# NEWSLETTER

NARVOS

NATIONAL ALLIANCE FOR REGENERATIVE VEG OIL SECTOR

**Initiated Under**

***Promotion of Regenerative Agriculture Practices for a Food Secure & Climate Resilient Future in the EU-India Partnership Programme***

Funded by the European Union

Solidaridad

## THIS EDITION AT A GLANCE

- *March Yield Assessment*
- *Krishi Chaupal Impact*
- *Women Chaupal*
- *Supply Chain Partnerships*

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# Dear Readers and Fellow Change-Makers,

As the rabi season draws to a close and the harvest comes in, we bring you this April edition of the NARVOS Newsletter a reflection of a programme that is not just growing in reach, but deepening in impact.

March has been a month of assessment, action, and alliance. Across demonstration plots in Madhya Pradesh, crops are yielding results not just in grain and oil, but in confidence. Farmers who once measured success in chemical sacks spent per acre are now measuring it in soil moisture retained, in input costs saved, and in the quiet knowledge that the land beneath their feet is healing.

This edition brings you field observations from the yield assessment phase of the rabi season a moment that tests the promise of regenerative practices against conventional benchmarks. We share stories from the Krishi Chaupal initiative, which has emerged as one of the most powerful community learning tools in our programme. From regular Chaupals to Women's Chaupals and the innovative Ratri (night) Chaupal, farmers are gathering not just to listen, but to lead.

We also report on a significant development in supply chain strengthening industry partners are now actively visiting the field, sitting across the table with FPO leaders, and beginning to build the procurement relationships that will make regenerative agriculture commercially viable and not just agronomically sound.

I want to acknowledge the extraordinary commitment of our field teams, our farmer-leaders, and our partners in making this programme what it is a genuine collaboration, rooted in trust and driven by shared purpose.

The soil is improving. The harvest is speaking. And the network is growing.

**Happy Reading!**

**Dr. Suresh Motwani**
**Programme Lead**

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# What The Fields Are Telling Us

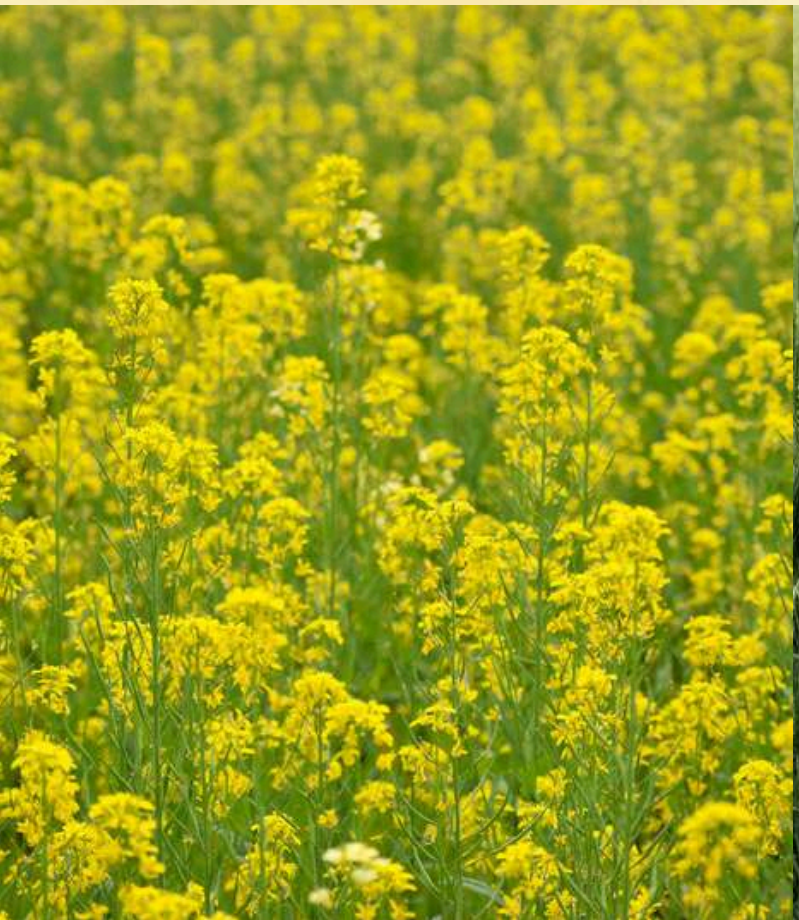
## Insights from Demonstration Plots

March is the most consequential phase of the rabi season the harvest. Across EU-India partnership supported demonstration plots, mustard crops have completed their cycle, and wheat is entering final grain maturation. The programme is measuring not just crop behaviour and input patterns, but actual yield outcomes from regenerative demonstration plots compared against conventional farming baselines. These numbers tell a story of early-stage transition, emerging soil recovery, and building long-term resilience.

## Crop Status – March

**MUSTARD**
Seed maturation → Harvest stage. Pod colour transitioning from green to yellow-brown, indicating readiness for harvesting across most plots.

**WHEAT**
Grain filling → Maturation stage. Dough to hard dough stage across pilot plots; crop nearing physiological maturity with strong stem retention.



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# Yield Assessment

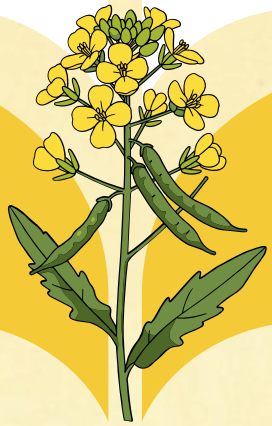
## Square Method for Yield Assessment

Accurate yield estimation is essential for understanding crop performance and guiding better farm decisions. Under this method, usually 1m × 1m tape is placed at random locations across the field. The crop within the square is harvested, weighed, and recorded. By taking multiple samples and calculating the average, the yield is then extrapolated to estimate production per hectare.

## Mustard Yield Observation

**Uniform pod fill observed across most regenerative plots**

**Minimal shatter loss due to stronger stem structure**



**Seed quality visibly improved higher oil content reported**

**Input costs reduced by 40-50% per acre**

## Wheat Yield Observation

**Strong grain weight and even maturation observed**

**Fewer lodging incidents in plots with reduced chemical use**

**Improved grain colour and marketable quality noted**

**Soil moisture retention reduced irrigation need by 1 cycle**

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# Strengthening Mustard Value Chains through Strategic Industry Engagements

As part of the ongoing efforts to strengthen the mustard value chain, Shri Mahesh Kabeskar, Business Head, VVF, undertook a field visit to Mandsaur and Neemuch districts to engage directly with key oil millers and industry stakeholders. The visit aimed to identify opportunities for enhancing supply chain efficiency, improving procurement linkages, and developing stronger market integration for mustard produce.

During the visit, interactions were held with leading stakeholders including Aadtiya Extraction, MS Extraction, Dhanuka Agro, Swastik Fresh, and Hariom Refinery. Discussions focused on critical aspects such as procurement systems, quality parameters, volume aggregation, prevailing price trends, and avenues for collaboration with Farmer Producer Organizations (FPOs).

A key focus area was the development of structured sourcing models that ensure traceability, consistent quality, and reliable supply. Stakeholders highlighted the importance of standardization and timely aggregation, while also expressing interest in building long-term partnerships with FPOs to streamline procurement processes.

The visit generated valuable insights into market expectations and operational dynamics within the mustard value chain. These learnings will play a crucial role in designing interventions that enhance efficiency, strengthen market linkages, and ultimately enable better price realization for farmers across Mandsaur and Neemuch districts.


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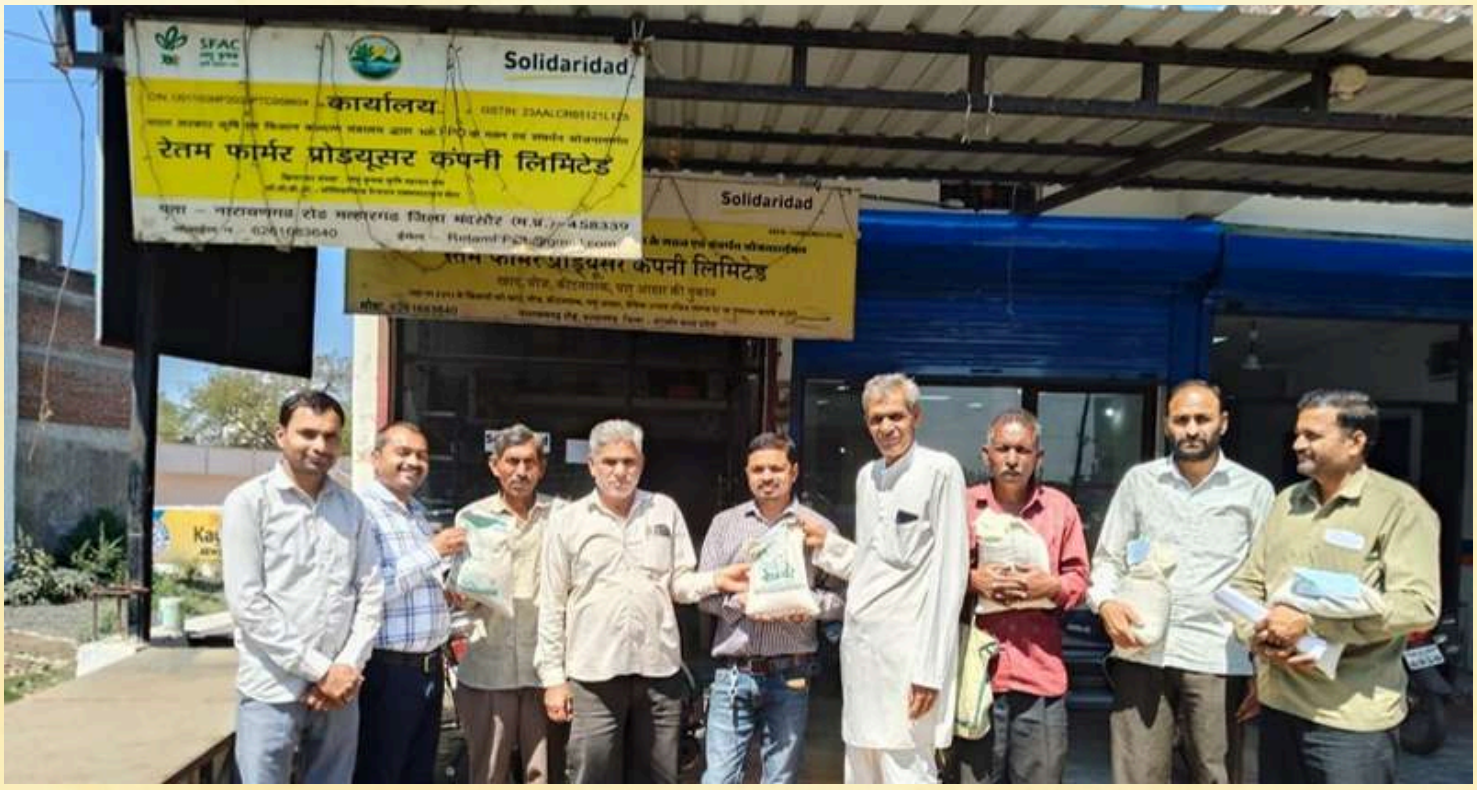
# Strengthening FPOs through Improved Input Access and Field Demonstrations




Under the NEOM initiative, a focused effort was undertaken to strengthen Farmer Producer Organizations (FPOs) by enhancing their role in input delivery and farmer engagement. In Malhargarh block of Mandsaur district, improved variety sesame seed distribution was successfully implemented through Retam Farmer Producer Organization (FPO), reinforcing its position as a reliable value chain partner.

Retam FPO facilitated the timely procurement and distribution of high-quality, improved sesame seed varieties to member farmers. This intervention aimed at improving crop productivity, ensuring better germination, and enhancing resistance to pests and diseases ultimately contributing to increased farm incomes and climate-resilient agricultural practices.

To further build farmer confidence and promote adoption, large-scale field demonstrations have been established in the summer season across nearly 100 hectares. These demonstration plots served as practical learning sites, enabling farmers to observe the performance of improved varieties and recommended agronomic practices firsthand, while encouraging peer-to-peer knowledge exchange.

Comprehensive technical support was provided throughout the crop cycle, covering key practices such as seed treatment, scientific sowing methods, nutrient management, irrigation scheduling, and integrated pest management. This continuous handholding strengthened farmers' capacities and ensured better on-ground implementation.

The initiative significantly enhanced the institutional capacity of Retam FPO by positioning it as a central node for input distribution, knowledge dissemination, and farmer aggregation. It also contributed to laying the foundation for a more organized and sustainable sesame value chain in the region, with strong potential for future scaling and wider adoption.

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# Women's Leadership in Regenerative Agriculture

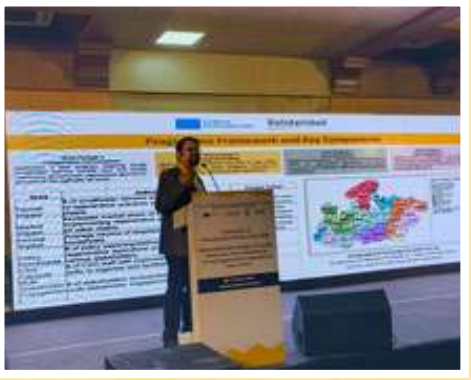
Jointly organised by Solidaridad in partnership with Indian Institute of Soil Science (IISS) & Center for Responsible Business (CRB)

A landmark multi-stakeholder event was convened to advance women's leadership at the intersection of regenerative agriculture, climate resilience, and policy advocacy. Bringing together Civil Society Organizations (CSOs), government bodies, research institutes, businesses, Farmer Producer Organizations (FPOs), and farming communities, the event marked a significant step toward inclusive and sustainable agricultural transformation in India.

## Key Objectives

The event was anchored around four strategic objectives:

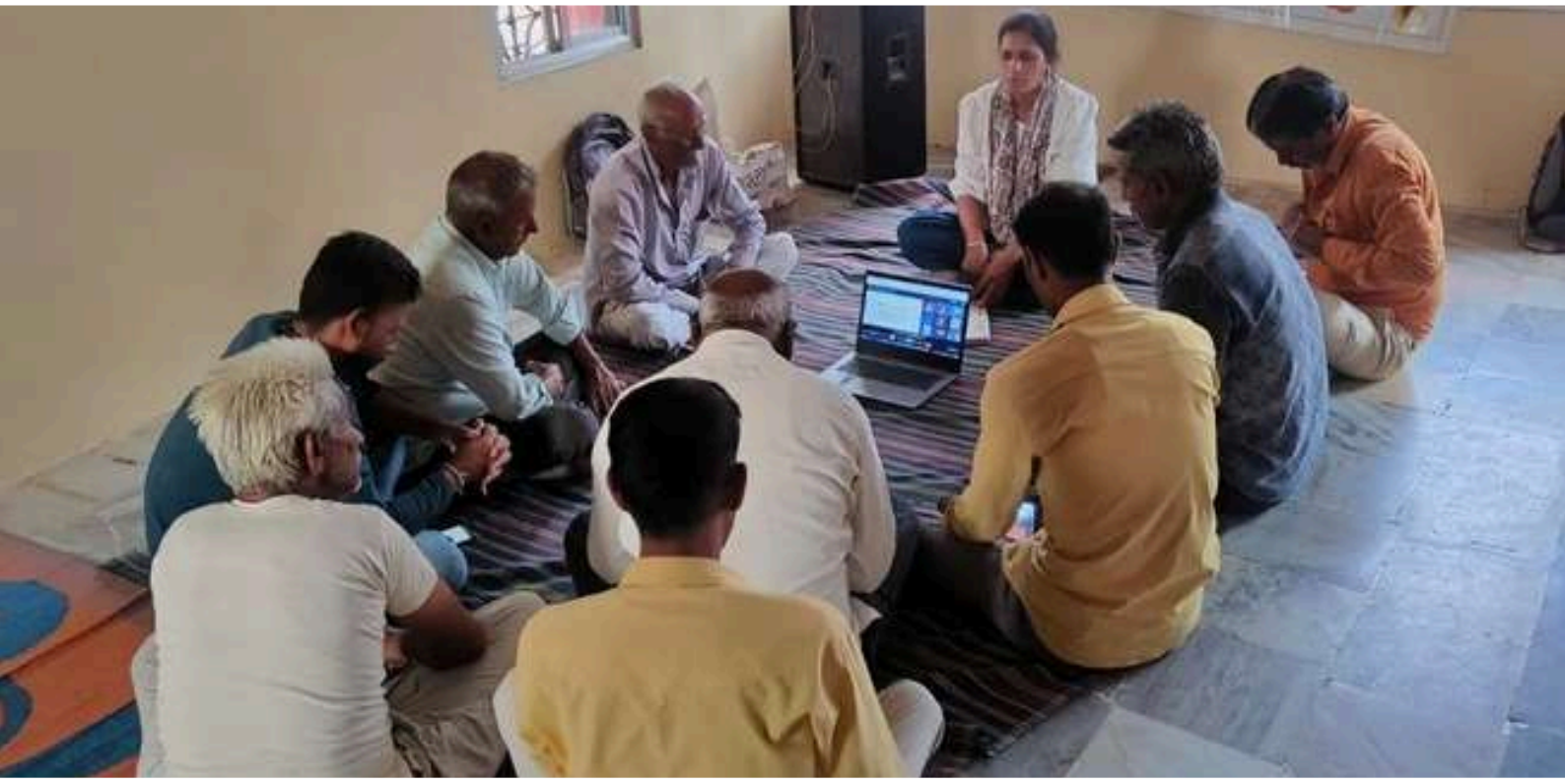
- To promote collaboration and strategic partnerships among CSOs, government organizations, research institutes, businesses, FPOs, and farmers.
- To enhance the participation of women leaders in collective action and multi-stakeholder platforms.
- To build the capacity of CSOs for effective policy engagement and advocacy at local, state, and national levels.
- To facilitate knowledge sharing, networking, and collective learning to amplify participants' collective voice.



## Highlights from the Day

Participants engaged in panel discussions featuring women leaders from farming communities, civil society, and policy. Capacity-building workshops equipped CSO representatives with tools for policy engagement and advocacy, while knowledge-sharing sessions explored regenerative agriculture practices and their role in building climate resilience.
Structured networking sessions enabled participants to forge new partnerships and develop collective action plans laying the groundwork for continued advocacy beyond the event.

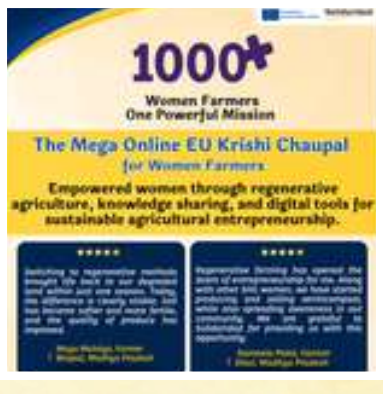
# Krishi Chaupal: Redefining Knowledge Exchange for Regenerative Farming

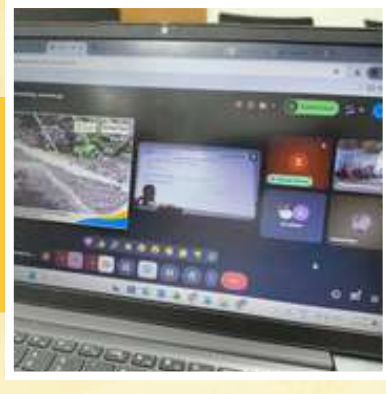


Krishi Chaupal is emerging as a powerful platform for localized and need-based knowledge exchange among regenerative farmers. Designed with a region-specific approach, these chaupals are now being organized by carefully selecting relevant topics and convenient timings, ensuring maximum participation and meaningful engagement from farmers.

An innovative step in this direction was the organization of a 'Ratri Chaupal', where sessions were conducted at night to suit farmers' schedules. This thoughtful timing enabled farmers to participate in a more relaxed and focused environment, leading to deeper understanding and active discussions on regenerative agriculture practices.

Expanding its reach further, a Mega Online EU Krishi Chaupal was organised on the occasion of International Women's Day, centered on the theme "Give to Gain." The session brought together around 1000 women farmers from across regions, highlighting the role of regenerative agriculture in developing women's entrepreneurship and economic empowerment.



# GROUND STORIES

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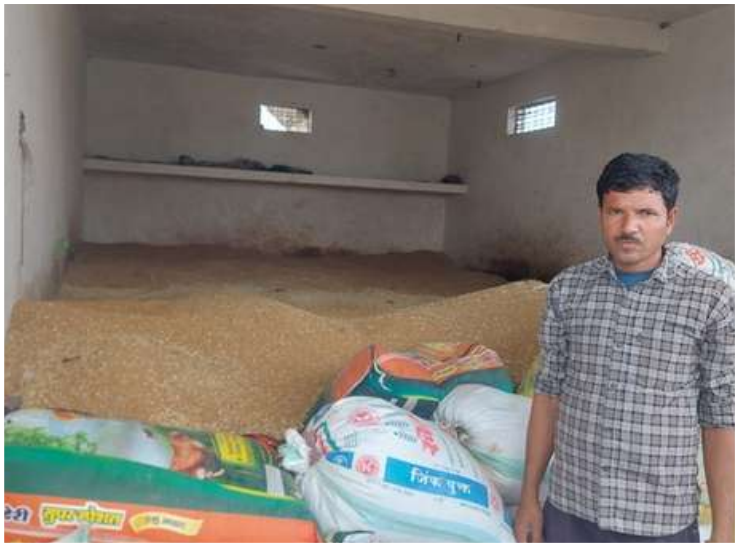
## No Queue, No Compromis, Regenerative Farming on Jeevan's Own Terms

> I would stand in that queue for days sometimes two, sometimes three just to get a sack of fertilizer from the government godown. And that godown is 18 kilometres away. By the time I paid for diesel and lost those days in the field, I wasn't saving anything at all.
>
> **- Jeevan Singh Yadav**



### The burden of dependency

Every season, Jeevan Singh Yadav a 35-year-old farmer supporting a family of five faced the same ordeal. To grow wheat on his six acres in Kachhikheda village, Shamshabad, he needed DAP and urea. The government rate for urea was Rs. 272 per sack, but getting it meant travelling 18 km to the godown, spending roughly Rs. 700 in diesel, and waiting in queues that stretched for days. Many times, the fertilizer simply ran out before his turn came. The only alternative was the black market, where the same 45-kg sack cost Rs. 400 already Rs. 128 more and the quality was never guaranteed.

For a single acre of wheat, Jeevan was using 50 kg of DAP and 15 sacks of urea. Add pesticides and medicines (Rs. 3,000–4,000 for six acres), four rounds of irrigation, and the cost of diesel and by harvest time, the margins had all but disappeared. Yet the crop still struggled. In the early stages, his wheat would turn yellow instead of green that is a sign the soil was hungry for something the chemicals alone could not give.

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## Wheat Yield Observation

In 2024, Jeevan joined the EU-India Partnership Programme and began experimenting with regenerative agriculture on a single demonstration plot. The approach was not about abandoning chemicals overnight, but reducing dependence on them gradually while rebuilding what the soil had lost.

He prepared a bio-input mixture of Neemkhali, Vermicompost, Trichoderma, and Pseudomonas, combined with an NPK microbial consortium. The mixture was kept in the shade for seven days to ferment before application. A Bio-Resource Centre was built on his farm under the programme, enabling him to produce these inputs himself breaking free from the godown queue at last.


### Before (per acre, wheat)

- DAP: 50 kg @ Rs 1,800
- Urea: 15 sacks (45 kg each)
- Seeds: Approx 2 quintals
- Pesticides: Rs. 3,000-4,000 (6 acres)
- Diesel (godown): Rs. 700+ per trip
- Queue wait: 2-3 days
- Yield: Approx 18-20 qt/acre (inconsistent)
- Soil: Compacted, 72HP tractor needed from tillage

VS

### After (demo plot, wheat)

- DAP: 15 kg only
- Urea: Sharply reduced
- Seeds: 40 kg (demo);
- Pesticides: Replaced with bio-inputs
- Queue wait in Government Gowdown: Zero
- Yield: 18–20 qt/acre (consistent)
- Soil: Softening; 35HP tractor sufficient

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## The numbers that matter

**↓ 70%**

Reduction in DAP use on demo plot (50 kg → 15 kg)

**2×**

Soybean yield advantage- demo vs. conventional plots (6 vs 3 qt/acre)

**↓ 50%**

Tractor diesel saved - 3 litres now instead of 6 per round.

## Kharif 2024-25: the proof expands

In the kharif season of 2024-25, Jeevan grew soybean on the demo plot. He replaced three to four rounds of chemical spray which would have cost around Rs. 7,000 across six acres with yellow sticky cards, neem oil spray, and a light trap that prevented insect infestation without a single chemical application. The result- 6 quintals per acre on the demonstration plot, compared to just 3 quintals per acre on the remaining conventional plots.

Encouraged, he expanded his regenerative wheat cultivation from one acre to three acres in the 2025 rabi season. The expanded demo plots yielded 20 quintals per acre, while his remaining four conventional acres gave 18 quintals a result that, for the first time, made the direction of change unmistakable.

Perhaps the most quietly significant change is what Jeevan notices underfoot. His father farmed the same land with a 35HP tractor. Years of chemical farming compacted the soil so severely that even a 72HP tractor struggled to work it. On the demo plot where regenerative practices have been applied, the soil has begun to soften and Jeevan believes a 35HP tractor will soon be sufficient again. The fuel savings alone from 6 litres to 3 litres per round speak to how deep that change goes.

## Looking ahead

Jeevan Singh Yadav is not a man of grand proclamations. He is a farmer who watches carefully, calculates quietly, and decides deliberately. He has committed to converting his entire 10 Beegha holding to regenerative agriculture within the next one to two years not because someone told him to, but because the soil, the savings, and the seasons have made the case themselves.

*The soil is getting softer. The cost is coming down. I stood in that queue for years and got nothing but a sack of fertilizer and a lost week. Now I make what I need on my own farm. That is enough reason for me."*

***- Jeevan Singh Yadav, Kachhikheda***

# Practice Highlight

## Turning Waste into Wealth through Vermicomposting

Meet Pooran Singh Lodhi from Bankhedi village in Raisen district a small nursery owner who has quietly transformed his 1-acre enterprise into a model of sustainable practice.

For the past 7-8 years, Pooran Singh has been running his nursery from a small plot adjoining his home. Like many small entrepreneurs, he depended on market-bought fertilizers to maintain his plants. However, the rising cost of inputs and inconsistent plant quality often posed challenges. Despite his efforts, the saplings did not always meet the standards he aspired to achieve.

A turning point came nearly two years ago, when the Solidaridad team, under the EU–India Partnership Programme, introduced him to vermicomposting by providing a starter bag of vermicompost. What began as a simple trial soon evolved into a transformative practice.

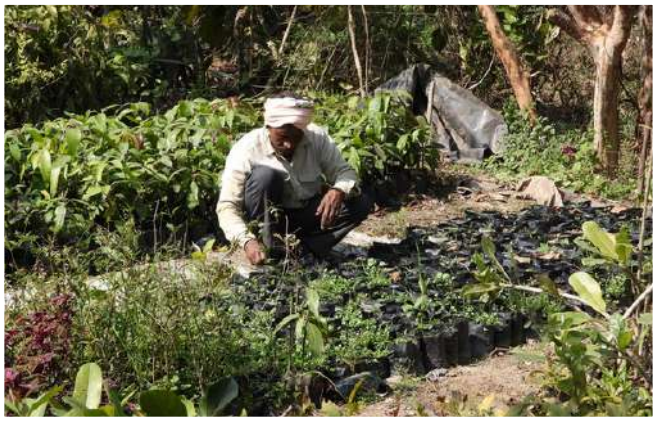
Curious to explore further, Pooran Singh started producing vermicompost at home using cow dung and agricultural waste. Within just 03 months, he harvested his first batch around 6-7 quintals of rich, dark compost. The impact was immediate and visible. His nursery plants began to show healthier growth, stronger root systems, and improved overall quality. Unlike earlier, there were no issues of root rot, and the plants appeared more resilient.

## How Vermicompost Works

Vermicomposting is a natural biological process where earthworms convert organic waste into nutrient-rich compost. When cow dung and organic residues are fed to earthworms, they break down the material through digestion. The output known as worm castings is a fine, humus-like substance rich in essential nutrients.

**Scientifically, vermicompost is highly beneficial for crops because:**

- It contains readily available nutrients like nitrogen (N), phosphorus (P), and potassium (K), along with micronutrients.
- It improves soil structure and aeration, allowing better root growth.
- It enhances microbial activity, which supports nutrient cycling in the soil.
- It increases water retention capacity, reducing irrigation needs.
- It contains plant growth hormones such as auxins and gibberellins, promoting healthier and faster plant development.



## From Adoption to Enterprise

Encouraged by the results, Pooran Singh expanded his vermicompost unit into a cemented pit, ensuring better production and management. Today, his nursery is not just thriving it has become a source of additional income.

He now produces and sells nearly 50 kg of vermicompost every month, priced between Rs. 30-50 per kg, supplying to nearby urban markets along with his high-quality saplings.

What started as a cost-saving measure has turned into a sustainable business model reducing dependency on external inputs, improving plant quality, and generating additional income.

# VOICES FROM THE FIELD

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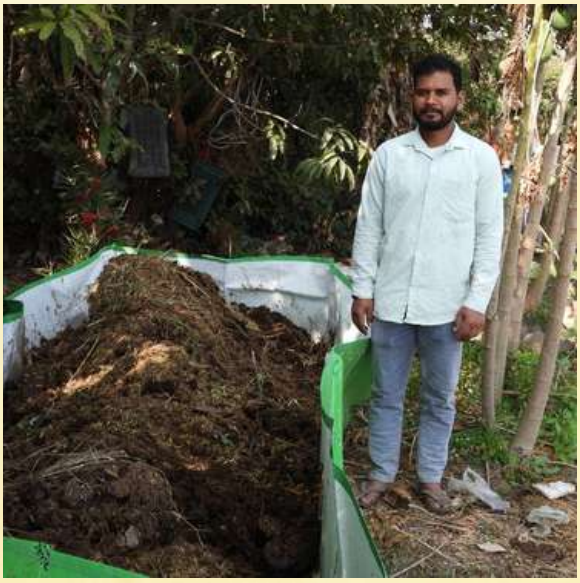
**Prem Singh Meena**
**Regenerative Farmer, Chandora, Raisen**



"While the use of natural fertilizers is not new our ancestors practiced it for generations adopting these methods in a more scientific and efficient way has made a significant difference. Through the training provided by the Solidaridad team, we have learned to prepare bio-fertilizers and produce nutrient-rich inputs like vermicompost using fewer resources. Encouraged by these results, I am committed to transitioning my entire 20-acre farm to regenerative agriculture within the next 2-3 years."

**Kailash Chandra Verma**
**Regenerative Farmer, Dhamankheda Sehore**

We were never fully aware of the extent to which we have been degrading our own land in the name of chemical-based farming. Today, despite the availability of several environmentally friendly alternatives, their adoption remains limited. This programme has significantly enhanced our understanding, empowering us to confidently advocate for sustainable and regenerative practices across various platforms.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