

Annual Report

2020-21



Satvik: Promoting Ecological Farming

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

SATVIK 
Promoting Ecological Farming



Annual Report 2020-21



Satvik: Promoting Ecological Farming

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



ABOUT SATVIK...

Satvik: Promoting Ecological Farming (Satvik) has been promoted by group of motivated organic farmers who came together 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 byproduct becoming 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 a 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, undertake various aspects of ecological farming techniques including distribution, promotion, marketing and trade of such produce, in its all forms, for strengthening of livelihood of 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 12 AA 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) | 25+ Years |
| 02 | Mr. Ramesh Makavana | Project Director | B. Sc. (Agriculture) | 15+ Years |
| 03 | Mr. Suleman Khoja | Field Assistant | S. S. C. | 12+ Years |
| 04 | Mr. Valimamad Theba | Field Assistant | 8 th Pass | 12+ Years |
| 05 | Ms. Tanvi Baxi | Accountant | B. Com. | 12+ Years |
| 06 | Mr. Valji Ahir | Field Assistant | B. A. | 03 Years |
| 07 | Mr. Ramesh Zapadiya | Field Assistant | 12th Pass | 03 Years |

CONTENTS

| | | |
|-----------|---|-----------|
| 1. | Conservation of Traditional Seeds: Anmol | 08 |
| 1.1 | Development of Clusters | 08 |
| 1.2 | Traditional Seed Production and Procurement | 08 |
| 1.2.1 | Summer – 2020 | 08 |
| 1.2.2 | Kharif – 2020 | 08 |
| 1.3 | Seed promotional and Farmers Awareness Activities | 09 |
| 1.3.1 | Farmer Awareness through Social Media | 09 |
| 1.4 | Traditional Seed Distribution | 09 |
| 1.4.1 | Cleaning, Packing and Storage | 09 |
| 1.4.2 | Seed Distribution | 09 |
| 1.5 | Seed Research and Demonstration | 10 |
| 1.5.1 | Traditional Seed Demonstration Plots | 10 |
| 1.5.2 | Traditional Seed Production under Control Condition | 10 |
| 1.5.3 | Varietal Demonstrations | 10 |
| 1.5.4 | Traditional Storage System | 10 |
| 1.5.5 | Bioremediation of Herbicide affected Soil | 10 |
| 1.5.6 | Efficacy of Bio-fertilizers | 11 |
| 1.5.7 | Microbiology Laboratory | 11 |
| 1.5.8 | Soil Health Improvement to Increase Production & Seed Quality | 11 |
| 1.5.9 | Research Paper and Publication | 11 |
| 1.6 | Geographical Expansion of Anmol Project | 11 |
| 2. | Strengthening Sustainable Agriculture | 12 |
| 2.1 | Capacity Building | 12 |
| 2.1.1 | Trainings | 12 |
| 2.1.2 | Educational Material and Documentation | 12 |
| 3. | Networking and Support | 12 |
| 3.1 | Working with Kutch Nav Nirman Abhiyan | 12 |
| 3.2 | Participation in Workshops/Seminars/Convention | 12 |
| 3.3 | COVID 19 Relief Work | 13 |
| 4. | Financial Report | 13 |
| 4.1 | Balance Sheet | 13 |
| 4.2 | Income and Expenditure | 14 |



1. Conservation of Traditional Seeds: Anmol

1.1 Development of Clusters

Satvik had worked with following clusters for implementation of Anmol project; within Kachchh and outside the district. The detail is given bellow in table no. 1.1.

Table No. 1.1: Clusters

| Sr. No. | Name of Cluster | Taluka | District |
|---------|---------------------|------------------------|------------------------------|
| 01 | Adesar Cluster | Rapar | Kachchh |
| 02 | Bhimasar Cluster | Anjar | Kachchh |
| 03 | Kothara Cluster | Abdasa | Kachchh |
| 04 | Lodai Cluster | Bhuj | Kachchh |
| 05 | Vang Cluster | Nakhtrana | Kachchh |
| 06 | Lakhapat Cluster | Lakhapat | Kachchh |
| 07 | Nani Kakhar Cluster | Mandvi and Mundra | Kachchh |
| 08 | Khambhadiya Cluster | Lalpur and Khambhaliya | Jamnagar and Devbhumi Dwarka |
| 09 | Radhanpur Cluster | Radhanpur | Patan |
| 10 | Bhogavo Cluster | Jasdan | Rajkot |

1.2 Traditional Seed Production and Procurement

1.2.1 Summer – 2020

As Kharif 2019 was not so good for seed production, we could not procure the targeted seed quantity from the project area. Hence, to make up the need of Kharif 2020, farmers from coastal belt of Mahuva, growing desi Gundari Sorghum were visited and 9200 kg Sorghum seeds were procured from them. These seeds were cleaned and packed at Sukhpar processing plant.


1.2.2 Kharif – 2020

Traditional seed production in Kharif 2020 was planned before onset of monsoon and strategy for distribution and promotion was also designed to reach maximum farmers in the region. Seeds procured during khariff 2019 were packed and stored at Sukhpar processing plant for distribution in khariff 2020.

Assigning specific farmer for seed production incurs more cost for seeds. So that, plots were selected based on crop health, uniformity of plants and farmer's interest among seed grower farmers. Seed grower farmers were those who had purchased traditional seed from program's seed distribution center. Kharif 2020 had good rain, so it was assumed that sufficient quantity seed will produced. 128 plots of 8 crops were selected based on crop health and uniformity as traditional seed production plots. Out of which only 57 plots were remain selected at crop maturity stage as crop damaged due to excessive rainfall. Selected plots monitored regularly by field staff and Satvik team. Further plots were rejected by seed approval and validation committee during committee visit due to inferior quality seeds. Total 49MT seeds were procured from 72 farmers at the end of khariff season 2020, which were stored after cleaning and grading for further distribution for production during khariff 2021. The detail for procurement is given bellow in table no. 1.2.

Table No. 1.2: Detail of Seed Procurement

| Crop | Qty. Procured (Kg) | No. of Farmers |
|--------------|--------------------|----------------|
| Cluster Bean | 7844 | 07 |
| Sorghum | 37359 | 42 |
| Green Gram | 796 | 07 |
| Pearl Millet | 1050 | 05 |
| Moth Bean | 600 | 02 |
| Black Gram | 1292 | 05 |
| Sesame | 338 | 03 |
| Castor | 156 | 01 |
| Total | 49435 | 72 |



1.3 Seed promotional and Farmers Awareness Activities

1.3.1 Farmer Awareness through Social Media

Owing to country wide "lockdown" imposed by government due to COVID 19 Pandemic in the beginning of the year, stalled field activities like exposure visits, trainings, meetings, melas, kisan sammelan etc. In order to interact with farmers through digital network, database software developed last year by Satvik was used this year, for WhatsApp and SMS services. Area-wise WhatsApp broadcast groups were formed to disseminate information to farmers through bulk SMS service. Information in local language on weather updates; pest diseases and its solutions; availability of traditional seeds; etc and photos, posters, brochures were sent through whatsapp and SMS.

1.4 Traditional Seed Distribution

1.4.1 Cleaning, Packing and Storage

After cleaning and grading, seeds were packed in cloth bags made from kala cotton lint in two varying sizes – 8kg bag for Cluster Bean and 4 kg bag for Green Gram. Labels containing information about program and crop wise important characters of seed was stuck on the bag.



1.4.2 Seed Distribution

Seed distribution centers were decorated with banners and posters. Packed seed bags were delivered at all centers before season. All centers were advised to maintain proper seed registers regarding inward and outward. Main objective of the campaign was to reach out more number of farmers to distribute traditional seeds. Total 20,003 kg seeds were distributed to 1275 farmers. The details are given below in table no. 1.4.

Table No. 1.4: Seed Distribution in Kharif 2020

| Crop | Distribution in Kharif 2020 | |
|--------------|-----------------------------|---------------|
| | Qty. (Kg) | Farmers (No.) |
| Cluster Bean | 4460 | 475 |
| Sorghum | 15580 | 460 |
| Green Gram | 80 | 33 |
| Pearl Millet | 437 | 217 |
| Moth Bean | 13 | 01 |
| Black gram | 258 | 35 |
| Kalthi | 23 | 10 |
| Sesame | 42 | 23 |
| Castor | 110 | 21 |
| Total | 21003 | 1275 |



1.5 Seed Research and Demonstration

1.5.1 Traditional Seed Demonstration Plots

In order to demonstrate performance of traditional seeds in rain fed condition, experiment trials for selected varieties of Bajra, Sorghum, Cluster Bean, Green Gram and Sesame seeds were planned at Jasdand and Khambhaliya Clusters. All crops performed well.

1.5.2 Traditional Seed Production under Control Condition

Traditional seed production in kharif season has always on risk. To reduce risk of seed loss and produce genetically pure seeds; seed production under control condition was planned. Low cost net house was constructed at Maganbhai's farm at Ningad Village. One selected variety for each crop Bajra, Jowar, Moong, Moth, Guwar, Til and Castor was grown under this net house in summer season. It was observed that the high heat inside the net house associated with weed infestation crops were not performed well.

1.5.3 Varietal Demonstrations

Varietal demonstrations of locally suited varieties developed by farmers for Wheat (GW496, M-1, M-6, M-8, Banshi, Black) crop in rabi and Groundnut (African Bold Groundnut, African Small Groundnut, Abdasa Rainfed Groundnut, Nakhtrana W-144) crop in summer were planned at Ningal village. The objective was to check locally suitable variety for organic farming. Well performing varieties have been selected for next season experiments.

1.5.4 Traditional Storage System

Seed storage system is very crucial for retaining quality of seeds. Traditionally, farmers were storing seeds in earthen containers called "Kothar". While in present time they are storing in plastic vessels or bags. It was observed that seeds were not safe in these modern containers. So Satvik has initiated studying seed storage mechanism used in past. Different shapes and size of traditional seed storage containers "Kothars" have been procured from farmers. 2 sets of storage system- 1 set containing 3 Kothars in different size and shape and 1 plastic container set purchased to store Green Gram and Mothbean seeds as both the seeds are highly sensitive to storage pests during high temperature. Temperature loggers were inserted in all containers to measure daily temperature. This study is ongoing at Satvik office.



1.5.5 Bioremediation of Herbicide affected Soil

Soil samples were collected from farms exposed by agrochemicals to check quantum of residues of agrochemicals presence in soil. Samples from organic farm as well as fellow land were also collected. Samples were analyzed in Eurofin laboratory. Residues of herbicide and fungicide detected in all samples collected from conventional farms. No residues detected in soil samples collected from organic farm and fellow land.

The Further to study the efficacy of commercially available microbes for degradation of glyphosate into the soil, a trial was established and samples from root zones were analysed. It is observed that in the trial plot, bacillus subtilis has degraded glyphosate 87% more than the controlled plot.

1.5.6 Efficacy of Bio-fertilizers

Bio-fertilizers are useful however it is difficult to assess which bio-fertilizer will work in Kachchh soil having low carbon; high EC, PH and deficient in micro nutrients. So, in order to check the efficacy of various bio fertilizers deep rooted crop castor and shallow rooted crop wheat were selected for trials. It is observed that two biofertilizers Azospirillum and Bacillus subtilis, were most prominent. Both have shown considerable yield hike in wheat. The results in castor crops are under scrutiny.

1.5.7 Microbiology Laboratory

Tials of commercially available biofertilisers has indicated that these microbes are not promising in Kutch soil condition, and therefore, there is a need to develop bio fertilisers based on local microbes. For this purpose, Satvik has collaborated with Earth and Science Department of Krantiguru Shyamji Krishna Verma University (KSKV) and Somvanshi Research Foundation. Under this collaboration Satvik has supported to upgrade their laboratory and to carry forward the research work.



1.5.8 Soil Health Improvement to Increase Production & Seed Quality

Seed production and seed's quality depends on soil health. It is observed that soils of Kachchh are less fertile. To increase seed production and improve quality of seeds; it was decided to provide support for deep ploughing in 2 acres and supply of enriched compost to more consistent farmers engaged in seed production. Total 68 farmers were supported during the reporting period.

1.5.9 Research Paper and Publication

Research paper on bio-fertilizers in Wheat has been accepted for publication in International Journal of Agriculture, Environment and Biotechnology, December 2020 as "Field efficacy of bio-fertilizers and bio-inputs to improve Wheat (*Triticumaestivum*) production under alkaline soil in Kachchh District of Gujarat" by M. H. Trivedi , M. Ahir , S. Vyas , H. B. Singh.

1.6 Geographical Expansion of Anmol Project

Expansion of Anmol Programme beyond Kachchh district was one of the objective during the project period, Apart from 7 clusters in Kachchh, the programme has it's foothold in other 3 clusters in Gujarat – a) Radhanpur and Santalpur block of Patan district; b) Khambhalia Block of Devbhumi Dwarka and Lalpur of Jamnagar District; and c) Jasdan and Vinchhiya block of Rajkot District.

This year the efforts were put to partner with Working Group of Women's and Land Ownership (WGWLO) to support the network to initiate traditional seed production programme in their working area. As part of providing technical guidance to their team, Satvik had provided online and offline trainings to their staff to orient traditional seed production systems in Rain fed Condition.

2. Strengthening Sustainable Agriculture

2.1 Capacity Building

2.1.1 Trainings

Satvik and Shree Ram Krishna Trust are jointly organizing short term training module on organic farming for the farmers who want to get introduced to organic farming before its adoption, 3 days' trainings were organized for such farmers at Chintan Farm. In this training use of audio visual was emphasized. Archive was surfed and relevant video clips and presentation was shortlisted. The detail is given below in table no. 2.1.

Table No. 2.1: Training detail

| No. of Trainings | Days of Training | Participants |
|------------------|------------------|--------------|
| 02 | 03 | 112 |

Satvik is a service provider to the Department of Agriculture for implementation of organic farming policy 2015 and Paramparagat Krishi Vikas Yojana (PKVY) in Kachchh district. Satvik is imparting training to the farmers and officers on organic farming under this scheme. Training detail is as below in table no. 2.2:

Table No. 2.2: Trainings for farmers and officers

| No. of Trainings | Category | Days of Training | Participants |
|------------------|----------|------------------|--------------|
| 02 | Farmers | 01 | 70 |
| 01 | Officers | 01 | 25 |
| 03 | | | 95 |

2.1.2 Educational Material and Documentation

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 dedicated website www.sasyaved.in for the public use. All educational materials are available on this website at free of cost.

3. Networking and Support

3.1 Working with Kutch Nav Nirman Abhiyan

Satvik is a member of Kutch Nav Nirman Abhiyan. As a member Sh. Shailesh Vyas has participated in AGM and Governing Board Meetings during the year.

3.2 Participation in Workshops/Seminars/Convention

Webinar series was organized by RRA network on seed. Satvik had participated and presented their work on traditional seeds.

5 days online workshop was organized by seed saver group and Sahaja Samruddha. Satvik had participated and presented their work on traditional seeds.

National Coalition for Natural Farming had organized online webinar series on natural farming. Satvik



had presented their work on natural farming and importance of traditional seeds in natural farming.

3 days online workshop was organized on desi cotton by Sahaja Samruddha and RRA network. Satvik had shared their working experience on desi cotton of Kachchh.

3.3 COVID 19 Relief Work

To promote nutritional value of Bajra in diet; 5MT Bajra from rainfed farmers of Kachchh was procured and distributed amongst 300 vulnerable families across the Kachchh during COVID 19 pandemic.

4. Financial Reports

4.1 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 2021

| Particular | Annexure | As on | As on | Total 2020-2021 | As on | As on |
|--------------------------------|----------|------------------|------------------|------------------|------------------|------------------|
| | | 31-03-2021-FC | 31-03-2021-NFC | | 31-03-2020-FC | 31-03-2020-NFC |
| Funds & Liabilities | | | | | | |
| Trust and Corpus Funds | A | | 1,784,400 | 1,784,400 | | 1,759,311 |
| Other Funds | B | 1,637,315 | 127,574 | 1,764,889 | 1,376,586 | 124,974 |
| Unutilized Grant | C | 584,481 | | 584,481 | 3,066,406 | |
| Total | | 2,221,796 | 1,911,974 | 4,133,770 | 4,442,992 | 1,884,285 |
| Assets & Properties | | | | | | |
| Net Block of Fixed Assets | D | | 1,466,368 | 1,466,368 | | 1,475,843 |
| Investments | E | 1,159,147 | 338,262 | 1,497,409 | 948,601 | 316,037 |
| Net Current Assets | F | 1,062,649 | 107,344 | 1,169,993 | 3,494,391 | 92,405 |
| Total | | 2,221,796 | 1,911,974 | 4,133,770 | 4,442,992 | 1,884,285 |
| Notes forming part of Accounts | O | | | | | |

For Satvik: Promoting Ecological Farming

 (Shriyesh Vyas)
 Secretary

Place: Bhuj

Date: 25 SEP 2021

For H.Rustom & Co
 Chartered Accountants
 Firm Reg. No. : 108908W


 (HRD Dalal)
 Proprietor

Membership No. 31368
 UDIN:21031368AAABR5086
 Place : Ahmedabad
 Date:

27 SEP 2021

For A S Shaikh & Co
 Chartered Accountants
 Firm Reg. No. : 139775W


 (Aslam Shaikh)
 Proprietor

Membership No. 162345
 UDIN:21162345AAAAFC9516
 Place : Ahmedabad
 Date:

27 SEP 2021

4.2 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 31.03.2021

| Particulars | Annexure | 31-03-2021 - FC | 31-03-2021 - NFC | Total 2021 | 31-03-2020 - FC | 31-03-2020 - NFC |
|--------------------------------------|----------|--------------------|---------------------|------------------|--------------------|---------------------|
| Income | | | | | | |
| Grants & Donations | G | 7,505,135 | | 7,505,135 | 6,814,773 | |
| Other Income | H | | 259,972 | 259,972 | | 46,750 |
| Interest Income | I | 262,490 | 26,428 | 288,918 | 490,352 | 26,582 |
| Total | | 7,767,625 | 286,400 | 8,054,025 | 7,305,125 | 73,332 |
| Expenditure | | | | | | |
| Expenditure on objects of the trust | J | 6,541,513 | 9,100 | 6,550,613 | 5,455,072 | 1,680 |
| Contribution to Charity Commissioner | K | 11,274 | | 11,274 | 9,294 | |
| Establishment Cost | L | 339,109 | 2,681 | 341,770 | 929,613 | 2,089 |
| Remuneration to Trustee | M | 540,000 | 240,000 | 780,000 | 380,000 | |
| Statutory Audit Fees | N | 75,000 | | 75,000 | 63,500 | |
| Depreciation | D | | 9,475 | 9,475 | | 9,705 |
| Transfer to Corpus Fund | A | | 22,564 | 22,564 | | 20,830 |
| Excess of Income over Expenditure | B | 260,729 | 2,600 | 263,329 | 487,646 | 39,048 |
| Total | | 7,767,625 | 286,400 | 8,054,025 | 7,305,125 | 73,332 |
| Notes Forming Part of Accounts | O | | | | | |

For Satvik: Promoting Ecological Farming
Secretary
(Shailesh Vyas)
Secretary

Place: Bhuj

Date: 25 SEP 2021

For H.Rustom & Co
Chartered Accountants
Firm Reg. No. : 108908W

(HRD Dalal)
Proprietor
Membership No. 31368
UDIN:21031368AAAABR5086
Place : Ahmedabad
Date: 27 SEP 2021

For A S Shaikh & Co
Chartered Accountants
Firm Reg. No. : 139775W

(Aslam Shaikh)
Proprietor
Membership No. 162345
UDIN:21162345AAA AFC9516
Place : Ahmedabad
Date: 27 SEP 2021



Annual Report

2020-21



Satvik: Promoting Ecological Farming

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