



Impact of Training Programme Provided by Rural Resource and Training Centre (RRTC) on Dissemination of Organic Farming in Meghalaya

KEYWORDS

RRTC, Organic Farming, Meghalaya, NGOs.

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ABSTRACT *The Rural Resource and Training Centre (RRTC), Umran, registered as St. Joseph's Agricultural Training Centre (SJATC), evolved into existence after several years of study and experimentation, as an answer to the critical problems that challenge the vast majority of the rural population of the Northeastern region specially Meghalaya. The most successful organic farming project in RRTC is "Sustainable Practice through Organic Agriculture in Ri-Bhoi District of Meghalaya" from Caritas, Denmark which was started in 2004 and will end on Dec. 2011. Under this project 19 Organic Farmers Clubs (OFC) were formed and 15 OFCs are functioning properly, registration of two cooperative society has been achieved, out of 384 selected farmers 314 farmers started organic farming. Despite the presence of large number of NGOs in the states, the numbers of active and successful NGOs are still limited, since the NGOs are run by people and not directly linked with the government, they also face lots of problems in implementing or undertaking different development programmes for the rural mass to know the extension facility of RRTC in organic farming and also the farmers' personal characters and perception about organic farming and 30 farmers from Lumkeni village were interviewed by using interview schedule. Farmers are well aware about organic farming but very less people know about bio-fertilizers, almost 63% of the farmers told there are no problems in organic farming and the main problem is marketing and cow dung as most of them do not have their own cow. From the study it was found that almost 60% of the farmers responded that there is very less disease and pest incidence in organic farming and more than 65% of the people uproot the plant if any pest or disease attack is there where as some farmers do not use any treatment and some of them use bio-pesticide.*

Introduction

India is witnessing ever increasing population with the corresponding increase in the requirement of food grain production. In India, around three fourths of the populations are poor and 80 percent of them live in rural areas with 70 percent of the people still pursuing agriculture as a way of life. Majority of them are small and marginal farmers are not producing enough to meet their minimum food requirement, have poorer access to education, health, water, agriculture and other services and amenities. Now days there are thousands of NGOs in the country serving the society. NGOs are playing vital role in agricultural and rural development, not only in human resource development but also in upgrading poverty alleviation through several programs based on the specific problems. The involvement of NGOs in agriculture and rural development is in infant stage. Despite the presence of large number of NGOs in the states, the numbers of active and successful NGOs are still limited, since the NGOs are run by people and not directly linked with the government, they also face lots of problems in implementing or undertaking different development programmes for the rural mass. As RRTC and College of Post Graduate Studies (CAU) both are located in Ri-Bhoi District and RRTC is one of the most successful NGOs in disseminating organic farming in the Ri-Bhoi District, it is essential to know the impact of training programme in disseminating organic farming in Ri-Bhoi District in Meghalaya, India.

Methodology

For studying the selected characters of the adopted farmers of RRTC and for knowing the farmers perception about organic farming and problem faced in organic farming 30 farmers were selected purposively from the Lumkeni village and its nearby area for the study. These farmers were interviewed by using an interview schedule.

Name of the Institution: Rural Resource and Training Centre, Umran

Established: 25th May 2000

Nature: Non Formal, Agro-based Training Centre

Ownership: Don Bosco Educational Society

Major projects of RRTC in organic farming: Sustainable Farming Practices through Organic Agriculture in Ri-Bhoi District of Meghalaya (2004-2011):

This project promotes sustainable livelihood through organic farming among 500 farmers, ensuring markets by organizing people's institutions and addressing constraints in marketing. This project is supported by Caritas Denmark. The main function of the project is awareness, capacity building, training, group formation (farmers club) etc. The farmers for the project was selected through Exposure trip, Field Visits, Demonstration, Awareness programme and then meeting after that training. This project do not give any input materials free of costs to the farmer but RRTC used to give the input from the other project to the same farmer to encourage them i.e. the same village or farm-

ers are getting benefit from more than one project. In this project they supplied vermin-compost, Maize seed, Ginger seed free of costs to 60 unit in Ri-Bhoi District and one unit is consist of one household. From ICAR also they got Pineapple, Black pepper, Ginger, Turmeric, Jalkund etc. Project and the farmer were selected from the same area and they got free input materials.

Components of organic farming:

Basically organic farming components can be grouped into six categories:

1. Green manures: The incorporation of green crop residue into the soil as a fresh biomass for the purpose of improving fertility status and physical structure of the soil. Some important green manure plants are Dhanchaa (*Sesbaniacannabina*), Sunn Hemp (*Crotalaria juncea*), Cowpea (*Vignacatjang*), Tephrosianoctiflora, Tephrosiapurpurea

2. Crop rotation: It is the diversification of cropping pattern and is very much helpful in maintaining soil fertility and productivity besides controlling pest and diseases. For e.g. cereals rotated with leguminous crops & vice versa, deep rooted crops with shallow rooted crops.

3. Organic manures: Organic manure is the source of organic matter and supply life to the soil as it contain micro and macro nutrients, growth promoters, vitamins, amino acids, etc. It include animal manure, farm yard manure (FYM), Compost, Vermicompostetc.

4. Biopesticides: These are bio-environmental preparations used for controlling pests, insects and diseases. Organic pesticides are prepared using different commonly available leaves, household commoditiesetc.

5. Biofertilizers: These are preparations containing primarily active strains of specific microorganisms, which help in enhancing the soil fertility either by fixing atmospheric Nitrogen (BNF), solubilisation/mineralization of Phosphorus (PSM) and Potassium (KSM) or decomposing organic wastes or by augmentation plant growth by producing growth promoting substances with their biological activities. Some common biofertilizers are Rhizobium, Azotobacter, Azospirillum, Anabaena, Calothrix, Nostoc, etc.

6. Mulching: It is a process where plant materials is used to cover the soil surface in order to conserve moisture, control weeds, prevent soil erosion and increase the soil fertility.

Benefits of organic farming

1. Maintaining healthy environment by reducing the level of pollution
2. Reducing human and animal health hazards by reduction of toxic residues in the products
3. Sustainable and reduction in the cost of agricultural production
4. Maintaining biodiversity and stability of the ecosystem
5. It improve the physical as well as the chemical properties of the soil
6. It ensures optimum utilization of natural resources for short term benefit and helps in conserving them for future generation.
7. Organic products are substantially better in quality, like flavor and aroma, health value, premium price etc.

Results

1. Farming experience: Almost half (50%) of the farmers

population is having less than 10 years of experience in agriculture followed by more than 20 years (40%). Very less farmers having farming experience of 11-20 years (10%). The establishment of the village is not that much old, so majority of the farmers do not have more farming experience. They started farming after shifting to the village itself.

2. Training or Demonstration attended: Half of the farmers population attended less than 5 number of training which is followed no training (33.33%) and more than 6 number of training (16.67%). As half of the farmers are illiterate the do not get information about the training in time and they are not in touch with most of the information sources regularly. Moreover some of the farmers do not have any interest for attending the training or demonstration, they are happy with whatever they have with them.

3. Awareness about organic farming: From the table below we can see that all the farmers are aware about compost, 93.33% of the farmers know about bio pesticide which is followed by vermin compost (86.67%) and green manure (83.33%). Very less number of farmers (16.67%) is aware about bio fertilizers. Before adopting organic farming the villagers follow traditional farming system where they used to use most of the organic material like FYM, compost, green manure etc. As bio-fertilizers is not a homemade product and they have to buy it from the market and moreover it is a costly staff, majority of the farmers are ignorant about it.

4. Markets for selling output: Majority of the farming community (40%) use Shillong and Umsning markets for selling the output, 23.33 % of the farmers use only Umsning markets followed by Shillong, Umsning and Nongpoh (20%). There are some farmers (16.67%) who does not sell anything, they cultivate for their own consumption only. Umsning is the nearest market for the farmers and they have to go to Shillong frequently as it is the capital of Meghalaya, so majority of the farmers uses both the markets for selling their product. Whereas very less farmers use Nongpoh market as it is a bit far from the village.

5. Problems faced in Organic farming: Majority of respondent stated that there is no problem (63.33%) in the organic farming followed by very less problems (23.33%) and who ever told there is problem is very few in number i.e. only 13.33%. The major problem point out by the farmers was marketing because they do not get more price of the organic product. Another problem is cow dung as most of them do not have their own cow, so they have to buy cow dung. Rather than this two other problems whatever they faced in organic farming are negligible.

6. Incidence of Disease or Pest: Most of the farmers told that there is very less (60%) disease or pest attack in organic farming. The farmers who told there is disease or pest attack in organic farming is 23.33%, where as 16.67% of the respondent stated that there is no disease or pest attack in organic farming.

7. Innovations adopted in Organic Farming: Cow dung and compost is used by maximum number of the farmers. Vermi-compost is used by 80% of the farmers followed by bio pesticide (73.33%), farm yard manure (70%) and green manure (66.67%), where as few numbers of the farmers knows about bio-fertilizers (13.33%). As before adopting organic farming the farmers followed traditional cultivation they are well known about most of the organic innovation

and their benefits and they already started using them.

8. Profitability of organic farming: According to the farmers organic farming is profitable as 80% of the farmers responded yes and only 20% of the farmers responded not profitable. The farmers who told organic farming is profitable is not because they are getting more price of the organic product but they experienced that when they go for organic farming it is very good for the soil and they used to get more production next season from the same field. Because of getting same price as the inorganic products some farmers stated that organic farming is not profitable.

9. Extension Participation: Majority of the farmers attend Extension group meetings (73.33%) followed by Agricultural exhibition (66.67%), Training program (63.33%) and field visits (53.33%). Almost 46.67 % of the farmers attended demonstration program, very less number of the farmers attended Educational tour (13.33%) and Krishimela (10%) but no one has any experience of field day. As most of the farmers are illiterate they do not know the importance of extension participation and most of them are not interested in attending educational tour, krishimela, field day, demonstration etc.

10. Adequacy of information obtained: According to farmers whatever information they get from the other farmers and RRTC experts is very much adequate and updated. The information receives through mobile (60%) and also information receives from the KVK / ICAR scientist (80%) is adequate and relevant. As very few of them use other sources regularly, the information get through those sources is less like newspaper (13.33%), Radio (16.67%) and T.V (23.33%), but the information receive is adequate.

Major achievements in short

1. Project has given more opportunities for mobility, participating in training, exposure, and to take up leadership roles in OFAs and Cooperative Societies.
2. Nineteen Organic Farmers Clubs were formed (4 clubs have been dissolved) and 15 OFCs are functioning properly.
3. Registration of Two Cooperative Society has been achieved namely, Iatreilang Cooperative Society and Teilang Cooperative Society

4. Out of 384 farmers 314 are organic farmers. According to the last sanction list that has been sent to INDOCERT and 77 new farmers have been approved by the OAC in 2010. The farmers have not only adopted alternative farming system but they are maintaining the organic standards in their field.
5. Ninety four farmers have attended refresher course on Integrated Pest Management (IPM) and have become aware about the uses and preparation of organic pesticides by themselves.
6. Seventy seven new farmers have been introduced this year 2010.
7. Ten model farms have been set up in three clusters.
8. Fifteen farmers have been selected for seed storage in three clusters.
9. Inaugural of Rural Outlet in Two Societies.
10. Approval of the project on Rural Mart from NABARD for Iatreilang Society.
11. Training cum exposure programmer for the members and leaders of CMSU to Consumer Cooperative, Tezpur Social Service, Tezpur, Sonitpur district of Assam.
12. Good communication, regular meeting between the leaders and project staff from all the three societies that's has bring lots of changes in farmers field.
13. Setting up Three Nursery in three clusters.
14. Regular field demonstration at farmer's field.
15. Seven OFCs have proper saving account in the bank.
16. Six Organic farmers Club has been submitted to the office NABARD, Shillong of which 2 are registered.
17. Growing sense of ownership among the farmers for the project and increased sense of responsibility among them.
18. Linkages with Northeast Hills University and Agrochemicals Limited for processing and oleoresin extraction of ginger and turmeric, and consequent marketing plan for the product.