Women farmers lead the way: pathways for climate resilient farming

Report on Agroecology Programme in Yavatmal district, 2023

Background

Since 2018, SOPPECOM has been actively working with women farmers from drought-prone and suicide-affected areas of Marathwada and Vidarbha; however, it was during the pandemic that we started actively engaging with them about the rising concerns around food and nutrition security. Women farmers pointed out that overt dependence on markets for food and agricultural inputs had led to food insecurity during the pandemic. Women from farmer suicide households also shared their experiences of the mainstream chemical-based farming that led to indebtedness and eventual suicides by their husbands. The conviction for making this transition emerged from these discussions with women farmers during the pandemic, where they expressed the need to grow food crops over cash crops like cotton, soybean, etc. This led to the agroecology programme that has evolved over the last three years.

The initial aim of the programme in 2021 was to support small and marginal women farmers from suicide-affected households who had been badly affected during the pandemic to shift towards chemical-free agriculture based on the principles of agroecology. However, in 2022, this relief programme became a full-fledged programme for self-reliant farming.

The programme is being implemented in the six districts of Maharashtra: Beed, Hingoli, Parbhani, Akola, Yavatmal and Nagpur.

The programme is supported through a pool of resources. In 2021-22, COVID-19 relief grants came from Arghyam, Nav Nirman Nyas and Schlumberger (CSR). In 2022-23, the programme was supported through grants from Agro Ecology Fund (AEF) and People for Progress in India (PPI). In 2023-24, the programme is supported through Agro Ecology Fund (AEF), People for Progress in India (PPI), as well as American Jewish World Service (AJWS).

Grant received from PPI contributes towards supporting women farmers from Yavatmal district.

Learnings from the first two years

In the first year, conducting the programme was difficult due to the pandemic, especially in the first phase of the programme, which happened at the peak of the second wave. Most trainings had to be conducted online, and in-person meetings could not take place, which affected the programme.

In 2021, one of the districts was severely affected by heavy rainfall. In 2022 as well, there was continuous rain from July until October. The fields were thoroughly washed away in many places, exposing the subsoil rocks. Much of the crops were lost, and soil biota was affected. 2023 has been a below-normal rainfall year, affecting the crops. We will get the complete picture in the coming months.

Crop raiding is a challenge faced by the entire farming community. All the women of all districts faced this problem with wild boars, blue bulls, some birds and also monkeys.

While climate change and crop raiding are issues faced by all farming communities, these women have some unique constraints being women farmers. Most women who participated in this

programme were widows and had to deal with constraints due to the patriarchal mindset of their families and communities. Some of the women are cultivating land which is not in their name. Single women depend on other men for various agricultural activities and often find themselves without support. Women also had to deal with many negative reactions from other farmers in the village, from ridiculing their practices to downright stealing their produce.

Despite all the constraints, women who have been part of the programme for three years now want to continue with this model as they see many benefits, including the variety of produce, improved soil quality, and reduced expenses.

Vaishali from Tirzada village in Yavatmal says, “This agriculture is affordable. Old seeds have come back. We are getting all this produce from our farm again. There is no guarantee in chemical farming, no matter how much we invest in it. The good thing about this model is even if you lose something, you get something else.”

Sanjeevani from Beed district said that this farming model gives her a different identity and earned her the respect that she never received from fellow farmers. She narrated her experience when an upper caste woman walked up to her farm to see the diversity on her farm, especially the rare varieties that were grown earlier and asked her to share the seed with her. For Sanjeevani, this was a critical moment that broke the caste barriers. Sanjeevani was also very happy that the other women farmers approached her for her Bajra variety. The seed she preserved from the first year’s crop was purchased by SOPPECOM and was distributed to other women from the district for the following year.

Women also want to continue this because this experiment has connected them with 200 women across six districts of Maharashtra. The learning and exposure this brings in is essential for them, too. Their confidence has been bolstered due to access to new information, study visits and decision-making about her field. They have also established a dialogue with other women from their village who have been curious about the experiment and get them involved in the programme.

As we enter the third year of our work with the women, we will move towards strengthening and consolidating based on the lessons learned concerning climate change, crop raiding, non-availability of seeds, and social challenges due to being a woman and belonging to certain socio-economic communities.

Scope of the programme in the third year

We continue providing the support to women farmers we have been supporting for the last two years. But we have also made some changes going forward in the third year.

Two years of work confirms the need for mentoring women farmers who have actively engaged with the programme but have also shown the potential to expand it in their own and neighbouring villages. So, in the third year, we are focusing on 40 women farmers who would be champions of the programme. We are conducting training programmes with them to increase their capacities and create awareness among their village and beyond.

On the other hand, we are expanding the programme to include more women farmers from the same villages who have shown interest in joining the programme. We are only providing support in terms of seeds, and we will continue to monitor their engagement throughout the year.

The table below gives a picture of women’s participation at these three levels of engagement:

Table: Women participants of the agroecology programme

District	Women continuing from last year	Women joined in 2023	Total participating women	Champion women
Akola	22	11	33	5
Beed	12	18	30	6
Hingoli	27	35	62	9
Nagpur	22	7	29	4
Parbhani	9	10	19	5
Yavatmal	39	26	65	11
	131	107	238	40

Of these 238 total women, 65 women from Yavatmal are supported through the PPI grant.

Activities so far

Training of champion women

A four-day training of the champion women was conducted in May 2023 at Chetana Vikas in Wardha. Since many participating women already had one round of training last year, this year, the content was modified considering their needs. Discussions were held about their experiences of the past two years and what they feel are the areas that need to be explored further. Some new topics like seed preservation were introduced this year, considering a way forward for the programme. Seven women from the Yavatmal district, along with the coordinators, participated in the training.

Direct support

Direct support of manure and seeds has been provided to 39 women farmers. As mentioned earlier, we are trying to expand the programme in the same villages, and seeds were provided to an additional 26 women. They were encouraged to apply manure themselves. Like previous years, the seed kit includes a mix of cash crops (non-BT cotton/ soybean), food crops, vegetables, and plants. Women-friendly equipment suitable for agro-ecology-based farming was introduced last year, and women have continued using it.

Research and documentation

The first two years have seen a lot of experimentation with setting up documentation and monitoring processes. In the third year, we are rectifying some of the issues and streamlining the monitoring process. We have developed new tools, including monthly and daily diaries, that women must keep. One of the lessons is to focus on a few women farmers and their plots for a detailed monitoring process, and 40 plots of the champion women will be monitored throughout the year. We have already started receiving monitoring formats from women, where they are documenting the daily updates. The SOPPECOM team is currently processing the data.

Field visits

SOPPECOM and the agriculture expert Ms Niranjana Maru are conducting joint visits. In September this year, a field visit to Yavatmal was conducted, and individual plots of all champion women were observed. We are in the process of compiling notes from the visit and preparing a report.

Champions from Yavatmal

Women from Yavatmal have built strong collectives in the villages they are working in. This process of collectivisation has helped women build their confidence in approaching government officials and other village-level functionaries as well. Here, we share two examples of women who have taken a leap and are innovating at their level. All the others, too, are innovating in their own ways, and SOPPECOM is in the process of documenting each of their stories.

Chanda Ghodam from Varud village is one such example. Chanda's family owns 12 acres of land. Mostly dedicated to BT cotton, Soyabean and Tur. When we started in 2021, she began cultivating half an acre of land based on the self-reliant agriculture model. At that time, she had leased out most of her land because she could not afford cultivation. That year, she noticed that the tur crop on her farm survived when her neighbouring farmers struggled to maintain theirs even after spending a lot on fertilisers and pesticides. She deduced that this was due to the application of manure and intercropping system that helped improve soil quality. So, encouraged by that, she increased her area under agroecology to one acre. She also got a motor pump for her dug well and stopped leasing out the land. She started cultivating vegetables without any chemical inputs and selling them. This was the first time she was growing vegetables, which she kept for her own consumption as well. Recognising the relevance of this kind of agriculture, she has gradually started transitioning to chemical-free farming. She is already implementing the model on one and a half acres of land, and another piece of land is dedicated to chemical-free vegetables. In the rest of the field, she is now regularly applying manure, and has reduced the use of chemical fertilisers to one dose and has stopped using chemical pesticides/ weedicides.

Sugandha Khangare is another example of women giving their best even in dire conditions. Some of their family land is in the village, but some is in the neighbouring village, 8 km from her home. Initially, her in-laws did not support her shifting to this agriculture model and did not allow her to cultivate land in the village. So, for the last three years, she has been cultivating the other land, which is not only difficult to access but also not of the best quality. The land is full of small pebbles and makes agriculture operations difficult. Also, since she can't go there daily, the crop is more likely to be raided by wild animals. Yet she has put a lot of effort into turning the plot profitable. She has grasped the principles of the model well and has been applying them to increase the quality of her soil. Now that her in-laws are seeing moong, tur, and the produce she can bring home, they have realised that it would have been better to experiment on the nearby land. Taking inspiration from her, another woman who has a farm nearby also cultivated moong on her land. During our recent visit to the farm, this neighbour participated in the discussion and was very keen on understanding what she could do next year to get a better yield like Sugandha.

Next steps

Role of the Champions

The 11 women from Yavatmal chosen as the champions will play an important role in building the movement for agroecology. They are expected to not only monitor their own plots with minute details but they are also expected to build awareness in their own villages to spread the word of challenging the mainstream farming paradigm through the self-reliant model. The champions are also expected to ensure that data is being monitored by the other women who are part of the programme in their villages. The champions will also take the lead in building local decentralised seed banks for local seed varieties that they are growing. Thereby reducing the reliance on markets for seed and other inputs.

A detailed format for the evaluation of the work being done by the champions is being developed. This will help the team in mentoring each of them while also learning from them, the innovations and modifications that they are constantly making.

Building scientific temper and internalising the principles of the model

During this field visit, it was observed that while all the women are committed to the process and working very hard on their plots, learning scientific principles behind certain practices will be an ongoing process. E.g. following the sowing model, having a minimal distance between two rows is essential to generate green manure, increasing the soil quality and also reducing the growth of unnecessary weeds. But some women, not grasping the principle behind the required distance in the two crop rows, either increased the distance between the lines or sowed the seeds sparsely. They had their reasons for making the changes – namely, unavailability of labour during sowing, so they had to do it by hand, or they were worried about the ability to do weeding in the thick crop. We realise there is a need for ongoing dialogue on these issues, which we will continue as we progress. During the field visits, discussions are being held about it, and we will address these issues through our regular online meetings.

Another in-person meeting is planned for November to review the Kharif season and prepare for Rabi.

By the end of December, we will have collected all the daily diaries for the Kharif season and be able to do a detailed analysis.

Balancing food and nutrition security with enterprise

One of the observations from the recent field visits was that women are now very happy with the food that comes on their plates and the cost saving as a result of what they are growing. They are also able to sell the surplus vegetables and the pulses they grow in the local markets. However, in the next phase, it would be important to also build their mindsets to become entrepreneurs. Balancing the cash, food and nutrition requirements of the household would thus become an important part of the programme. For this it would also be important to conceptualise the bio service centres at the village level which can be helmed by women and young girls and boys who belong to landless or small and marginal households.