

Organic Farming

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Organic Farming

Organic farming is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasizes, the use of management practices in preference to the use of off –farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, agronomic, biological, and mechanical methods, as opposed to using synthetic materials, to fulfil any specific function within the system (FAO, 1999).

Advent of Organic farming

Organic farming has grown out of the conscious efforts by inspired people to create the best possible relationship between the earth and men. Since its beginning the sphere surrounding organic agriculture has become considerably more complex. A major challenge today is certainly its entry into the policy making arena, its entry into anonymous global market and the transformation of organic products into commodities. During the last two decades, there has also been a significant sensitization of the global community towards environmental preservation and assuring of food quality. Ardent promoters of organic farming consider that it can meet both these demands and become the mean for complete development of rural areas. After almost a century of development organic agriculture is now being embraced by the mainstream and shows great promise commercially, socially and environmentally. While there is continuum of thought from earlier days to the present, the modern organic movement is radically different from its original form. It now has environmental sustainability at its core in addition to the founders concerns for healthy soil, healthy food and healthy people.

Concept of organic farming

Organic farming is very much native to this land. Whosoever tries to write a history of organic farming will have to refer India and China. The farmers of these two countries are farmers of 40 centuries and it is organic farming that sustained them. This concept of organic farming is based on following principles:

- Nature is the best role model for farming, since it does not use any inputs nor demand unreasonable quantities of water.
- The entire system is based on intimate understanding of nature's ways. The system does not believe in mining of the soil of its nutrients and do not degrade it in any way for today's needs.
- The soil in this system is a living entity
- The soil's living population of microbes and other organisms are significant contributors to its fertility on a sustained basis and must be protected and nurtured at all cost.
- The total environment of the soil, from soil structure to soil cover is more important.

Definitions

In today's terminology it is a method of farming system which primarily aims at cultivating the land and raising crops in such a way, as to keep the soil alive and in good health by use of organic wastes (crop, animal and farm wastes, aquatic wastes) and other biological materials along with beneficial microbes (biofertilizers) to release nutrients to crops for increased sustainable production in an eco-friendly pollution free environment.

As per the definition of the USDA study team on organic farming "*organic farming is a system which avoids or largely excludes the use of synthetic inputs (such as fertilizers, pesticides, hormones, feed additives etc) and to the maximum extent feasible rely upon crop rotations, crop residues, animal manures, off-farm organic waste, mineral grade rock additives and biological system of nutrient mobilization and plant protection*".

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

In philosophical terms organic farming means "farming in spirits of organic relationship. In this system every thing is connected with every thing else. Since organic farming means placing farming on integral relationship, we should be well aware about the relationship between the soil, water and plants, between soil-soil microbes and waste products, between the vegetable kingdom and the animal

kingdom of which the apex animal is the human being, between agriculture and forestry, between soil, water and atmosphere etc. It is the totality of these relationships that is the bed rock of organic farming.

The Global World of Organic Agriculture - 2010

As per the details released at BioFach 2010 at Nuremberg, the organic agriculture is developing rapidly, and statistical information is now available from 160 countries of the world. Its share of agricultural land and farms continues to grow in many countries. The main results of the latest global survey on certified organic farming are summarized below:

Growing area under certified organic agriculture

- 35 million hectares of agricultural land are managed organically by almost 1.4 million producers.
- The regions with the largest areas of organically managed agricultural land are Oceania (12.1 million hectares), Europe (8.2 million hectares) and Latin America (8.1 million hectares). The countries with the most organic agricultural land are Australia, Argentina and China.
- The highest shares of organically managed agricultural land are in the Falkland Islands (36.9 percent), Liechtenstein (29.8 percent) and Austria (15.9 percent).
- The countries with the highest numbers of producers are India (340'000 producers), Uganda (180'000) and Mexico (130'000). More than one third of organic producers are in Africa.
- On a global level, the organic agricultural land area increased in all regions, in total by almost three million hectares, or nine percent, compared to the data from 2007.
- Twenty-six percent (or 1.65 million hectares) more land under organic management was reported for Latin America, mainly due to strong growth in Argentina. In Europe the organic land increased by more than half a million hectares, in Asia by 0.4 million.
- About one-third of the world's organically managed agricultural land – 12 million hectares is located in developing countries. Most of this land is in Latin America, with Asia and Africa in second and third place. The countries with the largest area under organic management are Argentina, China and Brazil.
- 31 million hectares are organic wild collection areas and land for bee keeping. The majority of this land is in developing countries – in stark contrast to agricultural land, of which two-thirds is in developed countries. Further organic areas include aquaculture areas (0.43 million hectares), forest (0.01 million hectares) and grazed non-agricultural land (0.32 million hectares).

Almost two-thirds of the agricultural land under organic management is grassland (22 million hectares). The cropped area (arable land and

permanent crops) constitutes 8.2 million hectares, (up 10.4 percent from 2007), which represents a quarter of the organic agricultural land.

Continent wise growth –

- **Africa** - In Africa, there are almost than 900'000 hectares of certified organic agricultural land. This constitutes about 2.5 percent of the world's organic agricultural land. 470'000 producers were reported. The countries with the most organic land are Uganda (212'304 hectares), Tunisia (174'725 hectares), and Ethiopia (99'944 hectares).
- **Asia** - The total organic agricultural area in Asia is nearly 3.3 million hectares. This constitutes nine percent of the world's organic agricultural land. 400'000 producers were reported. The leading countries by area are China (1.9 million hectares) and India (1 million hectares). Timor Leste has the most organic agricultural area as a proportion of total agricultural land (seven percent). Organic wild collection areas play a major role in India and China, while Aquaculture is important in China, Bangladesh and Thailand.
- **Europe** - As of the end of 2008, 8.2 million hectares in Europe were managed organically by more than 220'000 farms. In the European Union, 7.5 million hectares were under organic management, with almost 200'000 organic farms. 1.7 percent of the European agricultural area and 4.3 percent of the agricultural area in the European Union is organic. Twenty-three percent of the world's organic land is in Europe.
- **Latin America** - In Latin America, 260'000 producers managed 8.1 million hectares of agricultural land organically in 2008. This constitutes 23 percent of the world's organic land. The leading countries are Argentina (4 million hectares), Brazil (1.8 million hectares), and Uruguay (930'965 hectares).
- **North America** - In North America, almost 2.5 million hectares are managed organically, representing approximately 0.6 percent of the total agricultural area. Currently the number of farms is 14'062. The major part of the organic land is in the U.S. (1.8 million hectares in 2008). Seven percent of the world's organic agricultural land is in North America. Despite tough economic times, U.S. sales of organic products, both food and non-food, reached 24.6 billion US dollars by the end of 2008, growing an impressive 17.1 percent over 2007 sales, according to the Organic Trade Association's 2009 Organic Industry Survey.
- **Oceania** - This region includes Australia, New Zealand, and island states like Fiji, Papua New Guinea, Tonga and Vanuatu. Altogether, there are 7'749 producers, managing more than 12.1 million hectares. This constitutes 2.8 percent of the agricultural land in the area and 35 percent of the world's organic land. Ninety-nine percent of the organically managed land in the region is in Australia (12 million hectares, 97 percent of which is extensive grazing land), followed by New Zealand (100'000 hectares), and Vanuatu (8'996 hectares).

Global market - According to Organic Monitor estimates, global sales reached 50.9 billion US dollars in 2008, doubling in value from 25 billion US dollars in 2003. Consumer demand for organic products is concentrated in North America and Europe; these two regions comprise 97 percent of global revenues. Asia, Latin America and Australasia are important producers and exporters of organic foods. The financial crisis has had a negative impact on the global market for organic products; however, preliminary research finds that growth continued in 2009 in spite of the poor economic climate.

Standards and regulations - 2009 witnessed several major developments in the field of standards and regulations. The new EU regulation on organic production came into force as well as the Canadian organic standard. Furthermore, the Australian domestic organic standard was implemented. Canada and the U.S. concluded the world's first fully reciprocal agreement between regulated organic systems, and the EU introduced procedures for approving certification bodies from outside the EU. It is expected that these developments will ease trade in organic products and foster the future growth of the sector. The number of countries with organic standards has increased to 73, and there are 16 countries that are in the process of drafting legislation. In 2009, FAO, IFOAM and UNCTAD started the Global Organic Market Access (GOMA) project. The aim of GOMA is to facilitate equivalence, harmonization and other types of cooperation in order to simplify the process for trade flow of products among the various organic guarantee systems. There has been modest growth in the number of certification bodies. The total is 488, up from 481 in 2008. Most certification bodies are in the European Union, the United States, Japan, South Korea, China, Canada, and Brazil. A growing number of organic producers are certified through Participatory Guarantee Systems (PGS) across the world. PGS are locally focused quality assurance systems. It is estimated that around 10'000 small operators are involved in PGS world-wide. The leading countries with regards to PGS are located in the global South. Several organic standard setters have also developed draft standards for climate "add-ons" for organic certification, and it is expected that the use of carbon labeling by retailers will grow considerably in the future.

Organic farming and development support - Both private and public development initiatives have contributed considerably in the last 25 years to the growth of the organic sector in many countries of the world. Activities have related to, for instance, building up the capacities of different stakeholder groups in the organic sector, developing domestic and international markets, and developing local standards and legislations. One of the new initiative is the proposed Organic Research Centres Alliance (ORCA), hosted by FAO, which intends to internationally network and strengthen existing institutions with scientific credentials and empower

them to become centers of excellence in transdisciplinary organic agriculture research. International trade, an engine for growth can substantially contribute to poverty reduction in developing countries. The Trade, Climate Change and Environment Programme of the International Trade Centre (ITC) supports the organic sector through the provision of market information, training in standards compliance, and trade promotion; by supporting policies favorable to organic agriculture and trade; and by facilitating business contacts.

(Source – Helga Willar, The World of Organic Agriculture- Statistics & Emerging Trends 2010, Publication FiBI and IFOAM)

Organic Agriculture in India

Since January 1994 “Sevagram Declaration” for promotion of organic agriculture in India, organic farming has grown many folds and number of initiatives at Government and Non-Government level has given it a firm direction. While National Programme on Organic Production (NPOP) defined its regulatory framework, the National Project on Organic Farming (NPOF) has defined the promotion strategy and provided necessary support for area expansion under certified organic farming.

Growing certified area

Before the implementation of NPOP during 2001 and introduction of accreditation process for certification agencies, there was no institutional arrangement for assessment of organically certified area. Initial estimates during 2003-04 suggested that approximately 42,000 ha of cultivated land were certified organic. By 2009 India had brought more than 9.2 million ha of land under certification. Out of this while cultivable land was approximately 1.2 million ha, remaining 8 million ha area was forest land for wild collection. Growing awareness, increasing market demand, increasing inclination of farmers to go organic and growing institutional support has resulted into phenomenal growth in total certified area during the last five years. As on March 2009, total area under organic certification process stood at 12.01 lakh ha.

Important features of Indian organic sector

With the phenomenal growth in area under organic management and growing demand for wild harvest products India has emerged as the single largest country with highest arable cultivated land under organic management. India has also achieved the status of single largest country in terms of total area under certified organic wild harvest collection.

With the production of more than 77,000 MT of organic cotton lint India had achieved the status of largest organic cotton grower in the world a year ago, with more than 50% of total world's organic cotton.

Growing organic food market

Although no systematic information is available on size of organic food market by as per the survey conducted by the International Competence Centre for

Organic Agriculture (ICCOA) in top 8 metro cities of India (which comprise about 5.3 % of the households) the market potential for organic foods in 2006 in top 8 metros of the country is at Rs 562 crore taking into account current purchase patterns of consumer in modern retail format. The overall market potential is estimated to be around Rs.1452 crore.