

SATVIK PROMOTING ECOLOGICAL FARMING

ANNUAL REPORT

2021 - 2022



243 – C, Krishna Park Society
Behind Nana Yax Temple
Madhapar, Bhuj
Kachchh, Gujarat
Phone: 02832-296025
Email: satvik.india@gmail.com
Website: www.satvik.org.in

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Promoting Ecological Farming



Annual Report

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ABOUT SATVIK...

Satvik: Promoting Ecological Farming (Satvik) has been promoted by a group of motivated organic farmers who came together to share their excitement and their practice at the turn of the century later formalized in 2007. The relatively low and erratic rainfall of arid regions, like Kachchh have challenged the indigenous populations to develop some of the finest crop and animal bio diversities - which have not only reduced risks to adequately feed their human and animals populations, but will in the future, prove to be critical in providing genetic material to face the challenges of climate change. Complex web of loops has been established that feed into one another wherein byproducts become primary inputs and the value chain takes place within the eco region. This has created efficiencies, economies and dependencies that promote strong and sustainable communities.

Satvik is reinvesting efforts in scientifically documenting their benefits; promoting their further development; reinstate confidence and dignity amongst its farmer practitioners - towards self-contained societies and economies that are self-dependent for their food security and only export their surplus.

OBJECTIVE

To Promote, conceptualize, encourage, aid, organize, assist, support, facilitate, and undertake various aspects of ecological farming techniques including distribution, promotion, marketing, and trade of such products, in it's all forms, for strengthening of livelihood of a marginal farming community and improvement in the health of the people irrespective of caste, class, gender, race and religion.

GOVERNING BOARD

Sr. No.	Name	Designation
01	Mr. Sukhpal Singh	President
02	Mr. Shailesh Vyas	Secretary
03	Dr. Yogendrasinh Jadeja	Member
04	Mr. Sandeep Virmani	Member
05	Mr. Magan Barariya	Member
06	Dr. Mrugesh Trivedi	Member
07	Dr. Sabyasachi Das	Member

REGISTRATION

Society Registration Act, 1860
Bombay Public Trusts Act, 1950
Section 12AA of Income Tax Act, 1961
Section 80G of Income Tax Act, 1961
Foreign Contribution Regulation Act, 1976
NGO Darpan Registration. 2016

STAFF PROFILE

Sr. No.	Name of the Staff	Designation	Education Qualification	Relevant Work Experience
01	Mr. Shailesh Vyas	Secretary and Trustee	B. Sc. (Agri.), PGD Ecology & Environment, MA (Economics)	26+ Years
02	Mr. Pravin Muchhadiya	Deputation	MA (Sociology)	20+ Years
03	Mr. Ramesh Makavana	Project Director	B. Sc. (Agriculture)	16+ Years
04	Mr. Suleman Khoja	Field Assistant	S. S. C.	13+ Years
05	Mr. Valimamad Theba	Field Assistant	8 th Pass	13+ Years
06	Ms. Tanvi Baxi	Accountant	B. Com.	13+ Years
07	Mr. Valji Ahir	Field Assistant	B. A.	04 Years
08	Mr. Ramesh Zapadiya	Field Assistant	12th Pass	04 Years

FROM THE SECRETARY DESK

I am hereby presenting you with the annual report for the financial year 2021-2022. This year Satvik completed development and uploaded 15 modules on the www.sasyaved.in. It was on 12th February when the Honorable Governor of Gujarat Shri Acharya Devvrat came to Ramkrishna Trust–Kukma and launched a www.sasyaved.in portal.

During the financial year, 2021-2022 Satvik has been able to distribute 34 MT of the traditional local seeds to the farmers and has given positive response to Anmol traditional seed bank. Satvik has developed a biofertilizer based on the macro found in the soil of the Kachchh district. Satvik conducted trials at farms of 21 farmers; they increased average production by 23%. Satvik is planning to develop mass production of biofertilizer at the Kachchh University campus. The Satvik has focused on experimenting with composting various materials like household-level kitchen waste and *Prosopis juliflora*. Satvik noted in both models the good quality compost produced and *Prosopis juliflora*-based compost will scale up the one cluster.

In transforming to non-chemical farming, the biggest challenges are pest and disease management for farmers. This year Satvik undertook the demonstration of the use of pheromone chemicals for the control of various agricultural pests, learning from the demonstration will be used to improve the design of the demonstration and trails in the upcoming year. Satvik worked on the head to raw method for plant breeding to improve the purity and production of locally suited Groundnut, Wheat, and pearl millet. A significant improvement in purity and production has been achieved.

Satvik has become a part of the Pan-India research on understating the Importance of mixed cropping systems in the context of climate variability and climate change. Satvik documented a mixed cropping system Rammol practiced by rain-fed farmers in the Kachchh district.

The annual report for the years 2021-2022 is not only a compilation of activities and processes but the pathways set by farmers. This is a snapshot of the journey with the community and efforts done by farmers on their farms. I would like to thank the team members for bringing the farmer's learning through this report in front of you. I would like to warmly thank all those who have supported us in this journey to become enjoyable and passionate with the learning and we look forward to their continued support in the future.

Shailesh Vyas
Secretary – Satvik Promoting Ecological Farming



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1. Traditional Seeds – Anmol

1.1 Geographical Area of Anmol Program

Anmol Programme of Satvik has spread over 8 clusters of Gujarat (6 clusters in Kachchh, 1 in Khambhaliya, Jamnagar and 1 in Bhogavo cluster of Jasdan Rajkot) covering 200 villages being implemented with 5 partners. The detail is given below in table no. 1:

Table No. 1: Anmol Project Clusters

Sr. No.	Name of Cluster	Taluka	District
1	Adesar Cluster FPO	Rapar	Kachchh
2	Kothara Cluster – KFFDT	Abdasa	Kachchh
3	Lodai Cluster – Satvik	Bhuj	Kachchh
4	Vang Cluster – Satvik	Nakhtrana	Kachchh
5	Lakhapat Cluster – Satvik	Lakhapat	Kachchh
6	Nani Kakhar Cluster – KDDDT	Mandvi and Mundra	Kachchh
7	Khambhadiya Cluster – ACT	Lalpur and Khambhaliya	Devbhumi Dwarka
8	Bhogavo Cluster – FPO	Jasdan	Rajkot

1.2 Traditional Seed Production and Procurement

Traditional seed production in Kharif 2021 was planned with partner organizations and strategy for distribution and promotion was also designed collectively to reach maximum farmers in the region. Seed distribution centers were decorated with banners and posters. Packed seed bags were delivered at all centers before the season. All centers were advised to maintain proper seed registers regarding inward and sell. Seed price was fixed by the farmer committee. Total 35.9 MT seeds were procured from 53 farmers at the end of kharif season 2021 which can be stored after cleaning and grading for further distribution for production during kharif 2022. The first stage cleaning and grading was done during the procurement process to avoid the processing cost; procured seeds were stored at Nani Khakhar Storage place of KFFFD. The detail for procurement is given below in table no. 1.2:

Table No. 2: Detail of Seed Procurement for Kharif 2022

Crop	Qty. Procured (Kg)	No. of Farmers
Cluster Bean	10452	08
Sorghum	24,512	40
Green Gram	470	04
Pearl Millet	475	01
Total	35,909	53



1.3 Traditional Seed Distribution

After cleaning and grading, seeds were packed in plastic two layers bags made prepared for the seed packing. An Anmol program bag prepared in two varying sizes – 05 Kg and 20 Kg bag for Cluster Bean, 20 Kg size bag for sorghum and 01 Kg bag for Green Gram and Pearl millet. Labels containing information about program and crop wise important characters of seed were stacked on the bag.

1.4 Anmol Seed Distribution and Awareness with Beej Rath

Seed distribution centers were decorated with banners and posters. Packed seed bags were delivered at all centers before the season. All centers were advised to maintain proper seed registers regarding inward and sell. Seed price was fixed by the farmer committee. Total 34 MT seeds of Cluster bean, Sorghum, Green Gram, Moth Bean, Bajra and Sesame were distributed amongst 3000 farmers during Kharif 2021.



2. Local Soil Micro Based Bio Fertilizer Development and Scale up

2.1 Trail and Infrastructure development

Satvik, in collaboration with Kutch University and Somvanshi Research Foundation, Lucknow entered into an MOU to understand the important role of domestic soil microbes to establish sustainable agricultural practices especially in dry land and further to identify and mass multiplication of agriculturally significant microbes at cluster level through Bio-resource Management Center (BMC). Following activities were carried out:

- Up gradation of existing lab set up at DEES-KU to carry out research work as per objectives of MoU.
- Isolation, identification and characterization of Plant Growth Promoting Microorganism (PGPM) from different agricultural soils of the district.
- Pure culture from isolated domestic as well as nationally recognized PGPM of Kachchh region prepared.
- Efficacy test to identify the potential and safe PGPM.
- Production of 50 packs of biofertilizers (300 ml each with 10^9 colony counts of potential PGPM) containing 3 different species of efficient PGPM.
- Field test of mass multiplied PGPM bio fertilizer on agricultural crops in Kachchh district.

Based on the data collected from 13 irrigated farmers and 8 rainfed farmers; production data of 9 farmers following results were more than 90% farmers have reported higher growth and yield of their treated crops and 36% farmers reported improvement in production observed compared to control. (Min 7.7% to Max 34.3%). The Local soil micro based fertilizers perform in Sesame and Cluster bean crop growth remaining lush green for a long duration. The crop of the Castor – height of treated plant is less but bearing of capsule pod is more. In performance in vegetable/ fruit crops Brinjal, Tomato, Kamlam and Guava observed high vegetative growth with more branching, more green and bearing more flowers and fruits.

2.2 Mass Production of Bio Fertilizers

Local soil micro based results in the field are considerably good. With 13 farmers, Satvik organized a workshop with a local partner organization at Kutch University. Satvik in partnership with Kutch University has organized a workshop on how to create a pilot on Bio-fertilizers in which 5 organizations working in the agriculture livelihood system have participated and have agreed to work on bio fertilizers in their working area. Satvik and Kutch University have an anchoring role for the production of the bio fertilizers. Every partner has taken responsibility for developing a production center at Kutch University. This program hasn't been funded. In this situation every partner has to contribute to this project.



3. Research Trails and Demonstrations

3.1 Kitchen waste Composting pilot trail

Satvik had to become a partner of the Homes in city program. The Home in city program is currently working in the Bhuj urban areas. The waste management program's objective was to develop a decentralized waste management model in Bhuj city. In the initiation phase, Satvik mobilized a Jaynagar and Shivkrupanagar Mahia Mandal for waste collection. Both Society and women's groups supported the started waste collection. The Satvik team has managed the waste collection from the two societies. The Satvik collected an average of 93 kg of waste per day from the 63 households. Satvik discussed with farmers the making of compost from Kitchen waste. The farmers agreed to give their piece of land for making compost from the kitchen waste. Satvik developed a compost bed on the farmer's land. The composting process is still ongoing on the field.

3.2 Prosopis Juliflora Composting pilot trail

Satvik is working on developing compost making from the prosopis juliflora. Satvik has taken trails of the Surendrashih Farms. The farmers make compost from Prosopis juliflora and use it in their

farms, the results come very positive. The experiment with the Surendrashih gives us hope for increasing soil fertility through this compost.

3.3 Research on Seed Storage

To check the effectiveness of traditional storage systems “Kothars”, set and plastic containers purchased in previous year to store Green Gram and Moth bean seeds as both the seeds are highly sensitive to storage pests during high temperature. Loggers were inserted in all containers to measure daily temperature. Positive results were found in both the crops stored in traditional earthen storage containers – “Kothars”.

3.4 Bio Pesticides & Botanical & Pheromone Traps

Satvik is working with Maganbhai at Ningal village of Anjar Block to undertake an organic input demo to Kharif Groundnut mainly to address the pest and disease problem which is causing a heavy reduction in the production in organic farming and to prepare mitigation and adaptation plans for the same. We have identified the required bio fertilizers, bio pesticides, and pheromone lures for trail in field and observing results.



3.5 Research on Seed – Groundnut, Wheat, Pearl millet

Satvik is working on developing a farm based seed experiment with Maganbhai's farm at Ningal to supervise the harvesting of various types of wheat shown in Rabi to undertake a comparative production trial. Satvik is collecting production-related data on various types of wheat plots at Maganbhai's farm at Ningal.



4. Program Development & Technical Support

Satvik is anchoring in the role of the program development of working in agricultural livelihood, Organic farming, sustainable agriculture and capacity building in Gujarat. In Kutch Satvik is implementing a seed conservation and organic farming programme with different grassroots partners. This year is focusing on scaling up with partners outside Kutch; therefore Satvik is supporting the organization for agriculture program development, execution and monitoring. Satvik provides technical support in the form of training and exposures for partner's organizations on topics like seed biodiversity, seed security, Rain-fed farming and organic farming. Currently, Satvik is associated with Center For Environment and Social Concerns - CESC, Arid Community and Technologies - ACT, Kutch Food fodder and Forest Development Trust – KFFDT and Shri Ram Krishna Trust - SRKT for Program development and Technical Support aspects.



5. Marketing & Value Chain

5.1 Kala Cotton

Satvik anchors a process of the Kala cotton value chain, regularly meeting and follow-up with Kala cotton partners. Satvik was working on the quality of Kala cotton samples collected from Adesar and discussed the issues emerging from processing which is largely due to poor quality of procured material. Made analysis of Thaliya percentage of 18 Kala samples collected from 3 villages of Adesar cluster from last season Kala cotton crop. Jointly organized visit to Ahmedabad, Dholka, Limbdi and Viramgam to explore the power loom weaving for the Kala cotton sourced by Nanlalbhai. Later yarn samples have been sent to Ahmedabad to find an appropriate power loom for improvement of quality of the yarn.



5.2 Urban Consumer Awareness & Market Linkages

Satvik is initiating a process with action for developing an organic produce market & as well as awareness on the organic produce in Bhuj. Satvik is associated with the HIC program and started to work on consumer awareness, access to organic market models for Bhuj city. Satvik worked on the home delivery model in the urban area, during the short period of months Satvik has reached out to 35 consumers with a 1.5 lakh turnover of selling organic produce.

6. Capacity building

6.1 www.sasyaved.in

Satvik has developed high quality educational materials on sustainable farming. Materials are available in pdf format and video format as well as in hard copy. Satvik has developed a dedicated website www.sasyaved.in for the public use. The Sasyaved portal was launched by Shri Acharya Devvrat - Honorable Governor of Gujarat at Kukma for the farming community as well as practitioners working for non-chemical farming. Below listed educational materials are available on this website.

Module 01 - Su.stainable Farming: A Concept of Nature Management

Module 02 - Crop Nutrients, Deficiency Symptoms and Law of Minimum

- Module 03 - Sampling Method of Soil and Water
- Module 04 - Soil Assessment: Understanding the Soil Testing Report
- Module 05 - Understanding of Water Testing Report
- Module 06 - Understanding Soil and Water Salinity
- Module 07 - Soil pH and its Impact on Agriculture
- Module 08 - Important Aspects of Compost
- Module 09 - Making of Compost
- Module 10 - Understanding Types of Seeds
- Module 11 - Appropriate Seeds for Sustainable Agriculture and Breeding Aspects
- Module 12 - Soil and Water Sampling Procedure
- Module 13 - Identification of Disease and Pests
- Module 14 - Prevention methods for disease and pests
- Module 15 - Disease and Pest Control by Using Natural Substances



6.2 Farmers & Students Training

This B Voc internship program on Organic farming is hosted by SRKT on behalf of Team Kachchh which includes Satvik, Nanlalbhai, and other organic farmers and trusts. Satvik participated in the opening and closing ceremony of the 1 Month internship program of 1st year B VoC Organic Farming course run by Lokhbharti Sanosara. Satvik is engaged with SRKT for developing syllables for the B VoC students for organic farming. Satvik conducted training on the history of agricultural development in the context of the current agricultural problems to link the changes required to make it sustainable. Satvik organized an exposure of these students on Maganbhai Ahir's farm and rainfed farmers of the Lodai cluster to help them understand organic farming better along with work on seeds.



7. Networking

Satvik is part or member of the various networks working on sustainable agriculture in India. Satvik shared their experience on various forums and network and various organizations in this year.

Table 3 - Summary of Experience Sharing

Summary of Experience Sharing						
Sr. No.	With Whom	Date	Mode-Offline/Online	Presentation/Visit/Exposure	Subject	Level
1	Living farms	09.11.2021	Offline	Presentation	Anmol-Promotion of the Traditional Seed	National
2	Revitalizing Rainfed Agriculture Network (RRAN)	18.11.2021	Online	Presentation	Anmol-Promotion of the Traditional Seed	National
3	Samerth Charitable Trust – Ahmedabad	31.12.2021	Offline	Exposure	Sustainable Agriculture	State
4	Working Group for Women and Land Ownership (WGWLO)	28.12.2021	Offline	Presentation	Anmol-Promotion of the Traditional Seed	National
5	Vaagdhara- Banswara- Rajsthan	06.01.2022	Offline	Visit	Sustainable Agriculture	State
6	Centre for Environment and Social Concerns (CESC)	03.03.2022	Offline	Exposure	Sustainable Agriculture	State
7	Krishi Vigyan Kendra – Kukma	01.03.2022	Offline	Visit	Sustainable Agriculture	District

8. Study and Documentation

8.1 Indigenous multi-cropping System – Rammol

Indigenous mixed cropping systems in rainfed areas have evolved over the years. In the arid agro-ecological conditions of the Kachchh, these cropping systems are climate resilience, diverse, covering soil for a longer duration, and providing nutrition to soil livestock and human beings. Watershed Support Services and Activities Network (WASSAN), Indira Gandhi Institute of development resource and transforming Indians green revolution by research and Empower collaboratively undertaken this study to document Indigenous mixed cropping systems of Kachchh region. The Rammol cultivation still enjoyed a prime position and rainfed farming in the Kachchh district. The Rammol – mix cropping system caters to the needs of the food and fodder of the large human and livestock populations. The Rainfed mix crop produced participated globally traded platforms and even after so many changes core of the Rammol cultivation is still practiced vibrantly in the Kachchh district of Gujarat.



8.2 Study on explore ways to enhance the fodder security at Nearby Bhuj

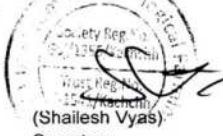

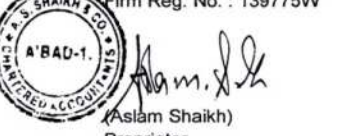
Satvik has done a study on exploring ways to enhance fodder security at nearby Bhuj city. The Study was done associated with the HIC program. Satvik was meeting with Pastoral families and breeders association for data collection and discussed the potential of fodder security options at nearby Bhuj City. Satvik did an assessment of the green fodder requirement of Bhuj City and production carried out by farmers of the neighborhood villages of Bhuj. Satvik completed a study and submitted a final report to the HIC program.



9. Finance Report


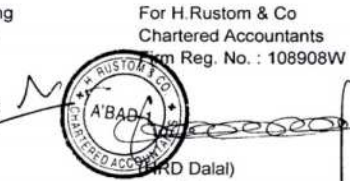
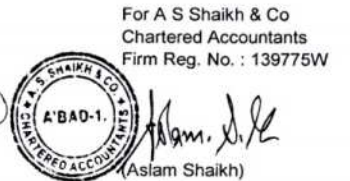
9.1 Balance Sheet

Satvik : Promoting Ecological Farming						
Public Charitable Trust Reg. No. F-1541/Kachchh & Society Reg. No. Guj/1355/Kachchh						
Balance Sheet as on 31st March 2022						
Particular	Annexure	As on 31-03-2022- FC	As on 31-03-2022- NFC	Total 2021-2022	As on 31-03-2021- FC	As on 31-03-2021- NFC
Funds & Liabilities						
Trust and Corpus Funds	A		18,03,882	18,03,882		17,84,400
Other Funds	B	13,86,945	1,96,032	15,82,977	16,37,315	1,27,574
Unutilized Grant	C	80,655		80,655	5,84,481	
Total		14,67,600	19,99,914	34,67,514	22,21,796	19,11,974
Assets & Properties						
Net Block of Fixed Assets	D		14,58,684	14,58,684		14,66,368
Investments	E	12,87,710	3,56,681	16,44,391	11,59,147	3,38,262
Net Current Assets	F	1,79,890	1,84,549	3,64,439	10,62,649	1,07,344
Total		14,67,600	19,99,914	34,67,514	22,21,796	19,11,974
Accounting Policies and Notes forming part of Accounts	O					

For Satvik: Promoting Ecological Farming	For H.Rustom & Co Chartered Accountants Firm Reg. No. : 108908W	For A S Shaikh & Co Chartered Accountants Firm Reg. No. : 139775W
 (Shailesh Vyas) Secretary	 (H.R. Dalal) Proprietor Membership No. 31368 UDIN: 22031368AQVEOF6780 Place: Bhuj Date: 03.09.2022.	 (Aslam Shaikh) Proprietor Membership No. 162345 UDIN: 22162345AQVDAM600 Place: Ahmedabad Date: 03.09.2022

9.2 Income and Expenditure

Satvik : Promoting Ecological Farming						
Public Charitable Trust Reg. No. F-1541/Kachchh & Society Reg. No. Guj/1355/Kachchh						
Income & Expenditure Account for the Year Ending on 31.03.2022						
Particulars	Annexure	31-03-2022 - FC	31-03-2022 - NFC	Total 2021- 22	31-03-2021 - FC	31-03-2021 - NFC
Income						
Grants & Donations	G	48,79,947		48,79,947	75,05,135	
Other Income	H		68,955	68,955		2,59,972
Interest Income	I	1,44,130	26,127	1,70,257	2,62,490	26,428
Total		50,24,077	95,082	51,19,159	77,67,625	2,86,400
Expenditure						
Expenditure on objects of the trust	J	43,38,134	-	43,38,134	65,41,513	9,100
Contribution to Charity Commissioner	K	10,978		10,978	11,274	
Administration Cost	L	3,65,335	165	3,65,500	3,39,109	2,661
Remuneration to Trustee	M	4,80,000	-	4,80,000	5,40,000	2,40,000
Statutory Audit Fees	N	80,000		80,000	75,000	
Depreciation	D		7,684	7,684		9,475
Transfer to Corpus Fund	A		18,775	18,775		22,564
Excess of Income over Expenditure	B	(2,50,370)	68,458	(1,81,912)	2,60,729	2,600
Total		50,24,077	95,082	51,19,159	77,67,625	2,86,400
Accounting Policies and Notes forming part of Accounts	O					

For Satvik: Promoting Ecological Farming	For H.Rustom & Co Chartered Accountants Firm Reg. No. : 108908W	For A S Shaikh & Co Chartered Accountants Firm Reg. No. : 139775W
 (Shailesh Vyas) Secretary	 (H.R. Dalal) Proprietor Membership No. 31368 UDIN: 22031368AQVEOF6780 Place: Bhuj Date: 03.09.2022.	 (Aslam Shaikh) Proprietor Membership No. 162345 UDIN: 22162345AQVDAM600 Place: Ahmedabad Date: 03.09.2022



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