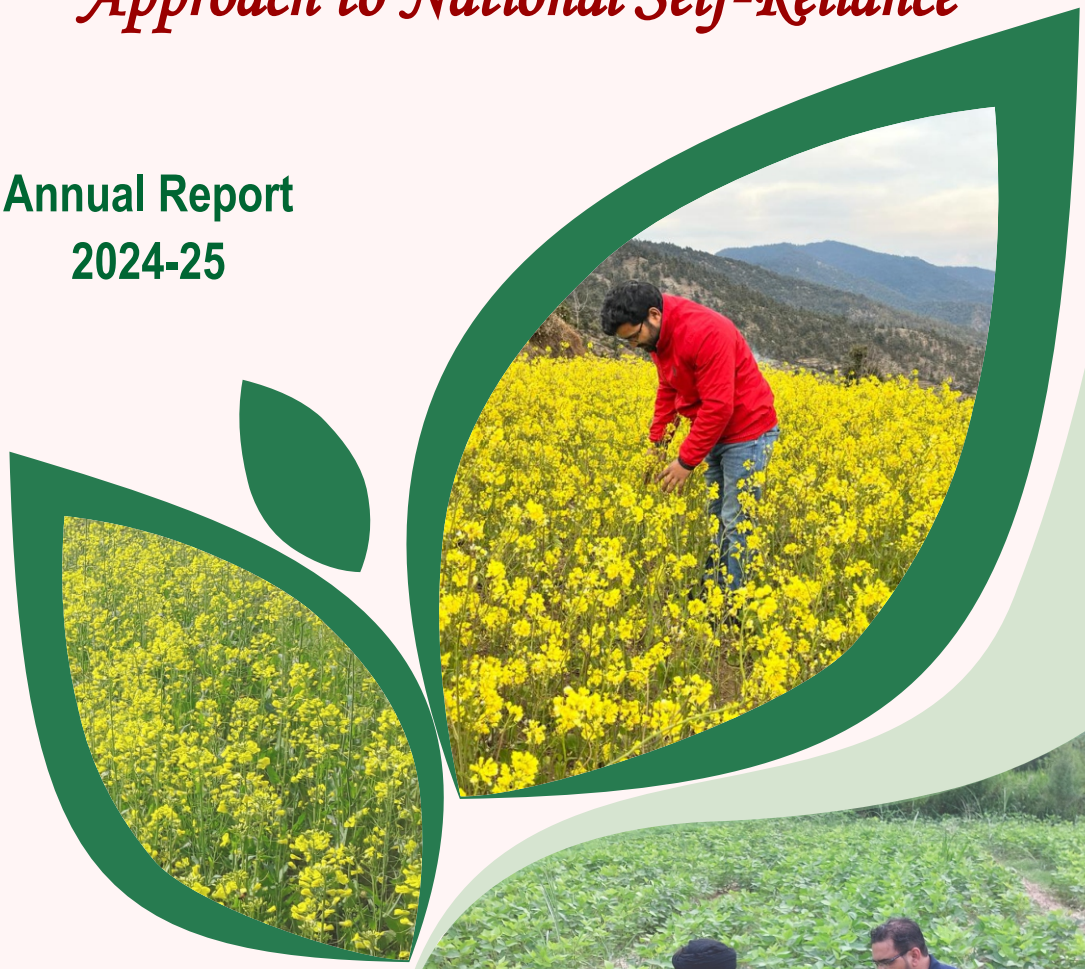
Bridging the Oilseed Gap: A Model Village Approach to National Self-Reliance

Annual Report
2024-25



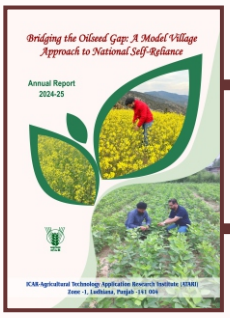
ICAR-Agricultural Technology Application Research Institute (ATARI)
Zone -1, Ludhiana, Punjab -141 004

Bridging the Oilseed Gap: A Model Village Approach to National Self-Reliance

ANNUAL REPORT (2024-25)
Oilseeds Model Village

Sponsored by:
Department of Agriculture & Farmers Welfare (DA&FW)
under National Food Security Mission-Oilseeds

ICAR-AGRICULTURAL TECHNOLOGY APPLICATION RESEARCH INSTITUTE (ATARI)
ZONE -1, LUDHIANA, PUNJAB -141 004



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PREFACE

Oilseeds and edible oils are two of the most sensitive essential commodities in India. Despite being the world's fourth-largest producer of oilseeds, India remains one of the largest importers of vegetable oils, with nearly 56.25% of its edible oil demand met through imports in the 2023-24 fiscal year. Recognizing the importance of achieving self-sufficiency in edible oilseeds, the Government of India approved the Oilseeds Model Village (OMV) project under the National Food Security Mission (NFSM)-Oilseeds for 2024-25 to 2026-27.

This strategic initiative aims to bridge the supply-demand gap through technological innovations and institutional interventions. Under ICAR-ATARI, Zone-I, Ludhiana, the project was implemented across Punjab, Himachal Pradesh, Uttarakhand, and Jammu & Kashmir through 15 Krishi Vigyan Kendras (KVKs). Each KVK was allocated 200 hectares and tasked with conducting demonstrations to showcase improved varieties, integrated crop management practices, and sustainable agricultural methods. For 2024-25, a budget of ₹31,594,000 was allocated to conduct 7,500 Cluster Frontline Demonstrations (CFLDs) on soybean (*Kharif* season) and rapeseed-mustard (*Rabi* season) across 3,000 hectares.

The OMV project represents a concerted effort by the Government of India, ICAR institutes, State Agricultural Universities, KVKs, and farmers to enhance oilseed productivity and reduce import dependency. By showcasing high-yielding varieties and best agronomic practices, this initiative not only strengthens national food security but also contributes to the economic stability of farming communities.

Special thanks are extended to the Department of Agriculture and Farmers Welfare for its support and guidance, the ICAR-ATARI Zone-I team for coordination, and the participating farmers whose active involvement made this program a success.

Parvender Sheoran
Director, ICAR-ATARI, Zone-I, Ludhiana

EXECUTIVE SUMMARY

Oilseeds are a cornerstone of India's agricultural economy and food security, serving as both a primary source of edible oil and a critical income stream for rural farmers. Despite India's position as the world's fourth-largest producer of oilseeds, more than half of its edible oil demand (56.25% in 2023-24) is met through imports. To reduce this dependency, the Government of India approved the Oilseeds Model Village project under the National Food Security Mission, Oilseeds for 2024-25 to 2026-27.

Under ICAR-ATARI Zone-I, Ludhiana, the project was implemented through 15 KVKs across Punjab, Himachal Pradesh, Uttarakhand, and Jammu & Kashmir. Each KVK managed 200 ha for demonstrations of soybean (*Kharif*) and rapeseed-mustard (*Rabi*). For 2024-25, a ₹31,594,000 budget was sanctioned, from which ₹15,871,446 (50.24%) was utilized to support 7,500 Cluster Frontline Demonstrations (CFLDs) across 3,000 ha, with funds allocated for critical inputs such as seeds, biofertilizers, and soil health testing, alongside contractual staff and farmer training.

In total, 7,693 CFLDs were completed on 2,988 ha, surpassing targets in some states. Soybean demonstrations covered 64 ha (188 CFLDs), achieving a 34.21 percent yield increase and raising net returns from ₹30,351 (check plots) to ₹43,299 (demo plots). Rapeseed-mustard demonstrations spanned 2,924 ha (7,505 CFLDs), with yield increase ranging from 14.99 percent in Punjab to 24.96 percent in Himachal Pradesh. Net returns improved markedly across states, with benefit-cost ratios consistently higher for demonstration plots (*e.g.*, 2.22 for soybean, up to 3.24 for rapeseed-mustard).

To promote adoption, 93 extension activities, including farmer trainings, field days, group meetings, and kisan goshthies, were organized across all participating states, benefiting 5,476 farmers. Monitoring visits by ICAR-ATARI staff and DA&FW representatives ensured quality implementation.

The OMV initiative demonstrates that improved varieties, integrated crop management, and farmer participation can significantly enhance oilseed productivity and profitability. Strengthening domestic production through the project contributes to reducing import dependence, enhancing rural livelihoods, and supporting India's pursuit of self-sufficiency in edible oils.

कार्यकारी सारांश

तिलहन भारत की कृषि अर्थव्यवस्था और खाद्य सुरक्षा की आधारशिला हैं। ये न केवल खाद्य तेल का मुख्य स्रोत हैं, बल्कि ग्रामीण किसानों की आय का एक महत्वपूर्ण साधन भी हैं। विश्व में तिलहन उत्पादन में भारत चौथे स्थान पर होने के बावजूद, इसकी खाद्य तेल की मांग का आधे से अधिक भाग (2023–24 में 56.25%) आयात के माध्यम से पूरा किया जाता है। इस निर्भरता को कम करने के लिए भारत सरकार ने 2024–25 से 2026–27 की अवधि हेतु राष्ट्रीय खाद्य सुरक्षा मिशन (तिलहन) के अंतर्गत तिलहन मॉडल ग्राम (Oilseeds Model Village – OMV) परियोजना को स्वीकृति दी है।

ICAR-ATARI, ज़ोन–I, लुधियाना के अंतर्गत यह परियोजना पंजाब, हिमाचल प्रदेश, उत्तराखंड और जम्मू–कश्मीर के 15 कृषि विज्ञान केंद्रों (KVKs) के माध्यम से लागू की गई। प्रत्येक KVK ने 200 हेक्टेयर क्षेत्र में खरीफ में सोयाबीन तथा रबी में रेपसीड–सरसों की प्रदर्शनी की। वर्ष 2024–25 के लिए ₹31,594,000 का बजट स्वीकृत हुआ, जिसमें से ₹15,871,446 (50.24%) का उपयोग 3,000 हेक्टेयर क्षेत्र में 7,500 क्लस्टर फ्रंटलाइन डिमॉन्स्ट्रेशन (CFLDs) हेतु किया गया। इस राशि से बीज, बायोफर्टिलाइज़र, मृदा स्वास्थ्य परीक्षण, संविदात्मक स्टाफ तथा किसान प्रशिक्षण जैसी आवश्यक गतिविधियों को सहयोग मिला।

कुल 7,693 CFLDs 2,988 हेक्टेयर में पूरे किए गए, जो कुछ राज्यों में लक्ष्यों से अधिक रहे। सोयाबीन प्रदर्शनों में 64 हेक्टेयर (188 CFLDs) शामिल रहे, जिससे 34.21% उत्पादकता वृद्धि हुई और शुद्ध लाभ ₹30,351 (चेक प्लॉट) से बढ़कर ₹43,299 (डेमो प्लॉट) तक पहुँचा। रेपसीड–सरसों प्रदर्शनों ने 2,924 हेक्टेयर (7,505 CFLDs) को कवर किया, जिनमें उपज वृद्धि पंजाब में 14.99% से लेकर हिमाचल प्रदेश में 24.96% तक रही। सभी राज्यों में शुद्ध लाभ में उल्लेखनीय वृद्धि दर्ज की गई, तथा लाभ–लागत अनुपात (Benefit–Cost Ratio) डेमो प्लॉट्स में लगातार अधिक रहा (उदा. सोयाबीन के लिए 2.22 तथा रेपसीड–सरसों के लिए अधिकतम 3.24)

अभिग्रहण (adoption) को बढ़ावा देने के लिए 93 विस्तार गतिविधियाँ आयोजित की गईं, जिनमें किसान प्रशिक्षण, फील्ड डेज़, समूह बैठकें और किसान गोष्ठियाँ शामिल थीं, जिनसे कुल 5,476 किसानों ने लाभ उठाया। ICAR-ATARI स्टाफ तथा कृषि एवं किसान कल्याण विभाग (DA&FW) के प्रतिनिधियों द्वारा निगरानी यात्राएँ की गईं, जिससे गुणवत्ता युक्त क्रियान्वयन सुनिश्चित हुआ।

तिलहन मॉडल ग्राम पहल यह प्रदर्शित करती है कि उन्नत किस्में, एकीकृत फसल प्रबंधन और किसान सहभागिता तिलहन की उत्पादकता और लाभप्रदता को उल्लेखनीय रूप से बढ़ा सकती हैं। इस परियोजना के माध्यम से घरेलू उत्पादन को सुदृढ़ करना, आयात पर निर्भरता को घटाना, ग्रामीण आजीविका को सशक्त बनाना और खाद्य तेलों में भारत की आत्मनिर्भरता की दिशा में एक महत्वपूर्ण कदम है।

CONTENTS

OILSEED MODEL VILLAGE

Oilseed sector occupies an important position in the agricultural economy. During 2023-24, the country recorded an estimated production of 39.67 million tonnes of nine cultivated oilseeds, contributing around 10 percent of the world's oilseed production. The high demand for edible oils in the country creates a gap between supply and demand, which is bridged by imports to keep prices stable. During 2023-24, domestic edible oil production stood at 12.17 million tonnes, and imports were 15.65 million tonnes. The total consumption/demand was 27.83 million tonnes. This shows that almost 56.25 percent of India's edible oil demand is met by imports. In the year 2023-24, India imported 15.65 million tonnes of edible oil, a decrease from 2022-23 (16.50 million tonnes).

In the early 1990s, the Yellow Revolution brought a brief period of self-sufficiency, but unpredictable rainfall and reliance on rainfed farming led to low productivity of oilseeds. Approximately 72 percent of India's oilseed area is rainfed, resulting in moisture stress and reduced productivity. However, advancements in crop production technologies have led to breakthroughs in oilseed production. The details of area, production, and productivity of major oilseeds in India during 2023-24 are given in Table 1. Over the past five years, oilseed production has consistently increased, reaching a record 39.67 million tonnes in 2023-24.

In an effort to achieve self-sufficiency in edible oilseeds, the Government of India has provided administrative approval for the implementation of a project, 'Oilseeds Model Village,' proposed by the Indian Council of Agricultural Research (ICAR). This initiative aimed to develop Oilseeds Model Villages (OMVs) through a combination of institutional and technological innovations, under the National Food Security Mission (NFSM) - Oilseeds. At ICAR-ATARI, Zone I, Ludhiana, the project was implemented through 15 Krishi Vigyan Kendras (KVKs) across the states of Punjab, Himachal Pradesh, Jammu & Kashmir, and Uttarakhand. Each KVK was been

Table 1: Area, Production, and Productivity of major oilseed (edible) crops in India during 2023-24

S. No.	Crop	Area (million ha)	Production (million tonnes)	Productivity (q/ha)
1.	Soybean	13.26	13.06	9.85
2.	Rapeseed & Mustard	9.18	13.26	14.44
3.	Groundnut	4.71	10.18	21.42
4.	Sesame	1.53	0.87	3.92
5.	Sunflower	0.15	0.17	11.44

Source: Indiastat.com

designated an area of 200 hectares (ha) for this project, with a target of conducting 500 demonstrations. The crops selected under this project for this zone were soybean (*Kharif* season) and rapeseed and mustard (*Rabi* season). For the year 2024-25, a budget of ₹31594000 was allocated to ICAR-ATARI, Zone-I, Ludhiana, to conduct 7500 CFLDs on oilseeds over an area of 3000 ha. The budget for each crop, *i.e*, soybean ₹7,500/ha, and rapeseed and mustard ₹6,000/ha, was provided to the respective KVKs for providing critical inputs like seed, biofertilizers, etc., to the farmers for conducting CFLDs under the OMV project. As per the guidelines of the NFSM, oilseeds, one YP-II at the ATARI level, and one technology agent for selected KVKs were hired for implementing this project. Separate funds were also provided for organizing one farmers' training program, Krishi Sakhi for monitoring the demonstrations and Soil testing and funds for monitoring the demonstrations.

The project was implemented with the following key objectives:

1. To showcase the technological options for breaking yield barriers by establishing Oilseed Model Villages with the active participation of farmers, FPOs, and other grassroots institutions.
2. To carry out the appropriate technological interventions using different modules at a wider scale for enhancing the oilseed productivity in potential as well as non-conventional areas.

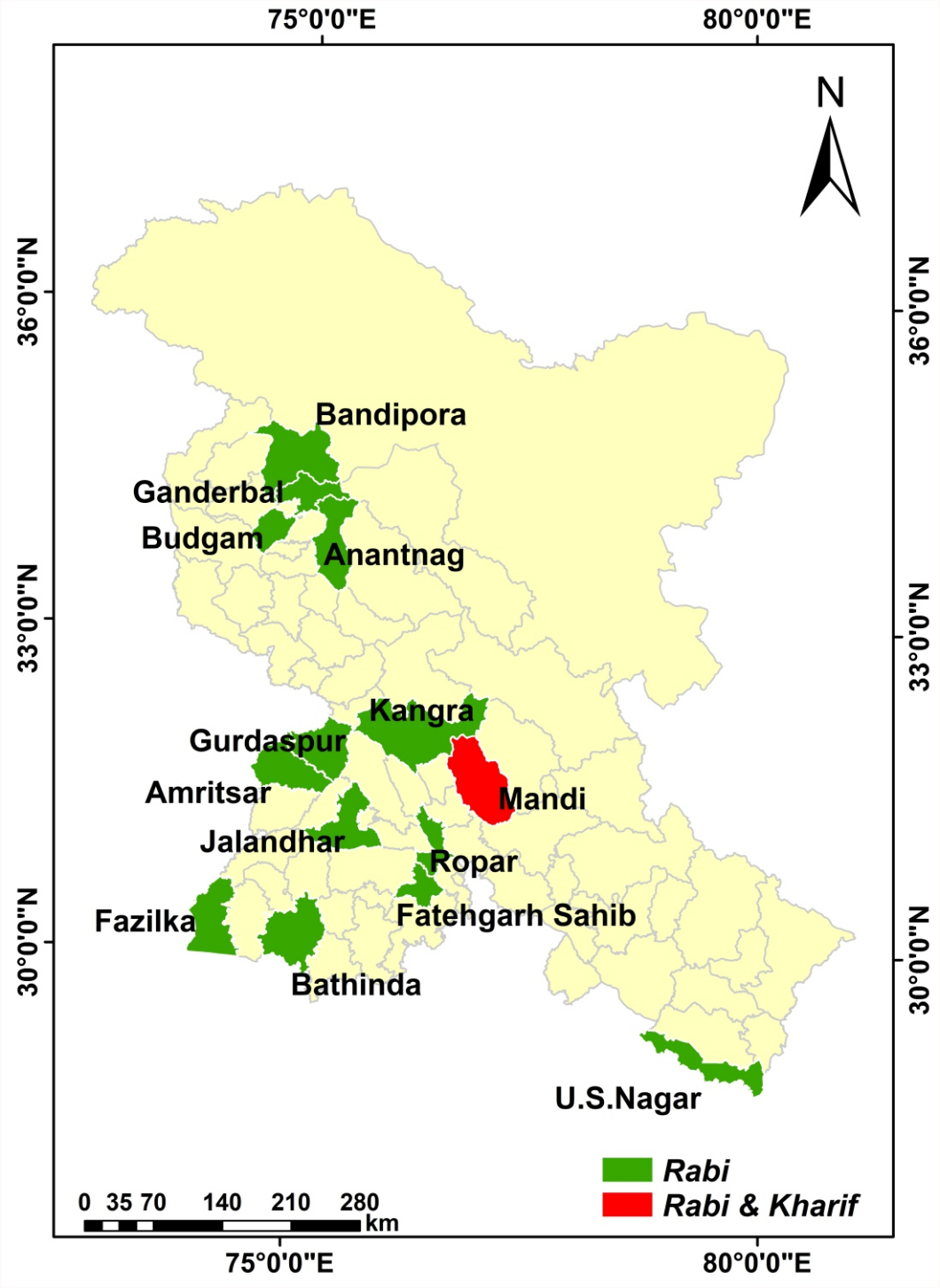
The Oilseeds Model Village project represents a strategic effort by the Government of India to enhance the country's agricultural capabilities and achieve self-sufficiency in edible oilseeds. Through a combination of technological advancements and institutional support, this initiative promises to transform the landscape of oilseed production in India, contributing to national food security and economic stability.

Accordingly, seeds of improved crop varieties included in the demonstrations were provided to the farmers. For soybean during the *Kharif* season, an area of 100 ha was allocated to the KVK Mandi of Himachal Pradesh, from which 188 CFLDs were conducted on an area of 64 ha. For rapeseed and mustard during the *Rabi* season, 7250 CFLDs were allocated on an area of 2900 ha, from which 7505 CFLDs were conducted on an area of 2924 ha. These CFLDs were allocated among four states: Punjab, 3500 demonstrations on an area of 1400 ha, 750 CFLDs on an area of 300 ha in Himachal Pradesh, 500 CFLDs on an area of 200 ha in Uttarakhand, and 2500 CFLDs on an area of 1000 ha in Jammu and Kashmir, covering 130 villages. Overall, a total of 7500 CFLDs were allocated on an area of 3000 ha among different KVKs during *Kharif* and *Rabi* seasons, from which 7693 CFLDs were demonstrated on an area of 2988 ha. (Table 2).

Table 2: Details of allocated and conducted demonstrations under Oilseed Model Village project during the year 2024-25

State	Crop	No. of KVKs (15)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
			***Kharif* season**			
Himachal Pradesh	Soybean	1	100	250	64	188
Sub-Total		1	100	250	64	188
Total *Kharif*		**1**	**100**	**250**	**64**	**188**
			***Rabi* Season**			
Punjab	R&M	7	1400	3500	1400	3500
Sub-Total		7	1400	3500	1400	3500
Himachal Pradesh	R&M	2	300	750	364	960
Sub-Total		2	300	750	364	960
Uttarakhand	R&M	1	200	500	160	221
Sub-Total		1	200	500	160	221
Jammu & Kashmir	R&M	5	1000	2500	1000	2824
Sub-Total		5	1000	2500	1000	2824
Total (R&M)		15	2900	7250	2924	7505
Total *Rabi*		**15**	**2900**	**7250**	**2924**	**7505**
Grand Total		**15**	**3000**	**7500**	**2988**	**7693**

Area allocated under OMV project during both *Kharif* and *Rabi* season



KHARIF OILSEED

SOYBEAN

HIMACHAL PRADESH

During the *Kharif* season, 250 CFLDs under the OMV project were allocated to an area of 100 ha of soybean in KVK Mandi. Whereas 188 demonstrations were conducted on an area of 64 ha under the OMV project. The major technologies demonstrated were improved variety (Pant Soya 1521) and the package of practices of State Agricultural Universities (Table 3).

Table 3: Technologies demonstrated on the soybean crop under the OMV in Mandi during 2024-25

Technology	Characteristics
Varietal demonstration of Pant Soya 1521 (2017)	• Resistant to yellow mosaic virus and bacterial pustule; moderately resistant to *Rhizoctonia* aerial blight. • It matures in 112-115 days & yields 20-25 q/ha.
Integrated Crop Management	• Herbicide: Quizalofop-ethyl 10% EC (Nishiana) @ 400 ml/ha

1. MANDI

188 CFLDs under the OMV project were conducted on an area of 64 ha of soybean among 3 blocks, *viz.,* Sunder Nagar, Dhanotu, and Drang, covering 5 villages of district Mandi. The average yield of the check plots was 11.81 q/ha, while the demonstration plots yielded 15.85 q/ha, reflecting a 34.21 percent increase in yield.

Table 4: Details of conducted CFLDs on soybean under the OMV project by KVK Mandi during 2024-25

KVK	Blocks (3)	Villages (5)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Mandi	Sunder Nagar, Dhanotu, Drang	Panjrala, Jarol, Dhamda, Sianji, Dabhan	100	250	64	188

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Mandi	Pant Soya 1521	11.81	15.85	34.21	30351	43299	2.07	2.22

In terms of net returns, check plots generated ₹30,351, while demonstration plots yielded significantly higher returns of ₹43,299. This resulted in a B: C ratio of 2.07 for check plots and 2.22 for demonstration plots (Table 4).

Monitoring of demonstrations on Soybean by in block Sunder Nagar by KVK Mandi of Himachal Pradesh

Monitoring of demonstrations on Soybean by KVK Mandi of Himachal Pradesh

धर्मपुर में 800 बीघा में उगेगी सोयाबीन की फसल, केवीके ने सजाओ में जारी किया बीज

रोसो, छतरैणा,गरली,छुहिंघाट, शेरपुर, दबरोट, तरयाबला,पाड़छु नलयाना गांवों में बनेंगे कलस्टर

भास्कर न्यूज़ | सरकाघाट

कृषि विज्ञान केंद्र सुंदरनगर द्वारा धर्मपुर किसान उत्पादक सहकारी सभा- एँफ़पीओ के सहयोग से सात सौ बीघा जमीन पर सोयाबीन के 9 कलस्टर स्थापित करने के लिए चार हज़ार किलो बीज आज किसानों को उपलब्ध करवा दिया गया। इसका वितरण सजाओ स्थित एफ़पीओ कार्यालय में केवीके की कृषि वैज्ञानिक एलके शर्मा और नेहा चौहान ने किया। इस अवसर पर एफ़पीओ के अध्यक्ष सत्तपाल सिंह चौहान सचिव भूपेंद्र सिंह डॉ. हरदयाल सिंह गुलेरिया, प्रेम सिंह, रूप चन्द गुलेरिया, रणताज राणा नितेश पराशर आदि भी मौजूद रहे।

केवीके सुन्दनगर की कृषि वैज्ञानिक और सोयाबीन कलस्टर के प्रभारी

किसानों को तिलहन का बीज वितरित करते कृषि विभाग के अधिकारी।

द्वारा भारतीय कृषि अनुसंधान परिषद नई दिल्ली की योजना के अनुसार तिलहन की खेती के लिए देश में दो सौ जिलों में ऑयल सीड मॉडल गांव परियोजना शुरू की गई है। इसमें हिमाचल प्रदेश में मंडी जिला चयनित किया गया है और उसमें भी इसके लिए धर्मपुर खण्ड को चुना गया है। इसकी रुचि है। उन्होंने बताया कि कृषि विज्ञान केंद्र इन कलस्टरों में नियमित तौर पर किसानों का मार्गदर्शन करेगा और उन्हें कीटनाशक दवाएं व अन्य प्रकार की सहायता भी देगा।

एफ़पीओ के अध्यक्ष सत्तपाल सिंह चौहान और सचिव भूपेंद्र सिंह ने बताया कि सबसे बड़ा सोयाबीन कलस्टर रोसो उपलब्ध करवाया गया। इसके अलावा बिंगा पंचायत के छुहिंघाट, दबरोट और शेरपुर गांवों में दो सौ बीघा, चतरैना में 170 बीघा गरली में 150 बीघा तथा नलयाना में 50 बीघा और पाड़छु तथा ट्रेअबला में 25-25 बीघा जमीन पर ये कलस्टर लगाये जायेंगे।जिसके लिए एफ़पीओ ने क्लस्टर कमेटियां बनाकर ये काम शुरू किया है।

उन्होंने यह भी बताया कि इन्हीं कलस्टरों में रबि सीजन में सरसों बिजी जायेगी और ये परियोजना तीन साल चलेगी। सत्तपाल चौहान ने बताया कि एफ़पीओ सोयाबीन प्रोसेसिंग का लघु उद्योग स्थापित करने के लिए भी प्रोजेक्ट बना रहा है जिसे राष्ट्रीय सहकारी विकास निगम के क्षेत्रीय कार्यालय शिमला के माध्यम से फंडिंग संथाओं को भेजा जा रहा है ताकि फसल तैयार

Newspaper coverage on the Oilseeds Model Village Project of KVK Mandi of Himachal Pradesh

RABI OILSEED

During the *Rabi* season, 7250 CFLDs under the OMV project were allocated for the rapeseed and mustard crop on an area of 2900 ha, with 7505 CFLDs ultimately conducted on a 2924 ha area under zone 1.

RAPESEED AND MUSTARD

PUNJAB

A total of 3500 demonstrations on 1400 ha area were conducted on the rapeseed and mustard crop by 7 KVKs of Punjab under the OMV project. The major technologies demonstrated were improved variety (GSC 7, PBR 357, and RH 725), along with the package of practices of PAU, Ludhiana (Table 5).

Table 5: Technologies demonstrated on the rapeseed and mustard crop under the OMV project in Punjab during 2024-25

Technology	Characteristics
Varietal demonstration of GSC 7 (2015)	● Cultivation under timely sown irrigated conditions, free from white rust and tolerant to *Alternaria* Blight. ● It contains 40.5 percent oil ● It matures in 154 days & yields 22.25 q/ha.
Varietal demonstration of PBR 357 (2014)	● Timely sown in irrigated conditions, moderately tolerant to *Alternaria* blight and white rust diseases. ● It contains 39 percent oil content ● It matures in 145 days and yields 21.25 q/ha
Varietal demonstration of RH 725 (2018)	● Timely sown under rainfed conditions ● It matures in 135 days and yields 25-30 q/ha ● It contains 40 percent oil
Integrated Crop Management	● Biofertilizer (*Azotobacter* @ 625 g/ha), Zinc Sulphate @ 25 kg/ ha, Bentonite Sulphur @ 32.5 kg/ha, ● Pesticide: Thiamethoxam (Actara 25 WG) @ 100 g/ha, Fungicide: Metalaxyl 4%+ Mancozeb 64% (Ridomil Gold) @ 625 g/ha

1. AMRITSAR

Cluster demonstrations of rapeseed and mustard under the OMV project were conducted by KVK Amritsar, covering 9 villages of 3 blocks, on an area of 200 ha in 500 farmers' fields. GSC 7 variety of rapeseed and mustard was demonstrated in farmers' field by KVK Amritsar. The average yield of check plots was 17.29 q/ha, while the demonstration plots yielded 20.74 q/ha, reflecting a yield increase of 19.95 percent. In terms of net returns, check plots generated ₹61,278, while demonstration plots yielded significantly higher returns of ₹78,931. This resulted in a B: C ratio of 2.68 for check plots and 3.06 for demonstration plots (Table 6).

Table 6: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Amritsar during 2024-25

KVK	Blocks (3)	Villages (9)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Amritsar	Ajnala, Harsha Chhina & Majitha	Makowal, Bhoey wali, Bhitteywad, Nanoke, Mattenangal, Madhu Chnaga, Talwandi Bhagwan & Jethuwal	200	500	200	500

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Amritsar	GSC 7	17.29	20.74	19.95	61278	78931	2.68	3.06

2. BATHINDA

In district Bathinda, cluster demonstrations under the OMV project on rapeseed and mustard were conducted by 5 villages of the block, Talwandi Sabo, on an area of 200 ha in 500 farmers' fields. GSC 7 variety of *gobhi sarson* was demonstrated in

Table 7: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Bathinda during 2024-25

KVK	Blocks (1)	Villages (5)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Bathinda	Talwandi Sabo	Ram Tirth Jagga, Malkana, Teona Pujaria, Bhagwanpura & Behman Kaur Singh	200	500	200	500

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Bathinda	GSC 7	17.17	19.51	13.65	61120	71733	2.70	2.86

farmers' field. The average yield of check plots was 17.17 q/ha, while the demonstration plots yielded 19.51 q/ha, reflecting a yield increase of 13.65 percent. In terms of net returns, check plots generated ₹61,120, while demonstration plots yielded significantly higher returns of ₹71,733. This resulted in a B: C ratio of 2.70 for check plots and 2.86 for demonstration plots (Table 7).

3. FATEHGARH SAHIB

In district Fatehgarh Sahib, cluster demonstrations under the OMV project on rapeseed and mustard were conducted in 3 villages of the block, Khera on an area of 200 ha on 500 farmers' fields. GSC 7 variety of rapeseed and mustard was demonstrated in farmers' field. The average yield of check plots was 18.72 q/ha, while the demonstration plots yielded 22.00 q/ha, reflecting a yield increase of 17.50 percent. In terms of net returns, check plots generated ₹67,198, while demonstration plots yielded significantly higher returns of ₹85,539. This resulted in a B: C ratio of 2.74 for check plots and 3.21 for demonstration plots (Table 8).

Table 8: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project in KVK Fatehgarh Sahib during 2024-25

KVK	Blocks (1)	Villages (3)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Fatehgarh Sahib	Khera	Bhukheri, Mehtabgarh, Jhampur	200	500	200	500

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Fatehgarh Sahib	GSC 7	18.72	22.00	17.50	67198	85539	2.74	3.21

4. GURDASPUR

In district Gurdaspur, cluster demonstrations under the OMV project on rapeseed and mustard were conducted by 4 villages of 2 blocks, Dhariwal and Batala, on an area of 200 ha on 500 farmers' fields. GSC 7 variety of rapeseed and mustard was demonstrated in farmers' field. An average yield of check plots was 17.61 q/ha, while the demonstration plots yielded 20.20 q/ha, reflecting a yield increase of 14.68 percent. In terms of net returns, check plots generated ₹62,921, while demonstration plots yielded significantly higher returns of ₹76,145. This resulted in a B: C ratio of 2.72 for check plots and 3.01 for demonstration plots (Table 9).

Table 9: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Gurdaspur during 2024-25

KVK	Blocks (2)	Villages (4)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Gurdaspur	Dhariwal & Batala	Sat Koha, Ghuman Kalan, Ghuman Khurd, & Sekhwan	200	500	200	500

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Gurdaspur	GSC 7	17.61	20.20	14.68	62921	76145	2.72	3.01

5. JALANDHAR

In Jalandhar district, cluster demonstrations under the OMV project on rapeseed and mustard were conducted by 8 villages of 3 blocks, *viz.,* Nakodar, Rurka Kalan, and Noor Mehal, on an area of 200 ha on 500 farmers' fields. GSC 7 variety of rapeseed and mustard was demonstrated in farmers' field. An average yield of check plots was 17.29 q/ha, while the demonstration plots yielded 19.76 q/ha, reflecting a yield increase of 14.29 percent. In terms of net returns, check plots generated ₹61,703, while demonstration plots yielded significantly higher returns of ₹72,912. This resulted in a B: C ratio of 2.71 for check plots and 2.88 for demonstration plots (Table 10).

Table 10: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Jalandhar during 2024-25

KVK	Blocks (3)	Villages (8)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Jalandhar	Nakodar, Rurka Kalan, Noor Mehal	Sangowal, Rupowal, Jandiala, Powadra, Talwan, Mehsampur, Sheikhupur & Burj Husan	200	500	200	500

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Jalandhar	GSC 7	17.29	19.76	14.29	61703	72912	2.71	2.88

6. ROPAR

In district Ropar, cluster demonstrations under the OMV project on rapeseed and mustard were conducted in 8 villages of 2 blocks, *viz.,* Anandpur Sahib and Ropar, on an area of 200 ha on 500 farmers' fields. GSC 7 and PBR 357 varieties of rapeseed and mustard were demonstrated in farmers' field. The average yield of check plots was 17.65

q/ha, while the demonstration plots yielded 19.44 q/ha, reflecting a yield increase of 10.16 percent. In terms of net returns, check plots generated ₹72,625, while demonstration plots yielded significantly higher returns of ₹81,959. This resulted in a B: C ratio of 3.12 for check plots and 3.24 for demonstration plots (Table 11).

Table 11: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Ropar during 2024-25

KVK	Blocks (2)	Villages (8)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Ropar	Anandpur Sahib & Ropar	Massewal, Ghanaur, Chikna, Narad, Baloli, Maura, Majher, and Dabur	200	500	200	500

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Ropar	GSC 7/PBR 357	17.65	19.44	10.16	72625	81959	3.12	3.24

7. FAZILKA

In district Fazilka, cluster demonstrations under the OMV project on rapeseed and mustard were conducted by 9 villages of 2 blocks, *viz.,* Abohar and Khuian Sarwar, on an area of 200 ha on 500 farmers' fields. RH 725 variety of rapeseed and mustard was demonstrated in farmers' field following the package of practices, CCSHAU, Hisar. The average yield of check plots was 18.93 q/ha, while the demonstration plots yielded 21.72 q/ha, reflecting a yield increase of 14.71 percent. In terms of net returns, check plots generated ₹70,414, while demonstration plots yielded significantly higher returns of ₹84,117. This resulted in a B: C ratio of 2.93 for check plots and 3.18 for demonstration plots (Table 12).

Table 12: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Fazilka during 2024-25

KVK	Blocks (2)	Villages (9)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Fazilka	Abohar & Khuian Sarwar	Sardarpura, Kaller Khera, Raghuchak, Variam Khera, Dhinganwali, Shergarh, Amarpura, Bhagsar and Tootwala	200	500	200	500

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Fazilka	RH 725	18.93	21.72	14.71	70414	84117	2.93	3.18

Overall, under the OMV project in Punjab during 2024-25, a total of 3500 demonstrations were conducted by 7 KVKs on 1400 ha, with an increase in yield of 14.99 percent. The demonstration plot showed net returns of ₹78,762 with a B: C ratio of 3.06, higher than check plots (Table 13).

Table 13: Details of cluster demonstrations conducted on rapeseed and mustard under the OMV project in Punjab during 2024-25

State	Demonstrated Variety	Area (ha)	No. of farmers	Yield (q/ha)		% increase
				Check	Demo	
Punjab (7 KVKs)	GSC 7, PBR 357, RH 725	1400	3500	17.81	20.48	14.99
Total (R&M)		**1400**	**3500**	**17.81**	**20.48**	**14.99**

State	Net Returns (₹/ha)		B: C Ratio	
	Check	Demo	Check	Demo
Punjab	65323	78762	2.80	3.06
Total (R & M)	**65323**	**78762**	**2.80**	**3.06**

HIMACHAL PRADESH

Under the project of OMV, a total of 3500 demonstrations on 1400 ha area were conducted on the rapeseed and mustard crop by 2 KVKs, *viz.*, Kangra and Mandi in Himachal Pradesh. The major technologies demonstrated were improved variety of *gobhi sarson* (GSC 7), along with the package of practices, CSKHPKV, Palampur (Table 14).

Table 14: Technologies demonstrated on the rapeseed and mustard crop under the OMV project in Himachal Pradesh during 2024-25

Technology	Characteristics
Varietal demonstration of GSC 7 (2015)	• Cultivation under timely sown irrigated conditions, free from white rust and tolerant to *Alternaria* Blight. • It contains 40.5 percent oil • It matures in 154 days & yields 22.25 q/ha.
Integrated Crop Management	• Bentonite Sulphur @ 25 kg/ha, NPK (12:32:16) @ 125 kg/ha • Pesticide: Thiamethoxam (Actara 25 WG) @ 0.5 ml/L of water, Cypermethrin @ 1.5 L/ha; Fungicide: Metalaxyl 4% + Mancozeb 64% (Ridomil Gold) @ 2.5 g/L of water; Herbicide: Pendimethalin (Stomp 30 EC) @ 3.01 L/ha

8. KANGRA

In district Kangra, cluster demonstrations under the OMV project on rapeseed and mustard were conducted in 4 villages of the block, Indora, on an area of 200 ha on 500 farmers' fields. The average yield of check plots was 9.15 q/ha, while the demonstration plots yielded 11.35 q/ha, reflecting a yield increase of 23.99 percent. In terms of net returns, check plots generated ₹23,886, while demonstration plots yielded significantly higher returns of ₹34,820. This resulted in a B: C ratio of 1.78 for check plots and 2.05 for demonstration plots (Table 15).

Table 15: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Kangra during 2024-25

KVK	Blocks (1)	Villages (4)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Kangra	Indora	Ghandran, Bhain Indaora, Chinour & Sanour	200	500	200	500

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Kangra	GSC 7	9.15	11.35	23.99	23886	34820	1.78	2.05

9. MANDI

In district Mandi, cluster demonstrations under the OMV project on rapeseed and mustard were conducted in 8 villages of 3 blocks, *viz.,* Drang, Dharampur, and Sarkaghat, on an area of 100 ha on 272 farmers' fields. The average yield of check plots was 7.85 q/ha, while the demonstration plots yielded 9.89 q/ha, reflecting a yield increase of 25.92 percent. In terms of net returns, check plots generated ₹21,179, while

Table 16: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Mandi during 2024-25

KVK	Blocks (3)	Villages (8)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Mandi	Drang, Dharampur & Sarkaghat	Dharwad, Sajao Piplu, Jodan, Dhawali, Garwasra, Binga, Tanihar, Sadhot	100	250	100	272

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Mandi	GSC 7	7.85	9.89	25.92	21179	26352	1.69	1.80

demonstration plots yielded significantly higher returns of ₹26,352. This resulted in a B: C ratio of 1.69 for check plots and 1.80 for demonstration plots (Table 16).

Overall, under the OMV project during 2024-25, a total of 772 demonstrations were conducted on 300 ha, with an increase in yield of 24.96 percent in Himachal Pradesh. The demonstration plots showed net returns of ₹30,586 with a B: C ratio of 1.92, higher than check plots (Table 17).

Table 17: Details of cluster demonstrations conducted on rapeseed and mustard under the OMV project in Himachal Pradesh during 2024-25

State	Demonstrated Variety	Area (ha)	No. of farmers	Yield (q/ha)		% increase
				Check	Demo	
Himachal Pradesh (2 KVKs)	GSC 7	300	772	8.50	10.62	24.96
Total (R&M)		**300**	**772**	**8.50**	**10.62**	**24.96**

State	Net Returns (₹/ha)		B: C Ratio	
	Check	Demo	Check	Demo
Himachal Pradesh	22533	30586	1.74	1.92
Total (R & M)	**22533**	**30586**	**1.74**	**1.92**

UTTARAKHAND

A total of 221 demonstrations were conducted under the OMV project on an area of 160 ha on the rapeseed and mustard crop in the KVK Udham Singh Nagar (US Nagar) of Uttarakhand. The major technologies demonstrated were improved variety (Pant Sweta), along with the package of practices, GBPUA&T, Pant Nagar, Uttarakhand (Table 18).

Table 18: Technologies demonstrated on the rapeseed and mustard crop under the OMV project in Uttarakhand during 2024-25

Technology	Characteristics
Varietal demonstration of Pant Sweta (2017)	• Cultivation under timely sown, well-irrigated conditions, pods are four-chambered, fruiting upwards, and flowers are white • It matures in 105-110 days & yields 16-20 q/ha.
Integrated Crop Management	• Bentonite Sulphur @ 12-15 kg/ha • Pesticides and insecticides: As per requirement; Herbicide: Pendimethalin (Stomp 30 EC) @ 3.3 L/ha

10. UDHAM SINGH NAGAR (US Nagar)

In district US Nagar, cluster demonstrations under the OMV project on rapeseed and mustard were conducted in 9 villages of 2 blocks, *viz.,* Gadarpur and Sitarganj, on an area of 160 ha on 221 farmers' fields. The average yield of check plots was 10.88 q/ha, while the demonstration plots yielded 12.46 q/ha, reflecting a yield increase of 14.52 percent. In terms of net returns, check plots generated ₹36,140, while demonstration plots yielded significantly higher returns of ₹42,838. This resulted in a B: C ratio of 2.24 for check plots and 2.34 for demonstration plots (Table 19).

Table 19: Details of conducted CFLDs on rapeseed and mustard under the OMV project by KVK US Nagar during 2024-25

KVK	Blocks (2)	Villages (9)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Udham Singh Nagar	Gadarpur & Sitarganj	Lakhipur, Khatola, Nirmal Nagar, Ukrauli, Bamanpuri, Basgar, Tiliyapur, Bakuntpur, Ratan Farm-2	200	500	160	221

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Udham Singh Nagar	Pant Sweta	10.88	12.46	14.52	36140	42838	2.24	2.34

JAMMU AND KASHMIR

A total of 1000 demonstrations on 2824 ha area were conducted under the OMV project on the rapeseed and mustard crop by 5 KVKs, *viz.,* Anantnag, Budgam, Ganderbal, Bandipora, and Pulwama of Jammu and Kashmir. The major technologies demonstrated were improved variety (Shalimar Sarson 2 (SS 2)), along with the package of practices of the crop of SKUAST, Srinagar (Table 20).

Table 20: Technologies demonstrated on the rapeseed and mustard crop under the OMV project in Jammu and Kashmir during 2024-25

Technology	Characteristics
Varietal demonstration of Shalimar Sarson 2 (2019)	• Moderately tolerant to *Alternaria* blight and tolerant to white rust. • It contains 42.7 percent oil • It matures in 215-220 days & yields 17 q/ha.
Integrated Crop Management	• Vermicompost @ 2.5 t/ha, Urea @ 99 kg/ha, DAP @ 82.5 kg/ha, MOP @ 50.25 kg/ha, Gypsum @ 125-150 kg/ha • Pesticides: Dimethoate 30 EC @ 100 ml/100 L of water; Herbicide: Pendimethalin (Stomp 30 EC) @ 1 kg a.i./ha

11. ANANTNAG

In district Anantnag, cluster demonstrations under the OMV project on rapeseed and mustard were conducted in 3 villages of the block, Dooru, on an area of 200 ha in 592 farmers' fields. The average yield of check plots was 9.33 q/ha, while the demonstration plots yielded 11.35 q/ha, reflecting a yield increase of 21.65 percent. In terms of net returns, check plots generated ₹26,450, while demonstration plots yielded significantly higher returns of ₹34,520. This resulted in a B: C ratio of 1.90 for check plots and 2.03 for demonstration plots (Table 21).

Table 21: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Anantnag during 2024-25

KVK	Blocks (1)	Villages (3)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Anantnag	Dooru	Shangrin, Nowpora & Dooru	200	500	200	592

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Anantnag	SS 2	9.33	11.35	21.65	26450	34520	1.90	2.03

12. BUDGAM

In district Budgam, cluster demonstrations under the OMV project on rapeseed and mustard were conducted in 24 villages of 4 blocks, viz., Beerwah, Khag, Budgam & Khansahib, on an area of 200 ha in 500 farmers' fields. The average yield of check plots was 9.58 q/ha, while the demonstration plots yielded 11.76 q/ha, reflecting a yield increase of 22.70 percent. In terms of net returns, check plots generated ₹28,950, while demonstration plots yielded significantly higher returns of ₹36,545. This resulted in a B: C ratio of 2.01 for check plots and 2.08 for demonstration plots (Table 22).

Table 22: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Budgam during 2024-25

KVK	Blocks (4)	Villages (24)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Budgam	Beerwah, Khag, Budgam & Khansahib	Aaru, Oohangam, Chewdara, Beerwah, Dreng, Hamchipora, Charihari, Aripanthan, Kanihama, Warihama, Badran, Pakherpora, Badipora, Chadoora, Nowpora, Dabipora, Kanoora, Shanipora, Gariend, wahabpora, Watrihail, soibugh, warpora, Hajibagh	200	500	200	500

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Budgam	SS 2	9.58	11.76	22.70	28950	36545	2.01	2.08

13. GANDERBAL

In district Ganderbal, cluster demonstrations under the OMV project on rapeseed and mustard were conducted in 9 villages of 3 blocks, *viz.,* Lar, Ganderbal, and Wakura, on an area of 200 ha in 500 farmers' fields. The average yield of check plots was 7.66 q/ha, while the demonstration plots yielded 9.76 q/ha, reflecting a yield increase of 27.42 percent. In terms of net returns, check plots generated ₹17,435, while demonstration plots yielded significantly higher returns of ₹25,980. This resulted in a B: C ratio of 1.61 for check plots and 1.80 for demonstration plots (Table 23). The villages selected were adjoining so that the demonstrations motivated the fellow farmers for oilseed cultivation. A large number of hilly-area villages were selected for demonstrations owing to the small size of land holdings.

14. BANDIPORA

In district Bandipora, cluster demonstrations under the OMV project on rapeseed and mustard were conducted in 15 villages of the block, Bandipora, on an area of

Table 23: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Ganderbal during 2024-25

KVK	Blocks (3)	Villages (9)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Ganderbal	Lar, Ganderbal, and Wakura	Manigam, Kurhama, Watlar, Barusa, Lar, Nuner, Badergund, Shuhama & Batwina	200	500	200	500

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Ganderbal	SS 2	7.66	9.76	27.42	17435	25980	1.61	1.80

200 ha in 539 farmers' fields. The average yield of check plots was 9.75 q/ha, while the demonstration plots yielded 11.86 q/ha, reflecting a yield increase of 21.59 percent. This resulted in a B: C ratio of 2.06 for check plots and 2.14 for demonstration plots (Table 24).

Table 24: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Bandipora during 2024-25

KVK	Blocks (1)	Villages (15)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Bandipora	Bandipora	Aloosa, Keema, Quilmuqam, Kedar Mohala, Mangnipora, Watapora, Kaloosa, Khiyar, Shiekpal, Kootasatree, Papachan Ashim, Tukapora, Putushai, Onagam, & Ahimshreef	200	500	200	539

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Bandipora	SS 2	9.75	11.86	21.59	30050	37845	2.06	2.14

15. PULWAMA

In district Pulwama, cluster demonstrations under the OMV project on rapeseed and mustard were conducted in 7 villages of 4 blocks, *viz.,* Tarl, Pulwama, Awantipura, and Pampore, on an area of 200 ha in 693 farmers' fields. The average yield of check plots was 9.66 q/ha, while the demonstration plots yielded 12.04 q/ha, reflecting a yield increase of 24.59 percent. In terms of net returns, check plots generated ₹27,445, while demonstration plots yielded significantly higher returns of ₹39,192 (Table 25).

Table 25: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVK Pulwama during 2024-25

KVK	Blocks (4)	Villages (7)	Allocated		Conducted	
			Area (ha)	Demo (No.)	Area (ha)	Demo (No.)
Pulwama	Tarl, Pulwama, Awantipura & Pampore	Chandrigam, Banderpora, Wasoura, Chakoora, Awantipora, Patalbagh & Qoi	200	500	200	693

KVK	Demonstrated Variety	Yield (q/ha)		% increase	Net Returns (₹/ha)		B: C Ratio	
		Check	Demo		Check	Demo	Check	Demo
Pulwama	SS 2	9.66	12.04	24.59	27445	39192	1.90	2.19

Overall, in Jammu & Kashmir region under the OMV project during 2024-25, a total of 2824 demonstrations were conducted on 1000 ha, with an increase in yield of 21.06 percent in cultivation of rapeseed & mustard. The demonstration plots showed net returns of ₹48,609 with a B: C ratio of 2.04 (Table 26).

Table 26: Details of conducted cluster demonstrations on rapeseed and mustard under the OMV project by KVKs of Jammu and Kashmir during 2024-25

State	Demonstrated Variety	Area (ha)	No. of farmers	Yield (q/ha)		% increase
				Check	Demo	
Jammu and Kashmir (5 KVKs)	SS 2	1000	2824	9.20	11.35	23.59
Total (R&M)		**1000**	**2824**	**9.20**	**11.35**	**23.59**

State	Net Returns (₹/ha)		B: C Ratio	
	Check	Demo	Check	Demo
Jammu and Kashmir	26066	34816	1.90	2.04
Total (R & M)	**26066**	**34816**	**1.90**	**2.04**

EXTENSION ACTIVITIES

A range of extension activities, such as farmer trainings, field days, group discussions, kisan goshthies, and group meetings, were organized under the Oilseed Model Village project during 2024-25. These initiatives aimed to encourage the adoption of improved agricultural practices. During these programs, improved seed, technical literature outlining the advanced package of practices developed by State Agricultural Universities (SAUs) were distributed to participating farmers.

Under OMV project, in total 93 extension activities were conducted by KVKs during both the *Kharif* and *Rabi* seasons, across Punjab, Himachal Pradesh, Uttarakhand and Jammu & Kashmir. These activities included 24 farmers' training sessions, which reached 1,854 farmers, 31 field days attended by 1,657 farmers, 13 group meetings involving 475 farmers, and 25 other activities that engaged 1,490 farmers. In total, these initiatives benefited 5,476 farmers. Overall, the data highlights the significant role of KVKs in disseminating agricultural knowledge and promoting best practices among farmers through diverse extension programs. (Table 27).

Table 27: Extension activities conducted by 15 KVKs on oilseed crops during 2024-25

Extension Activities	No. of KVKs	No. of Activities	No. of Farmers
Farmers training	15	24	1854
Field day	15	31	1657
Group meetings	15	13	475
Others	15	25	1490
Total	**-**	**93**	**5476**

During the *Kharif* season, KVK Mandi conducted a total of six extension activities on the soybean crop to support and educate farmers. These activities included two farmers' training sessions, which benefited 83 farmers, and 4 field days, which were attended by 73 farmers. In total, the extension programs benefited 156 farmers. The data indicate that farmers' training sessions reached the largest number of participants (Table 28).

During the *Rabi* season, a total of 87 extension activities were conducted on rapeseed and mustard aimed at educating and supporting farmers. These activities included 22 farmers'

Table 28: Details of extension activities conducted by KVK Mandi on soybean during the *Kharif* season, 2024-25

Extension Activities	No. of Activities	No. of Farmers
Farmers training	2	83
Field day	4	73
Total	**6**	**156**

training sessions that reached 1,771 farmers, 27 field days attended by 1,584 farmers, 13 group meetings involving 475 farmers, and 25 other activities that engaged 1,490 farmers. Overall, these initiatives benefited 5,320 farmers in the project during the year. The data reflects the KVKs' efforts to disseminate agricultural knowledge and promote best practices through a combination of training, demonstrations, and other outreach programs (Table 29).

Table 29: Details of extension activities conducted on rapeseed & mustard during the *Rabi* season, 2024-25

Extension Activities	No. of KVKs	No. of Activities	No. of Farmers
Farmers training	15	22	1771
Field day	15	27	1584
Group meetings	15	13	475
Others	15	25	1490
Total	**-**	**87**	**5320**

During the *Kharif* season, Punjab received a total of five official visits, with four visits conducted by the Director of Extension (DE) or DE Scientists and one visit by other representatives, such as officials from the Department of Agriculture and Farmers' Welfare (DA&FW) or the Indian Council of Agriculture Research (ICAR), etc. on CFLDs under the OMV project. During the Rabi season, seven visits by Director ATARI and three by scientists of ATARI were made on rapeseed and mustard crop (Table 30).

Table 30: State-wise monitoring visits done on CFLDs on oilseed crops under the OMV project during the *Kharif* and *Rabi* seasons, 2024-25

S. No.	Season	State	Visited by Director ATARI	Visited by the Scientists of ATARI	Visit by Director of Extension/ DE Scientist	Visit by members, of DA & FW, ICAR, etc.
1	*Kharif*	Punjab	0	0	4	1
2	*Rabi*	PB, HP, UK, J&K	9	3	0	0

Annexure-I

Contributors under the Oilseed Model Village Project (Year 2024-25)

S.No.	KVK	Programme Co-ordinator/Subject Matter Specialist
1.	Amritsar	Dr. Rajan Bhatt; Dr. Bikramjit Sngh
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14.	Kangra	Dr. Deep Kumar
15.	Ganderbal	Dr. Ishfaq Abidi

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