

MANAS RURAL DEVELOPMENT INSTITUTE

ACTIVITY REPORT

YEAR - 2018-2019

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Our Sonchafa floriculture plantation, golden flowers

MANAS RURAL DEVELOPMENT INSTITUTE

Annual Activity Report for the Year 2018-2019

Manas Rural Development Institute (MARDI) has pleasure to present this 14th Activity Report for the year ended 2018-2019. The Company is registered under the provisions of Section 25 of Company Act, 1956. The provisions depict the Company as “Non Profit Company”.

Major Programmes implemented during the year 2018-19

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.

2. Distribution of Bio-dynamic Agriculture Calendars to the farmers

As done in the past this year also we distributed 1500 agricultural calendars to the farmers from Thane district from Maharashtra, Khargone and Indore districts from M.P. and Rajkot and Surendranagar district of Gujarat engaged in organic farming practices. Agricultural Calendars which are also known as Bio-dynamic Calendars are based on the principle that the life pattern of all living organisms are interwoven into cosmic rhythms. Human life, as well animal and plant life is strongly dependent on the rhythms

of the earth and moon. On the basis of such influences, agricultural calendar is prepared for the year, 2018-19

It needs to be emphasized that there is definite loss of forces which can be observed while cultivation, sowing and planting are carried out on these particular days, in the same way as positive cosmic forces are active at other times which stimulate plant growth, improve health and increase the yield. Since moon is closest to the earth, hence its movement has much pronounced effect than other planets. Every page of the agriculture calendar has been the full of information by pictorial presentations on Organic farming, how to prepare bio-enhancers and bio-pesticides and their application methods, Agnihotra and its impact on atmosphere and plants, package of practices for the important vegetables like Okra, Tomato and Brinjals etc. The farmers found these calendars very handy and useful to carry out their agricultural operations and reap the harvest. There was also demand from the other NGOs working in the field of organic agriculture from Thane District. There have been also enquiries from the farmers from Rajasthan about the supply of these calendars to them. We have supplied calendars to them free of cost for the benefit of farmers. This year also we distributed Biodynamic Calendars to our associate NGOs Durvankur from Vashind and Prasad Chikitsalaya from Ganeshpuri and Sukhbhumi from Thane district for the use of farmers clubs and rice growing farmers.

3. Farmers Meet at ManasKrushi Farm Sajivali

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 Rain Fed farming, Farmers' Groups Farming, Organic Farming etc. In order to increase the income level of the rice growing farmers these programs were arranged. The programme was chaired by Shri MahavirJangate, D.S.A.O. of Thane district. Shri Ajay Patil and Shri V.B.Barve addressed the farmers on the subject. The scientists from K.V.K. Kosbad and Rice Research Station Karjat of Konkan KrushiVidyapeeth also addressed the participants. The programme was also attended by the members of the women SHGs from the villages in large numbers. Dr S M Kshirsagar gave in brief about the promotion of SHGs in rural areas and agro-based

income generating activities to be undertaken by the groups. The participants from Shahapur, Kalyan and Bhiwandi Talukas attended the program in good number.

4. Village level Meets of Farmers and Women Self Help Groups

Series of village level meetings were arranged with the association of Prasad Chikitsalaya, an NGO from Ganeshpuri in their villages for creating awareness on soil health, soil and water conservation for preserving soil bio-diversity, organic farming systems, income generating activities to be undertaken through women self help groups etc. DrKshirsagar gave brief idea about the organic farming systems and importance of self help groups in rural development. The villagers and especially members of the women self help groups have shown tremendous interest in the Manas activities and shown their willingness for active participation in these rural development programmes. Some of the women self help groups are now gainfully engaged in WADI project of BAIF and NABARD and utilization of local seeds for sowing by promoting seed bank. Dr S M Kshirsagar has been the regular resource faculty for their training and other programs.

5. Women Meet on the eve of Women's Day Celebration

Prasad Chikitsalaya, NGO from Ganeshpuri celebrated Women's Day and arranged huge gathering of the women members of the Self Help Groups. In all more than 1000 members participated in the meet. The SHG members presented various programmes on different topics related to women health, agriculture, environment and other social aspects. DrKshirsagar was invited as a Chief Guest. He congratulated the women members for their awareness in these fields and talked at length the role of women SHGs in rural development. The various income generating activities likely to be undertaken by the SHG members individually and in groups were also suggested since the Thane district offers good scope to start small business on agro-processing and allied activities to agriculture. Mrs. NilimaSathe, prominent speaker on women empowerment also shared her views in the program. She suggested value additions and agro processing tiny and small units to be promoted and run by such women self help groups.

6. Free Eye Check-up Camp at Manas villages

At the result of conducting free Eye check-up camps with the help of Tulsi Eye Hospital Nashik, of International repute the list of persons suffering from various eye illnesses was prepared. From the list the patients were sent regularly to the Tulsi Hospital for eye treatment and if necessary cataract operations. It is a step towards humanity by providing eye check-up for the needy village folks and backward tribal community of the society. Villagers now receiving the benefit of the free eye check-up. Some beneficiaries were also provided eye drops for eye lubrication. 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. During their visit vision disorders were identified and treated subsequently. As these beneficiaries belong to the weaker sections of the society, MARDI bears all the expenses for conducting the camp. MARDI place on record our deep sense of gratitude and thanks to the Tulsi Eye Hospital Authority for their kind help and co-operation.

7. Drinking Water Facility to villages

The villages from Shahapur face 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 ManasKrushi 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.

8. Lighting Tribal Houses

There are certain tribal villages which are still starving of electricity supply. As such they have yet not seen the light from the electricity in their houses. Manas have continued distribution of rechargeable solar lantern and tube lights to such tribal household in the tribal padas in Shahapur taluka. This has especially helped the school going children to complete their study at night also.

9. Crop Production Technology

- The first great revolution in human history was the development and spread of agriculture which was about 10,000 years ago.
- “AGRE” means field and “cultura” means cultivation
- Learning to grow crop meant that man no longer had to wander around for food and could settle down in communities
- Agriculture thus made it possible to sustain a larger population at one place
- When the human population began to rise sharply in the 19th century , the need for food was increased
- Farming methods had to become more intensive , that is, they had to produce much food as possible from the land available for raising crops and animals

What is Agriculture Practices and Crops?

Cultivation of same type of plant in a large scale is called as crop. The first cultivated crop were cereals such as wheat, barley, rice and maize. Their seeds are rich in carbohydrates and they therefore form the staple diet almost everywhere in the world. Cereals also contains proteins, vitamins, minerals and fiber. Pulses are cultivated generally as an intercrops which are rich sources of proteins. Sugar crops are mainly sugarcane and sugar beat which are source of energy

Three Broad Crop Patterns

Kharif Crops:

- The crops which are sown in the rainy season are called as kharif crop
- Generally they grow from June to September
- Paddy, Soybean, Maize are the common kharif crops

Rabi Crops:

- The crops which are sown in the winter season are called as Rabi crop
- Generally they grow from October to January
- Wheat, Gram, mustard, peas are the common Rabi crops

Summer Crops:

- The crops which are sown in the summer season are called as summer crop
- Generally they grow from February to May
- Groundnut, and okra type vegetables are the common crop

Land Preparation

Soil tillage or land preparation is one of the routine activities in most agricultural systems. Often, land preparation starts with removing fallow vegetation or previous crop residues in order to clear the land for sowing or plantation of next crop. Land preparation is important to ensure that the field is ready for planting. A well-prepared field controls weeds, recycles plant nutrients, and provides a soft soil mass for transplanting and a suitable soil surface for direct seeding. This is important for effective weed control and for enriching the soil. Primary tillage is the first soil tillage after the last harvest. It is normally conducted when the soil is wet enough to allow plowing and strong enough to give reasonable levels of traction. This can be immediately after the crop harvest or at the beginning of the next wet season

Implements used for opening and loosening of the soil are known as ploughs. Ploughs are used for primary tillage. Ploughs are of three types: wooden ploughs, iron or inversion ploughs and special purpose ploughs. Wooden plough is also known as indigenous plough. The most important aspect of soil preparation is loosening of the soil. Loosened soil allows the growth of microorganisms and earthworms, thus leading to enrichment. Soil preparation involves ploughing, leveling or harrowing and manure application

Plough is a tool used for ploughing in olden days. This is made up of wood and it is drawn by a pair of bullocks. It contains a triangular iron strip called as the ploughshare. The main part is long rod of wood called as the plough shaft. The other end is attached to the beam. The process of loosening and turning of the soil is called tilling or ploughing.

- This done by plough
- The ploughed field may contain big pieces of soil called crumbs
- To prevent the loose soil from being eroded by wind or water, it is leveled using a wooden or an iron leveler
- This also ensures uniform irrigation
- Next organic manure or fertilizer is added to the soil to increase its fertility before the seeds are sown

10. Farm Produce Storage Techniques

The grains have to be dried in bright sunlight and then packed in bags or bins before storing in silos or granaries. This helps to reduce the loss caused by rodents. If the monsoon fails in a particular year then it becomes essential to stock the grains. This is known as buffer stock. Dried Neem leaves are added in the bags and bins to protect grains from incidence of pests and fungal growth.

11. 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 has 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 ManasKrushi 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 AahaarSanhita 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. Educational and Environmental Study Tours

We have developed ManasKrushi 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, Amalaetc 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. The major training programs and visits during the year as follows:

Name of Organization	Category of Visitors	No of Visitors or Trainees
DadarBhaginiSamaj Mandal	Lady Members	155
YCMOU, Nashik	Students	40
Tarangan Group Thane	Society Members	60
VanitaSamajBhagini Mandal, Mulund	Lady Members	110
Department of Agriculture, Thane Division	Farmers	50
Sweden	Students	3
ATMA, Dept. of Agriculture, Thane Division	Farmers	25
Acharya AtreKatta, Thane	Members	110
ATMA Ulhas Nagar	Farmers &Agril. Asstts.	25
Consumers Awareness (Thane)	Housewives	25

11. 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 wenders.

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 at BhaginiMandals at Dadar, Mulund and Acharya AtreKatta, Thane. The programmes were well received by the participants and in turn the members of such BhaginiMandals specially visited our ManasKrushi farm to witness the oil and grains processing indigenous techniques.

12. Organic Agriculture: Promotional Publications

Books Published in Marathi

1. SendriyaSheti : ShaswatSheti Ani Pramanikaran (Organic farming and Certification)
2. MaziGirGai (Gir Cow)

DrKshirsagar, our Chief Coordinator, Rural Development actively participated as an 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 Professor at YCMOU, Nasik for the subject of Agro-journalism

He has developed the following Training Material essential for Organic Certification

- A Booklet on Organic Certification
- A Training Manual on Internal Control System (ICS) for Group Certification

Books to be published in Marathi:

- Why Organic Agriculture and its Certification
- Organic cultivation of Cereal, Pulses and other Cash Crops
- Organic Cultivation of Vegetables
- Organic Fruits Plantations
- Bio-dynamic farming and HomaJaivikKrushi
- Organic Manures and Bio-pesticides

The drafts of the books have been finalized and the printing of these booklets is in progress.

Acknowledgement

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.
