The WOTR in collaboration with Honeywell Hometowns Solutions India Foundation (HHSIF) initiated a project on promoting Ecosystem based Adaptation as an approach to build the natural resource stability for FPOs. The project’s primary objective is to develop strategies that assure FPOs and farmers of a secure income while sustainably managing their local natural resources.

KEY POINTS

- The process gathered 45 stakeholders from diverse groups in the FPO sector
- Participants agreed that income and the natural resources base are the two most important drivers for the future of FPOs in Jalna district
- A key expectation arrived at in the workshops, was the need for capacity building and skills enhancement of the stakeholders
- There was consensus among the participants on need of adopting nature friendly practices in agriculture and in FPO businesses

Transformative Scenario Planning (TSP) in Jalna

The Indian Government has set an ambitious goal to institute 10,000 Farmer Producer Organizations (FPOs), uniting over a million farmers in the process. Serving as pivotal catalysts, these FPOs are designed to not only multiply farmers’ earnings from agriculture, but also to kindle and capitalize on diverse business opportunities. These span from value-added services to trading, thereby fuelling the holistic growth and resilience of the agricultural sector. By emphasizing sustainable, eco-friendly practices, FPOs can both bolster farmers' livelihoods and foster a greener, more sustainable trajectory for India’s farming landscape. Leading the charge in the formation and promotion of FPOs, Maharashtra outstrips other states, thanks to the synergistic efforts of central and state governments, NGOs, and CBOs.

The success of the FPO model primarily relies on enhancing agricultural yield through four pivotal elements: the optimal use of water resources, maintaining soil health, judicious crop selection, and strategic land use. Yet, the accelerated exhaustion of natural resources, indiscriminate tree felling, and fierce competition among farmers for amplified income accentuates resource degradation. This vulnerability of the agricultural system is further intensified by extreme and unseasonal weather events.

Addressing this multifaceted challenge surpasses the capabilities of any single entity. It calls for a collaborative engagement of all stakeholders. In this context, the TSP process provides a neutral forum for stakeholders to voice their perspectives; it fosters a collective understanding of the situation and potential countermeasures. Acknowledging these hurdles, WOTR and W-CReS employed the TSP process to scrutinize the long-term sustainability of current farming practices championed by FPOs. This is to be done while maintaining robust production and income for farmers, in the face of dwindling natural resources. The TSP process was rolled out with FPOs of the Jalna district in Maharashtra as a representative case study.

This report presents a summary of the application and key findings from the TSP process, based on the theme of "FPOs in Jalna district towards 2030: Promoting Resilient Income and Environment Friendly Practices." The process was steered by WOTR and executed through two workshops held in Jalna between March and May 2023.
Workshop 1 (28th & 29th May 2023)

Step 1: Inviting the participants with diverse perspectives

The workshop convened 45 stakeholders, both women and men, representing a range of entities that shape the direction of FPOs at various levels within Jalna district. The diverse group included representatives from government departments - Agriculture, ATMA, the SMART project, and NABARD. Additionally, there were delegates from NGOs working with FPOs and farmer-related issues, social action groups, Krishi Vigyan Kendra (KVK), academics, the Network of FPOs, as well as directors, farmers and members of FPOs.

The participants offered their insights and perspectives on the future trajectory of FPOs, the nature of their business operations, and the factors that potentially drive their success or losses. These include:

- Lower and volatile market prices for agricultural produce
- Increasing input cost in agriculture
- Increasing extreme weather events affecting crops
- Need for capacity building of FPOs
- Benefit sharing among shareholders of FPOs
- Availability of loans and subsidies to FPOs
- Challenges in sustaining FPOs
- Distress migration to cities
- Dearth of farm labour for agriculture
- Depletion of natural resources (soil, water, forest)
- Soil health and land degradation
- Increase in cultivation of water-guzzling crops and overuse of water
- Global warming and pollution
- Inadequate resources and investment in agriculture
- Food and nutrition security
- Need of inputs for business development
- How can FPOs leverage carbon credits or Payment for Ecosystem Services?
- Is it possible to change or transform a potentially undesirable future?
- What is the training required by the board of directors and other officials to handle the FPO effectively?
- How will climatic factors influence FPOs in the future?
- How can FPOs access the capital they require?
- To boost FPO income, what is the potential of value addition or the value chain in rural areas?
- Can this TSP workshop lead to concrete actions?
- Will 'zero budget' or 'organic farming' ensure a stable income for FPO members?
- Can farmers change their approach to agriculture so that they will be less affected by the ups-downs in market price? If yes, how?
Questions raised by the participants

- Is it possible to change or transform a potentially undesirable future?
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- Can this TSP workshop lead to concrete actions?
Step 2: Identifying the main drivers of the future of FPOs in Jalna district

To gain a thorough understanding of the current state of FPOs and the influencing factors in Jalna district and across Maharashtra, recent headlines from mainstream newspapers spanning the last two months were analyzed. This exercise highlighted the connections between FPOs, related agricultural issues, and the Social, Technological, Economic, Environmental, and Political dimensions.

A paired walk exercise provided a platform for participants to express their apprehensions about the future of FPOs in the district. Through an iterative process, 24 influencing factors were identified. These were grouped into broader categories that included, market prices for agricultural produce, lack of farm labour, declining interest in agriculture, environmental degradation, soil health, water allocation and access, deforestation, and dwindling groundwater levels. After a process of voting, deliberation, and discussion, these factors were distilled down to the two most uncertain and impactful drivers. These two factors hold significant sway over the future trajectory of FPOs in Jalna.
The two primary drivers that emerged from this process are 1) Income Levels (High/Low) and 2) Condition of Natural Resources (Good/Poor). The interplay of these drivers forms the axes for constructing potential future scenarios.
Step 3: Constructing stories about what could happen in the future

By exploring the interplay of the two major drivers plotted on a two-dimensional plane, participants were separated into four groups, each tasked with crafting scenarios. Each group was supplied with accessible materials - colored chart papers, colored sheets, modeling clay, crayons, colored sketch pens, scissors, and glue - to facilitate the creation of their model. Their task was to envision the state of FPOs in Jalna district by 2030, given their specific context.

Following the model presentations and subsequent feedback sessions, each group developed a timeline that mapped the progression from the current context to their envisioned scenario for 2030. Participants were encouraged at each step to construct scenarios that were not only challenging and plausible but also pertinent to the FPO context. After incorporating feedback from their peers, each group relayed their scenario narratives to the entire assembly in the form of role-play performances.
Step 4: Story telling

Based on the 4 scenarios prepared earlier, stories were developed. In four groups having a balanced representation of stakeholders, the participants listened attentively to the story of each scenario. Individually each member identified the threats and negative indicators, as well as opportunities and positive signals present within each story. The insights were then shared and discussed within each group. Subsequent to the group discussions, every group compiled their insights on the THREATS and OPPORTUNITIES that emerged from each story.

Representatives from each group then presented their findings and provided clarifications as needed.

In the plenary session that followed, the facilitator synthesized the key findings under THREATS and OPPORTUNITIES that emerged from all the groups and all stories. The common points under each heading that emerged across the narratives were underscored. This process equipped participants with a holistic understanding of the threats and opportunities identified within the four stories and by all groups.

Some of the significant threats and opportunities that emerged from four stories are outlined in the following table:
### Threats & opportunities that emerged from discussions on the four stories

<table>
<thead>
<tr>
<th>Threats</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Increasing vulnerability to climate and natural calamities like hail, drought, unseasonal rain, floods, landslides.</td>
<td>- Improve land and water resources for sustained agriculture productivity</td>
</tr>
<tr>
<td>- Frequent incidences of crop losses and decrease productivity.</td>
<td>- Promote water use management for its sustained availability</td>
</tr>
<tr>
<td>- Deforestation increasing land desertification, environmental degradation with loss of arable land and increasing barrenness</td>
<td>- Implement nature aligned farming practices</td>
</tr>
<tr>
<td>- Increase in number and depth of borewells</td>
<td>- Empower farmer members through capacity building</td>
</tr>
<tr>
<td>- Farm ponds accelerate the depletion of groundwater</td>
<td>- Promote linkages with government programs</td>
</tr>
<tr>
<td>- An individualistic approach to utilization of the natural resources, particularly groundwater</td>
<td>- Encourage FPOs to pursue diverse micro-enterprises and value addition businesses</td>
</tr>
<tr>
<td>- Excessive use of chemical fertilizers and pesticides</td>
<td>- Expanding the market base of FPOs in urban areas</td>
</tr>
<tr>
<td>- Environmental degradation which also has a negative effect on human health</td>
<td>- Explore various financing options through institutions</td>
</tr>
<tr>
<td>- Mistrust of the board of directors and/or FPO members</td>
<td></td>
</tr>
</tbody>
</table>
The examination of threats and opportunities across different scenarios offered valuable insights to participants. It helped them anticipate potential hurdles and opportunities in preparation for the prospective FPO landscape in Jalna by 2030.

The participants in groups were encouraged to envision their preferred future for the year 2030. The visualization process serves two crucial functions: 1) to foster a shared understanding among participants of the desired or dream future, and 2) collaboratively to devise a roadmap to achieve this envisioned future.

Participants dedicated time to carefully review the charts of the Threats and Opportunities of the four groups. They then identified the threats and opportunities they deemed critically important. The necessary actions points were also identified.

Groups were formed and tasked with crafting a shared vision of their preferred future, utilizing an array of artistic tools such as crayons, colored pencils, and sketch pens. Participants were encouraged to discuss their individual concepts in the group and then visually depict their common envisioned ideal future of 'Sustainability of Farmer Producer Organizations (FPOs) in 2030.'

During the plenary session, each group presented their collective depiction of their preferred future. Each group unveiled their respective dream visions. Despite the significant number of shared aspects, differences emerged in the specific issues emphasized by each group.
Step 6: Transformative orientation: Self-reflection

To assimilate the transformation process, becoming more cognizant of their capabilities and potential in tackling various challenges, the participants contemplated a personal experience where they overcame a challenge to reach a desired outcome. Using a meditative relaxation technique, the facilitator steered participants towards recalling a significant obstacle they had surmounted in their lives, and the resources they harnessed to conquer that obstacle. Each measure and method employed to overcome the challenge was pinpointed.

Despite the deeply personal nature of this introspection activity, several participants chose to share their experiences, including the strategies they implemented to tackle significant life challenges. Other attendees also discussed their positive impressions of the meditative relaxation process itself, which many found invigorating.

This stage of the workshop was pivotal in identifying personal strengths to manage challenges on both an individual and collective level. Wrapping up this session, the facilitator underscored the enormous potential individuals possess to tackle various challenges and bring about change.
To go beyond mere discussions in the TSP workshops, it was critical to develop action points. Hence the conclusion merely initiates a journey towards the envisioned future. For Jalna, this journey leads towards 'Sustainability of Farmer Producer Organisations (FPOs) in 2030'.

In this step strategic responses / actions necessary were sought from the diverse participants to realize their desired future. Two Key Questions were proposed for consideration with the 2023 goal in view:

- **What should we AVOID?** Actions and practices that are detrimental, hence are to be discontinued?

- **What actions should we ADOPT?** Actions and practices that contribute to achieving the 2030 goal. These include actions by the various stakeholders – individuals, groups, and local authorities.

Some of the ACTION POINTS are captured below:

**Government officials share their thoughts during the TSP workshop**

ATMA Project Technology Manager, Bhokardan block, Jalna  
SMART Project Deputy Director, Jalna  
NABARD District Deputy Manager, Jalna
## Some Strategic Responses

<table>
<thead>
<tr>
<th>To be AVOIDED</th>
<th>To be ADOPTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Encroachment on hilly, barren, and common lands</td>
<td>• Increase area under tree plantation, agro- forestry and silvi-horticulture</td>
</tr>
<tr>
<td>• Deforestation and using wood as fuel</td>
<td>• Adopt environment friendly livelihoods and enterprises</td>
</tr>
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<td>• Burning crop waste/debris in the field</td>
<td>• Promote the use of organic and bio-products by FPOs</td>
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<td>• Drilling deep bore wells and sinking dug wells</td>
<td>• Adopt micro irrigation and water- use efficiency measures</td>
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<td>• Planning crop cultivation and water use based on water budgeting</td>
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<td>• Heavy use of chemicals in farming</td>
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<td>• Develop the value chain / value addition activities</td>
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<td>• Politics in FPO functioning</td>
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<td>• Cash transactions in FPO business</td>
<td>• Build the capacity of FPO members to effectively enhance agriculture productivity</td>
</tr>
<tr>
<td>• Autocratic decision making in FPO management</td>
<td>• Providing equal opportunities to women in decision making at all levels</td>
</tr>
</tbody>
</table>

**Way Forward**

**Some Strategic Responses**

- To be AVOIDED
  - Encroachment on hilly, barren, and common lands
  - Deforestation and using wood as fuel
  - Burning crop waste/debris in the field
  - Drilling deep bore wells and sinking dug wells
  - Overuse/extraction of water for irrigation
  - Heavy use of chemicals in farming
  - Elimination of beneficial pests in the field
  - Decreasing livestock numbers
  - Loans from local money lenders
  - Mismanagement of time, funds and resources of FPO
  - Politics in FPO functioning
  - Cash transactions in FPO business
  - Autocratic decision making in FPO management

- To be ADOPTED
  - Increase area under tree plantation, agro- forestry and silvi-horticulture
  - Adopt environment friendly livelihoods and enterprises
  - Promote the use of organic and bio-products by FPOs
  - Adopt micro irrigation and water- use efficiency measures
  - Planning crop cultivation and water use based on water budgeting
  - Adoption of the soil health and organic practices
  - Implementing Integrated Pest Management (IPM)
  - Promote livestock management
  - Develop the value chain / value addition activities
  - Transparency and accountability of FPO business practices and operations
  - Establish social norms in the Gram Sabha such as bans on tree felling, bore wells, and free grazing
  - Build the capacity of FPO members to effectively enhance agriculture productivity
  - Providing equal opportunities to women in decision making at all levels
Going Forward

- Workshop participants underscored their commitment to disseminate the crucial insights garnered during the workshop to their villages and FPO members.
- Several participants expressed the importance of such workshops and voiced their desire to organize similar ones for FPO directors and other professionals in the district, thereby emphasizing the importance of this initiative.
- Given the importance of the subject, WOTR is committed to extend the learnings from this exercise to a larger scale, offering FPOs substantial capacity-building support through training.