

MANAS RURAL DEVELOPMENT INSTITUTE

Activity Report



Desi Gir Cow Centric Organic Farming System at our Manas Krushi Farm

Year 2016-2017

Address

**304, Sunflower Tower, Kharkar Lane, Thane 400601.
Maharashtra, India.**

MANAS RURAL DEVELOPMENT INSTITUTE

Annual Activity Report for the Year 2016-2017

Manas Rural Development Institute (MARDI) has pleasure to present this 12th Activity Report for the year 2016-17. The Company is registered under the provisions of Section 25 of Company Act, 1956. The provisions depict the Company as “Non Profit Company”.

Economic Scenario

India has emerged as the fastest growing major economy in the world as per the Central Statistics Organisation (CSO) and International Monetary Fund (IMF). According to the World Bank, the Indian Economy will likely to grow at 7 per cent in 2016-17, followed by further acceleration to 7.6 per cent in 2017-18 and 7.8 per cent in 2018-19. Agriculture plays a vital role in Indian Economy. Over 58 per cent of households depend on agriculture as their principle means of livelihood. Agriculture, along with fisheries and forestry, is one of the largest contributors (17.3 per cent) to the Gross Domestic Products, (GDP). India’s food grain production is expected to be 271.98 MT in 2016-17. Production of pulses is estimated at 22.14 MT. India’s horticultural output is also estimated to be 287.3 million tonnes in 2016-17 making it the second largest fruits producer in the world.

Organic Farming has been practiced in India for thousands of years. The great Indian civilization thrived on organic farming. In traditional India, the entire industry of Agriculture was practiced using organic techniques, where the fertilizers and pesticides were obtained from plant and animal products. Organic farming was the backbone of the Indian economy which was usually on cow centric. The Green Revolution program adopted by the country has its own impacts on Indian agriculture. Despite increase in food production the shift from organic to

chemical farming has started showing its darker side. The land is losing its fertility and is demanding larger quantities of fertilizers to be used every season. Pests are becoming immune to pesticides requiring the farmers to use stronger and costlier pesticides that can do more damage to the environment. This has badly affected overall economy of the rural India. Many farmers in India are shifting to organic farming due to the domestic and international demand for organic food. There is no doubt that the organic movement has once again begun in India. We are working on this and creating awareness amongst the farmers and consumers.

Major Programmes implemented during the year 2016-17

1. Rice Seed Production Programme with market linkage of Mahabeej at the Villages

Rice seed production programme with the market linkage of Mahabeej, a pioneer seed production seed company in government sector of Maharashtra State is the prestigious programme being implemented by Manas more than a decade. The empowering of farmers in seed production program was also ensured so that now these farmers groups can undertake such seed production programs independently to enhance their farm income. This enabled us to handover the program to the volunteers / farmers from these villages to implement the program of their own. Accordingly the farmers themselves implemented the rice seed production program as usual without any difficulty. The guidance and support whenever needed was extended in order to make the program most successful. Thus there is substantial increase in their farm income from the paddy seed production programme undertaken by villagers under support and guidance from Manas and Mahabeej. This year the farmers received on an average Rs 1650/- per quintal which is quite high than the prevailing market rates which are hovering around Rs 1000-1100.

Thus Manas initiatives to increase the farm income are quite successful in our adjoining villages.

2. Training Programme for the farmers under ATMA

Our training facilities at Manas farm on organic farming has been widely utilized by the Department of Agriculture, Forest Department, ATMA, etc. As done in the past the Department of Agriculture, Thane Division has utilized our Organic Farming Training infrastructure for their staff and farmers for conducting various programmes related to Vegetable and horticultural plantations and organic agriculture. These programs were successfully conducted for the farmers at our Training Institute at Manas Krushi Farm during the year also. Agricultural Technology Management Agency (ATMA) program has been implemented throughout India in order to address the key constraints faced by extension system in the country. The project process involves adopting bottom up planning procedures for setting the research and extension agency in order to make the technology dissemination farmer driven and farmer accountable. The extension delivery has been oriented towards group approach catering to the location specific requirement of the farmers. With these objectives, the major topics covered during the program were as follows:

- Organic Farming and its relevance
- Different Systems of Organic Farming
- Four wheeler system of Organic Farming
- Harnessing the Energy from different sources
- Importance of cow in Organic Farming
- The Soil as living organism, role of organic matter
- Crop Production Technology

The overall response of the participating farmers was very positive and encouraging. We expect similar programs to be continued for the dissemination of local specific technology and ITKs in the field of organic agriculture.

Action Points emerged:

For immediate promotion organic agriculture it was recommended to implement the following activities on TOP PRIORITY

- To advise farmers to adopt the practices of using cow dung slurry (Jivamrut) for increasing microbial activities in the field.
- Planting Glyricidia on big bunds and Tur on paddy field boundaries and internal bunds to capture nitrogen from the atmosphere.
- Use of Bijamrut and Jivamrut as bio-enhancers for encouraging seed germination and plant vigour.
- Use of Nimbark and Lamit and Cow butter milk & urine as bio-pesticides
- Formation of Organic Farmers Groups (OFGs) for adoption and promotion of Jaivik Krushi in contiguous area for ease in certification

3. Seminar on Organic Pomegranate and Grape production

The huge gathering consisting of more than 200 farmers from the Nashik district under the banner of Gram Samruddhi an NGO participated in the programme. Dr Kailash Mote, Joint Director of Agriculture, Nashik Division and scientists from Pune talked at length on different facets of pomegranate and Grape cultivation with innovations and technological developments. The response of the farmers was overwhelming. The participants were also addressed by Shri Yogesh Patil, Chairman Gramonnati Pratishthan Nashik. This programme got wide publicity in

their house magazine Gramonnati on the subject of organic pomegranate and Grape production practices. The farmers who started implementing of organic methods of pomegranate and Grape production also shared their experiences on quality chemical free pomegranate and Grape production with reduced cost followed by questions and answers session. Shri Vyankatesh Joshi chaired the function. The training days were also utilized for field visit of the Manas farm.

4. Educational Trip of students from various educational establishments

Dr S M Kshirsagar, our Director of Training and Development is also well connected with the YCMOU, Nashik as a PGR Teacher Counselor. He is engaged in teaching the subject like Agro-journalism for B Sc (Agri) students and Agricultural Extension Management for the M.Sc (Agri) and Ph.D. students. In addition to YCMOU the students from Management Institutions and various schools from the adjoining urban and sub-urb area had an educational trip to Manas. The various practical activities carried out at the demonstration hut of the Manas were shown to the students and practical training on preparation of various inputs required in organic farming was imparted. The various films on Organic Farming Systems, Water Conservation Techniques, Dairy Farming, Forest Management etc were also shown to the students. The field visit of the Manas Krushi Farm was also undertaken. Thus the students had fully enjoyed their educational trip with the sole objective of caring nature mother.

5. Organic Products Awareness Program for Urban Consumers from Thane and Mumbai.

A special awareness trips were arranged for the urban consumers especially through social groups like Bhagini Mandals and Self Interest Groups. Some training program was also arranged for the social groups who are actively engaged

in conservation of nature and especially tree plantation activities since long. Dr. S M Kshirsagar conducted one day training program at Manas Rural Development Training Institute. The Classroom sessions with power point presentation followed by field visit to witness various plantations at the farm was the uniqueness of this training program. In all 53 participants attended the training. The participants enjoyed a video show of conservation of forest conceived by Department of Forests, Gujarat State, “Jungle Na Hota To Tu Kya Karega”. The participants consist of many professionals devoting their life for the concept of Hariyali and Nature Conservation.

6. Training Program for the Organic Food Marketing Team from Mumbai Suburbs

We have also undertaken series of awareness programmes and campaign of consumption of chemical free food for the benefit of urban consumers especially city dwellers from Dadar, Mulund and Thane. Our target group was the women members of different informal groups functioning very nicely since long in the cities. They are the main opinion makers about the purchase of food items for their family members. Therefore these programs were arranged at their establishments for the convenience of the members of these informal groups or mandals. The program content was devised to create awareness about the impact of consumption of chemical food on human health and the solutions for the same. This time we conducted for Educational and Sales Training Program for Ayucart Marketing Team. Dr Kshirsagar talked in length about the efforts of Manas in propagating Organic farming at various places of Maharashtra, Gujarat and Madhya Pradesh in order to produce chemical free food for the consumers.

He also talked about the cow centric organic farming and the participants were taken at Manas Cattle Farm to have on the spot information about the Gir Cow. The feed requirement of the cow, their milking characteristics and importance of cow dung and cow urine was explained in detail. The participants were then taken at Vermi-compost Depot for on the spot study of earthworms, their importance in organic farming and vermi-composting in Tetra beds. Dr Kshirsagar explained in detail about process of compost making and vermi-composting in Tetra beds in brief to the participants. The participants were then taken at our Demonstration Huts to study the preparation of bio-enhancers and bio-pesticides. The participants were also shown the Agnihotra hut and importance of Homa Organic farming, performance of Agnihotra was also explained in brief to the participants. Finally the participants were taken to our Training Centre Hall for further briefing on the various facets of organic farming with the help of OHP and power point presentation and various films on organic farming. The following topics were discussed and explained in detail by Dr Kshirsagar to the satisfaction of participants.

1. Manas Introduction
2. PPT on Organic Farming with films
3. Why Organic Food?
4. Efforts of Manas to propagate the concept of organic farming
5. Manas Organic Food Products
6. USP of Manas Food Products
7. Questions and Answers

The discussion was taken place on various points to be considered on marketing of these products. The participants wished to visit Manas Krushi Farm along with their clients for further details

7. Educational and Environmental Study Tours

We have developed Manas Krushi Farm and Manas Organic Farming Training Centre with all requisite infrastructural facilities and demonstration huts of preparation of bio-enhancers and bio-pesticides. Well equipped Goshala with the indigenous cow breed of Gir, Floriculture activities with Sonchafa cultivation, other Horticultural plantations like Mango, Cashew nut, Coconut, Jamun, Lemon, Guava, Custard Apple, Amala etc the total Horticultural plantation on more than 53 acres with more than 5300 trees. The visitors get essential knowledge about the floriculture, horticulture, Dairy, Composting methods, Organic bio-enhancers and bio-pesticides, Homa i.e. performance of Agnihotra for purification and natural blend of scenic beauty surrounded by beautiful mountain ranges beneath the Bhatsa Dam offers an unique opportunity and climate of learning. Many organizations bring their students, farmers, Women members of SHGs etc to visit our farm for happy learning. This year also witnessed huge turnout of school going children in huge numbers. High level dignitaries and officials from the various Govt Departments and other social institutions visited our farm site. The Forest Department also took an advantage of visiting our farm site and Training Institute for their Farm Guards Training School, Shahapur. Our Dr S M Kshirsagar is also a regular visiting faculty for this school.

During educational visit to Manas Krushi Farm Sajivali, the different systems of organic farming were explained with the help of power point presentation, video shows and doing practicals at our demo hut. After that during field visit of the farm the different types of horticulture, floriculture and vegetable plantations were shown. Special visit to our Goshala for enthusing farmers to rear the Indian cows for cow centric organic farming was also undertaken.

8. Participation in the TV show with Chief Minister of Maharashtra State

Our Chairman Shri Vyankatesh Kulkarni was the panel member to discuss the topic of “*Sankalp Shaswat Sheticha*”, a prestigious program “*Mi Mukhyamantri Boltoya*” of Hon. Chief Minister, Shri Devendra Phadanvis, Maharashtra State. In the live cast show, Shri Vyankatesh Kulkarni shared his views on sustainable organic agricultural practices being followed at Manas Krushi Farm. The other eminent members of the panel were Shri Madhukar Pawar, Shri Vijay Thube, Shri Anil Suryawanshi and Smt Vasudha Sardar.

9. Free Eye operations of local people of adjoining villages of Manas

As the saying goes, prevention is better than cure, MARDI’s eye check-up camp is a step of prevention from any eye problem in any villagers. MARDI place on record our deep sense of gratitude and thanks to the Tulsi Eye Hospital Authority, Nashik for their kind help and co-operation. This year also our villagers have taken this benefit.

10. Drinking Water Facility to villages

We are continuing the facility of drinking water facility for the village Sajivali. This village faces acute shortage of water in summer. Manas have taken an initiative for supplying fresh water to the village Sajivali through Tap system. Special overhead tank was constructed at Manas Krushi farm Sajivali and from this Water Tank the drinking water has been supplied daily through taps to the villagers. Thus the entire village including Tribals started getting good amount of fresh drinking water which has diminished incidence of water borne diseases due to contamination. Manas has plans to provide such drinking water facility to other adjoining villages also in near future with participatory community involvement

and management and also spreading the message of clean water for good health amongst the villages.

11. MARDI Organic Training Centre

Manas Rural Development Institute has already conducted various training programmes in respect of agriculture and rural development since a decade. We have now created essential infrastructure like Training Halls, Office Buildings, Guest Houses, Demonstrations structures, unique composting systems from wood chips and other organic material including cow dung and urine. The Training Hall is very spacious having capacity to accommodate around 500 trainee participants. The high quality posters on organic farming, bio-enhancers and bio-pesticides have been displayed in the Training Hall as well as in Demonstration Hut. These posters have been highly appreciated by the various visitors and trainees. Our dream will come true of establishing International Knowledge Centre at our Manas Krushi Farm at Sajivali in Shahapur Taluka of Thane district. We wish to promote the traditional indigenous knowledge and systems used in areas like organic farming, biodiversity conservation and are also involved in imparting training to farmers, NGOs and students. The Centers main focus would be specifically in three areas, biodiversity conservation, organic agriculture and Ayurveda and Aahar Sanhita for human wellness. So far we have conducted more than eight programmes on organic farming systems at this institute to the local farmers, college students, NGO staff and Motivators and Farm Houses, Students from Foreign countries like Sweden. The response is overwhelming. The school and college students, farmers clubs from ATMA, Women SHG members from the various Talukas of the district, Forest Guards and Forest Officers of the Forest Department are regular recipients of the technical knowledge from this Training Centre.

12. Support to Marketing of Organic Produce

We had already made inroads for organic movement in five districts of three states with the farmers' participation. Group certification is in progress. Now in order to fetch good prices for the organic produce we are going to start own marketing organization to meet the consumers demand for the organic produce and also to benefit the farmers for providing them a common platform for the marketing and fetching good remunerative returns. We have already launched our organic products in the market through other Organic Shoppe vendors. Special website has already been launched for this purpose i.e. www.manasorganicfood.com. In order to create consumer awareness amongst the city dwellers we have conducted series of programmes for urban consumers from the various suburbs of Mumbai.

13. Organic Agriculture: Promotional Publications

Books Published in Marathi

1. Sendriya Sheti : Shaswat Sheti Ani Pramanikaran (Organic farming and Certification)
2. Mazi Gir Gai (Gir Cow)

We propose to publish series of books related to organic farm practices, vegetables, fruits and food grains production techniques.

Dr Kshirsagar, our Director and Chief Coordinator, Training and Rural Development actively participated as a Guest Speaker in the workshops, seminars and training programmes arranged by Agriculture Finance Corporation Ltd, Mumbai on the subjects of Joint Forest Management, Promotion of Self Help Groups for development of forests, Global Warming, Climate Change and Eco-tourism in the States of Maharashtra, Gujarat and Goa. He has been visiting faculty at Forest Training School Shahapur of Govt. of Maharashtra Forest Dept and

RAMETI Nashik of Agriculture Department. He is also rendering his services as a Professor at YCMOU, Nasik for the subject of Agro-journalism and PGR Teacher Counselor. He is the co-author of the book “Agriculture Business Management” approved and adopted by YCMOU in the syllabus for their B.Sc (Agri) students.

14. Manas Rural Development Institute honoured with Krushibhushan Award

In recognition of our services to the rural populace in the field of organic agriculture we have been honoured with a very prestigious award of “**KRUSHIBHUSHAN**”. While thanking all concern authorities of Agriculture Department of Govt. of Maharashtra we will continue our efforts in the spreading the message of organic agriculture for the betterment of the farming community in general and producing chemical free food for the better health of our people in particular.

Acknowledgement

“We strive for the timely practical guidance and know how on organic agriculture to the farming community with their skill building to help them for increasing the farm income and enhance their livelihoods.” We would like to extend our sincere thanks and deep appreciation of the authorities of various departments of Govt. of Maharashtra, banks and well wisher for their continued support during the year 2016-17. We would like to thank especially Agriculture Department for their invaluable guidance and technical inputs.

MARDI is very happy to place on record its heartfelt thanks and appreciation to everybody and every organization which have helped us in organizing various programmes and activities throughout the year most successfully. We are also equally thankful to various dignitaries, valued visitors and students from various educational establishments from the State of Maharashtra for their visits to our farm and institute and appreciating our efforts and making valuable suggestions for further improvement. We really owe a lot to them for this act of kindness and sure to receive same help and patronage in our future endeavors too.



Visit of Shri Deepak Nagargoje and Shri Bhanje of Shantivan of Bid District



Visit to low cost Bio-enhancers and Bio-pesticides Demo Hut



Field Visit of ATMA Farmers of Agri Dept Shahapur



Educational Trip of ATMA Farmers, Thane Dist



Organic Farming Training for the Farmers of Agri.Dept.



Farmers Training of Agriculture Department



Our Sonchafa floriculture plantation, golden flowers



Organic Chilli production at Manas Krushi Farm



Visit of Shri Dhanwate and Shri Dhopate Dy. Secretary from Mantralaya Mumbai



Visit of Mumbai Mantralaya Officials to MARDI Organic Farming Training Centre



Discussion with Marketing Team of Manas Organic Products



Local Gir Cow best for Cow Centric Organic Farming and A2 Organic Milk



Our Organic Training Centre of MARDI



Full view of the Organic Training Centre



Residential arrangements for the Participants



Organic Farming Inputs Demonstrations Huts



Shri Vyankatesh Kulkarni Chairman, MARDI in Progressive Farmers' Meet at Nashik



Educational Trip of School Students