Sprayer, Water Pump, Hand Hoe, etc. were also distributed to them.

A farmers' training and input distribution programme was organized on September 30, 2024, at Thadnongiaw village in Ri-Bhoi District under IIPR-NEH "Promotion of Pulses in Meghalaya". The training programme saw the participation of 80 farmers, comprising 11 men and 69 women from various parts of the Thadnongiaw village.The training was coordinated by Dr. Kennedy N., with the support of Dr. Mahesh Pathak and Dr. T. Rajesh. Dr. Kennedy delivered the keynote address, emphasizing the significance of pulse cultivation and its health benefits. Dr. Mahesh Pathak conducted a session focused on strategies to

improve pulse production and the application of precision agriculture techniques. Additionally, an interactive discussion was held between farmers and subject matter experts, addressing common insect pests, plant diseases, and appropriate control measures. The programme concluded with the distribution of agricultural inputs to the attending farmers

A one-day farmers' training and input distribution programme was conducted on November 14, 2024, at Thadmuthlong village in West Jaintia Hills District as part of the IIPR-NEH "Promotion of Pulses in Meghalaya". The programme was attended by 32 farmers, including 15 men and 17 women from different parts of the village.The programme was coordinated by Dr. Kennedy N. (Assistant Professor) along with Dr. N. Anand Kumar Singh (Assistant Professor) and Dr. T. Rajesh (Associate Professor). Dr. Kennedy highlighted the role of pulses in agriculture and their health benefits. Dr. Anand Kumar Singh focused on the importance of market linkages for pulse growers. Participants were also given practical demonstrations on the use of biofertilizers and biopesticides. The event concluded with the distribution of agricultural inputs to the farmers.

One-dayfarmers' training and input distribution programme was held at CPGSAS, Umiam, on November 26, 2024, under the IIPR-NEH "Promotion of Pulses in Meghalaya." The training was attended by 30 farmers from various parts of Ri-Bhoi District, including 11 men and 19 women. The programme was coordinated by Dr. Kennedy N., with support from Dr. J. Lungdim (Associate Professor, Agronomy), Dr. Bingiala Laloo (Assistant Professor, Seed Technology) and Dr. Lipa Deb (Assistant Professor, Plant Pathology). Dr. J. Lungdim spoke on the production of pulses and their significance for both human health and soil fertility. Dr. Laloo highlighted the importance of quality seeds and proper storage practices, while Dr. Lipa Debengaged with the farmers on identifying plant diseases, along with appropriate control methods. The training programme concluded with the distribution of agricultural inputs to the participating farmers.

A one-day farmers' training and input distribution programme was organized at CPGSAS, Umiam, on December 10, 2024, under the IIPR-NEH "Promotion of Pulses in Meghalaya." The event brought together 38 farmers from various parts of Ri-Bhoi District, including 11 men and 27 women. The programme was coordinated by Dr. Kennedy N., with active participation from Dr. Vishram Ram, Dr. Amit Mishra, Dr. A.K. Singh and Dr. Mahesh Pathak. As part of the training, Dr. Kennedy delivered a detailed talk highlighting the significance of pulse cultivation in Meghalaya. Subject Experts emphasized the nutritional benefits of pulses for human health and their role in improving soil fertility through nitrogen fixation, contributing to sustainable farming systems. They encouraged farmers to adopt pulse cultivation to improve household nutrition and income, especially in the region's rainfed and upland areas. The training was followed by the distribution of essential agricultural equipment and inputs, including knapsack sprayers, water pumps, biopesticides, biofertilizers, and high-quality pulse seeds, aimed at supporting and enhancing farmers' productivity.

A one-day farmers' training and input distribution programme was held at CPGSAS, Umiam, on February 10, 2025, under the IIPR-NEH "Promotion of Pulses in Meghalaya". The event was attended by 41 farmers from different parts of Ri-Bhoi District, comprising 15 men and 26 women. The programme was coordinated by Dr. Kennedy N., with support from Dr. Mahesh Pathak, Dr. T. Rajesh and Dr. Lipa Deb. During the training, the experts addressed on vital role of pulses in improving both human nutrition and soil health, they focused on effective strategies to boost pulse production. They discussed common pest and disease issues affecting pulses, along with appropriate control measures. The programme concluded with the distribution of agricultural inputs to the participating farmers, aimed at supporting the adoption of improved practices in pulse cultivation.

A one-day farmers' training and input distribution programme was organized at Nalapara village in Ri-Bhoi Districton March 4, 2025, under the IIPR-NEH initiative titled "Promotion of Pulses in Meghalaya." A total of 45 farmers, including 21 men and 24 women from different parts of the village, actively participated in the programme. The event was coordinated by Dr. Kennedy N., with the support of

Dr. Mahesh Pathak, Dr. T. Rajesh, and Dr. R. Patidar. The training focused on promoting pulse cultivationasa means to improve soil fertility, enhance household nutrition, andincrease farm income. The sessions covered various aspects of pulse production, including improved cultivation practices, pest and disease management, and the use of eco-friendly inputs. Farmers were also explained about the role of pulses in sustainable agriculture, particularly their ability to fix atmospheric nitrogen and improve soil health in the long term. The programme concluded with the distribution of essential agricultural inputs such as quality seeds, biofertilizers, and biopesticides to help farmers implement the practices discussed during the training.

A one-day farmers' training and input distribution programme was held at Umbang, Sumer in Ri-Bhoi District on March 25, 2025, as part of the IIPR-NEH "Promotion of Pulses in Meghalaya". The programme was attended by 42 farmers, including 18 men and 24 women from different parts of Umbang village.The programme was led by Dr. Kennedy N., in collaboration with Dr. Mahesh Pathak, Dr. A.K. Singh, Dr. Amit Mishra, and Dr. Lala I.P. Ray. The training aimed to raise awareness among farmers about the benefits of pulse cultivation, both as a nutritional crop and as a contributor to sustainable farming through soil enrichment and nitrogen fixation.Participants were introduced to improved farming practices, pest and disease managementtechniques,andtheimportanceofusingqualityseedsandbio-basedinputs. The training concluded with the distribution of agricultural inputs such as seeds, biofertilizers, and biopesticides to support pulse production in the region.

Summary of the extension activities carried out during 2024-25

S. No.	Activity	Date	Location	No. of Beneficiary		
				Male	Female	Total
1.	Training-cum-Input Distribution Programme	30.09.2024	Thadnongiaw, Ri-Bhoi District	11	69	80
2.	Training-cum-Input Distribution Programme	14.11.2024	Thadmutlong, West Jaintia Hills District	15	17	32
3.	Training-cum-Input Distribution Programme	26.11.2024	CPGSAS Umiam, Ri-Bhoi District	11	19	30
4.	Training-cum-Input Distribution Programme	10.12.2024	CPGSAS Umiam, Ri-Bhoi District	15	23	38
5.	Training-cum-Input Distribution Programme	10.02.2025	CPGSAS Umiam, Ri-Bhoi District	15	26	41
6.	Training-cum-Input Distribution Programme	04.03.2025	Nalapara, Nongpoh, Ri-Bhoi District	21	24	45
7.	Training-cum-Input Distribution Programme	25.03.2025	Umbang, Ri-Bhoi District	18	24	42
			Total	**106**	**202**	**308**

The implementation of farmers' training and input distribution programmes under the IIPR-NEH "Promotion of Pulses in Meghalaya" marks a significant step toward enhancing pulse cultivation in the region. Conducted across multiple villages including Thadnongiaw, Thadmuthlong, Umiam, Nalapara, and Umbang in the Ri-Bhoi and West Jaintia Hills Districts, these programmes collectively reached a diverse group of farmers, with notable participation from women, reflecting an inclusive approach to agricultural development.

Each training session was meticulously planned and delivered by experienced faculty members and subject matter specialists, including Dr. Kennedy N. and his team of experts. Collectively, these programmes contributed to building awareness about the multiple benefits of pulses. By promoting pulses as an integral part of crop diversification and sustainable farming systems, the initiative aligns with broader goals of climate-resilient agriculture and rural development.

The IIPR-NEH "Promotion of Pulses in Meghalaya" initiative has made a positiveimpact by strengthening farmers' knowledge, enhancing access to resources, and fostering a more resilient agricultural system in Meghalaya. Continued support, follow-up programmes and the establishment of farmer networks will further sustain and amplify these gains in the future.

Training cum Input Distribution programme participated by Dr. Anupam Mishra, Honourable Vice Chancellor, CAU; Dr. V. K. Mishra, Director, ICAR Research Complex for NEH Region, and other dignitaries

Glimpses of activities

MIZORAM

To bridge the gaps left by other existing schemes, Department of Agriculture & Farmers Welfare, Government of Mizoram is engaged in"Promotion of Pulses in NE Region" (Mizoram) under IIPR-NER Programme of ICAR-Indian Institute of Pulses Research, Kanpur. It aims to promote pulse cultivation and enhance agricultural sustainability, productivity, and livelihood opportunities across the state.

Implementation & Coverage

The project has been carried out across all eleven districts of Mizoram. As a result, more than 2,000 farmers have been directly assisted under this initiative. The key pulse crops cultivated under the programme include:

1. *Rajmash*
2. Field pea
3. French bean
4. Rice bean
5. Cowpea

Interventions

1. Seed Distribution

One of the core activities under the scheme was the distribution of high-quality seeds to participating farmers. This intervention addressed the major barrier faced by many small and marginal farmers *i.e.*, access to quality seed materials. The provision of free seeds ensured that even the economically disadvantaged could participate in pulse cultivation, promoting inclusivity and agricultural equity.

2. Training and Capacity Building

The project also placed a strong emphasis on capacity building through organized training sessions. These trainings focused on:

1. Improved and sustainable cultivation techniques specific to pulse crops
2. Efficient and appropriate application of pesticides and pest management practices
3. Overall enhancement of farm productivity through technical knowledge transfer

These sessions helped farmers adopt modern agricultural practices while preserving the organic nature of farming traditionally practiced in Mizoram.

3. Distribution of Plant Protection Chemicals

Weeding is often the most labour-intensive and costly operation in crop cultivation. Acknowledging this challenge, the scheme provided 1,000 litres of weedicides to 1,000 beneficiaries across the state. This intervention significantly reduced manual labour requirements and brought down the overall cost of cultivation. It allowed farmers to better manage their fields with less input and increased efficiency.

4. Demonstrations

Demonstrations allow farmers to visually observe and learn improved practices and technologies of pulse cultivation directly in the field. They build farmer confidence, promote adoption of new methods, and encourage peer-to-peer learning by showcasing real-time benefits under local conditions. The project has had a tangible impact on the area under pulse cultivation in the state. Prior to its implementation, the total area devoted to pulse crops in the state was approximately 2,722 hectares as of 2023–24. Following the programme, this area expanded to about 2,900 hectares, indicating a 6.54% increase in the area under cultivation. This growth demonstrates the effectiveness of the project in encouraging farmers to adopt pulse cultivation on a wider scale.

Gaps

Despite the successes, one key challenge that remains is the need for irrigation facilities, particularly for *Rabi* pulses which require water during the dry season. The lack of irrigation infrastructure limits the ability of farmers to expand pulse cultivation beyond *Kharif* season. This issue could be addressed through the provision of pump sets, pipes, and other irrigation equipment, enabling further expansion and diversification.

Outcome

The scheme aligns well with the agricultural practices prevalent in Mizoram, where many farmers prefer organic farming and are generally reluctant to use chemical fertilizers. The leguminous nature of pulses enhances soil fertility naturally, reducing the need for synthetic inputs. This makes pulse cultivation not only sustainable but also highly acceptable among local farmers.

Furthermore, the initiative supports double cropping; enabling farmers to make productive use of *Kharif* rice or maize fallows during *Rabi* season in areas that would otherwise be left barren. This has empowered farmers to generate secondary income, improving household economic stability and enhancing overall agricultural productivity in the state.

The programme 'Promotion of Pulses under NE Region' in Mizoram has been a highly successful initiative, effectively addressing key agricultural challenges while promoting inclusive and sustainable farming practices. With continued support and targeted funding, the project can be further scaled up to transform the pulse production landscape of Mizoram.

Table 1. Input distributed to farmers under IIPR NER programme during 2024-25

	Quantity (kg)	No. of Beneficiaries			Locations
Seed Input					
Crop		**Male**	**Female**	**Total**	Aizawl, Lunglei, Siaha, Champhai, Kolasib, Serchhip, Mamit, Lawngtlai, Hnahthial, Saitual, and Khawzawl
Rajmash	500	700	300	1000	
Field pea	800	1540	460	2000	
French bean	500	760	240	1000	
Rice bean	150	380	120	500	
Cowpea	540	1650	350	2000	
Total	**2490**	**5030**	**1470**	**6500**	
Plant Protection Chemicals					
Name of the chemical	**Quantity (l)**				Aizawl, Lunglei, Siaha, Champhai, Kolasib, Serchhip, Mamit, Lawngtlai, Hnahthial, Saitual, and Khawzawl
PP Chemicals & Weedicides	2000	1600	400	2000	
Total	**2000**	**1600**	**400**	**2000**	

Table 2. Details of trainings conducted under IIPR NER Programme during 2024-25

S. No.	Title of the Training	Date	Venue (If village, then district also to be mentioned)	No. of Beneficiary		
				Male	Female	Total
1.	Farmers Training on improved pulse production techniques	9th – 20th September, 2024	Aizawl, Lunglei, Siaha, Champhai, Kolasib, Serchhip, Mamit, Lawngtlai, Hnahthial, Saitual, and Khawzawl	890	210	1100

Table 3. Details of demonstrations conducted under IIPR NER Programme during 2024-25

S. No.	Title of the demonstration	Crop	Site name with district/venue	Area covered (ha)	No. of Beneficiary		
					Male	Female	Total
1	Cropping System based Demonstration	Rice – Pulses	Aizawl, Lunglei, Siaha, Champhai, Kolasib, Serchhip, Mamit, Lawngtlai, Hnahthial, Saitual, and Khawzawl	400	300	100	400

NAGALAND

In order to promote pulse production technologies and also to create awareness of growing different pulses for sustainability, several villages in different parts of the Nagaland state were targeted keeping in mind the prospect and scope of promoting pulse crops would benefit the farming community.

The programme 'Promotion of Pulses in NE Region (Nagaland)' was carried out in collaboration with the School of Agricultural Sciences (SAS), Nagaland University, Medziphema; and Kohima Science College, Jotsoma, Kohima, under the 'ICAR-Indian Institute of Pulses Research- NER Conponent'.

Chickpea field trial was initiated as an independent project in the *Rabi* season of 2021-22 in wet terrace rice cultivation fallow in Kohima district, Nagaland. Multiple progressive farmers were contacted to undertake the trial in the farmers' field of Chedema, Kohima, Jotsoma, Kigwema, Mima and Phesama villages for three years (2021-2024). The farm owners' willing contribution of their plots to conduct the field trials made it possible to determine the feasibility of chickpea production potential in Kohima, Nagaland. During the trial, six chickpea varieties including five *desi* (BG 3043, GCP 105, GJG 0809, GNG 2207, KPG 59) and one *kabuli* (BDNGK 798) varieties were successfully tested. Through this outcome, the importance of introducing chickpea as a potential income generation *Rabi* crop was realized.

Activities conducted under the programme

Training: Chickpea production trainings were conducted in Jotsoma, Mima, Phesama, Kiruphema and Peducha. Training components included awareness about chickpeas as an important *Rabi* pulse, field preparation, planting, weed management, pest management, post-harvest processing and storage. A chickpea management manual was prepared in local dialect, incorporating the local experiences encountered during the three years trial period and distributed to the farmers.

Seed & input distribution: Seeds, biofertilizers, biopesticides and rodenticides were distributed with appropriate instructions for application.

Demonstrations: Demonstration on pre-planting seed treatment, field preparation and planting, biopesticide application, rodenticide application, scouting field for pathogen and pests (pod borer) were conducted.

Exposure visits: Two exposure visits were conducted in 2024-25. In March 2025, farmers from Nagaland visitedthe ICAR-Indian Institute of Pulses Research, Kanpur. They were able to see the standing chickpea crop at the Institute Technology Park, Experimental fields and the Laboratories. Also, a one-day training programme was organized by the institute during their visit. A local exposure visit was also conducted where the Officers of Biofertilizer and Biocontrol laboratories of Integrated Extension Training Centre, Department of Agriculture, Medziphema, Nagaland, organized hands-on training and farmers also visited to their facilities. Additionally, the farmers visited Central Institute of Horticulture, Medziphema, (Nagaland).

Outcome of 2024-25

During *Rabi* season of 2024-25, chickpea seeds were distributed to over eighty farmers from seven

villages of Kohima district, Nagaland. Seeds were also given for trial to one farmer each in Dimapur, Niuland, Tuensang and Wokha districts, Nagaland. About fifty people were able to successfully grow the chickpea crop. Because of the delay in paddy harvest and various social engagements of the farmers, chickpea was planted on several dates between November and January (2024-25). During onsite visits to farmers' fields, damage from livestock foraging (cattle/goat/chicken) was noticed; however, successful regrowth was observed after few months. Instances of pod borer infestation and rodent damage were observed. Training on scouting and control measures were provided beforeh and, and inputs were distributed; thus, further damage was prevented due to timely intervention by the farmers.

Impact of the programme

Under the 'Promotion of Pulses in NE Region (Nagaland)', awareness was generated among the farmers and inputs were distributed to a substantial number of farmers. Exposure visits benefited multiple famers as a source of motivation in their effort to farming. Awareness was generated on usage and local availability of biofertilizer and biocontrol agents, plant management and knowledge on agri-business. This programme also benefited research scholars by opening opportunities to participate in active community services through their assistance in conducting training and demonstrations for the farmers.

Table 1. Details of Input distributed in Nagaland under IIPR NER Programme during 2024-25

INPUTS		No. of Beneficiaries			Village with District covered
Seed Input					
Crop	**Quantity (kg)**	**Male**	**Female**	**Total**	
Chickpea	150	16	65	81	Kohima-Jotsoma, Mima, Phesama, Peducha, Kiruphema, Kigwema, Chedema; Niuland-Yevito; Wokha-Wokha, Pangti Village (Wokha District), Mon District (Phomching, Yuching and Tangyu Village), Mokokchung District (Yaongyimti, Kupza Village), Tuensang, District (Chessore Village), Kiphire District (Kiphire, Cedevyong and Phelungre Village), Zunheboto District (Alaphumi Village), Peren District (New Chalkot, Samsuiram Village)
Greengram	50	59	111	170	
Total	**200**	**75**	**176**	**251**	
Fertilizers/Biofertilizers					
Name of the Fertilizer		**Male**	**Female**	**Total**	**Village with District covered**
Phosphotika	81	16	65	81	Kohima-Jotsoma, Mima, Phesama, Peducha, Kiruphema, Kigwema, Chedema; Niuland-Yevito; Wokha-Wokha
Azotobacter	81	16	65	81	
Total	**162**	**32**	**130**	**162**	
Plant Protection Chemicals					
Name of chemicals	**Qty. (kg/l)**	**Male**	**Female**	**Total**	**Village with District covered**
Minchu Plus	20 l	16	65	81	Kohima-Jotsoma, Mima, Phesama, Peducha, Kiruphema, Kigwema, Chedema; Niuland-Yevito; Wokha-Wokha, Pangti Village (Wokha District), Mon District (Phomching, Yuching and Tangyu Village), Mokokchung District (Yaongyimti, Kupza Village), Tuensang District (Chessore Village), Kiphire District (Kiphire, Cedevyong and Phelungre Village), Zunheboto District
Rodenticides	400 kg	16	65	81	
Lizard & mouse	120 l	16	65	81	

sticky traps					(Alaphumi Village), Peren District (New Chalkot, Samsuiram Village)
Bt Formulation	17 l	59	111	170	
Neem	17 l	59	111	170	
Trichoderma	170 kg	59	111	170	
Pseudomonas	85 kg	59	111	170	
Chlorpyriphos	17 l	59	111	170	
Carbofuran	85 kg	59	111	170	
Total		**402**	**861**	**1263**	
Small Farm Implements					
Name of the tool	**Qty. (Nos.)**	**Male**	**Female**	**Total**	**Village with District covered**
Mini power tiller	2	16	65	81	Kohima-Jotsoma, Mima, Phesama, Peducha, Kiruphema, Kigwema, Pangti Village (Wokha District), Mon District (Phomching, Yuching and Tangyu Village), Mokokchung District (Yaongyimti, Kupza Village), Tuensang District (Chessore Village), Kiphire, District (Kiphire, Cedevyong and Phelungre Village), Zunheboto District (Alaphumi Village), Peren District (New Chalkot, Samsuiram Village)
Brush cutter	1	16	65	81	
Water pump	1	16	65	81	
Water sprayer	1	16	65	81	
Tarpauline	20 No	59	111	170	
Knapsack sprayer	170 No / 16 l each	59	111	170	
Spade (small)	170 No	59	111	170	

Spade (Medium)	170 No	59	111	170	
Total		**300**	**704**	**1004**	

Table 2. Details of Inputs distributed in Nagaland under IIPR NER Programme during 2023-24

	Quantity (Kg)	No. of Beneficiaries			Village with District covered
Seed Input					
Crop		**Male**	**Female**	**Total**	**Village with District covered**
Pigeonpea	140	48	217	265	Mhainamtsi, Beisumpuikam and Samzuiram Village (Peren District) Pangtong, Changpang Village (Wokha District), Zani, Seithekima, Village (Chumukedima District), Meluri village (Phek District), Longpayimsen, Yaongyimti Village (Mokokchung District), Ghotovi Village (Nuiland District), New Terogvuynu and Sendenyu Village (Tseminyu District)
Plant Protection Chemicals					
Name of chemical	**Qty. (kg/l)**	**Male**	**Female**	**Total**	**Village with District covered**
Bt Formulation	26.5 l	48	217	265	Mhainamtsi, Beisumpuikam and Samzuiram Village (Peren District), Pangtong, Changpang Village (Wokha District), Zani, Seithekima Village (Chumukedima District), Meluri Village (Phek District), Longpayimsen, Yaongyimti Village (Mokokchung District), Ghotovi Village (Nuiland District), New Terogvuynu and Sendenyu Village (Tseminyu District)
Neem oil	26.5 l	48	217	265	
Total		**96**	**434**	**530**	

Small Farm Implements					
Name of the tool	**Qty. (Nos.)**	**Male**	**Female**	**Total**	**Village with District covered**
Aspee Hivol battery	6	19	124	143	Mhainamtsi, Beisumpuikam and Samzuiram Village (Peren District) Pangtong, Changpang Village (Wokha District), Zani, Seithekima, Village (Chumukedima District), Meluri Village (Phek District), Longpayimsen, Yaongyimti Village (Mokokchung District), Ghotovi Village (Nuiland District), New Terogvuynu and Sendenyu Village (Tseminyu District)
Rubber gloves	265	48	217	265	
Garden spade	265	48	217	265	
Garden rake	265	48	217	265	
Onion hoe	265	48	217	265	
Brush cutter	2	12	40	52	
Aspee Knapsack sprayer	10	29	93	122	
Total		**252**	**1125**	**1377**	

Table 3. Details of trainings conducted in Nagaland under IIPR NER Programme (2024-25)

S. No.	Title of the Training	Date	Location	No. of Beneficiary		
				Male	Female	Total
2.	Chickpea production training	16/09/2024	Kiruphema & Peducha, Kohima	19	32	51
3.	Chickpea production training	28/09/2024	Phesama, Kohima	0	35	35
4.	Seed distribution & seed treatment & planting instructions	20/10/2024	Kiruphema & Peducha villages, Kohima Nagaland	19	32	51
5.	Seed distribution & seed treatment & planting instructions	27/10/2024	Phesama, Kohima	0	35	35
6.	Farmers field day & training on scouting for pests & diseases management	21/03/2025	Jotsoma, Mima, Phesama, Kiruphema, Peducha (Kohima, Nagaland)	3	10	13
7.	Promotion of pulses in NEH Region	28/01/2025	Alaphumi Village (Zunheboto District)	16	4	20
8.	Promotion of pulses in NEH Region	10/02/2025-11/02/2025	Phelungre, Kiphire, Cedevyong and Pungro Village (Kiphire District)	16	36	52
9.	Promotion of pulses in NEH Region	06/02/2025	Chessore Village (Tuensang District)	-	20	20
10.	Promotion of pulses in NEH Region	20/03/2025	Pangti Village (Wokha District)	14	16	30
11.	Promotion of pulses in NEH	22/03/2025 - 23/03/2025	Yaongyimti and Kupza Village (Mokokchung District)	12	18	30
12.	Promotion of pulses in NEH	26/03/2025-27/03/2025	Yuching, tangyu and Phomching Village (Mon District)	6	24	30
			Total	**105**	**262**	**367**

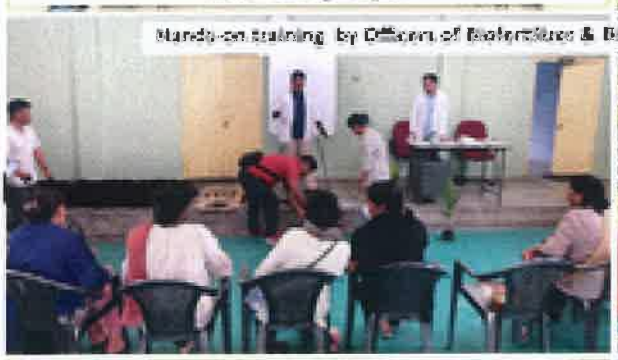
Table 4. Details of demonstrations conducted in Nagaland under IIPR NER Programme (2023-25)

S. No.	Title of the demonstration	Crop	Location	No. of Beneficiary		
				Male	Female	Total
1.	Field preparation demonstration	Chickpea	Jotsoma, Kohima	4	3	7
2.	Field preparation demonstration	Chickpea	Kiruphema & Peducha, Kohima	2	4	6
3.	Field preparation demonstration	Chickpea	Phesama, Kohima	3	4	7
4.	Planting demonstration	Chickpea	Phesama, Kohima	2	4	6
5.	Planting demonstration	Chickpea	Jotsoma, Kohima	2	4	6
6.	Planting demonstration	Chickpea	Kiruphema & Peducha, Kohima	2	4	6
7.	Demonstration of scouting for pod borer & pesticide distribution & application	Chickpea	Jotsoma, Kohima	1	3	4
8.	Demonstration of scouting for pod borer & pesticide distribution & application	Chickpea	Phesama, Kohima	0	12	12
9.	Demonstration of scouting for pod borer & pesticide distribution & application	Chickpea	Kiruphema & Peducha, Kohima,	2	6	8
10.	Demonstration of scouting for pod borer & pesticide distribution & application	Chickpea	Dimapur & Niuland, Nagaland	2	1	3
11.	Demonstration of rodenticide application & rodenticide distribution	Chickpea	Phesama, Kohima	2	6	8
12.	Demonstration of rodenticide application & rodenticide distribution	Chickpea	Jotsoma, Kohima	1	4	5
13.	Demonstration of rodenticide application & rodenticide distribution	Chickpea	Kiruphema & Peducha, Kohima	0	5	5
14.	Management of diseases and pest in pigeonpea using bio pesticides and biological agents	Pigeonpea	Phelungre, Kiphire, Cedevyong and Pungro Village (Kiphire District)	16	36	52
15.	Management of diseases and pest in	Pigeonpea	Chessore Village (Tuensang	-	20	20

	Pigeonpea using bio pesticides and biological agents		District)			
16.	Management of diseases and pest in pigeonpea using bio pesticides and biological agents	Pigeonpea	Pangti Village (Wokha District)	14	16	30
17.	Management of diseases and pest in pigeonpea using bio pesticides and biological agents	Pigeonpea	Yaongyimti and Kupza Village (Mokokchung District)	12	18	30
18.	Management of diseases and pest in pigeonpea using bio pesticides and biological agents	Pigeonpea	Yuching, tangyu and Phomching Village (Mon District)	6	24	30

Glimpses of activities

Meeting with Director & Nodal Officers during exposure visit to ICAR-IIPR, Kanpur



Hands-on training by Officers of Biofertilizer & Biocontrol lab, Medziphema, Nagaland

Meeting with Principal & Vice-principal, Integrated Extension Training Centre, Medziphema, Nagaland

Farmers Field day

Collaborative meeting with Dr. Anup Chandra during his visit to Fakhim Science College, Jotsoma, Nagaland


ICAR-Indian Institute of Pulses Research
Kanpur-208024
Organized by
AICRP on Kharif Pulses
SAS : NU, Medziphema campus
ICAR Indian Institute of Pulses Research- (IIPR)
Kanpur, Uttar Pradesh, NEH Component

SIKKIM

Pulses are an important commodity group of crops that provide high quality protein complementing cereal proteins for pre-dominantly vegetarian population of the country. In 2003, Sikkim became the first state in India to go totally organic to ensure long term sustenance of soil fertility, protection of environment and ecology, healthy living and decreasing the risk of health ailments. However, maintaining soil fertility *via* organic source is the major problem in organic farming for harnessing high yield. Therefore, incorporation of pulse crops in the cropping system is of paramount importance owing to its nitrogen fixing ability, climate resilient and environment friendly. Urdbean (blackgram), frenchbean, ricebean, mungbean, pea are the major pulse crops grown in Sikkim and is grown sporadically in all the corners of the state. Though, there is no released high yielding varieties available for cultivation in Sikkim except for *rajma* (Sikkim Rajma 1), there are plenty of local landraces of various pulse crops that are being cultivated by the farmers. Considering the importance of pulse crops in Sikkim, the present project was initiated with an objective of promoting pulse crops among the farmers of Sikkim and to educate, train them for increasing the production and productivity of pulses.

Activities undertaken

Sikkim has a rich agro-biodiversity, and possesses great genotypic variability in different pulse crops. The pulse farmers of Sikkim grow locally adapted landraces of pea, frenchbean, blackgram, greengram, ricebean *etc*. Availability of quality seed of these local landraces in right time is a major constraint. The Department of Horticulture, Sikkim University, under this project during 2024-25, prioritised to distribute the seeds of local germplasm of pea (Dentamey Matar), frenchbean (Singtamey sibi), ricebean (Masaim) and blackgram (kalo dal). Considering the state of Sikkim as organic state, organic fertilizers have also been distributed like *Rhizobium*, *Trichoderma*, vermicompost facilitating in improving productivity. These local landraces of pulse crops have very poor storability and its quality deteriorates rapidly, if not stored properly. The state of Sikkim receives an average annual rainfall of about 2739 mm, and receives rainfall from the month of April to October, which is also characterized by very high relative humidity. The poor storability of the seeds of these pulse crops may be due to very high RH prevailing throughout the year. Therefore, grain storage bins (75 Kg capacity) have also been distributed, so that the farmers can keep their produce relatively safe. Along with input distribution, training programmes were also organized. During 2024-25, first training was organized at Hee Gaon, Dentam, Geyzing district on November 11, 2024 on production technology of pulse crops, particularly pea. Dr. Hemant Ghimirey, Deputy Director, Horticulture, Sikkim government was present during the training wherein the farmers were told about the importance of pulse crops and different practices for increasing its production. Since most of the farmers follow broadcasting for sowing of pea, they were told about the importance of sowing methods and suggested them to follow line sowing, which was also demonstrated. Importance of timely sowing, use of importance of line sowing, biofertilizers and its uses were also told to the farmers. The major constraints that the farmers of Dentam faced while cultivating pea were lack of improved varieties, lack of quality seed, pea susceptible to lodging, low temperature, insects like leaf miner, diseases especially powdery mildew. Total of 50 farmers participated in the training programme, of which 32 were male and 18 were female. Training was organized on Organic pest and disease management at Tumin, Gangtok District on December 15, 2024. Sh. Karun Luitel, Krishi Sewak, Agricultural Department, Sikkim Government has made his presence in the meeting. The pulse growing farmers of Tumin were trained regarding major diseases and pests infecting the pulse crops and suitable mitigation strategies were also told. Shri Karun Luitel demonstrated the preparation of formulation of *Pseudomonas* and its uses. Also, the importance of neem oil as an organic means for management of pests and diseases was discussed and demonstrated. Total 30 farmers participated in the training programme, of which, 20 were male and 10 were female. Training was also organised at Maniram village, Namchi district on March 22, 2025 in the presence of Sh. Pradeep Chettri and Sh. Barun Rai, Agricultural Inspector of Soreng and Namchi district, respectively. During the training, seeds of blackgram, frenchbean and ricebean, along with other inputs were distributed. In Sikkim, pole type frenchbean is prevalent. Hence, during the training and demonstration, special emphasis was given on the advantages of staking method. In general, the training covered all the cultivation aspect of these three crops. The training was attended by 35 farmers, of which 10 were female and 25 were male.

Table 1. Inputs distributed under promotion of pulses in NE Region (Sikkim) during 2024-25

	Quantity (kg)	No. of Beneficiaries			Village with District covered
Seed Input					
Crop		Male	Female	Total	
Blackgram	300	25	10	35	Maniram, Namchi
Frenchgram	200	25	10	35	Maniram, Namchi
Pea	500	32	18	50	Hee Gaon, Geyzing
Ricebean	150	20	10	30	Maniram, Namchi
Total	**900**	**102**	**48**	**150**	
Fertilizers/Biofertilizers					
Name of the Fertilizer					
Rhizobium	150	52	28	80	Hee Gaon, Geyzing; Maniram, Namchi
Trichoderma	150	52	28	80	Hee Gaon, Geyzing; Maniram, Namchi
Vermicompost	**1000**	**32**	**18**	**80**	Hee Gaon, Geyzing
Small Farm Implements					
Name of the tool					
Grain storage bins (75 kg capcity)	80 nos.	52	28	80	Hee Gaon, Geyzing; Maniram, Namchi

Table 2. Inputs distributed under promotion of pulses in NE Region (Sikkim) during 2023-24

	Quantity (Kg)	No. of Beneficiaries			Village/District
SEED INPUT					
Crop		Male	Female	Total	
Blackgram	350	45	25	70	Biring, Pakyong
Frenchbean	300	35	25	60	Biring, Pakyong
Total	**650**	**80**	**50**	**130**	

Table 3. Details of trainings conducted under IIPR NER Programme during 2024-25

S. No.	Title of the Training	Date	Location	No. of Beneficiary		
				Male	Female	Total
1.	Organic cultivation practices of pea	23.11.2024	Hee Gaon, Geyzing	32	18	50
2.	Organic pest and disease management in pulses	15. 12. 2024	Tumin, Gangtok	20	10	30
3.	Improved technologies for production of rainy season pulse crops	22. 03. 2025	Maniram, Namchi	25	10	35

Table 4. Details of trainings conducted under IIPR NER Programme during 2023-24

S. No.	Title of the Training	Date	Location	No. of Beneficiary		
				Male	Female	Total
1.	Improved technologies for production of rainy season pulse crops	17.03.2024	Biring, Pakyong	45	25	70

Glimpses of activities


Training, input distribution and demonstration at Hee Gaon, Bermiok, Geyzing district of Sikkim in the presence of Dr. Hemant Ghimirey, Deputy Director (Horticulture), Sikkim Government on November 11, 2024.

Demonstration of line sowing in pea at Hee Gaon, Dentam.


Training on organic pest and disease management in pulses facilitated by Sh. Karun Luitel, Krishi Sewak, Agriculture Department, Sikkim Government organised at Tumin, Gangtok on December 15, 2024.


Training, input distribution at Maniram village, Namchi on March 22, 2025 in the presence of Shri Pradeep Chettri, Agriculture Inspector, Soreng District, and Shri Barun Rai Agriculture Inspector, Namchi District

TRIPURA

Pulses are an essential part of the agricultural landscape in Tripura, ranking just after rice in importance. Despite their significance for local consumption and nutrition, Tripura's share in national pulse production remains negligible. In 2024, a total of 18,918 MT of pulses were produced in Tripura in an approximate area of 25,854 ha with a productivity of 732 kg/ha in *Kharif* and *Rabi* seasons. With a population of about 4.3 million, this translates to roughly 4.5 kg of pulses per person per year. Tripura's per capita pulse availability is among the lowests in India. For comparison, states like Rajasthan and Madhya Pradesh produce over 4,000 kg per person annually, indicating a significant gap in local pulse production relative to demand. Tripura fulfills only about 24% of its pulse requirements locally, indicating a significant dependency on external sources. In view of this, 'Promotion of Pulses in NE Region (Tripura)" was initiated under ICAR-IIPR NER Programme with the goal of enhancing pulse cultivation and farmer awareness in the state.Tripura is actively promoting pulses cultivation as part of its agricultural development strategy, aiming to enhance food security, boost farmers' incomes, and reduce dependency on external markets. The progrmme encompasses farmers' capacity building, demonstrations, and input support in the form of quality seeds, fertilizers, protection chemicals and small farm tools *etc.*

Implementation:

The project activities commenced simultaneously at the College of Agriculture farm and in selected farmers' fields of different districts across Tripura. The initiative focused on the promotion of major pulse crops such as blackgram, greengram, *rajma*, and lentil.

Capacity Building:

To ensure effective outreach and adoption, eight (8) Farmers' Training Programmes were organized in collaboration with:

- Farmer Producer Organizations (FPOs)
- Krishi Vigyan Kendras (KVKs)
- Department of Agriculture, Government of Tripura

These training sessions were conducted across various districts and aimed at improving farmers' knowledge of pulse cultivation practices, pest and disease management, and post-harvest handling.

Total Farmers Benefitted: 276

In *Kharif* season of 2024-25, demonstration of pulse crops such as blackgram (Table 1) and greengram (Table 2) were demonstrated in seven districts namely West Tripura, Sipahijala, South Tripura, Gomati, Khowai, Unakoti and North Tripura.

Clustered demonstration on blackgram var. IPU 10-26 & TRC Urd 99-2 was performed in Seven districts namely West Tripura, Sipahijala, South Tripura, Gomati ,Khowai, Unakoti and North Tripura. Total 125 numbers of beneficiaries have cultivated high yielding variety (IPU 10-26 & TRC Urd 99-2) of blackgram. Average productivity (q/ha) of blackgram crop were observed as West Tripura (8.5), Sipahijala (7.8), South Tripura (8.7), Gomati (7.9), Khowai (9.2), Unakuti (8.4) and North Tripura (7.2).

Likewise, demonstration of greengram [Variety TRCM 131] was also conducted in 13 ha of land covering three districts namely Gomati, Unakoti and SouthTripura. The productivity (q/ha) of greengram achieved were observed as Gomati (7.8), Unakoti (8.0),South Tripura (7.6). The average B:C ratios of blackgram & greengram in demonstrations were 1.84 and 1.87, respectively. The details of the demonstrations are given below :

Table 1. District-wise area (ha), production and productivity of *kharif* Blackgram [IPU 10-26 & TRC Urd 99-2] during 2024-25

S. No.	Name of District	Name of Village	Area (ha)	Date of sowing	Date of harvesting	No. of beneficiaries						Total	Prod. (q)	Productivity (q/ha)	B:C
						OBC		SC/ST		Others					
						M	F	M	F	M	F				
1.	West Tripura	Bamutia, Ananganagar, Borjosh,Narsinghagarh	9	04.09.24-10.09.24	25.11.24-30.11.24	13	0	8	1	6	0	28	76.5	8.5	1.79
2.	Sepahijala Tripura	Raghunathpur, Pathalia	5	15.09.24-20.09.24	04.12.24-08.12.24	6	0	1	0	2	0	8	39.0	7.8	1.69
3.	Gomati Tripura	Amarpur, Natun bazaar, Maharani, Futamati, Killa Tepania,Atharabhola, bagma	18	17.09.24-25.09.24	08.12.24-15.12.24	20	4	10	7	0	0	41	142.2	7.9	1.82
4.	Unakoti Tripura	Bilaspur, Koulikora,Pechardhar	7	14.09.24-19.09.24	06.12.24-12.12.24	20	3	5	0	0	0	28	58.8	8.4	1.89
5.	North Tripura	Boithanbari	4	18.09.24-21.09.24	10.12.24-14.12.24	0	0	7	2	0	0	9	28.8	7.2	1.71

6.	South Tripura	Sabroom	6	16.09.24-20.09.24	06.12.24-10.12.24	3	0	0	0	*0*		3	52.2	8.7	1.87
7.	Khowai Tripura	Purba Ram, Chandraghat, Nama Para	4	04.09.24-09.09.24	25.11.24-30.11.24	*0*	*0*	*6*	*1*	*0*	*0*	7	36.8	9.2	2.12
		Total area= 53 ha												**8.24**	**1.84**
						62	**7**	**37**	**11**	**8**	**0**	**125**	**434.3**	**(Av.)**	**(Av.)**

Table 2. District-wise area (ha), production (q) and productivity (q/ha) of *kharif* Greengram [TRCM 131] during 2024-25

S. No.	Name of District	Name of Village	Area (ha)	Date of sowing	Date of harvesting	No. of beneficiaries							Prod (q)	Productivity (q/ha)	B: C
						OBC		SC/ST		Others		Total			
						M	F	M	F	M	F				
1.	Gomati Tripura	Kakraban, Mirja	5	08.09.24-10.09.24	20.11.24-22.11.24	4	0	5	0	2	0	12	39.0	7.8	1.76
2.	Unakoti Tripura	Kaolikura	3	28.08.24-31.08.24	10.11.24-14.11.24	5	0	1	0	3	0	9	24.0	8.0	1.98
3.	South Tripura	Sabroom	5	10.09.24-14.09.24	22.11.24-27.11.24	2	0	0	0	5	0	7	38.0	7.6	1.88
			13			**11**	**0**	**6**	**0**	**10**	**0**	**28**	**101**	**7.73**	**1.87**

The average productivity in FLD plots of *Kharif* green gram was 7.73 q/ha (Table 3), which was 1.06 % above the district average productivity. The increase in productivity was due to the mechanized line sowing of HYVs of *Kharif* Pulses, *Rhizobium*seed inoculation, herbicide application for weed control, micronutrient application, phosphate fertilizer application for the better development of flowering and fruiting and harvesting at optimum point of time (75% pod maturity). Likewise, the *Kharif* blackgram average productivity in FLD plots was 8.24 q/ha which was 1.32% above the district average productivity.

Technological intervention through ICAR-IIPR Pulse promotion project[NEH Component]

1) HYV seeds
2) Line sowing with manual seed drill
3) *Rhizobium* seed Inoculation
4) Soil application of *Trichoderma*
5) Herbicide application for weed control
6) Micronutrient application
7) Recommended dose Phosphate fertilizer application.
8) Harvesting in right time(75% pod maturity)

Table 3. Increase inproductivity of *Kharif* Pulses through technological intervention of ICAR-IIPR Pulse promotion Project

S. No.	Name of District	Crop	State Average productivity (q/ha)	FLD Average productivity (q/ha)	Increased Productivity (q/ha)
1.	West Tripura	Black gram	6.94	8.5	1.56
2.	Sepahijala Tripura	Black gram	7.27	7.8	0.53
3.	Gomati Tripura	Black gram	6.92	7.9	0.98
4.		Green gram	7.10	7.8	0.70
5.	Unakoti Tripura	Black gram	6.35	8.4	2.05
6.		Green gram	6.48	8.0	1.52
7.	North Tripura	Black gram	6.54	7.2	0.66
8.	South Tripura	Black gram	7.39	8.7	1.31
9.		Green gram	6.64	7.6	0.96
10.	Khowai Tripura	Black gram	7.09	9.2	2.11

During the programme, various extension activities were also carried out to upgrade the know-how of *kharif* pulses through awareness programme, trainings, demonstrations, *kisan melas*, field days *etc*. A total of 738 farmers and farm women were benefited from these activities; out of which 542 were male and 196 numbers were female participants. It is pertinent to mention that 202 numbers were SC/ST beneficiaries consisting of 139 male and 63 female beneficiaries. The details of the various extension activities (Table 4) are given below :

***Kharif* black gram cultivation in West Tripura and Gomati districts of Tripura**

Table 4. District-wise extension activities carried out during *kharif* pulse programme during 2024-25

S. No.	Name of District	Activitiy	Location	Date conducted	No. of beneficiaries						
					OBC		SC/ST		Others		Total
					M	F	M	F	M	F	
1	West Tripura	Training Programme	Bamutia, Anagannagar, Borjosh,Narsinghagarh, Lankamura,Bamutia, Borjosh,	02.09.24 & 24.09.24	19	4	10	7	6	2	48
		Method demonstration	Lankamura, Barjor,Bamutia, West tripura	18.09.24 24.09.24	9	1	7	1	0	0	18
		Awareness programme	College Of fisheries, Lembucherra, West Tripura	19.09.24-21.09.24	98	67	73	28	29	5	300
2	Unakoti	Training Programme	Bilaspur, Koulikora	12.09.24	25	3	2	0	0	0	30
		Method demonstration	Bilaspur, Koulikora	12.09.24	25	3	2	0	0	0	30
3	South Tripura	Training Programme	Amarpur, Sabroom,Mirza,Kakrabon	13.09.24	34	9	7	6	2	0	58
		Method demonstration	Amarpur, Sabroom,Mirza,Kakrabon	13.09.24	34	9	7	6	2	0	58
4	Gomati	Training Programme	Bagma, Atharobola, Tepania,Maharani, Killa	13.09.24	34	9	7	6	2	0	58
		Method demonstration	Bagma, Atharobola, Tepania,Maharani, Killa	13.09.24 & 18.09.24	35	10	9	6	5	0	65
6	North Tripura	Training Programme	Jubrajnagar,Boithongbari	18.09.24	13	2	4	1	0	0	20
		Method demonstration	Boithongbari	24.09.24	11	3	4	0	0	0	18
7	Sipahijala	Method demonstration	Raghunathpur, Pathalia	24.09.24 & 18.09.24	19	6	7	2	1	0	35
				Total	356	126	139	63	47	7	738

FARMERS' TRAINING/DEMONSTRATION/FIELD DAY/OTHER PROGRAMMES

a. Training/Demonstration/Input Distribution on Promotion of *kharif* Pulses in West Tripura District of Tripura on September 02, 2024

One day farmers' training-cum-beneficiary selection programme was carried out at '*Krishak Bandhu Kendra*', Bamutia, West Tripura on 2nd September 2024. It was the initial training programme performed under the project named "Promotion of Pulses in the NEH Region (Tripura)" initiative. A total of 30 farmers from different parts of Unakoti district attended the training programme. The training programme was graced by Sri Raju Rabi Das, Supdt. of Agriculture, Bamutia Agri-Subdivision and Mrs. Antara Chowdhury, Sector Officer. Comprehensive training on Scientific cultivation of *Kharif* pulses *i.e* Blackgram and Green gramwas given to them with audio-visual aids. Farmers were encouraged to go for pulses cultivation.The programme ended with inputs distribution to beneficiaries.


বামুটিয়ায় কৃষি কর্মশালা

সত্যপ্রকাশ প্রতিনিধি ,আগরতলা, ২ আগস্ট।। ত্রিপুরা একটি কৃষি প্রধান রাজ্য। এখানে বাণিজ্য ফসল থেকে শুরু করে মাঠের ফসল সবকিছুই কম বেশি উৎপন্ন হয়,যা রাজ্যবাসীর দৈনন্দিন চাহিদার তুলনায় কম। অর্থকরী ফসল জাল, তুলা, তৈলবীজ উৎপাদনের হার নেহাত কম। আমাদের রাজ্য এখনো খাদ্যে উৎপাদনে স্বয়ম্ভর হয়ে উঠতে পারেনি । বর্তমান রাষ্ট্রবাদি সরকার বিষয়টির প্রতি সচেতন। এরই অংশ হিসাবে রাজ্যের কৃষি দপ্তরের পক্ষ থেকে বামুটিয়া কৃষি মহকুমার অন্তর্ভুক্ত নতুন নগর কৃষক বন্ধুর কেন্দ্রে জাল উৎপাদন নিয়ে একদিনের কর্মশালা আয়োজন করা হয়েছে । সেখানে মাসকলাই, মুগ, মুশুরি, নিউলি ইত্যাদি জাল শস্য কীভাবে ব্যাপক হারে কম খরচে উৎপাদন করা যায় সে বিষয়ে কৃষকদের অবগত করানো হয়। এই কৃষি কর্মশালায় ত্রিপুরা কৃষি বিদ্যালয়ের অধ্যাপক ডক্টর অভিজিৎ সাহা, কৃষি অধিকর্তা শ্রী রাজু রবিদাস সহ বিশিষ্ট ব্যক্তিগণ উপস্থিত ছিলেন। উপস্থিত কৃষকগণ এই কর্মশালা আয়োজনের জন্য রাজ্য কৃষি দপ্তরের প্রতি কৃতজ্ঞতা প্রকাশ করেন।

Technical Session & Input Distribution

b. Training/Demonstration/Input Distribution on Promotion of *kharif* Pulses in Unakoti District of Tripura on September 12, 2024

A 'One-Day Farmers' Training cum Input Distribution cum Demonstration Programme' was held at KVK Unakoti, Tripura, on September 12, 2024, as part of the "Promotion of Pulses in the NEH Region (Tripura)" initiative. A total of 35 farmers from different parts of Unakoti district attended the training programme. The program aimed to educate farmers on sustainable pulse cultivation practices, with a focus on enhancing productivity and profitability. Dr. Biswajit Bal, Senior Scientist & Head of KVK, Unakoti, inaugurated the event and highlighted the nutritional and environmental significance of pulses in sustainable agriculture. The training included an interactive session led by Mr. Ripan Das, SMS, KVK, Unakoti, who emphasized the role of pulses in soil health and the potential for their cultivation in Tripura. A technical session by Dr. Abhijit Saha from the College of Agriculture, Tripura, covered crucial topics such as seed treatment with *Rhizobium*, mechanized sowing using low-cost seed drills, and integrated crop management practices. Participants also received inputs such as blackgram and greengram seeds, fungicides, insecticides, herbicides, micronutrients, and bio-inoculants like *Trichoderma* and *Rhizobium*. Extension literatures in scientific cultivation procedure of greengram and blackgram in local Bengali language were provided. Practical demonstrations showcased *Rhizobium* inoculation and mechanized sowing techniques, with active farmer participation. The programme covered an area of 7 ha in Unakoti district.

Technical Session & Input distribution

Technology demonstration

c. Training/Demonstration/Input Distribution on Promotion of *kharif* Pulses in Gomati and South Tripura Districts of Tripura on September 13, 2024

A 'One-Day Farmers-cum-Input Distribution-cum-Demonstration Programme' on the Promotion of Pulses in the NEH Region (Tripura) was held at Bagma, Gomati District, Tripura, on September 13, 2024. Organized in collaboration with ICAR-IIPR, Kanpur, and supported by the Bagma Agri Producer Company Limited (BAPCL), the event aimed to educate farmers on sustainable and scientific pulse cultivation practices. A total of 55 progressive farmers from Gomati and South Tripura districts, along with members of four FPOs and FPCs, attended the programme. Shri Diganta Kr. Das, DGM of NABARD and Managing Director of BAPCL, inaugurated the event and emphasized on the dual benefits of pulse cultivation for nutrition and soil fertility.

The training included an interactive session led by Dr. Abhijit Saha, Principal Investigator of the programme, who discussed key topics such as *Rhizobium* seed treatment, incorporating pulses into crop rotations, and the line sowing method. Input distribution followed, with farmers receiving high-quality seeds, bio-inoculants, and other essential farming materials. Hands-on demonstrations showcased the *Rhizobium* seed treatment process, line sowing method, and mechanized sowing using a low-cost manual seed drill. The programme covered an area of 24 ha in Gomati and South Tripura districts.

Technical Session & Input distribution

d. Field Day/Demonstration/Input Distribution on Promotion of *kharif* Pulses (Blackgram) in West Tripura District of Tripura on September 18, 2024

A 'Field-Day-cum-Demonstration-cum-Input Distribution Programme' on the Promotion of Pulses in the NEH Region (Tripura) was organized at Bamutia, West Tripura District, Tripura, on September 18, 2024. The event, held in collaboration with ICAR-IIPR, Kanpur, and supported by the Bamutia Agricultural

Sub-Division, aimed to train farmers in scientific crop management and herbicide application to improve pulse productivity and profitability. Dr. Abhijit Saha, Principal Investigator of the programme, demonstrated correct herbicide application methods for effective weed control, while Ms. Antara Saha, Sector Officer of West Tripura, interacted with farmers to address their queries. The programme attracted farmers from the area, providing them with personalized guidance on improving their crop management practices.

The training included practical demonstrations on seed treatment with *Rhizobium* for improved nodulation and post-emergence herbicide application using a knapsack sprayer. Farmers were shown the correct procedures for both techniques, including the benefits of *Rhizobium* treatment in enhancing nitrogen fixation and pulse crop yield. Additionally, the importance of effective weed management through herbicide application was highlighted to ensure optimal crop growth. The total demonstration area covered in West Tripura was 9 ha.

Farmer Field Visit

e. Awareness activity through project stalls at Annual North-East Zonal Workshop of Krishi Vigyan Kendras (KVKs) from September 19-21, 2024 at College of Fisheries, Lembucherra, CAU (I) Tripura

The North-East Zonal KVK Workshop, held from September 19-21, 2024 at the College of Fisheries, Tripura, provided an excellent platform for showcasing agricultural advancements and innovations across the region. During the event, the College of Agriculture, Tripura, set-up anexhibition stall, where various activities related to the promotion of pulses in Tripura were highlighted. These activities, carried out in different districts, focused on increasing pulse cultivation and improving the livelihoods of farmers through better agricultural practices and awareness. The stall not only showcased the ongoing initiatives in pulse promotion but also highlighted the college's broader contributions to agriculture in the region.

The stall received significant attention for its informative displays and the impact of its outreach programmes. The collective efforts and achievements of the College of Agriculture, Tripura were well appreciated, and the stall secured the 3rdposition in the exhibition. This recognition underscores the importance of the college's work in promoting sustainable agriculture in Tripura, particularly in the cultivation of pulses, which plays a crucial role in enhancing food security and economic development in the region. The workshop provided an opportunity to share knowledge, foster collaboration, and celebrate the achievements of agricultural institutions in the North-East.

f. Field-Day/Input Distribution/Demonstration Programmeon Promotion of *kharif* Pulses in North Tripura District of Tripura on September 24, 2024

A 'Field-Day-cum-Input-Distribution-cum-Demonstration Programme' on the Promotion of Pulses

in the NEH Region (Tripura) was held on September 24, 2024, at Jubrajnagar, North Tripura, in collaboration with ICAR-IIPR, Kanpur. The event, aimed at promoting pulse cultivation, was inaugurated by Mr. Bijoy Debnath, Sector Officer of Jubrajnagar, who highlighted the nutritional and soil fertility benefits of pulses. Dr. Abhijit Saha led an interactive session on pulse cultivation, covering topics like seed treatment with *Rhizobium*, crop rotation, and line sowing methods, emphasizing their economic and ecological benefits.

Practical demonstrations followed, where farmers were shown how to treat seeds with *Rhizobium* and use a low-cost manual seed drill for line sowing. These methods promote better yield, soil health, and reduced reliance on chemical fertilizers. Farmers received high-quality seeds, herbicides, and bio-inoculants to implement the techniques discussed. The programme successfully equipped participants with practical skills and fostered confidence in adopting modern pulse farming practices. The programme promoted *kharif* blackgram cultivation on an area of 4 ha in North Tripura district.

Method demonstration & Input distribution

g. Training/Demonstration/Input Distribution on Promotion of *kharif* Pulses (Blackgram) in Sepahijala District of Tripura on October 08, 2024

A 'Training-cum-Input-Distribution-cum-Demonstration Programme' on the Promotion of Pulses in the NEH Region (Tripura) was organized at Pathalia, Bishalgarh, Sepahijala District, Tripura, on October 8, 2024. The event was held in collaboration with ICAR-IIPR, Kanpur, and supported by the Bishalgarh Agricultural Sub-Division. The programme aimed to educate farmers on sustainable pulse cultivation practices, focusing on improving productivity and profitability. Mr. Prabir Datta, Sector Officer of Sepahijala District, inaugurated the event, emphasizing the dual benefits of pulses-addressing nutritional needs and improving soil fertility through nitrogen fixation.

The training featured an interactive session by Dr. Abhijit Saha, Principal Investigator, who discussed seed treatment with *Rhizobium*, incorporating pulses in crop rotation, and the advantages of the line sowing method. Farmers were provided with high-quality seeds, herbicides, and bio-inoculants to support the adoption of scientific farming methods. Practical demonstrations included seed treatment with *Rhizobium* and the implementation of the line sowing method, using a low-cost manual seed drill. The programme successfully equipped farmers with practical knowledge and skills, which are expected to enhance crop performance, reduce dependency on chemical inputs, and improve farm profitability. Participants expressed enthusiasm for applying the techniques learned to their fields. The programme covered an area of 5 ha under blackgram cultivation in Sepahijala district in *Kharif* season.

Technical Session & Input distribution

Technology demonstration (Seed inoculation with *Rhizobium*)

Similarly, during *Rabi* season of 2024-25, demonstration of pulse crops such as lentil (Table 5) and *Rajma* (Table 6) were also demonstrated in three districts namely West Tripura, Sipahijala and South Tripura. Clustered demonstration on Lentil var. L 4717 was performed in two districts namely West Tripura and Sipahijala district. A total of 30 numbers of beneficiaries have cultivated high yielding variety (L 4717) of lentil. Average productivity (q/ha) was 7.25 and 7.95 in West Tripura and Sipahijala respectively. To further enhance its productivity, introduction of short-duration lentil varieties aremuch needed in the state, as early rainfall batters the crop at its maturity.

Likewise, demonstration of *Rajma* crop [Variety- Tripura *Rajma* Sel-1 & HUR 301] was also conducted in 23 ha area covering three districts namely West Tripura, Sipahijala and South Tripura. The productivity of *rajma* achieved up to 13.25,14.25 and 14.7 q/ha in West Tripura, Sipahijala and South Tripura districts, respectively. The average B: C ratio of lentil and rajma in demonstrations were 2.23 and 2.41, respectively. The details of the demonstrations of lentil and *Rajma* crops in *Rabi* promotion are given below:

Table 5. Demonstration on *Rabi* pulse Lentil variety L 4717 (Pusa Ageti) during *Rabi,* 2024-25

S. No.	Name of District	Name of Village	Area (ha)	Date of sowing	Date of harvesting	No. of beneficiaries							Production (q)	Productivity (q/ha)	B:C
						OBC		SC/ST		Others		Total			
						M	F	M	F	M	F				
1.	West Tripura	Gandhigram, North Gandhigram, Dighalia, West Bubhanban, Nabagram, Anagannagar,	5	12.11.24. 15.11.24	28.02.25-03.03.25	16	2	4	0	0	0	22	36.25	7.25	2.17
2.	Sepahijala Tripura	Bishalgarh, K.K Nagar, Teparia	4	08.11.24-14.11.24	26.02.25-04.03.25	7	0	1	0	0	0	8	31.8	7.95	2.29
		Total	**9**			**23**	**2**	**5**	**0**	**0**	**0**	**30**	**68.05**	**7.6**	**2.23**

Table 6. Demonstration on *Rabi* pulse crop *Rajma* variety HUR 301 during 2024-25

S. No.	Name of District	Name of Village	Area (ha)	Date of sowing	Date of harvesting	No. of beneficiaries							Production (q)	Productivity (q/ha)	B:C
						OBC		SC/ST		Others		Total			
						M	F	M	F	M	F				
1.	West Tripura	Gandhigram, Debendra Nagar, Lankamura, West Bamutia, Anagannagar, Natun Nagar,	5	25.10.24-02.11.24		10	0	4	0	0	0	14	66.25	13.25	2.3

		Chinahori, Tebaria, Nabagram, Nabagram												
2	Sepahijala Tripura	Bishalgarh, K.K. Nagar, Teparia	4	01.11.25-05.11.25		7	0	1	0	0	0	8	57	14.25	2.41
3	South Tripura	Doulbari, Sabroom	18	28.1024-06.11.25		14	1	5	0	0	0	20	265.5	14.75	2.52
			Total=23 ha			**31**	**1**	**10**	**0**	**0**	**0**	**42**	**388.75**	**14.08**	**2.41**

Table 7. District-wise productivity enhancement of *Rabi* Pulses through technological intervention of ICAR-IIPR Pulse promotion Project

S. No.	Name of District	Crops Grown	State Average productivity of lentil & *Rajma* (q/ha)	Average productivity of lentil and *Rajma* (Demonstration)	Increase in productivity
1	West Tripura	Lentil	6.41	7.25	0.84
		Rajma	8.75	13.25	4.5
2	Sepahijala Tripura	Lentil	6.35	7.95	1.6
		Rajma	8.52	14.25	5.73
3	South Tripura	*Rajma*	8.59	14.75	6.16

The average productivity in demonstrations plots of *Rabi* lentil was 7.6 q/ha (Table 7), which was 1.22 % above the district average productivity. The increase in productivity is due to mechanized line sowing of HYVs of *Kharif* Pulses, *Rhizobium* seed inoculation, soil treatment, herbicide application, micronutrients and phosphate fertilizer application and optimum time harvesting (75% pod maturity).

Likewise, the average productivity of *rajma* in FLD plots was 14.08q/ha which was 5.47% higher than the district average productivity.

Technological Intervention through ICAR-IIPR Pulse Promotion Project [IIPR-NEH Component]

1) HYV seeds
2) Line sowing with manual Seed drill
3) *Rhizobium* Seed Inoculation
4) Soil application of *Trichoderma*
5) Herbicide application for weed control
6) Micronutrient application
7) Recommended dose of Phosphate fertilizer application.
8) Harvesting at right time of (75% pod maturity)

Rabi Lentil Cultivation in Sipahijala and West Tripura Districts

Rajma Cultivation in South Tripura District

Various extension activities were also conducted for *Rabi* pulses to sensitize the farming community about the improved production technology of pulse crops, its importance in human life and impact on Indian economy(Table 8). A total of 3 nos. of training programme, 1 no. of Demonstration, 2 nos. of Field day Programme, 1 no. of awareness programme and 1 no. of *Kisan Mela* were organized among various extension activities. A total of 2313 nos. of farmers were benefited. The details of various extension activities are given below:

Table 8. District-wise extension activities carried out during *Rabi* Pulses programme during 2024

S. No.	Name of District	Activities	Location	Date of conduct	No. of beneficiaries						
					OBC		SC/ST		Others		Total
					M	F	M	F	M	F	
1	West Tripura	Training Programme	Bamutia	04.12.24	27	0	6	0	2	0	35
		Awareness programme	College of Agriculture,Tripura	23.12.24	21	2	9	0	0	0	32
2	Sipahijala	Training Programme	Pathalia Bishalgarh	08.10.24 30.11.24	13	0	3	0	0	0	16
		Method demonstration	Pathalia	08.10.24	0	0	8	0	0	0	8
3	Khowai	Field day	East R.C. Ghat	12.12.24	10	0	0	0	0	0	10
4	South Tripura	Field Day	Sabroom	01.12.24	14	2	3	1	0	0	20
		Total			**85**	**4**	**29**	**1**	**2**	**0**	**121**

Training/Input Distribution on Promotion of *rabi* Pulses (Lentil and Rajma) in Sepahijala District of Tripura on November 30, 2024

A "One-Day Farmers' Training cum Input Distribution Programme" on promoting pulses in the NEH Region was held on November 30th, 2024, at Bishalgarh, Tripura. Organized by the College of Agriculture, Tripura, in collaboration with the Bishalgarh Agricultural Sub-Division, the programme aimed to promote sustainable pulse cultivation and improve productivity. Mr. Prabir Datta, Sector Officer of Bishalgarh, inaugurated the event and highlighted the nutritional and soil fertility benefits of pulses. Dr. Abhijit Saha, Assistant Professor, conducted a technical session covering seed treatment with *Rhizobium*, crop rotation, and line sowing methods.

Farmers received essential inputs, including *Rajma* and Lentil seeds, fungicides, and bio-inoculants. Practical demonstrations were conducted on *Rhizobium* seed treatment and line sowing techniques.The programme covered an area of 2 ha under lentil cultivation and 2 ha under *Rajma* cultivation.

Technical Session & Input distribution

Field-Day/Training / Input Distribution Programme on Promotion of *Kharif* Pulses in Gomati and South Tripura District of Tripura on December 01, 2024

A 'Field Visit-cum-Training-cum-Input Distribution Programme' was conducted on December 1,[t] 2024, under the project "Promotion of Pulses in NEH Region (Tripura)," in collaboration with ICAR-IIPR, Kanpur, and supported by Bagma Agri Producer Company Limited (BAPCL), Tripura. The visit aimed to assess pulse cultivation practices and provide guidance to farmers in Gomati and South Tripura districts. Dr. Abhijit Saha, Principal Investigator, visited fields in Maharani and Amarpur villages in Gomati District, interacting with farmers cultivating blackgram and greengram. He also visited South Tripura District, where he inspected the fields of Shri Biswajit Majumder, who had successfully cultivated black gram using machine line sowing techniques. His crop showed excellent growth, proper plant distribution, and minimal pest and disease issues.

During the visit, Dr. Saha engaged with farmers on the best practices for pulse cultivation, including *rajma* cultivation, as many crops were in the flowering or pod development stages. In the future, the College of Agriculture, Tripura, plans to provide Tripura Rajma-1 seeds to farmers and dedicate approximately two hectares of land for *Rajma* cultivation, supported by ICAR-IIPR. This initiative is expected to boost pulse production and improve farmers' livelihoods. The field visit offered valuable insights into the region's farming practices and will aid in the successful implementation of the project, contributing to sustainable agricultural development in the region.

Farmer Field Visit in Gomati District

Farmer Field Visit in South Tripura District

Training/Demonstration/Input Distribution on Promotion of *Rabi* Pulses (Lentil and *Rajma*) in West Tripura District of Tripura on December 04, 2024

A 'Training-cum-Input Distribution-cum-Demonstration Programme' on the Promotion of Pulses in the NEH Region (Tripura) was organized at Bamutia, West Tripura District, Tripura, on December 4, 2024. The event was held in collaboration with ICAR-IIPR, Kanpur, and supported by the Bamutia SA Office, Agricultural Sub-Division. The programme aimed to train farmers in scientific crop management techniques and herbicide application to improve productivity and profitability in pulse cultivation.

The programme was inaugurated by Mr. Balai Goswami, Chairperson of the West Tripura Zilla Parishad, who emphasized the dual advantages of pulse cultivation—addressing nutritional needs and improving soil fertility through biological nitrogen fixation.

The training featured an interactive session led by Dr. Abhijit Saha, Principal Investigator, and Dr. Durga Prasad Awasthi, Co-PI, on essential aspects of pulse cultivation. Key topics included the profitability of pulses, Tripura's suitability for pulse crops, seed selection, soil preparation, and pest management strategies.

Farmers were provided with essential inputs, including lentil seeds, *Rhizobium* culture, *Trichoderma* culture, micronutrients, and fungicides. Practical demonstrations included seed treatment with *Rhizobium* and pest management techniques.

Technical Session &Input distribution

Field Day/Input Distribution/Demonstration Programme on Promotion of Pulses in Khowai District of Tripura on December 12, 2024

A 'One-Day Input Distribution-cum-Demonstration Programme' on the Promotion of Pulses in the NEH Region (Tripura) was held at KVK Khowai, Tripura, on December 12, 2024. The programme,

organized in collaboration with ICAR-IIPR, Kanpur, and supported by Divyodaya KVK, aimed to educate farmers on sustainable pulse cultivation practices to improve productivity and profitability. Dr. Abhijit Saha, Principal Investigator from the College of Agriculture, Tripura, conducted a technical session covering seed treatment with *Rhizobium*, mechanized sowing using low-cost manual seed drills, and integrated crop management techniques, such as the use of bio-inoculants and fertilizers to boost crop health and yields.

Practical demonstrations were conducted to show *Rhizobium* inoculation techniques and mechanized sowing using a low-cost manual seed drill. The demonstrations focused on enhancing germination, root development, and overall yield. Farmers actively participated and appreciated the hands-on learning experience, particularly the ease and cost-effectiveness of the methods. Input distribution included high-quality seeds, fertilizers, and *Rhizobium*, encouraging the adoption of scientific farming practices. The event successfully equipped farmers with valuable knowledge and tools for improving pulse cultivation, with positive feedback indicating a strong interest in applying the demonstrated techniques. The programme was a collaborative success.

Demonstration of post-*Kharif* black gram

Awareness/Training Programme on the Occasion of *Kisan Diwas* at College of Agriculture, Tripura on December 23, 2024

'Awareness-cum-Training Programme' on the Promotion of Pulses in the NEH Region (Tripura) was organized at the College of Agriculture, Tripura, on December 23, 2024, in collaboration with ICAR-IIPR, Kanpur. The event aimed to honour farmers and enhance agricultural awareness, providing hands-on training to 30 farmers from districts like Sepahijala, West Tripura, South Tripura, Gomati, and Khowai. The programme featured a ceremonial lamp-lighting by Mr. Anil S. Kotmire, General Manager of NABARD, Agartala, along with other distinguished guests, including Dr. Debashish Sen, Principal of the College of Agriculture, Tripura. The event included an interactive session by Dr. Abhijit Saha, Principal Investigator of the programme, who guided farmers on various aspects of pulse cultivation, such as seed selection, soil preparation, and pest management. Experts also addressed farmer concerns during the plant health clinic.

The programme also included a felicitation and award ceremony, where four farmers were recognized for their excellence in blackgram cultivation. Progressive farmers shared success stories, motivating others to adopt new techniques. A quiz session was conducted for both farmers and students, focusing on agricultural topics, and the programme concluded with a vote of thanks from Dr. Utpal Giri. This event successfully equipped farmers with the necessary knowledge and skills to improve pulse cultivation in Tripura, fostering collaboration and encouraging sustainable farming practices.

Inaugural Session & Felicitation Ceremony

Plant Clinic & Award Ceremony

Trainees participated in the programme

Field Day on Promotion of Pulses in North Tripura District of Tripura on January 10, 2025

A Field Visit was conducted on January 10, 2025, under the project "Promotion of Pulses in NEH Region (Tripura)" in Baithangbari ADC village, Jubarajnagar, North Tripura. The visit aimed to assess pulse cultivation practices and provide technical guidance to local farmers. Dr. Abhijit Saha, Principal Investigator, visited the *kharif* blackgram fields (IPU 10-26 variety) and interacted with farmers about the crop's growth, yield, pests and disease management. Strategies for pest control and ways to enhance crop yield using sustainable practices was discussed. The farmers had grown blackgram in an area of two ha.

During the visit, Dr. Saha also sensitized READY (Rural Agricultural Youth Development) students to the farmers' fields, offering them an opportunity to observe and learn about pulse cultivation challenges and solutions. The students engaged with farmers and gained valuable practical experience. The field visit was an essential part of the project, helping to improve knowledge exchange and providing farmers with the tools and strategies needed to increase pulse production sustainably in the region.

Field Day in North Tripura District

Field Day/Demonstration Programme on Promotion of Pulses in South Tripura District of Tripura on February 22, 2025.

A 'Field Day-cum-Demonstration Programme' on the Promotion of Pulses in the NEH Region (Tripura) was held at Doulbari, Sabroom, South Tripura, on February 22 2025. Organized in collaboration with ICAR-IIPR, Kanpur, and supported by BAPCL, Tripura, the event aimed to educate farmers on sustainable pulse cultivation practices. Dr. Abhijit Saha, Principal Investigator from the College of Agriculture, Tripura, visited local farmers cultivating *Rajma* on 5 hectares using HUR 321 and Tripura *Rajma* 1 varieties. Practical demonstrations included micronutrient spraying and crop cutting experiments (CCEs) to estimate yields. Discussions covered pest management and crop cultivation techniques. The productivity was impressive, with 14-15 pods per plant and an estimated yield of 3-3.2 tonnes per hectare, leading to an expected income of Rs. 2.5 to 3 lakh per hectare. The use of mechanized row sowing, top dressing of fertilizers, and split urea application significantly boosted yields. Farmers were satisfied with the superior yield and expressed interest in adopting the demonstrated techniques. The programme successfully provided valuable insights and practical tools to improve pulse cultivation in the region.

Field Day in Sabroom, South Tripura

Similarly, during summer season of 2024-25, demonstration of pulse crops such as summer blackgram (Table 9) and Greengram (Table 10) were also demonstrated in two districts namely Sipahijala and Khowai. Clustered demonstration on Summer Blackgram var. PU 9 was performed in two districts namely Sipahijala and Khowai. Total 60 numbers of beneficiaries have cultivated high yielding variety (PU 9) of Summer blackgram. Likewise, demonstration of summer greengram [Variety- Virat] was also conducted in 10 ha of land in Sipahijala district.

Summer blackgram & greengram cultivation in Sipahijala (Left) visit to demonstration plot by Hon'able Minister of Ag & FW, Tripura

Table 9. District-wise area (ha), production (q) and productivity (q/ha) of Summer Blackgram variety PU 9 During 2025

S. No.	Name of District	Name of Village	Area (ha)	Date of sowing	No. of beneficiaries						
					OBC		SC/ST		Others		Total
					M	F	M	F	M	F	
	Sepahijala (Tripura)	Noapara	10	21.03.25-31.03.25	38	2	0	0	0	0	40
	Khowai (Tripura)	Purba Ram Chandraghat, Nama Para	2	25.03.25-29.03.25	4	0	15	1	0	0	20
				Total	**42**	**2**	**15**	**1**	**0**	**0**	**60**

Table 10. District-wise area (ha), production (q) and productivity (q/ha) of Summer Greengram variety Virat during 2025

S. No.	Name of District	Name of Village	Area (ha)	Date of sowing	No. of beneficiaries						
					OBC		SC/ST		Others		Total
					M	F	M	F	M	F	
	Sepahijala Tripura	Noapara	10	21.03.25-31.03.25	9	1	0	0	0	0	10

Various extension activities (Table 11) were also conducted for *Summer* pulses to sensitize the farming community about the improved production technology of pulse crops, its importance in human life and impact on Indian economy. Two demostrations and Three *KisanMela* were organized among various extension activities. A total of 140 nos. of farmers were benefited. The details of various extension activities are given below :

Table 11. District-wise extension activities carried out during Summer Pulses programme during 2025

S. No.	Name of District	Activitiy	Location	Date of conduct	No. of beneficiaries						
					OBC		SC/ST		Others		Total
					M	F	M	F	M	F	
1.	North Tripura	Field day	Jubarajnagar	10.01.25	3	4	2	1	0	0	10
2.	Sipahijala	Demonstration	Noapara	18.03.25	28	3	11	8	0	0	50
		Field day	Noapara	18.03.25	29	3	17	0	1	0	50
3.	South Tripura	Field Day	Sabroom	22.02.25	17	3	8	2			30
				Total	77	13	38	11	1	0	140

Field Day/Input Distribution/Demonstration Programme on Promotion of Summer Pulses (Blackgram and Greengram) in Sepahijala District of Tripura on March 18, 2025

A 'Field Day-cum-Input Distribution-cum-Demonstration Programme' on the Promotion of Summer Pulses in Sepahijala District, Tripura, was held at Noapara, Sepahijala district, Tripura, on March 18, 2025. Organized in collaboration with ICAR-IIPR, Kanpur, and supported by the Bagma Agri Producer Company Limited (BAPCL), the event aimed to introduce summer pulse cultivation practices in an area that had previously been fallow after mustard and before the sowing of *kharif* paddy. A total of 50 progressive farmers from the district attended the programme, marking the first time that Greengram (Virat) and Black gram (PU 9) were being cultivated in a clustered area of approximately 10 hectares.The event commenced with speeches from key dignitaries, including the Chairman of the Panchayat Samiti, SA, and the Sector Officer of Bishalgarh Agricultural Sub-Division. Dr. Abhijit Saha, Principal Investigator of the programme, highlighted the benefits of summer pulses, including enhanced soil fertility and increased income for farmers. The training included an interactive session where key topics were discussed, such as the use of *Rhizobium*, *Azotobacter*, *Trichoderma* bioagents and other biofertilizers. Farmers were also introduced to the manual seed drill, which offers a more efficient sowing method compared to traditional broadcasting.Input distribution followed, with farmers receiving high-quality seeds of Greengram (IPU 205-7/Virat) and Black gram (PU 9), fertilizers, manual seed drills, and bioagents/biofertilizers. Hands-on demonstrations were conducted, focusing on the correct application of biofertilizers and the use of the manual seed drill for efficient pulse sowing.

Input Distribution (Left); Demonstration on mechanized line sowing (right)

Conclusion

The implementation of pulses promotion activities in Tripura, in collaboration with ICAR-IIPR Kanpur, has yielded positive outcomes across the targeted districts. These initiatives have led to increased adoption of improved cultivation practices, enhanced productivity, and higher incomes for small and marginal farmers. As a result, the programme has significantly contributed to boosting the overall pulse production in the state. This progress not only supports improved livelihoods for pulse growers but also sets the foundation for achieving self-sufficiency in pulse production in Tripura in near future.

DAPST (TSP) Activities

With aims to improve the nutritional and livelihoods security of tribal communities, Tribal Sub Plan was first adopted in India during Fifth Five-Year Plan (1974-1979). The Tribal Sub Plan, now rechristened as Development Action Plan for Scheduled Tribes (DAPST), is a focused initiative aimed at improving the socio-economic status of tribal communities. In this context, efforts were made by ICAR-IIPR, Kanpur to introduce and promote improved pulse production practices among tribal farmers of Madhya Pradesh and Chhattisgarh state under TSP (STC). The progress made in this regard during past five years (2020-21 to 2024-25) is presented here. Pulse based technological interventions (3197 nos.) on chickpea, pigeonpea, urdbean, mungbean, lathyrus were organized on 1279 ha in partnership with tribal farmers of Dindori, Mandla, Barwani, Shahdol, Jhabua, Annuppur, Dhar districts of Madhya Pradesh and Baster, Bijapur, Dantewada, Surgurja, Jashpur, Kanker, Narayanpur, Balrampur, Koriya districts of Chhattisgarh state during 2020-21 to 2024-25. These interventions were also supported by appropriate capacity building programmes for a sustainable influence in the desired direction. The quantitative details of the activities have been tabulated below (Table 1-10).

Table 1. Details of TSP organized during 2020-21 to 2024-25

Year	Nos. of demonstrations	Area (ha)
Summer/Spring 2025	350	146
Rabi 2024	560	224
Summer/Spring 2024	388	149
Summer Spring 2023	209	83.6
Rabi 2023-24	320	128
Kharif 2022-23	300	120
Summer/Spring 2022	72	28.8
Kharif 2021-22	250	100
Rabi 2021-22	400	160
Summer/Spring 2020-21	178	71.2
Rabi 2020-21	170	68
Total	**3197**	**1279**

Table 2. Status of demonstrations during 2025 under TSP programme

Season	Crop	State	District	No. of Demonstration	Area (Ha.)	Total Amount (₹)
Summer Spring 2025	Black gram	Madhya Pradesh	Shahdol	36	15	1,35,000
			Dhar	36	15	1,35,000
			Total	**72**	**30**	**2,70,000**
		Chhattisgarh	Aliirajpur	33.6	14	1,26,000
			Total	33.6	14	1,26,000
			Grand Total	**105.6**	**44**	**3,96,000**
	Green gram	Madhya Pradesh	Jhabua	48	20	1,80,000
			Dhar	**36**	15	1,35,000
			Total	**84**	**35**	**3,15,000**
		Chhattisgarh	Aliirajpur	28.8	12	1,08,000
			Kanker	36	15	1,35,000
			Sukma	48	20	1,80,000
			Dantewada	48	20	1,80,000
			Total	**160.8**	**67**	**6,03,000**
			Grand Total	**350.4**	**146**	**13,14,000**

Table 3. Status of demonstration during 2024-25 under TSP program

Season	Crop	State	District	No. of Demonstration	Area (ha.)	Total Amount (₹)
Rabi 2024-25	*Rabi* Pulses	Madhya Pradesh	Dindori	35	14	1,26,000
			Mandla	35	14	1,26,000
			Jhabua	35	14	1,26,000
			Dhar	35	14	1,26,000
			Total	**140**	**56**	**5,04,000**
		Chhattisgarh	Jashpur	35	14	1,26,000
			Kanker	35	14	1,26,000
			Balrampur	35	14	1,26,000
			Baster	35	14	1,26,000
			Total	**140**	**56**	**5,04,000**
		Bihar & Jharkhand	Banka and Katihar	**280**	**112**	**10,08,000**
			Grand total	**560**	**224**	**20,16,000**
			Anuppur	25	10	81,000
			Shahdol	30	12	97,200
			Mandla	25	10	81,000

Summer/ Spring 2024	Mungbean /Urdbean	Madhya Pradesh	Dindori	25	10	81,000
			Jhubua	25	10	81,000
			Dhar	25	10	81,000
			Total	**155**	**62**	**5,02,200**
		Chhattisgarh	Bijapur	25	10	81,000
			Dantewada	25	10	81,000
			Surguja	25	10	81,000
			Kanker	25	10	81,000
			Bastar	30	12	97,200
			Total	**130**	**52**	**4,21,200**
		Bihar & Jharkhand	Banka and Katihar	**103**	**35**	**3,20,000**
			Grand Total	**388**	**149**	**12,43,400**
2024-25	Capacity building training and storage bins	Madhya Pradesh	Dhar, Alirajpur Dindori Mandla	200	200	
		Chhattisgarh	Kanker, Sukma	100	100	
				300	**300**	

Table 4. Status of demonstration during 2023-24 under TSP programme

Season	Crop	State	District	No. of Demonstration	Area (ha.)	Total Amount (₹)
Summer/ Spring 2023	Mungbean	Madhya Pradesh	Jhabua	35	14	1,08,500
			Shahdol	35	14	1,08,500
			Mandla	35	14	1,08,500
			Total	**105**	**42**	3,25,500
		Chhattisgarh	Bijapur	35	14	1,08,500
			Dantewada	35	14	1,08,500
			Kanker	34	13.6	1,05,400
			Total	**104**	**41.6**	**3,22,400**
			Grand Total	**209**	**83.6**	**6,47,900**
			Dindori	30	12	90,000
			Mandla	30	12	90,000

Rabi 2023-24	*Rabi* Pulses	Madhya Pradesh	Jhabua	30	12	90,000
			Shahdol	30	12	1,08,000
			Dhar	40	16	1,26,000
			Total	**160**	**64**	**5,04,000**
		Chhattisgarh	Jashpur	40	16	1,26,000
			Kanker	40	16	1,26,000
			Balrampur	40	16	1,26,000
			Baster	40	16	1,26,000
			Total	**160**	**64**	**5,04,000**
			Grand total	**320**	**128**	**10,08,000**
Rabi 2023-24	Capacity building training and storage bins	Madhya Pradesh	Shahdol	25	25	65,000
			Annupur	25	25	65,000
			Dhar	25	25	65,000
			Mandla	25	25	65,000
			Barwani	25	25	65,000
			Total	**125**	**125**	**3,25,000**
		Chhattisgarh	Kanker	25	25	65,000
			Baster	25	25	65,000
			Balrampur	25	25	65,000
			Total	**75**	**75**	**1,95,000**
			Grand Total	**200**	**200**	**5,20,000**

Table 5. Status of demonstration during 2022-23 under TSP programme

Season	Crop	State	District	No. of Demonstration	Area ha.)	Total Amount (₹)
Kharif 2022-23	Pigeonpea	Madhya Pradesh	Shahdol	30	12	93,000
			Annupur	30	12	93,000
		Chhattisgarh	Balrampur	30	12	93,000
			Surguja	30	12	93,000
	Blackgram	Madhya Pradesh	Jhabua	30	12	93,000
			Barwani	30	12	93,000
		Chhattisgarh	Balrampur	30	12	93,000
			Kanker	30	12	93,000
	Greengram	Madhya Pradesh	Barwani	30	12	93,000
			Dhar	30	12	93,000
			Total	**300**	**120**	**9,30,000**

Summer 2022	Mungbean	Madhya Pradesh	Shahdol	12	4.8	37,200
			Mandla	12	4.8	37,200
			Jhabua	12	4.8	37,200
		Chhattisgarh	Kanker	12	4.8	37,200
			Bijpur	12	4.8	37,200
			Surguja	12	4.8	37,200
			Total	**72**	**28.8**	**2,23,200**

Table 6. Status of demonstration during 2021-22 under TSP programme

Season	Crop	State	District	No. of Demonstration	Area (ha.)	Total Amount (₹)
Kharif 2021-22	Pigeonpea	Madhya Pradesh	Shahdol	25	10	77,500
			Annupur	25	10	77,500
		Chhattisgarh	Balrampur	25	10	77,500
			Surguja	25	10	77,500
	Blackgram		Balrampur	25	10	77,500
			Kanker	25	10	77,500
		Madhya Pradesh	Jhabua	25	10	77,500
			Barwani	25	10	77,500
	Greengram	Madhya Pradesh	Barwani	25	10	77,500
			Dhar	25	10	77,500
			Grand Total	**250**	**100**	**7,75,000**
Rabi 2021-22	*Rabi* Pulses	Madhya Pradesh	Dindori	50	20	1,80,000
			Mandla	50	20	1,80,000
			Annupur	50	20	1,80,000
			Dhar	50	20	1,80,000
			Total	**200**	**80**	**7,20,000**
		Chhattisgarh	Jashpur	50	20	1,80,000
			Kanker	50	20	1,80,000
			Balrampur	50	20	1,80,000
			Koriya	50	20	1,80,000
			Total	**200**	**80**	**7,20,000**
			Grand total	**400**	**160**	**14,40,000**

Table 7. Status of demonstration during 2020-21 under TSP programme

Season	Crop	State	District	No. of Demonstration	Area (ha.)	Total Amount (₹)
Summer 2020-21	Summer Mungbean	Madhya Pradesh	Shahdol	28	11.2	86,800
			Mandla	30	12	93,000
			Jhabua	30	12	93,000
		Chhattisgarh	Kanker	30	12	93,000
			Bijapur	30	12	93,000
			Surguja	**30**	12	93,000
			Total	**178**	**71.2**	**5,51,800**
Rabi 2020-21	*Rabi* Pulses	Madhya Pradesh	Anuppur	35	14	1,08,500
			Mandla	35	14	1,08,500
			Dhar	35	14	1,08,500
		Chhattisgarh	Balrampur	30	12	93,000
			Bastar	35	14	1,08,500
			Total	**170**	**68**	**5,27,000**

Table 8. Details of *Kharif* demonstrations during 2021-22 under STC

Crop	Districts	Variety	No. of farmers	Farmer Yield (q)	Demo Yield (q)	Yield adv. (q)	Eco.Adv. @ MSP
Pigeon pea	Dindori, Mandla Shahdol, Annuppur of Madhya Pradesh	Rajeshwari, Rajeev Lochan	175	7.63	11.36	3.72	23457.76
	Baster and Surgurja of Chhattisgarh	Rajeev Lochan	60	6.44	8.32	1.88	11,829.72
	Total		**215**				
Urdbean	Barwani, Balrampu Dhar, Jhabua of Madhya Pradesh	PDU-1, PU-31, Pratap Urad 1	120	5.0	7.4	2.4	15,273.30
	Bastar, Jashpur Kanker, Surguja Narayanpur of Chhattisgarh	PratapUrad 1, PU-31 Indira Urad Pratham	126	5.4	6.8	1.4	8,858.80
	Total		**246**				

Table 9. Details of *Rabi* demonstrations during 2021-22 under STC

Crop	Districts	Variety	No. of farmers	Farmer Yield (q)	Demo Yield (q)	Yield adv. (q)	Eco.Adv. @ MSP
Chickpea	Madhya Pradesh Annuppur,Barwani, Balrampur, Dhar Dindori, Mandla	JG 12 RVG 202 JG 36	286	8.6	12.4	3.8	19,306.9
	Chhattisgarh Dantewada, Korea	RVG 202 GNG 2144	75	5.1	7.2	2.1	10,493.8
	Total		**361**				
Lathyrus	Jashpur district Chhatisgarh	Mahateora	31	4.0	4.8	0.8	2,664.5
	Total		**31**				

Table 10. Details of demonstrations during 2021-22 under STC

Crop	Districts	Variety	No. of farmers	Farmer Yield (q)	Demo Yield (q)	Yield adv. (q)	Eco.Adv. @ MSP
Mungbean	Barwani, Dhar districts of Madhya Pradesh	IPM 205-7 IPM 410-3	50	5.4	7.8	2.4	17544.1
	Kanker district of Chhatisgarh	IPM 410-3	30	5.3	6.4	1.1	8014.6
	Total		**80**				

Front Line Demonstrations (FLDs) on Pulses

Frontline Demonstrations on Pulses were organized by ICAR -IIPR, Kanpur for showcasing the improved pulse production technologies on farmers' fields for increasing production and productivity of pulses. In this line, during 2020-21 and 2024-25, the Institute organized a total of 725 nos. demonstrations on *Kharif*, *Rabi* and summer pulses covering 310.6 ha across 5 districts namely, Fatehpur, Kanpur Nagar, Kanpur Dehat, Jalaun and Hamirpur districts of Uttar Pradesh State (Table 11).

Table 11: Details of demonstrations under FLDs 2021-22 to 2024-25

Year	Season	District	No. of Demons.	Area Covered (ha)
2024-25	Summer	05	37	36.00
	Rabi	05	51	39.16
	Kharif	04	187	62.90
2023-24	*Rabi*	02	26	16.94
	Kharif	04	144	43.04
2022-23	Summer	04	23	10.80
	Rabi	07	56	25.91
	Kharif	02	37	9.85
2021-22	Summer	05	24	10.00
	Rabi	06	140	56.00

2020-21	Summer	03	10	07.00
	Rabi	04	26	20.00
	Kharif	04	15	10.00
	Total	**44**	**725**	**310.60**

Model Pulse Village Project

Technological demonstrations under the project

For promotion of sustainable production technology through demonstrations of improved pulse production technology, technology demonstrations (546 nos.) on chickpea (var. IPC 2006-77, IPC 2011-112), field pea (var. IPFD 12-8, IPFD 12-02), mungbean (var. Shikha, Virat), urdbean (var. IPU 13-1), pigeonpea (var. IPA 203) was organized on 231.83 ha in four villages in partnership with 546 farmers of Kanpur Dehat district (Table 12). Demonstrations were also conducted on appropriate need-based crop protection measures for management of insect-pest in pulse crops. In this context, a total of 655 demonstrations on plant protection chemicals like Indoxacarb, Chlorantraniliprole, and pre-emergent weedicide, pendimethalin were conducted. Additionally, 340 nos. farm implements such as battery-operated sprayers, weeders and storage bins were provided for promotion of farm mechanization in the project villages. In addition, crop stage specific capacity building programmes (12 nos.) were also organized for 996 partner farmers of the Kanpur Dehat district.

Table 12. Details of technological demonstrations organized during 2023-24 to 2024-25

Year	Demons. (Nos.)	Area (h a)
Rabi 2023-24	35	18.16
Summer 2024	148	75.00
Kharif 2024	59	20.00
Kharif 2024-25	60	18.00
Rabi 2024-25	114	25.67
Summer 2025	130	75.00
Total	**546**	**231.83**

Farmers collectives formed

The partner farmers of project villages were mobilized to form registered farmers societies (04 nos.) *i.e. Tathagat Dalhan Krishi Utpadak Samiti, Kanpur Dehat* (11 members), *Satnam Dalhan Krishak Samiti, Kanpur Dehat* (11 members), *Sarthi Krishi Utthan Samiti, Kanpur Dehat* (08 members) and *Premshankar Krishak Utthan Samiti, Kanpur Dehat* (08 members) under the Society Registration Act, 1860.

Establishment of pulse processing hub in project villages

For strengthening pulse value chains and entrepreneurship development among the partner farmers of *Kandhi* and *Kandhi Ki Madaiya* villages of *Kanpur Dehat,* two rural pulse processing hubs were established, that were led by the farmers registered societies *i.e. Tathagat Dalhan Krishi Utpadak Samiti, Kanpur Dehat* and *Satnam Dalhan Krishak Samiti, Kanpur Dehat.* These hubs were supported in acquiring GST certification, Udyam registration and FSSAI licensing for promotion of the business. These rural pulse processing hubs not only reduced post-harvest losses but also generated income and employment for the member farmers. These hubs generated total revenue of ₹ 21,379 from selling of 1416 kg of processed pulses and ₹ 13,363 as a processing charge from processing of 1328 kg of pulses till June, 2025.

Promotion of farm mechanization in project villages

To increase the production and income of partner farmers by catering the problem of unavailability of seed drills for line sowing of pulses, the seeds drills (02 nos.) were provided to *Prem Shankar Krishak Uthaan Samiti, Kanpur Dehat* (08 members) and *Sarthi Krishak Uthan Samiti, Kanpur Dehat* (7 members) on March 07, 2025 and March 10, 2025. These societies will also provide the seed drills to the farmers of the village in the form of Custom Hiring Centers (CHCs). These seed drills will support farmers by sowing seeds more efficiently, ensuring better seed placement and reduced seed wastage.

Strengthening the seed system

For strengthening the seed system in project villages, partner farmers were engaged in seed production (1584 kg) of improved mungbean varieties (Virat & Shikha) and earned revenue of ₹ 1,58,491.

Farmer FIRST Project

For enhancing farmers livelihoods by integrated approaches for food, nutrition and livelihood security of rural households, technological demonstrations (1376 nos.) on mungbean (var. Virat), paddy (var. Pusa Basmati, Arize gold, NDR 2065), wheat (var. K-1006, DBW 187, DBW 222), summer maize (DKC-9108), mustard (var. Kanti), okra (Navya (F1)), chilli (var. G-4, Divyajyoti), pearl millet (Pioneer 86M84), bottle gourd (Vigro (GSH-2), pumpkin (Hybrid Vishal), chickpea (var. GNG 2207, RVG 202, IPC 2004-01), field pea (var. IPFD 12-02, lentil (var. IPL 220, IPL 315), mustard (Azad Mahak, KMR (E) 15-2), garden pea (Kashi Uday), carrot (Kashi Arun), radish (Kashi Ardra), pigeonpea (var. IPA 203) were organized on 339 ha during 2020-21 to 2024-25 (Table 13).

Table 13. Details of technological interventions during 2020-21 to 2024-25

Year	No. of technological demons trations	Area covered (ha)
2020-21	233	59.86
2021-22	391	113.417
2022-23	255	61.67
2023-24	383	82.25
2024-25	114	21.43
Total	**1,376**	**339**

Farmers collectives formed

The partner farmers of the project villages were mobilized to form registered farmers societies (03 nos.) *i.e. Namami Gange Mahila Krishi Utpadak Samiti*, Fatehpur (11 members); *Pragatisheel Krishi Yantra Samiti, Khadra* (11 members) and *Pragatisheel Murgi Palak Samiti*, Khadra (08 members).

Entrepreneurship Development among women farmers

Women farmer society (11 members), *"Namami Gange Mahila Krishi Utpaadak Samiti, Khadra, Fatehpur"* was promoted for entrepreneurship development in agro-processing and value addition. The women farmer member prepared and sold 547.5 kg of value-added products including flour of bio-fortified variety of wheat (DBW 187) (207 kg) and processed pulses like mungbean split (34.5 kg), chana split (37 kg), chickpea flour (217 kg) and chickpea nuggets (52 kg) and earned the gross revenue of ₹ 47,375.

Training programmes organized in past five years (2020-21 to 2024-25)

A total of 139 nos. of sponsored training programmes/farmer-scientist interaction programmes were organized for 5963 nos. of farmers/students/entrepreneurs of Uttar Pradesh, Madhya Pradesh, Bihar, Odisha and Jharkhand states.

Table 14. Details of training programme organized during 2020-21 to 2024-25

S. No.	Program	Year	Activities (nos.)	Farmers (nos.)	States Covered
1.	Training programs for farmers/students/entrepreneurs	2020-21	15	660	UP, MP
2.	Training programmes for farmers/students/entrepreneurs	2021-22	18	496	UP, MP, Jharkhand
3.	Training programmes for farmers/students/entrepreneurs	2022-23	16	958	UP, Odisha
4.	Training programmes for farmers/students/entrepreneurs	2023-24	38	1691	UP, Odi sha, Jharkhand, MP, Bihar
5.	Training programmes for farmers/students/entrepreneurs	2024-25	52	2158	Odisha, Bihar Madhya Pradesh, Uttar Pradesh
	Total		**139**	**5963**	

Exposure visits organized in past five years (2020-21 to 2024-25)

A total of 111 nos. of exposure visits were organized for 7068 nos. of farmers/students/entrepreneurs of Uttar Pradesh, Madhya Pradesh, Bihar, Odisha, Jharkhand and Uttarakhand states (Table 15).

Table 15. Details of exposure visits organized during 2020-21 to 2024-25

S. No.	Programme	Year	Activities (nos.)	Farmers (nos.)	States Covered
1.	Exposure visits of farmers	2020-21	15	502	UP, MP
2.	Exposure visits of farmers	2021-22	11	362	UP, MP
3.	Exposure visits of farmers	2022-23	13	464	Uttarakhand, UP, MP
4.	Exposure visits of farmers	2023-24	25	979	UP, MP, Bihar, Odisha,
5.	Exposure visits of farmers	2024-25	47	4,761	UP, MP, Bihar, Odisha, Jharkhand
	Total		**111**	**7,068**	

Glimpses of TSP Project Activities

KVK Jhabua (Chickpea)

Field preparation for lentil crop-KVK Jashpur (left), field preparation for Chickpea-KVK Kanker

Chickpea crop (left), Seed treatment (right); KVK Kanker

Glimpses of FLD Project Activities

Glimpses of Model Pulse Village Project Activities

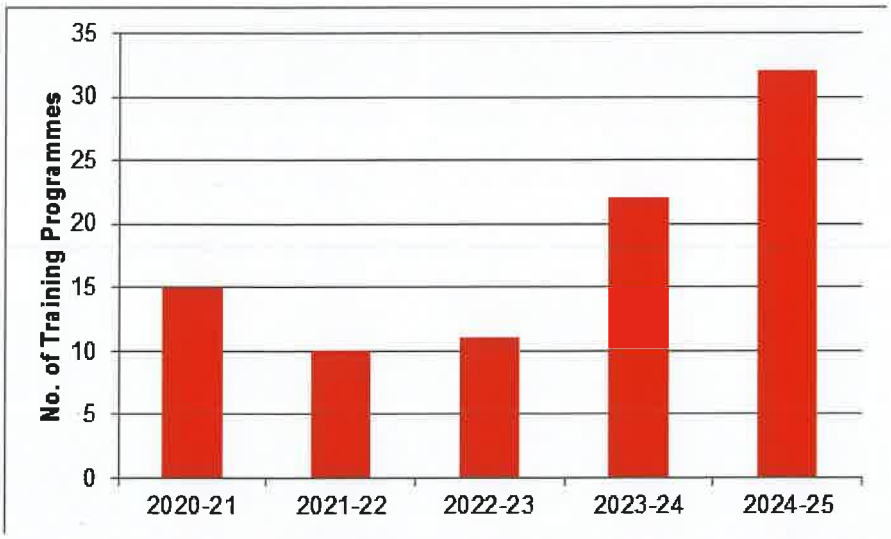
Glimpses of Farmer FIRST Project Activities

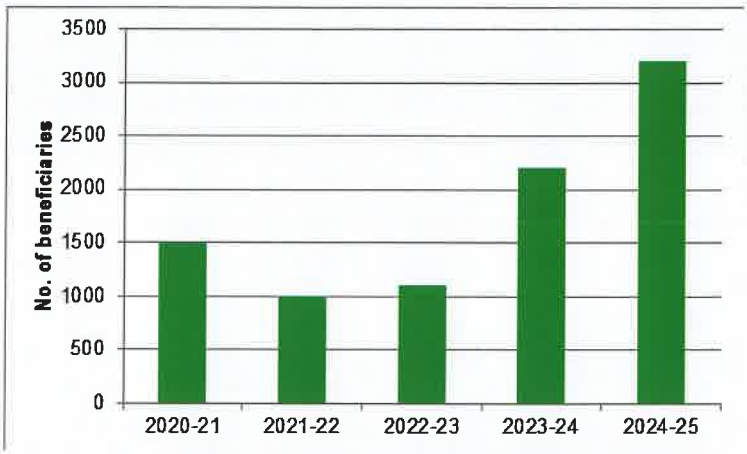
Scheduled Caste Sub-Plan Activities

Scheduled Caste Sub-Plan (SCSP) is a centrally funded project aimed at the welfare of farmers belonging to the scheduled castes. It works with the objectives of upliftment of the livelihood and living standard of the scheduled caste community. In order to make the project more viable, the programmes and activities are generally conducted on the basis of local community needs. The plan, funded by ICAR/Govt.of India, encompasses the districts with more than 20 per cent scheduled caste population below poverty line. They are supported by a number of programmes/activities strenthening their livelihood and economic status. These activities include Trainings (Capacity building/skill development programmes), On-farm trials, Input distribution of quality seeds, biofertilizers and micronutrients, agricultural implements, livestock/poultry chicks and even technical literatures.

Under the capacity building/skill development programmes, farmers of scheduled caste communities were trained for improved cultivation of pulses, its quality seed production, maintainance and proper storage of seeds. Scientists from the various discipline of the Institute participated as resource persons in these on/off campus training programmes conducted at the Institute or selected model pulse villages where they interacted with the farmers on specific issues and problems faced by them. During the period of 2020-21 to 2024-25, 90 nos. of such trainings were conducted benefitting around 9000 farmers.

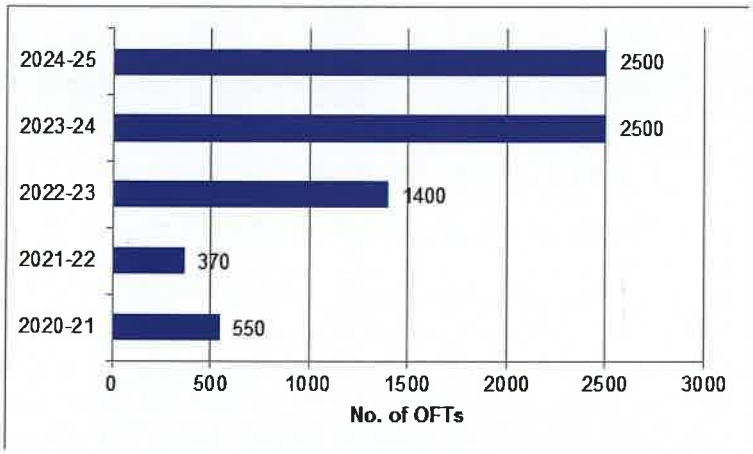
Glimpses of On-Campus (Left) and Off-campus (Right) training programmes conducted under SCSP





Nos. of Training Programmes conducted (upper) and beneficiaries (lower)

During the last five years (2020-21 to 2024-25), a total of 7,320 on-farm trials were conducted under the SCSP. Under these trials, the quality seeds of improved varieties of pulses were distributed to the SC farmers which they cultivated on their own farms. The performance of the distributed seeds was monitored by the Institute and feedbacks were recorded from the concerned farmers. The purpose of these on-farm trials was to make them aware about the improved package and practices of pulse cultivation including cultural practices, use of fertilizers, plant protection measures and practical knowledge of seed production.

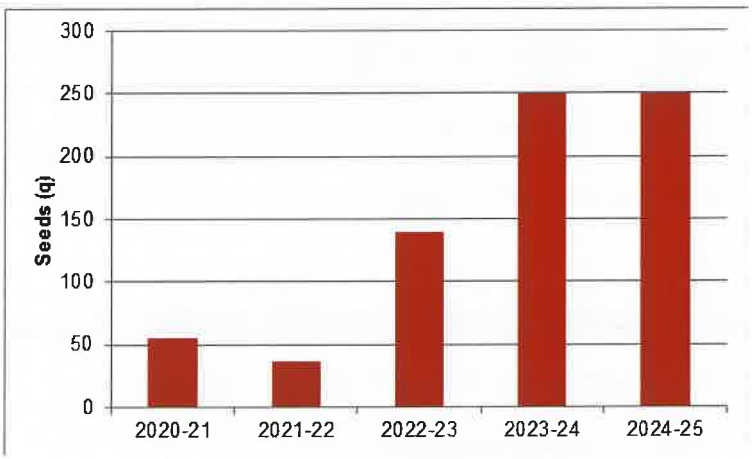


No. of on-farm trials conducted during 2020-21 to 2024-25 under SCSP

On-farm trials conducted under the SC-SP programme and its monitoring

Since 2020-21, the Institute has distributed quality seeds of improved varieties of different pulse crops like pigeonpea, mungbean, urdbean (*Kharif*); chickpea, fieldpea, lentil (*Rabi*) amounting to more than 700 q among the SC farmers of Kanpur Dehat, Unnao, Barabanki, Raebareli, Hamirpur, Fatehpur, Auraiya, Etawah and Hardoi districts (U.P.); Bikaner (Rajasthan); Bhopal (M.P.) and Dharwad (Karnataka).

Distribution of quality seeds of pulses to farmers under SCSP

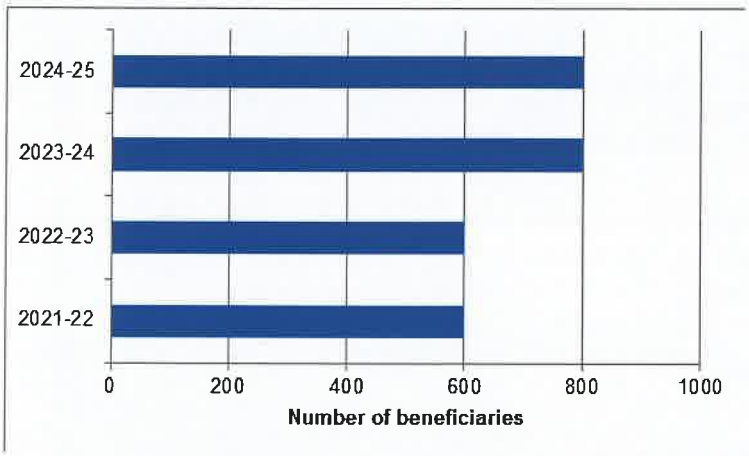


Quantity of seeds distributed to farmers during 2020-21 to 2024-25 under SCSP

Liquid formulations of crop-specific strains of *Rhizobium* were distributed to 600 beneficiaries (100 ml per farmer) during the year 2024-25. Hands on trainings were also provided for their proper method of application. Generally, pulses are grown in the marginal lands where the crop shows nutrient deficiency symptoms. Intensive cultivation depletes the level of micro-nutrients and needs amelioration. Micronutrients were also distributed along with the knowledge of its application method.

In the series, small agricultural implements like Knapsack sprayers and agricultural tool kits containing several items were distributed among the SC farmers of Kanpur dehat, Unnao, Raebareli, Hamirpur, Fatehpur, Barabanki, Auraiya, Etawah and Hardoi districts. Totally, 2,800 farmers were provided with the input support of small agricultural implements under the programme.

Distribution of Knapsack sprayers to farmers under SCSP



Number of farmers benefitted from small agricultural implements

During 2023-24 and 2024-25, medium sized agricultural implements like storage bins of different capacities were distributed, respectively among 200 and 500 beneficiaries of Kanpur Dehat, Unnao, Raebareli, Hamirpur, Fatehpur, Barabanki, Auraiya, Etawah and Hardoi districts. The provided bins aided in safe storage of seeds for the next season sowing.

Distribution of storage bins under SCSP

IIPR *Dal* Mill distributed to the "*Tathagat Dalahan Krishak Samiti*", *Kandhi ki Madaiya*, Kanpur Dehat under SCSP

Large equipment like IIPR Mini-*Dal* Mill and Seed Drills were distributed only to the registered Self-help groups (SHGs) of SC farmers in different villages under the plan. Quality breeds of poultry chicks, procured from the ICAR-Central Avian Research Institute (CARI), Bareilly, were distributed to eligible SC farmers having protective shelters and other required facilities. This, owing to limited resources, was taken up by the farmers as a good enterprise enhancing their income. The quality breeds of poultry chicks like '*Shyama*' and '*Nirbheek*' produces more numbers of eggs and better quality of chicken meats on which they earn comparatively higher income from their sale.

View of poultry chicks distributed to the farmers under SCSP

A total of 8,500 leaflet/pamphlets prepared in the local language on scientific cultivation of pulses, quality seed production, safe seed storage, recommended agronomic practices, weed management, plant protection measures, harvesting/threshing techniques *etc.* were also distributed among the farmers during the training/input distribution programs. These literatures served as ready reckoners for the farmers in carrying out their day to day operations.

Farmers Participatory Seed Production Programme

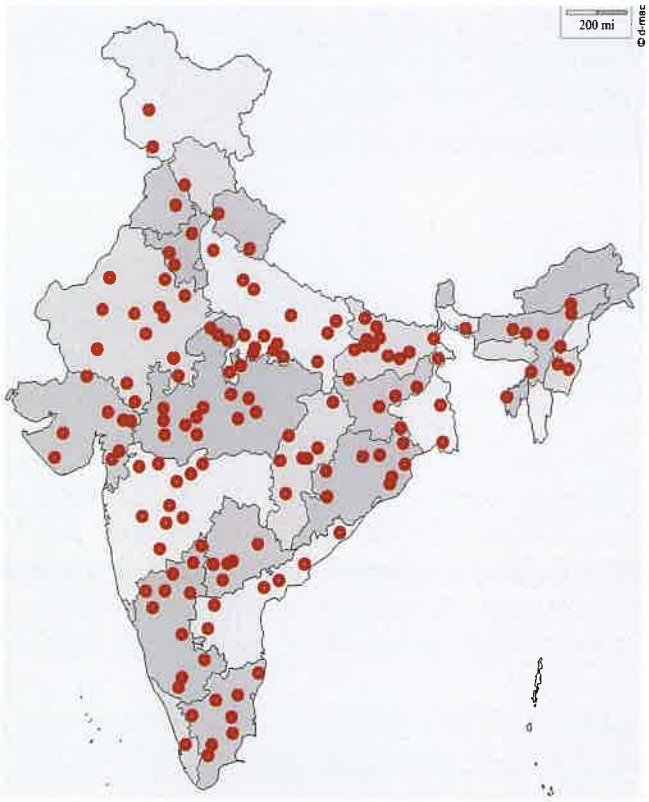
Pulses serve as an economical source of plant-based protein and calories for vegetarians, making them crucial for global food and nutritional security. These crops are typically cultivated with minimal inputs in areas prone to stress and on marginal lands. Seeds serve as a vital nexus for integrating production, protection, and quality enhancement technologies in a cost-efficient manner. The general consensus is that if timely and appropriate seed supply is guaranteed, pulse productivity can be significantly raised. Recognizing the availability of quality seeds as a pivotal element in enhancing pulse productivity and production in the nation, the Department of Agriculture and Farmers Welfare, Government of India, had initiated efforts to ensure local access to quality seeds (foundation and certified).

The Seed Hubs were established under a dedicated ICAR project titled "Creation of Seed Hubs for Increasing Indigenous Production of Pulses in India," in 2016. As a result, 150 Seed Hubs have been established, which are operational in ICAR Institutes, State Agricultural Universities, and *Krishi Vigyan Kendras* (Agricultural Science Centres), affiliated with both Non-Governmental Organizations and publicly funded institutions. The seed hubs are located in the pulse producing regions, across 24 states (Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Tripura, Nagaland, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand and West Bengal) of the country. Out of 150 seed hubs, 95 are based in Krishi Vigyan Kendras (KVKs), 47 in All India Coordinated Research Projects (AICRPs), operational in State Agricultural Universities (SAUs) and Central Agricultural Universities (CAUs) and 8 in ICAR institutes. It is essential that funds designated for KVKs are channelled through ICAR-ATARIs, as KVKs fall under the administrative control of the ATARIs. The ICAR-ATARIs play a pivotal role in facilitating a cohesive framework for quality seed sales, thereby enhancing coordination among other KVKs not directly associated with the Seed-Hub project. The task of implementing the project and providing technical support to the constituent seed hubs has been delegated to ICAR-IIPR, Kanpur which acts as the Nodal Office for the project.

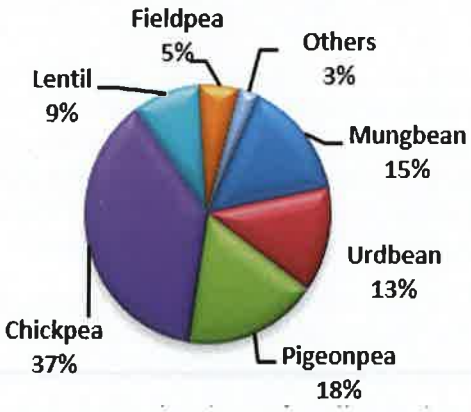
The project was established with a total funding support of ₹ 22531.08 lakh. A total of ₹ 50 lakh was provided to each seed hub centre for creation of infrastructure (seed processing plants and seed storage godowns). Seed storage godowns were established under the 150 constituent centres through a grant of ₹ 35 lakh to each centre and each godown has a storage capacity of 1500 quintals. Collectively, these seed storage godowns at 150 centres can store up to 2,25,000 quintals of seed. The remaining grant of ₹ 15 lakh (out of the total INR 50 lakh) allocated for infrastructure; was provided to each centre for establishing seed processing plants. Each plant is equipped with a processing capacity of 1.5 tonnes per hour. Collectively, these processing plants at 150 seed hub centres possess the capability to process an impressive 54,000 tonnes of seeds each month. Furthermore, a revolving fund of INR 100 lakh had been granted to each seed hub to cover various expenses related to seed production, procurement, and processing during 2016-18. The profit generated from the sale of seeds can be utilized by Seed-Hub for development of other facilities and employing manpower, etc., as per the requirement for increasing quality seed production of pulses.

Each Seed Hub has been assigned a target to produce 1,500 quintals of quality seeds annually. This concerted effort is poised to fortify the supply chain of quality seeds for eleven pulse crops, including Chickpea, Fieldpea, Lentil, Pigeonpea, Urdbean, Mungbean, Lathyrus, *Rajmash*, Cowpea, Mothbean and Horsegram. Additionally, the varieties taken up in the seed production programme were not older than 10 years. During 2016-17 to 2024-25, 926384.91quintals of quality seed of eleven pulses were produced. In the same period, 1,33,726.43 q (mungbean), 1,17,904.57 q (urdbean), 1,61,405.13q (pigeonpea), 3,37,970.62 q (chickpea) 82,690.94q (lentil), 49,290.27 q (fieldpea) and 23,396.94q (other pulses) were produced. A MoU has been signed with NSC to lift the seeds produced under the seed hub programme. For the *Kharif* 2024 season, the seed hubs have granted financial assistance for production of certified seeds of pigeonpea and urdbean through Department of Agriculture and Farmers' Welfare. In an effort to digitalize the seed

production and seed sales report under the seed hub centres, ICAR-IIPR, Kanpur has developed the Pulses Seed Portal, which can retrieve crop-wise, variety-wise and centre-wise seed production and seed sales report. The portal also stores and displays the information pertinent to infrastructure and revolving fund status of each centre. The end use of the portal is for farmers and other agencies to check the availability of quality seed of different crops at the 150 seed hub centres at any given point of time. In this way, the project envisages fortifying the seed supply chain of the country through production of foundation and certified seeds, increasing their accessibility to the local farmers and further elevating the production of pulse crops indigenously.



Distribution of Seed Hub Centres



Crop-wise share of quality seed production under pulses seed hub during 2016-17 to 2023-24

Seed Storage Godown

Access to quality seed availabilty across pulses seed hubs on the pulses seed hub portal

The three Seed Hub Centres running in the ICAR-IIPR, Kanpur and their regional stations/centres are, ICAR-IIPR Kanpur Centre (Uttar Pradesh), ICAR-IIPR-RRC, Khordha (Odisha) and ICAR-IIPR-RRS, Phanda, Bhopal (Madhya Pradesh). Following are the centre-wise achievement during 2020-21 to 2024-25 under the Seed Hub programme.

1. ICAR-IIPR, Kanpur Centre

Quality seed production of high yielding varieties of different pulse crops namely, mungbean, urdbean, pigeonpea during spring/summer and *kharif* seasons and chickpea, fieldpea, lentil during *rabi* season were conducted at farmers' field of Kanpur Dehat, Kanpur Nagar, Hamirpur, Jalaun and Banda districts during 2020-21 to 2024-25. For dissemination of quality seed production technology and its easy reach to the farmers, a project "Creation of Seed Hubs for increasing production of pulses in India" was funded by Department of Agriculture and Farmers welfare, Government of India. A total of 2,443 q of quality seed of pulses were produced and covered 369 hectare area among 161 farmers from Kanpur under Seed Hub, ICAR-IIPR Kanpur Centre during 2020-21 to 2024-25 (Table 1).

A total of 177.52 q of quality seeds of different pulses including Chickpea (Variety GNG 2207), Fieldpea (IPFD 12-2, IPFD 10-12 and IPFD 14-2), Lentil (IPL 220, IPL 315, IPL 316), Mungbean (Virat and Shikha), Urdbean (IPU 13-1 and IPU 11-02), Pigeonpea (IPA 203) were produced and covered with 18 hectare area among 16 farmers of Hamirpur, Kanpur Dehat and Kanpur Nagar districts during 2020-21 including *Rabi*, *Kharif* and Spring/Summer seasons.

Total 544.77 q of quality seeds of different pulses namely, Chickpea (IPC 2006-77), Fieldpea (IPFD 12-2, IPFD 10-12 and IPFD 14-2), Lentil (IPL 315 and IPL 526), Mungbean (Virat and Shikha), Urdbean (IPU 13-1), Pigeonpea (IPA203) were produced and covered with 57 hectare area among 28 farmers of Kanpur Dehat and Kanpur Nagar districts during 2021-22 including *Rabi,Kharif* and Spring/Summer seasons.

Similarly, a total of 428.95 q of quality seeds of pulses including Chickpea (IPC 2006-77), Fieldpea (IPFD 13-2 and IPFD 10-12), Lentil (IPL 315), Mungbean (Virat and Shikha), Urdbean (IPU 13-1), Pigeonpea (IPA 203) were produced and covering 71.9 hectare area among 20 farmers of Hamirpur, Kanpur Dehat and Kanpur Nagar districts during 2022-23 including *Rabi*, *Kharif* and Spring/Summer seasons.

Altogether 540.28 q of quality seeds of pulses including Chickpea (IPC 2010-134, IPC 2011-112, IPC 2004-01, IPC 2007-28), Fieldpea (IPFD 13-2, IPFD 12-2), Lentil (IPL 315 and IPL 526), Mungbean (Virat and Shikha), Urdbean (IPU 13-1), Pigeonpea (IPA 15-2) were produced covering 100.72 hectare area among 47 farmers of Hamirpur, Kanpur Dehat and Kanpur Nagar districts during 2023-24 including *Rabi, Kharif* and Spring/Summer seasons.

A total of 751.25 q of quality seed of pulses including Chickpea (IPC 2010-134, IPC 2011-112 and IPC 2007-28), Fieldpea (IPFD 13-2), Lentil (IPL 315 and IPL 220), Mungbean (Variety Virat and Shikha), Urdbean (IPU 13-1), Pigeonpea (IPA 15-2) were produced covering 121 hectare area among 47 farmers of Hamirpur, Jalaun, Kanpur Dehat, Kanpur Nagar and Banda districts during 2024-25 including *Rabi, Kharif* and Spring/Summer seasons.

2. ICAR-IIPR-RRC, Khordha Centre, Bhubaneswar, Odisha

During 2023-24 *Rabi* season, quality seed production programme was taken up in Hamirpur district and 58 q of Fieldpea (IPFD 12-2) was produced covering 3 hectare area among two farmers. Similarly, a total of 43 q lentil (IPL 220) was produced covering 2.5 hectare area among three farmers of Kanpur district by the ICAR-IIPR-RRC Khordha Centre.

During Spring/Summer 2024, 71.0 q of quality seeds of mungbean (Virat and Shikha) were produced among four farmers covering 4.44 ha area in Kanpur Dehat district. Similarly, a total of 19.10 q of quality seeds of urdbean (IPU13-1) were produced by a farmer covering 1.5 ha area in Kanpur Dehat district during *Kharif* 2024.

A total of 167.23 q of quality seed of lentil (IPL220 and IPL315) were produced by six farmers in an area of 9.65 hectare in Kanpur Dehat districtduring *Rabi* 2024-25.

Altogether, a total of 26.0 q quality seeds of urdbean (IPU 13-1 and IPU 11-02) were produced among three farmers of Kanpur Dehat district covering 4.7 hectare area during Spring/Summer 2025. Similarly, 173.30 q quality seeds of mungbean (Virat and Shikha) were produced by 12 farmers covering 13.67 hectare area in Kanpur Dehat and Hamirpur district during Spring/Summer 2025.

Table 1. Year-wise quality seed production of major pulses under Seed Hub, ICAR-IIPR Kanpur Centre

Crop	2020-21			2021-22			2022-23			2023-24			2024-25		
	Farmer (Nos.)	Area (ha)	Prod. (q)	Farmer (Nos.)	Area (ha)	Prod. (q)	Farmer (Nos.)	Area (ha)	Prod. (q)	Farmer (Nos.)	Area (ha)	Prod. (q)	Farmer (Nos.)	Area (ha)	Prod. (q)
Chickpea	1.0	1.0	3.70	2.0	4.0	37.20	1.0	2.5	24.00	7.0	12.35	77.68	16.0	22.0	146.21
Fieldpea	5.0	3.0	49.32	9.0	18.0	236.60	5.0	11.5	148.99	9.0	17.00	191.34	3.0	12.0	94.3
Lentil	4.0	3.0	27.43	2.0	5.0	14.20	2.0	3.0	15.81	4.0	5.37	44.03	8.0	21.5	240.96
Mungbean	4.0	5.0	52.99	11.0	22.5	206.55	8.0	30.9	158.52	19.0	45.0	182.36	17.0	62.5	197.78
Urdbean	3.0	5.0	32.70	3.0	5.5	10.22	3.0	19.0	9.73	7.0	17.0	4.87	2.0	3.0	32.0
Pigeonpea	2.0	1.0	11.36	1.0	2.0	40.0	1.0	5.0	71.90	1.0	4.0	40.0	1.0	4.0	40.0
Total	**19.0**	**18.0**	**177.52**	**28.0**	**57.0**	**544.77**	**20.0**	**71.9**	**428.95**	**47.0**	**100.72**	**540.28**	**47.0**	**121.0**	**751.25**

Viksit Krishi Sankalp Abhiyan

(29th May to 12th June, 2025)

The *Viksit Krishi Sankalp Abhiyan* 2025 was a major initiative by the Government of India, aimed at transforming Indian agriculture by empowering farmers and promoting sustainable farming practices. Launched under the broader vision of a "*Viksit Bharat*" by 2047, this campaign focuses on increasing awareness among farmers about modern agricultural techniques, government schemes, and the use of technology to boost productivity. Through the *Abhiyan*, outreach programmes such as farmer meetings, exhibitions, demonstrations, and the involvement of *Krishi Vigyan Kendras* (KVKs) were organized across the country. A key component of the initiative was to bridge the information gap and ensure that farmers benefit from various central and state-level schemes, including PM-KISAN, Soil Health Cards, Natural Farming, and Precision Agriculture. The *Viksit Krishi Sankalp Abhiyan* 2025 also promoted climate-resilient practices and aimed to double farmers' income while ensuring food security. Overall, it represented a holistic approach in strengthening the agricultural sector and making Indian farming future-ready.

Objectives

- To create awareness among farmers about improved agricultural technologies including livestock, poultry, fisheries, *etc*
- To make aware farmers about various government schemes and policies on agricultural development
- To mobilize the scientific fraternity to have reciprocal learning with farmers and to document grassroots insights for strengthening agricultural research
- To understand local-level needs and document farmer's feedback on improved technologies and their innovations

Composition of Teams under VKSA

- Teams formulated were multidisciplinary, multi-institutional & multi-partner.
- All the Scientists from ICAR-Indian Institute of Pulses Research, Kanpur, were part of the team.
- SMSs from *Krishi Vigyan Kendras* were also involved in the team.
- Officers from State Agriculture, Horticulture and Animal Husbandry & Fisheries Departments.
- Plant Protection Officers attached to National Pest Surveillance System (NPSS).
- Progressive farmers, agri-preneurs and members and representatives of FPO/FIG/Self Help Group.
- Other organizations (*e.g.* NABARD, Lead Banks, *etc.*).

During the *Viksit Krishi Sankalp Abhiyan*-2025, organized during May 29 to June 12, 2025, a record number of farmers were participated and interacted with the team of scientists both at state and national level (Table 1).

Table 1. Number of teams and farmers interacted at state and national level under the programme

S. No.	State/UT	No. of districts	No. of Villages	No of Teams.	Farmers targeted
1.	Uttar Pradesh	75	5,987	232	14,96,750
2.	All India	723	65,184	2,170	1,31,30,539

Contribution of ICAR-IIPR Kanpur to *Viksit Krishi Sankalp Abhiyan* (VKSA) 2025 held during May 29, 2025 to June 12, 2025

Scientist Strength (ICAR-IIPR, Kanpur): **40+1**

A total of 80,355 farmer participants were interacted from 675 villages in the five districts, i.e. Kanpur Dehat, Etawah, Auraiya, Fatehpur and Kannauj. All the 46 blocks of these districts were covered under the programme (Table 2).

Table 2. Number of farmer participants from different villages/block under five districts

District	Total nos of blocks	No of blocks covered	Nos of villages covered	Nos of participants
Kanpur Dehat	10	10	135	80,355
Etawah	08	08	135	
Auraiya	07	07	135	
Fatehpur	13	13	135	
Kannauj	08	08	135	
Total	**46**	**46**	**675**	

Following are the researchable issues identified under VKSA (May 29 to June 12, 2025) at ICAR-IIPR Kanpur

1. Requirement of green seeded urdbean varieties for spring/summer season.
2. Requirement of MYMV resistant mungbean varieties for summer/spring and *Kharif*.
3. Requirement of mungbean variety of 80-85 days duration for *Kharif* season to avoid pre-harvest sprouting.
4. Requirement of early duration (less than 60 days) and multiple disease resistant urdbean and mungbean varieties for summer cultivation.
5. Requirement of package and practices for spring/summer cultivation of urdbean/mungbean.
6. Requirement of wilt resistant, pod borer tolerant varieties pigeonpea varieties.
7. Requirement of dwarf pigeonpea varieties for ease of spraying plant protection chemicals.

Major policy issues identified during the interaction

1. Increased availability of quality seeds of pulses.

Protection of crops from blue bulls and other stray animals


Contribution of ICAR-IIPR RC, Bikaner to *Viksit Krishi Sankalp Abhiyan*(VKSA) 2025 held during May 29, 2025 to June 12, 2025

Scientist Strength: 05

Table 3. No. of participants/villages/blockinteracted by the team of scientists at ICAR-IIPR RC, Bikaner, Rajasthan

District	No. of blocks covered	Nos. of villages covered	Nos. of participants
Bikaner	06	42	**6,839**

Contribution of ICAR-IIPR RS, Khorda Odisha to *Viksit Krishi Sankalp Abhiyan*(VKSA) 2025 held during May 29, 2025 to June 12, 2025

Scientist Strength :01

Table 4. No. of participants/villages/block interacted by the team of scientists at ICAR-IIPR, RS, Khorda, Odisha

District	Total no. of blocks	No. of blocks covered	Nos. of villages covered	Nos. of participants
Bhubaneshwar	10	09	18	**15,637**

Researchable issues identified under VKSAat ICAR-IIPR, RS, Khorda, Odisha

1. Requirement of pod borer tolerant and YMV resistant varieties of greengram
2. Requirement of sustainable pest and disease management modules under natural/organic farming systems

Contribution of ICAR-IIPR RS, Phanda, Bhopal to *Viksit Krishi Sankalp Abhiyan*(VKSA) 2025 held during May 29, 2025 to June 12, 2025

Scientist Strength : 05

Table 3.No. of participants/villages/block interacted by the team of scientists at ICAR-IIPR RS, Phanda Bhopal

District	No. of blocks covered	Nos. of villages covered	Nos. of participant
Sehore	03	75	**8984**

Researchable issues identified under VKSA at ICAR-IIPR RS, Phanda, Bhopal

1. Requirement of early duration, wilt resistant pigeonpea varieties
2. Requirement of wilt and dry root rot resistant chickpea and lentil varieties
3. Requirement of long duration urdbean varieties for *kharif* season
4. Requirement of high yielding and YMV resistant urdbean varieties for summer season

Policy / Social Issue

1. Pulses crop market/mandi rates remains lower than MSP
2. Damage to pulses crops (pigeonpea in particular) by wild animals

ICAR-IIPR RS, Dharwad

Scientist Strength : 05

District	Nos. of villages covered	Nos. of participants
Gadag, Yadagir and Koppal	51	**7,070**

Researchable issues identified under VKSA

1. Short duration pigeonpea cultivars with tolerance to wilt and SMD required
2. Requirement of mungbean varieties resistance to YMD and powdery mildew

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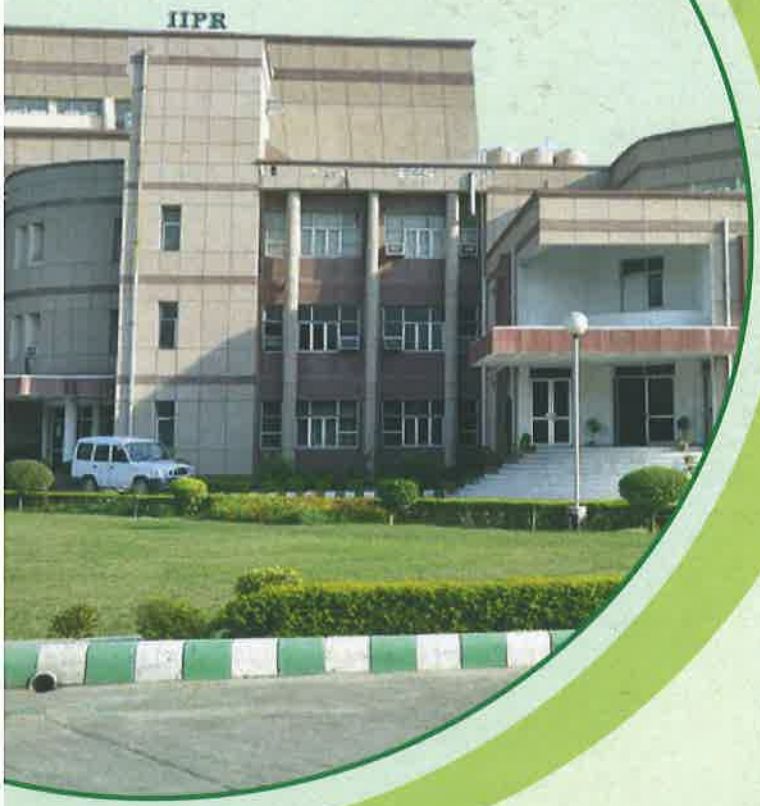

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