## **SAFAL- Sustainable Agriculture, Forest and Land**

#### Three years activity report from April 2018 to March 2021

## **SAFAL- Sustainable Agriculture, Forest and Land**

**SAFAL** programme aims to revitalize traditional farming and sustainable organic farming practices which can maximize the local resource use.

## The objectives of the programme are: -

- To promote and popularize organic farming and sustainable agricultural practices.
- To improve the fertility of soil, environment and livelihood of small and marginal farmers especially women through sustainable organic farming practices.
- Formation of women and men farmers' collectives with the objective of helping them to regenerate soil and water conservation systems, plant trees and increase green cover, popularize organic agricultural practices, increase the use of organic manure and pesticides, proliferate and collect traditional seeds.
- Conservation of on-farm resources and preparation of nutrient rich Farmyard Manure.
- To increase green cover, raise awareness on climate change, global warming and reduction of the use of plastics.
- Equip the farmers with skills and techniques through trainings, capacity building and exposure visits.

Presently **SAFAL** programme is working with men, women and marginalised farmers in 110 villages of two districts of Himachal Pradesh i.e. Kangra and Chamba .The farmer groups are organised in groups and the team provides information on government agricultural subsidies, distributes seeds, encourages traditional seed preservation methods , and demonstrates organic practices such as making bio-fertilisers, bio-pesticides, bio-insecticides and vermi-compost pits with the collaboration of the Agriculture Department of Himachal Pradesh.

### **Activities under this programme:**

- 1. Farmers Meetings and Demonstrations
- 2. Networking meetings
- 3. Workshops and trainings
- 4. Exposure visits
- 5. Yearly Environment Awareness Campaigns

## 1. Farmers Meetings and Demonstrations

Regular village level meetings and sessions with farmers were conducted as part of the programme. The objective was to create awareness and capacity building among farmers. In the past three years 1801 village level meetings were conducted with 80 farmers' groups of Kangra district and 18 groups conducted 584 village level meeting in Chamba district. Some of the topics which were discussed during the regular meetings were vulnerabilities of farmers in adjusting with changes in agricultural practices and volatile markets, the adaptive capacity to understand how farmers perceive various farming options like chemical farming, organic farming, permaculture, hydroponics etc. and what steps are needed to enable their farms to persist through uncertain times. Apart from this, meetings were also organised with specific themes which included. Zero Budget Natural Farming, government schemes related to agriculture, importance of Azolla cultivation, bio-pesticides and manure, mushroom cultivation, herbal plantation and traditional seed preservation, etc.



### **Meetings**

Duration	No of meetings	Participants	Groups
April 2018- March 2019 (Kangra)	610	1396	156
April 2018- March 2019 (Chamba)	192	325	
April 2019- March 2020 (Kangra)	659	1799	153
April 2019- March 2020 (Chamba)	209	325	
April 2020- March 2021 (Kangra)	532	1623	155
April 2020- March 2021 (Chamba)	183	355	
Total	2385	5823	464

#### **Demonstrations**

In collaboration with the Department of Agriculture, Himachal Pradesh, 204 demonstrations on the System of Rice Intensification (SRI), vermi compost, bio-fertilisers, bio-pesticides, bio-insecticides, azolla cultivation and zero budget natural farming have been conducted in 100 villages. These demonstrations were attended by 1200 farmers. Four kinds of bio-pesticides -Jeevamrit, Ghanajeevamrit, Draket Astra and Agni Astra are regularly being made by the farmers. As an output, total 630 vermi compost pits have been built in the villages by the farmers. In addition, 458 farmers have reverted back to conventional farming practices on 9.38 hectares (194.5 kanal) area in 90 villages. As such the dependence on urea has ended. In Chamba 83 farmers in collaboration with the agriculture department built vermin-compost pits.





Duration	No of Demonstrations	Participants
April 2018- March 2019 (Kangra)	77	868
April 2018- March 2019 (Chamba)	4	117
April 2019- March 2020 (Kangra)	75	826
April 2019- March 2020 (Chamba)	4	102
April 2020- March 2021 (Kangra)	52	514
April 2020- March 2021 (Chamba)	5	130
Total	217	2557

# 2. Networking meetings

Networking meetings were held regularly in which farmers from adjoining 3-5 villages got together and educated other farmers in the community about natural farming. 1649 participants attended these meetings during the past three years. Some expert farmers were invited in these meetings to share their achievements and practices used to strengthen, revive and restore natural farming methods. These cluster level meetings have inspired other farmers to give up the use of chemicals and live a healthy life. The weakening of community ties due to market interventions, disappearance of the *juari* (collective harvesting) system and people prioritizing personal interest over interpersonal

relationships, the importance of diversifying peoples' diets by reintroducing traditional crops was also discussed in these meetings. People were made aware of the various serious health effects linked to handling and consuming pesticides and fertilizers, which are dangerous to pregnant women, children and older people. In 5 villages of Chamba district farmers started cultivating Kodra, Local Wheat, Mustard and Koni which are no longer grown on a large scale.

Duration	No of networking meetings	Participants
April 2018- March 2019 (Kangra)	4	412
April 2019- March 2020 (Kangra)	8	724
April 2020- March 2021 (Kangra)	4	513
Total	16	1649

# 3. Workshops and trainings

In the last three years, JRCT has conducted a series of capacity building programmes which include workshops , trainings, exposure visits and demonstration sessions with women and men farmers. The main objectives of these capacity building programmes are :

- To enhance the understanding and skills of farmers on different methods of organic and traditional farming practices.
- Provide a platform for farmers to share their knowledge and experience with each other.



Nineteen workshops were conducted during the past 3 years in which 397 farmers participated from three blocks of Kangra district and 7 blocks of Chamba district. These trainings were facilitated by an experienced team of trainers from Agriculture University, Palampur, Department of Agriculture Himachal Pradesh and trainers from an NGO working in the field of organic farming. In these trainings' farmers were educated about the use and benefits of different types of organic manures and compost, bio-pesticides and seed preservation methods. Through participatory demonstration sessions, farmers learnt the different methods of making organic manure, liquid compost and various organic bio pesticides. They also acquired knowledge about saving and protecting traditional

seeds and crops from diseases and fungus by using organic sprays. 15 farmers are presently working as leaders and educating others to adopt natural farming techniques to live a healthy life.

Duration	No of workshops	Participants
April 2018- March 2019 (Kangra)	11+1 Follow-up	239
April 2018- March 2019 (Chamba)	3	135
April 2019- March 2020 (Kangra)	3+1 Follow-up	97
April 2019- March 2020 (Chamba)	5	163
April 2020- March 2021 (Kangra)	2	46
April 2020- March 2021 (Chamba)	1	21
Total	52+2=54	701

# **Trainings in collaboration with Govt. Departments**

105 trainings were held in 60 villages of Kangra District on topics such as zero budget natural farming, azolla cultivation, mushroom farming, bee keeping, sericulture, and horticulture. 36 farmers participated in zero budget natural farming, mushroom farming and bee keeping trainings conducted by Department of Agriculture and Department of Horticulture. 5 team members were appointed as master trainers by Agricultural Technology Management Agency (ATMA) — an extension arm of the Department of Agriculture. ATMA also helped three farmers to set up village resource centres to sell the prepared bio fertilisers.





## **Trainings**

	Number of trainings at village level	Participants
Subhash Palekar Natural	86	1190
Farming (SPNF)		
Mushroom cultivation	12	27
Bee keeping	6	12
Food Processing	1	9
Total	105	1238

# 4. Exposure visits

13 exposure visits were organised to Krishi Vigyan Kendra, different Agriculture departments, biocontrol and bio-fertilisers labs, horticulture department, sericulture department, medicinal plant



board etc. Farmers learnt different techniques of natural farming, bio-fertilisers and integrated pest management. Farmers also used tricho cards to save their crops from different harmful insects. Some of the farmers treated their manure and soil with azotobacter and rhizobium which resulted in good crop yield. 40 famers used pheromone traps which again saved their crops from harmful insects.





Duration	No of visits	Participants
April 2018- September 2018	6 visits to KVK, Agriculture	80
	University, Mushroom	
	Cultivation Farm	
October 2018- March 2019	5 visits to KVK, bio fertiliser lab,	37
	bio control lab, Shimla and	
	Rajasthan for natural farming.	
	Visit to Dehradun for traditional	
	seed conservation.	
April 2019- September 2019	1 visit to bio control lab	24
October 2019- March 2020	1 visit to soil testing lab	22
2018 to 2020 (Chamba)	1 visit to KYK	21
Total	14	184

# **Mushroom Cultivation**

1993 bags for mushroom cultivation were distributed among 972 women farmers. 8 women made considerable profit by selling mushrooms.

Duration	No of bags distributed	No of farmers
April 2018- September 2018	none	
October 2018- March 2019	558	222
April 2019- September 2019	none	
October 2019- March 2020	935	480
April 2020- September 2020	none	
October 2020- March 2021	500	270
Total	1993	972

## **Azolla cultivation**

33 azolla pits were constructed by the farmers and the cultivated azolla was used in 91 kanals of paddy fields. Increased farm production was seen by 27 farmers though they did not use any chemicals in their fields. Traditional rice seeds were cultivated in 31 kanal of land by 41 farmers.



Duration		No of pits constructed	Traditional rice seed cultivation/land	Azolla used in rice cultivation in Kanals
April 2018- Septer	mber 2018	none	12 farmers/7Kanals	28kanals
October 2018- Ma	rch 2019	17		
April 2019- Septer	mber 2019	9	12farmers/9kanals	32kanals
October 2019- March 2020	7			
April 2020- September 2020	none	17farmers/15Kanals	31Kanals	
October 2020- March 2021	none			
Total	33	41farmers/ 31Kanals	91 Kanals	

## **Food Festival**

Food festival was organised to educate consumers about the nutritional benefits of local agriculture and to re- integrate value back into the local food system. Nutritional value of traditional foods was explained to the people. 83 women from 3 blocks of Kangra district participated in this event and shared their memories about traditional food.

#### **Traditional Food Festival**

Duration	No of events	No of farmers
April 2019- September 2019	1	83





# 5. Environment Awareness Campaign-Van Mahotsav (Forest festivals)

In the last three years, Environment awareness Campaigns have been organised in 90 villages of 3 blocks of Kangra district. The main objective of these campaigns was to increase the green cover by involving the community and increasing their access to fodder, seasonal fruits and health benefits.

The campaign has reached directly and indirectly a population of 5000 women, men, young boys and girls including those in educational institutions.

1627 saplings of different fruit trees (mango, Citrus fruits (Nimbu, malta, orange, lemon) apricot, Guava, Amla, Papaya, moringa, Bill and plum) and green trees have been planted in nearly 50 villages. Nearly 1000 saplings have been planted in collaboration with Forest department. 2300 farmers received seeds of spinach, mustard, okra, peas, cauliflower, eggplant, beans, pumpkin, bitter gourd, cucumber, onion and grass seeds.



# Seeds and plant distribution

Duration	No of farmers who received seeds through Agriculture Department	No of trees distributed
April 2018- September 2018	298	460
October 2018- March 2019	436	380
April 2019- September 2019	552	423
October 2019- March 2020	632	156
April 2020- September 2020	none	
October 2020- March 2021	402	208
2018 to 2020 (Chamba)	80	
Total	2402	1627



# Numbers of farmers and land cover increased From Oct. 2018 to March 2019

Block	Farmers	Field Area (Kanals)
Dharamshala	15	10
Rait 1	6	5
Rait 2	5	7
Kangra	16	10
	42	32
Total	84	64





April 2019 to Sep. 2019

Block	Farmers	Field Area (Kanal)
Dharamshala	3	6
Rait 1	10	21
Rait 2	5	10
Kangra	6	9
Total	24	46

# October 2019 to March 2020

Block	Farmers	Field Area (Kanal)
Dharamshala	8	6.5
Rait 1	7	4.5
Rait 2	6	4
Kangra	7	3.5
Total	28	18.5

# April 2020 to September 2020

Block	Farmers	Field Area (Kanal)
Dharamshala	6	3
Rait 1	14	6
Rait 2	5	3
Kangra	13	2
Total	38	14

#### September 2020 to March 2021

Block	Farmers	Field Area (Kanal)
Dharamshala	5	7.5
Rait 1	9	6
Rait 2	19	16
Kangra	4	5
T0tal	37	34.5
<b>Grand Total</b>	211	177 kanals

8.95 hectare land has been converted into natural farming land during the last three years. 465 farmers are presently practicing natural farming which is 29% of the total no of farmers (1600) in 80 groups. In Chamba the total land converted into natural farming land is 60 hectare.

### **Main Outputs**

- Increased awareness among larger groups of farmers about the harmful impact of chemical-based agriculture.
- Farmers gained knowledge about improving the health of the soil and its fertility by using
  the multi cropping techniques and growing multi crops, such as spices, pulses, oil seeds
  etc. together. They also learnt how to make the irrigation methods more systematic and
  effective including proper management of cultivated land.
- Farmers acquired new skills regarding preparation of bio pesticides using locally available resources such cow milk, buttermilk, cow dung and urine, lime, ash and bitter leaves of different plants. This helps in reducing the dependency on the market for seeds, manure, pesticides and herbicides.
- Most of the farmers applied these techniques and skills in their fields and motivated other farmers also to grow organic produce for the green leaf project.
- Women have tried to break the patriarchal stereo type regarding farming as an occupation and they have recognised their worth as skilled farmers.

## **Concluding Remarks -**

Significant increase in interest regarding the practice of natural farming, growing and saving indigenous seeds and using bio fertilizers has been observed among farmers during the past three years.

A women group in Chuharu village of Kangra district set-up their own seed bank and shared the traditional seeds within the group. The group also focuses on multiplying the seeds and distributing them to other groups.

Kisan Mela was organised at Shahpur, inspired by the example of Kheti Virasat Mission organisation. One of the main objectives was to give farmers a platform share their experiences and organic seeds. This festival was attended by nearly 550 men and women farmerss

We have also introduced cluster meetings this during this period with the intention of holding community discussions with farmers on these issues. Overall, we have been speaking about the problems farmers face with market based agriculture and alienation from their work by corporate interference in a traditionally village-based system The millet cultivation program was born out of these meetings and 15% of farmers who attended these meetings signed up to plant millets this

season. Additionally, a farmers' group in Kangra created a seed bank last year and they are planning to conserve millet seeds within this bank as well.

In past three years, we have begun expanding our work to also reach men farmers in order to teach them about sustainable agriculture and sensitise them to the issues with an extraction based approach to farming. As a result 30 men farmers showed interest and started participating in regular meetings and workshops. They also helped in mobilisation during events and identification of farmers for upcoming workshops.