NATIONAL COALITION FOR NATURAL FARMING

SEWA COOPERATIVE FEDERATION

Capacity-building • Business Development • Policy Action

INTERNATIONAL YEAR OF THE WOMAN FARMER 2026

Mahila Adivasi Khedut Sashaktikaran Samaroh

EVENT REPORT

November 7, 2025

Dr. Babasaheb Ambedkar Bhavan

Vyara, Tapi, Gujarat

TABLE OF CONTENTS

INTRODUCTION

The Adivasi Mahila Sashaktikaran Samaroh was organised on 7th November 2025 at Dr. Babasaheb Ambedkar Bhavan, Vyara, Tapi district, as a district-level gathering of Adivasi women farmers and agroecological practitioners. The event brought together 50–70 women tribal farmers along with agricultural experts to celebrate the role of women in advancing natural farming and to facilitate dialogue on climate-resilient agricultural practices.

The Samaroh was anchored in the understanding that natural farming is not only an agricultural alternative, but an essential pillar of a sustainable and climate-resilient future. By promoting soil health, biodiversity, and reduced dependence on synthetic inputs, natural farming contributes to carbon sequestration, ecological restoration, and improved food and water security. Within this movement, women farmers play a central role — drawing on traditional knowledge of seed saving, native crops, and natural pest management, while ensuring household nutrition and community well-being.

The event aimed to recognise this leadership, create space for collective reflection on challenges in agriculture and animal husbandry, and strengthen knowledge exchange between women farmers and experts. Through discussions, presentations, and an exhibition of women farmers' produce, the Samaroh sought to reinforce the role of Adivasi women as key agents in building climate-resilient agrarian systems.

Objectives

- To recognise and celebrate the role of Adivasi women farmers in promoting natural farming and agroecological practices.
- To create a platform for women farmers to share their experiences, challenges, and local solutions in agriculture and animal husbandry.
- To facilitate knowledge exchange between women farmers and agricultural experts on climate-resilient farming practices.
- To discuss the impacts of climate change on agriculture and explore mitigation and adaptation strategies through sustainable farming systems.
- To strengthen collective learning and solidarity among women farmers at the district level.

> **To address climate change, we must shift towards organic fertilizers, natural pest repellents, water conservation, drought-resistant local crops, and better livestock care. Sustainable farming and proper cattle management are the only long-term solutions.**

Women Farmers
Mahila Adivasi
Sashaktikaran Samaroh,
Vyara

> **If we produce different vegetables, and if our women make a *sangathan* to sell these produce in the market, I am sure they will get good rates. We will get freedom to decide our price.**

Darshana Choudhary
Progressive Farmer - Organic Farming

KEY INSIGHTS

Question 1

What are the main issues faced by women farmers in farming and cattle rearing activities? What support is required?

Group 1

Agriculture-related Issues - Participants shared that they do not receive Minimum Support Price (MSP) that adequately reflects the labour and input costs incurred in crop production. Market prices often fail to compensate for their efforts, making farming financially unviable. They also raised concerns regarding lack of transparency in agricultural budgeting and the absence of compensation in cases of crop loss.

Cattle Rearing-related Issues - In livestock management, women reported low and unfair margins on milk sales. The calculation of milk prices based on fat content was described as manipulative, leading to underpayment by aggregators. The cost of fodder and cattle feed has increased significantly, adding to financial strain. Additionally, labour involved in feeding and maintaining cattle was highlighted as an invisible but heavy burden on women.

Participants also reported systemic gaps in veterinary and breeding services:

- Lack of proper advisory support during cattle breeding
- Irregular and arbitrary charges at government breeding centres
- Unavailability of vaccines at government veterinary centres

Although vaccines are officially priced at Rs. 50, due to stock shortages at government facilities, women are often compelled to purchase them privately at rates as high as Rs. 1,150.

Group 2

Agriculture-related Issues - Participants reported crop loss due to unpredictable rainfall patterns. Excessive rainfall, as well as insufficient rainfall, has disrupted traditional crop cycles and led to financial losses. Extreme heat was identified as a major concern. Women farmers shared that rising temperatures reduce soil moisture and can burn crops even before they mature. Heat stress also makes it difficult to carry out routine farm activities, as working conditions become physically unbearable.

The increased use of chemical fertilizers and pesticides was also highlighted. Participants observed that excessive chemical use is affecting crop growth and quality, while simultaneously degrading soil health over time.

Support and Solutions Suggested - Group members suggested the need for increased afforestation as a long-term ecological measure. They recommended the use of biogas and cattle-dung-based natural manures to reduce chemical dependency.

Given shifts in crop cycles — especially delayed crop calendars and increased Rabi cultivation — participants proposed that the government consider providing subsidies or MSP support for winter crops.

They also recommended:

- Adoption of drip irrigation systems
- Avoiding deep ploughing and excessive use of land
- Improved dissemination of government advisories, schemes, and subsidies through NGOs and local institutions

Group 3

Agriculture-related Issues - Participants shared that unpredictable rainfall and changing weather patterns have disrupted crop planning and seasonal cycles. Farmers are no longer able to accurately predict sowing and harvesting periods, leading to crop loss and financial instability.

They also noted:

- Lack of routine soil testing, resulting in limited knowledge about soil characteristics and suitable crops
- Inadequate awareness regarding appropriate crop selection and timing
- High cost of seeds, especially hybrid varieties that are not subsidised
- Low market prices for crops, making farming financially unviable
- Lack of compensation from the government in cases of crop loss
- Limited transparency in agricultural budget allocation and decision-making

Women farmers further emphasised the double burden they bear — managing farming activities alongside household responsibilities, childcare, and social obligations.

Cattle Rearing related Issues - In livestock management, participants reported:

- High cost of fodder and feed
- Low sale price for milk
- Manipulation in fat measurement leading to underpayment
- Declining milk quality due to weather changes
- Shortage of veterinary doctors and services
- Lack of training and awareness regarding modern cattle rearing techniques
- Higher mortality rates among cattle offspring

Participants stressed the need for:

- Timely and fair compensation for crop loss
- Regulated MSP for crops
- Transparent and accessible government support systems
- Availability of quality seeds and inputs
- Improved veterinary services and livestock training
- Greater institutional accountability in pricing and service delivery

Group 4

Agriculture-related Issues - Participants highlighted a lack of information regarding which types of seeds are suitable for different soil conditions. Farmers often purchase well-branded and packaged seeds that later turn out to be of poor quality, resulting in crop loss.

High seed prices significantly reduce profit margins, especially when market prices for produce remain low. Farmers also reported that government-approved seeds are not consistently available at KVK centres during sowing seasons.

Market access was identified as a major concern. Farmers cultivating organic crops in limited quantities struggle to find reliable buyers. To sell their produce, they often have to travel long distances and lack storage facilities to aggregate crops locally.

Additional concerns included:

- Shortage of skilled agricultural labour
- Lack of stock of organic fertilisers at KVK centres
- Over-reliance on chemical fertilisers due to easier availability
- Unpredictable rainfall disrupting crop planning
- Delayed or inaccessible information regarding government schemes and subsidies
- Bureaucratic hurdles in accessing support services

Cattle Rearing related Issues - In livestock management, participants reported:

- Non-availability of appropriate indigenous (desi) cow breeds
- High cost of fodder and feed
- Low milk sale prices and exploitation in pricing
- Manipulation in fat calculation leading to underpayment
- Impact of weather changes on milk quality
- Lack of veterinary doctors and training support
- Increasing mortality among cattle offspring

Group 5

Group 5 identified both climate-related and input-related challenges affecting agriculture and livestock management.

Agriculture-related Issues

Participants reported the following key concerns:

- Irregular rainfall affecting crop cycles
- Increased use of fertilisers and pesticides
- Overuse of chemical medicines and sprays
- Declining soil quality and fertility
- Increase in crop diseases
- Extreme weather conditions impacting crop growth and productivity

The group highlighted that heavy reliance on chemical inputs has weakened soil health over time, making crops more vulnerable to climatic stress.

Cattle Rearing-related Issues

In livestock management, participants raised the following issues:

- Increase in fodder prices
- Water scarcity
- Shortage of fodder and feed
- Impact of climate change on milk production and overall animal health

Group 5 emphasised that both farming and cattle rearing are becoming increasingly difficult due to rising costs, climate variability, and declining natural resource availability.

KEY INSIGHTS

Question 2

What are some ways to adopt to climate change such that farming practices can shift from chemical based farming, to natural/organic farming?

Group 1

Participants observed that climate change is affecting not only farming, but also cattle rearing, human health, insects, and the overall environment. They emphasised that unpredictable weather patterns and changing climatic conditions are directly impacting crop yield and farm stability.

Farmers expressed the need for stronger government intervention and institutional support to cope with these changes. They also stressed the importance of fair and appropriate pricing aligned with the actual produce and effort of farmers.

Support Required for Transition to Natural Farming

To enable a shift from chemical-based to natural farming, the group suggested:

- Conducting agriculture land surveys at the earliest to better understand soil and cropping needs
- Providing farmers with clear guidelines to improve farming practices
- Reducing seed prices or offering subsidies for quality seeds
- Regulating MSP for all crops
- Encouraging companies to produce organic fertilisers instead of chemical fertilisers
- Collective commitment to shift towards natural/organic farming practices to preserve the environment
- Planting at least one tree annually as an environmental measure

The group underscored that environmental preservation and farmer viability are closely linked, and that policy support, fair pricing, ad access to quality inputs are essential for enabling sustainable agricultural transition

Group 2

Group 2 discussed the need for improved infrastructure, fair pricing mechanisms, and institutional reforms to support farmers in adapting to climate change and transitioning to natural farming.

Challenges Identified

Participants emphasised the need for a reliable system ensuring continuous water availability for farming. Inadequate irrigation infrastructure and lack of connectivity between main roads and interior fields were also highlighted as barriers affecting agricultural productivity. Farmers expressed concern about delayed or inadequate compensation for crop loss and reiterated the need for fair prices supported by MSP mechanisms.

They also reported unfair practices in the sale of milk, including manipulation of fat-measuring machines, resulting in lower payments to farmers. Participants noted that decisions taken by agricultural officers are often not favourable to farmers, leading to additional losses. The existing “Karda” system was mentioned as a source of exploitation, and members suggested its abolition to ensure farmers receive MSP for their produce.

Barriers to Transition to Natural Farming

Group members highlighted that natural fertilisers are not routinely available, which forces farmers to purchase chemical fertilisers at high prices, increasing financial burden.

They also shared that while purchasing chemical fertilisers or pesticides, farmers are sometimes compelled to buy additional products, further adding to costs. This practice was strongly opposed by the group.

The group concluded that ensuring fair pricing, accessible irrigation, institutional accountability, and reliable availability of natural inputs are essential conditions for enabling farmers to transition sustainably to natural farming practices.

Group 3

Group 3 discussed the financial, informational, and environmental barriers that prevent farmers from adapting effectively to climate change and transitioning towards natural farming.

Impacts of Climate Change

Participants noted that both excessive rainfall and complete lack of rainfall adversely affect crop production. They highlighted that farmers are often unable to access government compensation for crop loss due to lack of required documentation.

Climate variability has also affected financial stability. Farmers reported difficulties in household financial planning, reduced and delayed crop output, and lack of fair market prices at the time of sale.

As a result, many farmers are forced to take loans and become trapped in debt cycles. Participants further observed:

- Water scarcity affecting farming practices
- Increased mental and emotional stress among farmers
- Adverse effects on cattle health and milk output
- Increasing mortality rates among cattle

Support Required for Transition to Natural Farming

To enable a shift from chemical-based to natural farming, the group suggested:

- Ensuring availability of organic fertilisers to even the smallest farmers through government or NGO support
- Creating awareness about the importance of natural fertilisers and encouraging farmers to adopt them
- Facilitating market linkages and ensuring MSP support for produce
- Making organic fertilisers available at comparable prices to chemical fertilisers
- Strengthening seed supply through cooperatives for organic farming
- Ensuring complete information on government schemes and subsidies is available at village level
- Constituting farmer committees at area/cluster/taluka levels to participate in crop price determination
- Promoting tree plantation and soil testing facilities for all farmers

The group underscored that climate adaptation, fair pricing, access to natural inputs, and institutional transparency must go hand in hand for a sustainable agricultural transition.

Group 4

Group 4 discussed the direct effects of climate variability on crop cycles, soil health, and production costs, while also outlining measures required for a transition towards natural farming.

Impacts of Climate Change

Participants observed that seasonality has become unpredictable, making it difficult to plan cropping cycles in advance. Rainfall patterns have become erratic, leading to crop loss in recent seasons for crops such as paddy, groundnut, and sesame.

Extreme heat and cold conditions were also reported to negatively affect crop growth and overall yield. Excessive rainfall and flooding were said to cause soil erosion, while inadequate rainfall also leads to crop failure.

Participants noted that higher rainfall often results in increased pest and insect attacks. Additionally, unregulated use of pesticides was reported to weaken soil quality and reduce its water retention capacity, further affecting crop health.

Measures Suggested for Transition to Natural Farming

To respond to these challenges, Group 4 emphasised the need to:

- Improve access to reliable water supply systems for farming
- Ensure timely compensation for crop loss
- Provide fair pricing mechanisms, including MSP support
- Strengthen availability of natural fertilisers to reduce dependence on chemical inputs
- Discontinue exploitative practices related to forced purchase of additional chemical products

The group reiterated that predictable weather, fair market systems, access to natural inputs, and institutional accountability are essential conditions for enabling farmers to sustainably transition towards natural farming practices.

Group 5

Group 5 discussed the broader impacts of climate change on crop productivity and proposed scientific and practical methods for sustainable agriculture.

Impacts of Climate Change

Participants observed:

- Loss in crop yield due to changing weather
- Spread of new pests and diseases
- Decline in productivity and income
- Reduction in crop quality
- Decrease in soil fertility
- Increase in production costs

They emphasised that climate change is not only affecting crop cycles but also financial stability.

Measures for Transition to Natural Farming

The group suggested adopting the following scientific and sustainable practices:

- Use of organic fertilisers
- Use of natural pest repellents
- Sustainable mulching practices
- Preparation of organic manure through composting
- Adoption of drip irrigation
- Cultivation of long-term trees capable of withstanding extreme weather
- Growing local, drought-resistant, pest-resistant crop varieties
- Water conservation practices
- Kitchen gardening and small-scale vegetable cultivation
- Use of animal manure to maintain soil health
- Reducing expenses in livestock and crop management

Sustainable Livestock Management

Participants also proposed:

- Proper feeding and care of cattle
- Providing shelter and shade
- Regular vaccination and health check-ups
- Ensuring clean water availability
- Disease prevention and hygiene maintenance
- Improved breed selection
- Awareness and training on livestock management
- Efficient use of by-products such as dung and urine

Group 5 underscored that a transition to natural farming requires both ecological practices and strengthened livestock management to ensure long-term sustainability.

KEY INSIGHTS

Individual Reflections

1 Dr. Shriyansh Chaudhari

Scientist
District Agricultural Meteorology Unit (DAMU), KVK-Waghai, Navsari Agricultural University

After welcoming the guests and participants from various mandalis, Dr. Shriyansh Chaudhari structured his address around two themes: (1) understanding climate change, and (2) its impact on agricultural practices of women farmers.

Understanding Climate Change

Dr. Chaudhari explained that while climate variability has existed since the formation of the earth, the current rate of change is unprecedented and largely linked to rapid industrialisation. The increase in greenhouse gases such as carbon dioxide, methane, and nitrous oxide—driven by industrial expansion, vehicular pollution, construction activities, and fossil fuel use—has intensified the greenhouse effect.

He briefly explained the greenhouse mechanism: when solar radiation reaches the earth, heat is absorbed and then radiated back into the atmosphere. Greenhouse gases trap part of this heat, leading to a rise in atmospheric temperature. While this process is natural, the rising concentration of carbon emissions from coal, petroleum, and other fossil fuels has significantly amplified the effect.

On average, global atmospheric temperatures have increased by approximately 1.5–2°C. He noted that even this seemingly small increase has tangible consequences. In Tapi district, summer temperatures that previously ranged between 38–40°C are now reaching 42°C, with urban areas touching 44°C. He cautioned that if emissions continue unchecked, temperatures could rise up to 4°C, which would severely impact ecological balance and agricultural systems.

Dr. Chaudhari also referred to rising sea levels due to melting glaciers, increased cyclonic activity, and unpredictable rainfall patterns as manifestations of climate change. He observed that events once projected as future risks are now being experienced firsthand by farming communities.

While climatic events themselves cannot be controlled, he emphasised that their pace can be slowed through responsible energy use, reduced dependence on carbon-intensive sources, and greater adoption of renewable energy solutions such as solar power.

Impact on Agriculture and the Need for Weather Planning

Moving to the second theme, Dr. Chaudhari highlighted that farming traditionally depends on two visible factors—land availability and water supply. However, he identified weather patterns as the third and often invisible determinant of successful cultivation.

He explained that for generations, farmers followed relatively stable crop cycles inherited from their ancestors. However, in recent years, unpredictable rainfall and shifting seasonal patterns have disrupted traditional sowing, harvesting, and ploughing timelines. Rainfall may arrive too early, too late, or in uneven distribution, making crop planning increasingly uncertain.

In response to these challenges, he stressed the importance of timely and accurate weather information. He informed participants that advisory bulletins have been developed in collaboration with the Indian Meteorological Department (IMD) and related institutions. These advisories provide five-day forecasts, including expected rainfall intensity (light, moderate, heavy), temperature variations, wind direction, and crop-specific guidance on fertiliser use and harvesting decisions.

These bulletins are issued twice weekly (Tuesdays and Fridays) and are shared with farmers through WhatsApp. The Tapi KVK also circulates district-level advisories.

Dr. Chaudhari further noted that weather conditions can vary even within districts. For instance, different blocks or talukas may experience contrasting rainfall patterns on the same day. Efforts are therefore underway to generate more granular, taluka-level advisories.

He also informed participants about mobile applications launched by the Government of India and IMD, including Green Alert, Meghdoot, and Damini. These applications provide location-specific weather updates, rainfall forecasts, lightning alerts, and guidance to help farmers plan harvesting and crop cycles more effectively.

Dr. Chaudhari concluded by emphasising that while climate change presents growing challenges, informed planning and timely weather advisories can help farmers make better crop decisions and reduce climate-related losses.

KEY INSIGHTS

Individual Reflections

2

C.D. Pandya

Agricultural Expert

Krishi Vikas Kendra

Vyara

After reviewing the issues presented by the five groups, C.D. Pandya offered brief reflections focused on seed selection, cost management, farming practices, labour challenges, and institutional processes.

Seed Selection and Farming Decisions

Mr. Pandya began by emphasising that before identifying the "right" seed, farmers must understand the different categories of seeds available and their economic implications. He explained that seed types include nuclear seeds, breeder seeds, foundation seeds, certified seeds, truthful (vishvasu) seeds, and hybrid seeds. While nuclear and breeder seeds remain with scientists, foundation and certified seeds are distributed through universities and cooperatives.

He highlighted the economic difference between hybrid and improved/desi seeds. Improved seeds such as Devligor, Mahatma, and Jaya varieties are reusable for up to five years and are comparatively cost-effective. In contrast, hybrid seeds are significantly more expensive per season and often increase dependence on chemical fertilisers. He advised farmers to carefully assess input costs before opting for hybrids.

Mr. Pandya also pointed out the contradiction between discussions on reducing chemical fertiliser use and the continued reliance on such inputs. He stressed that reducing chemical dependency ultimately lies in farmers' own decisions. Training programs offered by KVK and university centres provide guidance on preparing and using natural fertilisers.

Labour Shortage and Crop Planning

Addressing labour shortages during peak harvest periods, he noted that when crops mature simultaneously, agricultural labour becomes scarce. While large machinery such as harvesters is available, it is often unaffordable and unsuitable for small landholdings.

He suggested alternative approaches, including:

- Using smaller, locally available agricultural tools suited for small farms
- Adjusting sowing timelines
- Cultivating early or medium-duration crop varieties (e.g., veli pakki jaat, madhyam modi pakki jaat) to stagger harvest cycles

He further emphasised maintaining appropriate crop maturity periods. A minimum 40-day interval between sowing and harvesting was recommended to ensure

crop quality and reduce unnecessary labour expenses. KVK centres provide training on crop care during this period.

Livestock and Dairy Practices

Responding to concerns regarding milk fat calculation, Mr. Pandya suggested that farmers remain vigilant and, if necessary, purchase a lactometer to independently verify fat content before selling milk to dairies.

He also mentioned training on livestock management practices, including fodder preparation techniques such as silage (sailaj).

Subsidy and Land Documentation Issues

On the issue of subsidies, Mr. Pandya clarified that subsidy approvals are determined at government levels, while local officials implement them. He cautioned farmers to carefully verify land documentation during surveys, as discrepancies in claimant names, signatures, and thumb impressions can result in disputes and rejection of compensation claims.

He noted that land fragmentation and multiple claimants often create procedural complications that prevent subsidy disbursement.

Pest Management and Pinjar Paak

Mr. Pandya also explained the concept of pinjar paak (protective or trap cropping). For example, cultivating marigold (galgota) alongside green chillies can attract pests such as green worms away from the main crop. Destroying pests in the trap crop protects the primary crop and reduces pesticide dependence. This technique can be applied across several crops, including potatoes.

Concluding Remarks

Mr. Pandya concluded by encouraging farmers to:

- Make informed decisions regarding seed and input selection
- Reduce dependency on chemical fertilisers
- Plan crop cycles strategically
- Verify documentation carefully
- Approach KVK centres for theme-specific training and technical guidance

He reiterated that institutional support is available, but effective implementation depends on farmers' proactive engagement.

KEY INSIGHTS

Individual Reflections

3 Ms. Darshana Choudhary

Progressive Farmer & Prakrutik Sakhi

Ms. Darshana Choudhary addressed the gathering and shared her journey towards organic farming and the lessons she has learned along the way.

She began by thanking the organisers and acknowledged Dr. Mevada for mentoring her during her transition to organic farming. She shared that initially, she did not know where to seek guidance for shifting away from chemical-based practices. With support from KVK and training received at a university under Dr. Mevada's guidance, she gradually gained confidence in organic methods. Through repeated discussions and clarifications, she became convinced that organic farming provides sustainable solutions to the challenges posed by chemical farming.

According to Ms. Darshana, organic farming reduces input costs, improves crop quality, maintains soil fertility, safeguards health, and contributes to environmental sustainability. She recalled that limited availability of organic inputs in the market initially posed challenges, but she eventually made a firm decision to stop using chemical fertilisers entirely on her farm.

She emphasised the importance of livestock, particularly indigenous breeds such as Gir cows, in supporting organic farming through cow-dung-based natura manure. Despite not owning a cow earlier, she invested in one and began integrating livestock into her farming system. She encouraged other farmers to consider maintaining cattle as part of their transition.

Ms. Darshana shared that despite widespread belief that chemical farming ensures higher yields, her organic paddy crop remained resilient even during a season when many crops were damaged due to excessive rainfall. She highlighted that organic methods have enabled her to maintain crop quality and reduce pest incidence.

Today, she serves as a Prakrutik Sakhi, providing training and guidance to other women farmers. With the support of women leaders such as Pushpaben and Shardaben, she has helped mobilise and train groups of women farmers in the region. With assistance from KVK, a shed for 25 cows has been established, and several farmers have begun adopting livestock-supported organic farming practices.

She noted that organic produce fetches favourable prices in the market, with paddy varieties selling between ₹200–₹250 depending on quality. She emphasised that collective marketing through women's groups can enhance bargaining power and

enable farmers to determine fair prices for their produce.

Concluding her address, Ms. Darshana encouraged women to form small groups, seek training, and commit to organic practices with determination. She offered to conduct regular training sessions and invited interested farmers to visit her centre for demonstrations of ongoing cultivation practices. Her contact details were shared with participants for further engagement.

KEY INSIGHTS

Individual Reflections

4 Mr. Karshanbhai

Progressive Farmer & Organic Farming Trainer

Mr. Karshanbhai began his address by inviting participants to collectively recite the Omkar dhwani. He reflected on the contributions of farmers, particularly women, to national progress and highlighted the time constraints faced by women farmers. He observed that women manage multiple responsibilities — household work, childcare, livestock care, water collection, and agricultural labour — leaving them with little time for rest. In this context, he argued that shifting towards organic farming can reduce input dependence and create a more sustainable and manageable farming system.

He endorsed the transition to organic farming, building on Darshanaben's reflections. Drawing from his experience as a trainer working across three villages, he stated that farmers trained in organic practices are not only producing crops successfully but are also securing favourable market prices.

Soil Health and Natural Inputs

Mr. Karshanbhai emphasised the importance of soil preservation and reducing chemical fertiliser use. He explained that natural elements available locally — such as cow dung, compost, and stove ash — contain essential nutrients required for soil health. He noted that cow dung contains multiple elements that strengthen soil and support crop resistance to disease.

He has been involved in collectivising farmers since 2010 to prepare organic compost at village level. Through such collective efforts, farmers are able to reduce dependency on purchased chemical fertilisers and lower input costs.

He reiterated that training plays a crucial role in broadening farmers' understanding of soil science and organic practices. He encouraged participants to seek technical guidance from KVKs and agricultural institutions.

Seed Sovereignty and Local Varieties

Mr. Karshanbhai advocated for the use of indigenous seed varieties and reducing reliance on hybrid seeds. He shared that he cultivates multiple varieties of organic paddy and maintains sufficient seed stock for long-term use. He distributes seeds and organic manure to farmers across districts including Dediapada, Navsari, Valsad, Tapi, and Surat — sometimes free of cost and sometimes at nominal rates.

He also highlighted that organic produce often fetches higher prices in the market, enabling farmers to benefit economically while reducing chemical inputs.

Crop Planning and Land Use

He advised farmers not to over-plough land and to adopt organic methods gradually, particularly in fields where soil health has already deteriorated. According to him, with proper training and consistent practice, soil quality can improve significantly within a few years.

He further suggested longer-duration training programs, recommending at least three days of continuous training sessions to ensure deeper understanding and effective adoption of organic practices.

Concluding Remarks

Mr. Karshanbhai concluded by encouraging farmers to:

- Reduce chemical fertiliser use
- Adopt composting and organic manure preparation
- Preserve indigenous seed varieties
- Participate actively in structured training programs
- Support collective efforts for sustainable farming

KEY INSIGHTS

Individual Reflections

5 Dr. Mevada

Retired Professor, Expert and Professional Trainer in Organic Farming
Associated with NCNF

Dr. Mevada structured his address around two themes: women farmers' empowerment and Adivasi women farmers' empowerment. He acknowledged the platform and briefly introduced the work of the NCNF (National Coalition of Natural Farming), noting that multiple farmer organisations across Gujarat are connected to the forum and are collectively working on research, experimentation, and practical models to address agricultural challenges.

Re-thinking Farming Concepts

Dr. Mevada emphasised that transitioning to organic farming requires "unlearning" certain conventional assumptions. He explained that while agricultural science identifies a set of essential elements required for plant growth, soil contains a far greater diversity of minerals and microorganisms than typically acknowledged. The health of soil microorganisms (sukshma jeevanu) is central to crop productivity.

He described soil as a living system containing vast microbial diversity. These microorganisms convert nutrients into forms that plant roots can absorb (ionic form). He explained that while chemical fertilisers supply specific nutrients such as nitrogen or phosphorus, they cannot replace the broader ecological role of soil microorganisms.

Using an analogy, he compared microorganisms to a cook in a kitchen: even if all ingredients are present, food cannot be prepared without the cook. Similarly, nutrients in soil must be biologically processed to become usable for crops.

Organic Inputs and Gradual Transition

Dr. Mevada discussed the limitations of relying solely on large quantities of cow dung or market-purchased vermicompost due to cost and availability constraints. Instead, he suggested the use of ghan jeevamrit (solid organic formulation) as a practical alternative.

He outlined a phased transition approach:

- In the first year of shifting from chemical to organic farming, apply 800–1000 kg per hectare.
- Gradually reduce the quantity each year.
- By the fifth year, soil health can stabilise sufficiently to reduce external inputs significantly.

He highlighted that ghan jeevamrit contains high concentrations of beneficial microorganisms and should be applied

periodically to sustain soil biological activity.

Four Key Dimensions of Farming

Dr. Mevada identified four important aspects that farmers must consider:

1. Soil production capacity
2. Cost of inputs
3. Marketing
4. Crop protection and nutrition

He stressed that crop residues (paak avshesh) should not be wasted. Instead, residues can be incorporated into soil with moisture and microbial solutions to improve fertility, or composted for reuse.

He encouraged mixed cropping and sahjeev paak (companion cropping), particularly integrating pulses and vegetables with primary crops. He shared that NCNF has developed multiple organic farming models, including kitchen garden models led by women farmers.

ATM (Anytime Money) Model and Seed Exchange

Dr. Mevada introduced the concept of "ATM – Anytime Money," which promotes continuous cropping and diversified cultivation instead of limiting farming to seasonal divisions such as Kharif and Rabi. He cited examples of farmers cultivating multiple crops within small landholdings to ensure regular income.

He also described a seed exchange model in which farmers return seeds with an additional 20 percent quantity after harvest, promoting seed sovereignty and collective resilience.

Labour and Equipment Solutions

Addressing labour shortages, Dr. Mevada explained that small-scale equipment suited for small landholdings can significantly reduce labour dependency. In some organisations, tools are collectively purchased and distributed at nominal rents among farmers.

He noted two critical gaps in current farming practices:

- Limited adoption of multicropping
- Inadequate mulching

According to him, these practices are essential for improving drainage, reducing crop loss due to waterlogging, and enhancing soil moisture retention.

Importance of Training

Dr. Mevada emphasised that training is essential for both farming and livestock management. He encouraged women farmers to seek structured training in order to understand the science behind soil health, crop nutrition, and organic practices.

He acknowledged that women often bear dual responsibilities—farm work and household work—yet are rarely included in decision-making processes related to agriculture. Strengthening women's technical capacity, he noted, is crucial for meaningful empowerment.

Dr. Mevada concluded by thanking the organisers and participants for the opportunity to share his reflections.

CONCLUSION & KEY OUTCOMES

The Samaroh reinforced that climate-resilient agriculture cannot rely on a single intervention. It requires integrated approaches — combining soil regeneration, seed sovereignty, livestock integration, collective organisation, and institutional support. Women farmers are not only participants in this transition but central leaders in shaping sustainable agrarian futures.

Importantly, discussions also addressed concerns around market access and affordability of inputs. It was highlighted that organic systems can become economically viable when demand and supply are organised collectively. Through organisational platforms, demand from urban consumers can be mapped in advance, and production can be aligned accordingly. In such models, farmer networks identify organic producers, aggregate products, and facilitate direct connections between producers and buyers. Trust-based systems reduce dependence on costly certification processes when buyers and producers are directly linked.

Participants were encouraged to explore collective marketing through SHGs, seed exchange models, and demand-driven supply mechanisms. Such platforms can help ensure secure markets, fair pricing, and reduced exploitation within traditional market structures.

The event concluded with a strong emphasis on collaboration — between farmers, training institutions, civil society organisations, and local mandalis. The collective participation of organisations including AKRSP, BAIF, Sparsh, Hitakshi Mandal, Gram Vikas Trust, and various sakhi mandals demonstrated the strength of networked action.

The Adivasi Mahila Sashaktikaran Samaroh affirmed that sustainable agriculture is not only a technical transition but a social and institutional one — rooted in knowledge, collective effort, and women's leadership.

Key Outcomes

1. **Climate Change as a Lived Reality**
Participants unanimously acknowledged that changing rainfall patterns, rising temperatures, soil degradation, and pest incidence are directly affecting crop yield, livestock health, and household income. Climate variability is no longer a projected risk but a present-day challenge.

2. **High Input Costs and Market Vulnerability**
Rising costs of seeds, fertilisers, fodder, and labour — combined with unstable market prices and concerns around milk fat measurement — continue to strain women farmers' economic viability.

3 **Soil Health as the Foundation of Resilience**

Experts and farmers emphasised the importance of strengthening soil microorganisms, reducing chemical inputs, and adopting organic alternatives such as jeevamrit and ghanjeevamrit. Improved soil structure was linked to better water retention and reduced crop loss during extreme weather.

4 **Seed Sovereignty and Indigenous Varieties**

There was strong advocacy for the use of indigenous and reusable seed varieties over costly hybrid seeds. Seed exchange and local seed conservation models were highlighted as viable alternatives.

5 **Collective Action and Women's Leadership**

Women farmers demonstrated strong interest in forming groups for collective marketing, shared training, livestock integration, and knowledge exchange. The role of trained women leaders (Prakrutik Sakhis) emerged as a critical enabler of transition.

6 **Need for Technical Training and Advisory Support**

Access to structured training, weather advisories, mobile applications (Green Alert, Meghdoot, Damini), and KVK-based support was identified as essential for climate-responsive planning.