

Government of India
Ministry of Agriculture & Farmers Welfare
Department of Agriculture, Cooperation & Farmers Welfare
Krishi Bhavan, New Delhi

# Report of Task Force on Organic and Non-Chemical Farming

Recommendations on strategy to promote Organic and Non-Chemical Farming in India

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### Introduction

Organic Farming has drawn a global attention during the recent past and many countries have made their policy and legislation to regulate the organic production and marketing. Canada, United States of America, Australia, Argentina, Brazil and European Countries have been forward in adoption of organic farming especially for self consumption. In Asian Countries India has acquired an image of largest exporter of organic produce especially to western countries. From the consumers perspectives the organic foods being free from residues of used pesticides are considered as safe for health. From the farmers angle the Organic Farming is a low cost affair sustainable in long term as against the Conventional Farming practices which depends on the high cost inputs and turning deficient in long term sustainability. In the eyes of researchers the Organic Farming is a way out to solve the environmental concerns, climate change, global warming and issues of sustainability. An organic farmer has to face a steep decline in yields in the initial years due to sudden restrictions on use of synthetic inputs; fertilizers and pesticides in the nutrient deficient soils and resistant pest and diseases attacking the crops. This leads to the thought that conversion of conventional farming in to Organic would create a food crisis before the huge population of the country. Policy framers are very much conscious to this thought and want an answer from the scientific fraternity.

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In Organic Farming the term 'organic' is new, the 'Farming' is the same, traditional, as was practiced by farmers since the time the man learn the art of cultivation till the introduction of green revolution technologies. The only difference if exists lies in the approaches. In the current approaches where the farmers are advised to follow a systematic plan with certain standards, in the old approaches they practiced the traditions voluntarily without any strategy. The result was that they suffered failure at many fronts and ultimately losses in yield.

Organic farming methods offer the best, currently available, practical model for addressing climate-friendly food production. This is because it is not dependent on oil-based fertilizers and pesticides and confers resilience in the face of climatic extremes. It also stores higher levels of carbon in the soil. The organic farming in real sense envisages a comprehensive management approach to improve the health of underlying productivity of the soil. It largely excludes the use of synthetic compounded fertilizers, pesticides, growth regulators and livestock feed additives. It relies on crop rotation, crop residues, animal manure, legumes, green manure, off farming organic waste and aspects of biological pest control.

# From the history:

Organic farming system in India is not new and is being followed from ancient time, a system that encompasses both Tantra and Mantra. India had ancient wisdom on farming since human civilization inhabited settled community lifestyle. Knowledge was

brought forth by enlightened Rishis who lived in forests and understood the rhythms of nature. One of these great Rishis was Parashara Maharishi but there were many others who taught the art and science of cultivation as per Vedic science.

"Organic agriculture is a unique production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity. This is accomplished by using on-farm agronomic, biological and mechanical methods in exclusion of all synthetic off-farm inputs".

Organic farming promotes the use of crop rotations and cover crops, and encourages balanced host/predator relationships. Organic residues and nutrients produced on the farm are recycled back to the soil. Cover crops and composted manure are used to maintain soil organic matter and fertility. Preventative insect and disease control methods are practiced, including crop rotation, sensitivity to time of planting and harvesting as per season & lunar cycles.

Maitreyi Kitchen includes traditional leafy greens, many millet varieties, indigenous dairy, organic grains, cereals, spices, cold pressed oils, natural palm sugar, farm produced fruits, vegetables, forest honey and more...

# Task Force on Organic and Non Chemical Farming

In view of the growing concern about Organic Farming the DACF&W vide letter no. 7-3/2015-Org Famg dated 23/06/15 constituted a Task Force on Organic and Non- Chemical Farming as following:

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1			С	o r	۱ V	e r	n e	r
2		Dr A K Singh, Deputy Director General (AE)	М	е	m	b e	r	
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3		Dr Krishan Chandra, Director	M	emb	er S	Secr	eta	ry
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		DisttFaridkot Punjab						
7		Dr B Mohan Kumar	M	emb	er S	Secr	eta	ry
		Asstt. Director General (NRM)	withdrew due to Supe					
		Division of NRM, KrishiAnusandhanBhavan,						
		New Delhi						
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## Terms and Reference (Specific) for Task Force

- i. To analyse the barriers to and the potential of further growth of production, processing, trade and consumption of organic products.
- ii. To recommend a market based strategy covering all of the aspects of the development on organic farming including certification and labeling, package of practices, food safety and regulation, research and international trade in order to achieve expension in area under organic farming and to secure increased share in export and domestic market.
- iii. To and present marketing and promotional programmes for assistance and development of organic farming.
- iv. Suggest creation of new structure for interface with farmer organizations, input support service providers, industry associations, environmental groups, consumer associations, export-import associations etc.

# Terms and Reference (General)

- The Task Force may co-opt any other official/non-official expert/ representative of any organization as member (s), if required.
- ii. The Tas Force may also examine and address any other issue which are important but are not specifically spelt out in ToRs. The Task Force may device its own procedure for conducting its business / meetings.
- iii. The expenditure on TA/DA of the official members in connection with meetings

In USA and EC the organic farming has been found more viable than the conventional farming due to higher yield, lower cost of cultivation and high product price. In India the organic was started to fetch the global trade considering the growing demand of organic food in the international market. Now its need is emerging due to un-sustainability of high cost conventional farming, environmental concerns and growing consciousness about ill effects of foods containing pesticides residues. Besides export now the country has to meet the domestic needs also. The Organic Farming is the pathway not only to address the issues of environment, and sustainability but also to eliminate the burden of huge subsidy paid for input production used in conventional farming.

Organic farming was started in India in year 2001 with launch of National Programme on Organic Production (NPOP) by APEDA for export of organic food. The MOA also took initiative in this direction and launched National Project on Organic Farming through National/Regional Centres of Organic Farming in the year 2004 to promote the Organic Farming and establishment of Organic Inputs Production Units. Subsequently some organic fertilizers and biofertiliser were also brought under the purview of FCO 1985 to ensure that the quality organic inputs. The NPOP has witnessed a rapid growth rate over the years. The N/RCOFs have motivated the people; State Agriculture/Horticulture Officers, Extension and Field Functionaries of NGOs engaged in agriculture development and farmers. The Government has launched a famer friendly cluster based scheme 'Parmaparagat Krishi VikasYojana' (PKVY) under which the farmers are given financial assistance for inputs production / purchase, training and marketing requirements for first three years. The PKVY is

linked to PGS-India certification programme through NCOF for meet the domestic market requirement.

# From the Task Force Meetings 31/08/15 at Nass Complex, Pusa New Delhi

The following issues emerged during the meeting

- a. It was stated that mobilization of small and marginal farmers in rain- fed areas with minimal irrigation facilities and creation of a supply chain adhering to organic farming principles is a very challenging task. Hence, it was stated that it is a different system and the index of measures for organic farming systems should not be the same as that of conventional farming. It was explained that application of correct package of practices in Organic farming will result in same crop yields as in conventional farming. It was suggested that at a policy level this should be recognized and new method be used to measure productivity in organic agriculture other than just crop yields. The examples of traditional rice varieties where nutritional yield in organic agriculture far exceeds that of chemically grown hybrids (Garib-Sal rise variety – nutrition analysis by Debal Deb) was cited.
- b. Paramparagat KrishiVikasYojana(PKVY) & Participatory Guarantee System(PGS)
- i. It was informed that PGS is functional in India for about a decade but the PKVY scheme is not extended to the farmers who have been practicing organic farming with PGS certification. It was therefore suggested that existing PGS farmer groups should also be allowed to avail the financial

benefit available for marketing and branding under PKVY. As of now, the only benefit the existing PGS farmers receive is to register with the PGS Organic India portal. It was requested that, they should be show cased as a good functional model of PGS that is working on the ground for almost a decade now.

- ii. It was suggested that the PGS- India portal should not only have the PGS registration process but also contain information on the mechanism of accessing PKVY schemes through the state governments. It was requested that a flowchart be made available on PGS portal along with the necessary forms and pro-formas required for small PGS farmers to access these funds.
- iii. Facilities and funds for small retail initiatives in organic farming should also be included in PKVY.
  - c. Marketing of organic products :It was discussed that the existing mandi marketing model poses several challenges for organic farmers, due to issues of mixing organic & inorganic products and lack of direct market access. It was suggested that direct consumer access models, fairs, shandies, Organic Farmers market and network of small green shops starting from the village level and to the cities will be more suitable for marketing of Organic Farming products.
  - d. Quality Testing: On the provision relating to residue testing, it was mentioned that access to laboratories is exorbitantly expensive for the small holders and consumers. It was suggested that NCOF may perform randomised sample testing of products of various PGS groups that register with PGS-India portal across India. A new quality assurances scheme may be formulated for implementation through

- NCOF, so that the cost burden is not passed onto the farmers under PGS.
- e. Documentation of success stories: It was suggested that existing success stories of organic farming and marketing models practised in clusters or people driven initiatives should be promoted and documented as part of the activity of the Task Force on Organic Farming. It was recommended that examples such as organic farmers markets, PGS marketing models can be showcased as success stories should be uploaded on PGS-India Portal.
- f. Dedicated institution for research in Organic Farming: There was a suggestion that at least one dedicated NARC through the ICAR must be created for research on Organic Farming. It was expressed that necessary scientific backing for Organic Farming should be generated within the system. It was stated that currently most data being generated is from foreign sources civil societies with very little data emanating from the public institutions is available in Organic Farming.
- g. Price issues: It was suggested. Price is a sensitive issue for the farmers and equal important issue is the transparency in transactions. It was recommended that instead of always targeting for premium pricing for organic products, we should ensure discovery of prices at which farmers can cover their input costs and the consumers can buy them at affordable prices while maintaining operational transparency for benefit of all in the supply chain.
- 3. Secretary, Agriculture & Cooperation chaired the post lunch session and discussed with participants on various challenges in the promotion of Organic farming.

He interacted with each and every participant and elicited responses on following issues:

- The challenge of mobilizing farmers groups in 50 acre clusters under PKVY Scheme.
- ii. The utility of PGS certification for promoting Organic Farming in domestic market.
- iii. Technical back shopping and research support required for promoting Organic Farming practices.
- iv. Usage of city compost for organic farming.
- v. Advantages of portal launched for PGS India.
- vi. Market and premium pricing that is available for farmers in the domestic market.
- 4. The following decisions were taken in the meeting:
  - The portal PGS- India may create a html page for task force on Organic Farming.
  - The portal may upload the data on Organic Farming clusters in various states and also geo- reference them.
  - iii. DAC shall consider implementation of a Quality Assurance scheme by NCOF to ensure residue testing of products marketed by groups that register for PGS certificate.
  - iv. To change the home page of PGS India portal to reflect organic farming practices.
  - v. To document best practices access India and upload on portal.

During the interaction, following points were emerged:

### Farmer's opinion:

- 1. The farmer suggested that animal components should compulsorily be incorporated in the organic farming system.
- 2. The producers are getting good prices from organic products on their own effort
- The consumers are unable to differentiate the better quality of organic products from general products available in the market due to lack of certification and labeling for organic products.
- 4. There should be certain stall specifically for organic products in the town / district to facilitate the marketing of organic products where only registered organic farmers should sell their products.
- Organic input production and certification are required to ensure quality parameters of the products like bio-pesticides, seeds etc. to save the farmers from cheating.
- 6. Production of organically resistant disease and pest varieties should be made available.
- 7. Indigenous bio-pesticides and botanicals may be standardized and specific recommendation for crops and pests be ensured.
- 8. Some regulations for fixing the price of organic based products should be assessed on their cost of cultivation.
- Group approach like formation of SHG, FPO etc. should be promoted for large scale production of organic materials in selected

- villages / area may be marked as organic village for easy access to consumer and seller.
- 10. Use of green manuring crops and bio-fertilizers, residue management of animals based farming system may be taken for research purpose.

### Suggestions for accelerating organic farming:

- 1. A single window system to provide services for solving the problems related to the farmers who are practicing organic farming.
- Incentives should be given for cattle based farming systems. Cattle population is decreasing in villages; there is a need to increase cattle population for organic farming. One cattle per acre is enough for practicing organic farming.
- There is a need to establish an Organic Farming University for research and development.
- Local body for certification is required. KVKs and VV should be authorized as certification agency.
- 5. Training programmes on package of practices in organic farming should be organized for the farmers.
- 6. Research could be conducted for evolving input-efficient, varieties suitable for organic farming.
- 7. Facilities should be provided for the quality analysis of organic products. On the basis of which certification should be done.
- Organic farming based farming system models should be developed
- Efforts should be made to reduce the cost of cultivation.
   Mechanization is required for small, medium and large farmers for conservation farming.
- 10. There should be an organic produce marketing day every week, where farmers can sell their produce and get the facilities for the purchase of inputs for organic farming.

### Constraints for adopting organic farming:

- 1. Organic farming is labour and resource intensive.
- 2. Absence of marketing facilities of organic products.
- 3. Certification process is very complicated and not farmer friendly.
- 4. Unavailability of seeds for organic farming.
- 5. Cost of bio- products are very high due to which farmers cannot afford to apply it. Quality control is also required.
- 6. Weeding is a problem due to non availability of weedicides which can be used for organic farming.
- 7. Consultancy services are not available.

### **Policy Interventions**

Quality parameters specific to the organic produce/products could be identified for fetching higher market prices.

- The parameters could be region and commodity/product specific.
- A separate market hub could be given for purchasing the input as well as selling the organic produce/products.
- Mapping of the region and stakeholders' database could be maintained for promoting the organic farming.
- Organic produce/products be the toxicant free, such awareness and assurance could be given to the consumer level.
- Soil testing and residual effect report could be maintained for the organic plots.
- Post harvest certification particularly for the fruits/vegetables need to be evolved. Also mentioning the transportation and storage methods

- Knowledge enriching and experience sharing apropos production, marketing, storage, packaging should be done at regular basis.
- Certified inputs from the authentic source should be advocated mainly for the practicing farmers.
- A database on ITKs related with the organic farming could be made available to the organic farmers for reducing the cost of production.

### 09/12/15 at UAS, Bangalore

### During the interaction following points were emerged:

### Farmer's opinions:

- The farmers emphasized the systematic resource development by establishing the institutions / schools/ universities especially for organic agriculture.
- 2. Sufficient awareness, promotion, demonstration and display for organic venture.
- 3. Single window funding to run the organic schemes.
- Quality research on indigenous ITK's developed locally and traditionally.
- Authentic validation and documentation of local innovations and indigenous ITK's
- 6. Separate plan for organic agriculture and market promotion
- 7. Women empowerment for organic mission
- 8. Special animal welfare for indigenous breeds improvement
- 9. Master plan for indigenous germplasm and local breeds.

10. Institution to farmers, farmers to institution and farmers to farmers interface knowledge exchange.

### Four Core issues of interaction:

- 1. Input production technology
- 2. Packages of Practices for Organic Farming
- 3. Marketing strategies for Organic Farming
- 4. Institutional Mechanisms for promotion of Organic Farming

### For better interaction, all the farmers were divided into four groups namely:

- 11. Input Production Technology-Dr. KavithaKaraganti, Taskforce member
- 12. Improved Package and Practices /Technology-Dr. Dev Kumar, Pro and HOD, RIOF, UAS, GKVK, Bangalore
- 13. Marketing Strategy –Sh. Ananda, Taskforce member
- 14. Institutional Package and Practices-Dr. ManojMenon, Managing Director, ICCOA, Bangalore

### Recommendations of Input Production Technology Team:

- Imparting knowledge to the young generation and farmers
- What type and how the native seeds will be made available to the farmers
- No seed should be chemically treated
- Maintaining healthy ecology for healthy soil should be on top priority
- Pest and Diseases: When soil is healthy, plants will be healthy. No need of any pest repellants

- There should be appropriate and suitable tools for farm from sowing to processing
- Farm animals and their needs-Cattles, dogs, fodder needs,
   common grazing land for the animals
- Finances: Finance is very important especially during the transition period

# Recommendations of Institutional Mechanisms for promotion of Organic Farming Technology Team:

- Encouragement should be given to local seed banks at village level
- More importance should be given for Bio-Control and Seed treatment practices
- More encouragement should be given to Drip, Sprinkler and mulching
- Local Agricultural University should develop package of practices which comes under their jurisdiction
- Conservation and improvement of Local cattle breeds
- Traditional practice and local ITK's has to be documented
- More encouragement for agricultural empowerment

### Recommendations of Marketing Strategy Team:

- Registered Farmers Association should be started in all possible ways
- There should be no VAT/Sales Tax if these groups are selling farmers produce
- PGS Certification should be accepted in Task Market
- Producer contact details should be mentioned on the packet
- Producers, processers, market stake holders details should be well documented and available on Google

### Recommendations of Institutional Package and Practices Team:

- No Farmers Association-access Central Government
- There must be multiple streams of funding
- Commodity Boards should be encouraged
- Water is the very crucial need and only organic farming is ensuring rainwater getting harvested into well
- State Level Organic Independent Organic Body should be set up.

# **Capacity Building**

### **Establishment of Organic Vikash Kendra in Farmers Field:**

The Organic Vikas Kendra shall be established in the farmers field providing them structural spport which would be used for organizing trainings to the farmers.

### Other recommendations:

- i) KVKs to be utilized for training on Input production training.
- Organic Input Support:- Each farmers should get structure support for production of vermi comost, Panchgavya etc.
   One cattle per FPO per 10 ha must be made available to the farmers.
- iii) In India, we have about 2500 Gaushala which help cow dung collection about up to 4.0 million tons after conversion into manure it will be about 1.3 million tons. This needs to be regularized and some incentive like Rs. 2 per kg manures should be made available to against the collection and it should be tagged with the chemical fertilizers.

- iv) Liquid Bio-fertilizer:- Nitrogen, Phosphorus and Potash, are produced in the country. The 50% subsidy should be made available to the manufacturers of the liquid biofertilisers.
- v) Recycling of Farms Waste:- it is proposed that village wise crops waste/animal waste/Home waste should be recycled and incentive of Rs. 2 per kg should be provided to the farmers directly to their account.
- vi) Liquid Bio-Control Agents:- 50% subsidy should also be provided to the manufacturers.
- vii) Existing norms of FPO is about 1000 farmers. It must be reduced to 100 farmers and Govt support shuold be placed to registered FPOs soon after registration. However the funds must be released in advanced and its operation may be started once it reaches the strength of 100 farmers.
- viii) Soil should be tested for the Organic Carbon. Rs 5000 per ha for every 0.1% Organic Carbon achieved should be provided to the farmers as incentive directly to their account. It will help to increase the fertility of soil and interest of farmers to use the increased organic matter / input.
- ix) There should be Organic HAAt at the district level and two fairs may be organized on every crops harvest.

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