

ECONOMIC PERSPECTIVE AND EXTENSION STRATEGIES FOR PROMOTING ORGANIC FARMING

K. Ponnusamy, Jancy Gupta and B. S. Chandel*

Division of Dairy Extension, National Dairy Research Institute, Karnal

INTRODUCTION

Food security and hunger eradication in India need urgent attention, careful planning and determined action in view of declining per hectare yield of major crops and ever increasing population pressure. With tremendous pressure on land and water resources, safe agricultural practices of thousands of years were given up and chemical agriculture ushered in. Apart from threat posed by indiscriminate exploitation of land, water and ecosystem, there is a total lack of safe and healthy practices in the use of these resources affecting the very sustenance of land, water flora, fauna and the diversified ecosystems. The pursuit of more sustainable forms of agriculture is of central importance in meeting the above said challenges. Hence, there is a need to think of alternatives in order to sustain food production without endangering environment and ecology.

NOMENCLATURES OF ALTERNATIVE AGRICULTURE

There are alternative agricultural technologies which are scientific, productive, economical, resource conserving and appropriate to many farming situations. There are several nomenclatures to denote alternative agriculture as organic farming, eco agriculture, biological farming, eco-farming, do-nothing agriculture, rishi krishi, permaculture, agro-eco systems natural farming, biodynamic agriculture indigenous farming system etc. Among all these names organic farming is found to be the most

popular and highly quoted term to refer to alternative form of agriculture throughout the world.

ANCIENT INDIAN FARMING

Organic farming is very much native to India. Whoever tries to write a history of organic farming will have to refer to India and China. The farmers of these two large countries are known as "farmers of forty centuries" and it is organic farming that sustained them. There are recorded facts about the tremendous potential of traditional farming which were carried on by following organic methods. Ancient Hindu religious scriptures mentioned about importance of organic manures (Rig Veda 1, 161, 10, 250001500 Be; Atharva Veda II 8.3). In those olden days, yields of crops were also high ranging from 6 to 18 tonnes per hectare. Those ancient farmers could attain this phenomenal yield due to their knowledge and experience based wisdom on sustainable organic farming. They believed in the basic principle of organic farming that all were interconnected, the living and the inert. Now the focus should be on utilising the essence of this past knowledge and its reverence for sustainable agriculture.

ESSENCE OF ORGANIC FARMING

In nature, organic relationship is a pervasive phenomenon. Everything is connected with everything else and it is important to know the relationship between soil, water, plants, microbes, waste products, vegetable kingdom, animal kingdom, agriculture, forestry and atmosphere. It is the

* DES&M Division, N D R I, Karnal

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totality of these relationships that is the bedrock of organic farming (Ghosh, 1999). Producing more food and agricultural commodities from less land, water and energy is a task that will call for the integration of the best in modern technology with the ecological strengths of traditional practices (Dahama, 2002).

PERCEPTION ABOUT ORGANIC FARMING

Organic farming has been perceived differently by different people around the globe. In the advanced countries, it is meant for prevention of contamination of food, fodder and fibre by poisonous chemicals (Veeresh, 1996). Organic farming systems rely upon crop rotations, input recycling within farm and aspects of biological pest control to maintain soil productivity and tillth to supply plant nutrients and to control insects, weeds and other pests (USDA Study Team on Organic Farming, 1980). According to the broad definition given by the Ministry of Agriculture, Forestry and Fisheries (MAFF) of Korea, Organic farming is farming that uses the minimum possible rates of chemical fertilizers and other agricultural chemicals in combination with organic mixture and naturally occurring substances (Chong-Woon Hong, 1994). Under the organic system, the focus is on maintaining and improving the overall health of the individual farm's soil-microbe-plant-animal system, which affects present and future yields (Nadia Scialabba, 2000).

ECONOMIC PERSPECTIVE OF ORGANIC FARMING

Majority of the Indian farmers are small and medium, and have poor socio-economic conditions. The agriculture they practice is organic by 'compulsion' in the sense that they cannot afford to apply costly chemicals and fertilizers. Thus, only 30 percent of India's total cultivated area is covered with chemical fertilizers. But the

organic farming, we are talking in this paper is not 'by compulsion' but 'by choice' and per se does not reflect its meaning. The organic farming being talked about is a systematic production, under strict vigilance and certification, using natural organic system that exist among soil-microbes-plants and animals. In this farming, number of certifying organizations at international level has come up who guides and certifies organic farming in different sectors of agriculture like crops, dairy, livestock, fishing, horticulture, etc. Therefore, before start practicing organic farming there is a need to have an organization who certifies that the production being claimed organic is really organic and provide guideline to the farmers about organic production. Such organizations existing at international level charge heavily for certification of organic farming. The charge varies from Rs. 22,000 to Rs. 29,200 per certification. The farmers in India though practice organic farming cannot claim to be organic in the absence of such certification and are unable to bear the cost of certification. There is a need to lower the certification cost and make the farmer aware about meaning of organic farming in the present context. Organic farming is not limited to the organic production but it should be handled and marketed in an organic way so that when the consignment reaches at the consumer it remains organic only. This demands development of better practices in marketing of organic products.

The economic perspective of organic farming is increasing day by day with the increasing awareness & health conscious consumers both in the domestic and at international level. There is availability of 600-700 million tones of agricultural waste, which could be converted into vermin-compost, bio-fertilizers etc. The retailing formats like hypermarkets, departmental

stores and food stores promoting production and consumption of organic products at very high premium price. Price premium for organically produced agriculture products vary from 10% to 100% (V. Garibay, K. Jyoti, 2003). Diverse agro-climate regions across the country that provides environment for wide range of crops that can cater to the needs of organic products in different markets. There is availability of comparatively cheap labor for labor-intensive organic agriculture in India. Huge numbers of small farmers those who do the traditional farming with very limited capacity to pay for most of the chemical inputs into agriculture would readily shift to organic farming (Planning Commission, 2001). There are number of Non Government Organizations (NGOs) who are active promoters of Organic farming in different agro-climatic regions (Donthi N. R., 2001). Increasing involvement of private companies in field of agricultural extension, trade, consultation and other services has enhanced Government attention and support for organic agriculture through various policy initiatives and action programs.

Tenth plan allocated hundred crore of rupees for the promotion of organic farming. The main components of this initiative include farming of standards, negotiating with different countries and putting in place a system of certification for organic products. Government has initiated a project "National Project on Development and Use of Bio fertilizers" for this purpose. Agricultural and Processed Food Products Export Development Authority (APEDA) has been identified as a nodal agency for the promotion and export of organic produce. National Steering Committee under the Chairmanship of Secretary Commerce has already outlined and approved the National Program for Organic Production (NPOP). Under this program,

National Organic Standards have been evolved. It has also developed criteria for Accreditation of certification agencies, Accreditation Procedure and Inspection and Certification Procedures. In developing these standards and procedures, due attention is paid to the guidelines as enumerated by international organizations such as International Federation for Organic Agricultural Movement (IFOAM), EU Regulations and F AO Codex Standards. As part of this program, a National Logo for organic products on behalf of Govt. of India has also been developed.

Some of the other efforts towards promotion of organic exports include attempts to collaborate with all the major organic importing countries. Towards this APEDA is deliberating with European Union for inclusion of India in the list of third countries under Article 11 of the EU regulations No 2092/91 so that India's National Programme for Organic Production gets the required recognition under the EU regulations.

LIMITING FACTORS OF ORGANIC PRODUCE MARKET:

Limitations of the various propositions suggested as alternative to green revolution point out the following:

1. The present main concern in India is about increasing farm productivity to feed ever growing human population as alternatives suggested will not be able to ensure food security for all.
2. There is always a log phase during which there will be productivity drop while switching over to the alternative production modes.
3. Organic farming is labour intensive and farming operations will adversely be affected in peak seasons.
4. Scattered and small size farm holdings make it difficult to adopt organic farming. Indian organic agriculture is very fragmented and there are no

organizations

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5. Level of farmers' educational status is still low to understand and exploit market dynamics of organic farming.
6. Costly certification procedure and lack of suitable policy support make it unfriendly to follow organic farming. Given the high levels of transaction costs for getting farms certified as organic it is a major deterrent for enhancing organic production in the country.
7. Retailers are typically not interested in selling bio inputs because their demand is low, supply is erratic and farmers are ignorant about bio inputs.
8. Lack of market information in general and organic market information in particular is biggest drawback for Indian agriculture. As a result farmers are in a predicament as they are unable to attune their production practices as per the market changes. Marketing network specifically for organic products has not yet developed both in the domestic as well as export market.
9. Quality of Indian food industry is always a constraint for growth, low consistency of quality and contamination in food products is a hindrance in capturing the available market especially the international market.
10. Lack of proper infrastructure in terms of road from remote villages. Cold storage facilities and slow transportation affects the cost, quality and reach of producers.

EXTENSION STRATEGIES FOR PROMOTING ORGANIC FARMING

Keeping in view the economic perspective of organic farming and comparing it with its limitations, organic farming reserves enormous potential in future for Indian farmers. There is a need to

develop an appropriate framework to harness these opportunities. Suggested below are the important extension strategies for promoting organic farming in India.

1. Education programmes need to be launched on ill effects of indiscriminate application of chemicals resulting in various diseases such as cancer in Punjab.
2. Formation of self help groups for farmers to collect the organic produce from scattered land holdings for certification and marketing.
3. Sensitising the extension functionaries about the prospects and importance of organic farming in the liberalised global economy.
4. Providing regular feedback to the research system will help to re-orient research agenda.
5. It is important to identify the motivational forces, which may pull or push the farmers towards adopting organic farming.
6. Strong linkage between growers and consumers with minimum influence of middlemen should be developed.
7. Certification of organic farms, their produce and products along with providing logos and accreditation powers should be initiated by regional nonprofit organisations.
8. Encouraging visits of farmers to model organic farms will motivate the farmers for adopting the organic farming.
9. Documenting the success stories of preactising organic farmers and disseminating the same will put further impetus to other farmers.
10. Organising of fairs, exhibitions and interaction meets regularly will stimulate interest and enthusiasm among many stakeholders.
11. Preparation of extension materials in local dialect can popularise the importance of organic farming.

REFERENCES

- Chong Woon Hong. 1994. Organic farming and the sustainability of agriculture in Korea. Agricultural Science Institute, Rural Development Administration, Suweon 4411707, Korea, 1994. www.agent.org.
- Dahama, A.K. 2002. Organic Farming for Sustainable Agriculture. Agrobios (India), Jodhpur-342 002, Rajasthan.
- Donthi N. R., Organic Farming in India: Poised for Growth in the New Millennium, Proceedings of the Fifth IFOAM Asia Scientific Conference, Hangzhou, China, Oct 31-Nov. 4, 2001.
- Garibay S V and Jyoti K, Market Opportunities and Challenges for Indian Organic Products, Study funded by Swiss State Secretariat of Economic Affairs, February 2003.
- Ghosh, Sailen. 1999. There is no salvation except through organic farming. In: Claude Alvares (ed.), Organic Farming Source Book, Other India Press, Goa, India pp: 127.
- Kaushik, B.D. 2005 Bio-Inputs Resources in Organic Crop Production. In: Management of Appropriate Technologies for Sustainable Agriculture, IARI, New Delhi.
- Laxmi Narain Modi. 1997. Organic farming practices and feasibilities in India @Recommendations by the Government of India Technical Team, In: Shiva Shankar (1997) Food security in harmony with nature, 3rd IFOAM Asia Scientific Conference and General Assembly proceedings, I_4th December, 1997, Bangalore. pp :105-108.
- Nadia Scialabba. 2000. Opportunit(ies and constraints of organic agriculture-A Socioecological analysis. Faculty of Agriculture, Viterbo, 17-28, July.
- Planning Commission, Organic and Biodynamic Farming, Report of the Working Group, Government of India, New Delhi, 2001.
- USDA Study Team of Organic Farming (1980) Report and Recommendation on Organic Farming, Washington DC. PP: XI, NAL call # aS605-5 U52.
- Veeresh, G.K. 1996. Organic farming and its relevance to present condition, paper on organic farming, AME, Bangalore.

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