

## Organic Farming- A Perspective

A. V. Ramanjaneyulu<sup>1</sup>, N. C. Sarkar<sup>2</sup>, Ashok K. Thakur<sup>3</sup> and R. K. Maiti<sup>4</sup><sup>1</sup>Regional Agricultural Research Station, Acharya N.G. Ranga Agricultural University, Palem, Mahabubnagar district, Andhra Pradesh (509 215), India<sup>2</sup>Department of ASPEAN, PSB, Visva-Bharati, Sriniketan, West Bengal (731 236), India<sup>3</sup>Seed Technology and Production Centre, Dr. Y.S. Parmar University of Horticulture and Forestry, Nauni Solan, Himachal Pradesh (173 230), India<sup>4</sup>Universidad de las Americas, Departamento de Quimica y Biologia, Santa Catarina Martir, C.P., Puebla (72820), Mexico

## Correspondence to

\*E-mail: avr\_agron@rediffmail.com

## 1. Introduction

The present commercial farming systems, due to intensive involvement of synthetic chemical inputs, have shown negative impacts on human health and ecology. In the recent past, this eyebrow raising issue forced the policy makers, researchers, producers and consumers to find out the healthy and safe alternate ways of farming. Organic farming is one such system that provides healthy food without leaving negative mark on the environment. According to United States Department of Agriculture (USDA), *organic farming is the production system which avoids or largely excludes the use of synthetically compounded fertilizers, pesticides, growth regulators, and live stock feed additives. To the maximum extent, organic farming system rely on crop residues, animal manures, legumes, green manures, off-farm, organic wastes, mechanical cultivation, mineral-bearing rocks and aspects of biological pest control to maintain soil productivity and tilth, to supply plant nutrients and to control insects, weeds and other pests.*

Today, world organic agriculture is in well progress due to existence of scientific methods of cultivation and procedures. Demand for organic products is always at increasing trend mainly because people are becoming more health cautious and sensitive. Recent survey (February, 2013) by Research Institute of Organic Agriculture (FiBL, Frick, Switzerland) in cooperation with IFOAM reported that 162 countries are practicing organic agriculture totaling 37.2 mha of total area including the farms under conversion to organic. The share of the world's organic agriculture is only 0.9% of total agricultural land. During the period 2004-2011, the area under organic farming has increased little

from 21.8 mha to 23.2 mha, whereas permanent crops covered almost double (3.4 to 6.3 mha) and permanent grassland almost three times area (0.9 to 2.6 mha). Half of the organic grassland or grazing areas is located in Oceania (50% of the organic grassland or grazing area or 11.6 mha), followed by Europe (21% or 4.8 mha) and Latin America (21% or 4.8 mha).

Oceania has almost one-third of the total global organic agricultural land, however most of it is under natural pastures. Because of this, its importance in terms of organic food production is relatively low. Europe, a region that has had a very constant growth of organic land over the years, has more than one quarter of the world's organic agricultural land. The share of Latin America is slightly lower than that of Europe (18%). Asia covers 10% (3.7 mha) of the organic area. Among the countries, Australia is the country with the maximum organic agricultural land, 97% of which is extensive grazing area. Argentina is second, followed by the United States in third place. The ten countries with the most organically managed agricultural land have a combined total of 26.3 mha, constituting almost 70% of the world's organic agricultural land. The country with the highest share is the Falkland Islands (Malvinas), where several large sheep farms are working organically followed by Liechtenstein (29.3%) and Austria (19.7%).

The organic agricultural land, compared with 1999, when data on organic agriculture worldwide were available for the first time, has increased more than three times while for the revised data from 2010, it has increased by 3% in 2011 (Figure 1). Organic area in true sense of total 69.7 mha in 2011 that not only includes the agricultural land, but also other areas may be called as *further organic area*. The largest part of these areas is wild



collection beekeeping, aquaculture, forest and grazing areas on non-agricultural land. About 31.6 mha of wild collection and bee-keeping areas more or less evenly distributed over four regions: Europe, Africa, Asia, and Latin America, reflecting quite a different pattern than that for agricultural land. Finland has highest area followed by Zambia and India. About a total of 1.8 million organic producers were reported, out of which more than three quarters of the producers are located in Asia, Africa and Latin America. India has most number of producers (5,47,591), followed by Uganda (1,88,625) and Mexico (1,69,570).

**2. Organic Farming in Indian Context**

Growth of organic farming area in India is really appreciable. Among the ten countries with the highest organic agricultural land during 2011 (Figure 2), India (1.1 mha) ranks 7<sup>th</sup> in the world and 2<sup>nd</sup> in Asia after China (1.9 mha). The total organic agricultural area in Asia was 3.7 mha in 2011, covers 10% of the world’s organic agricultural land. Timor-Leste has the most organic agricultural area as a proportion of total agricultural land (almost 7%). During 2010-11, India had the largest number of organic producers of over 0.5 million and accounted for 3.89 mt of certified organic produce. India exported 86 items with the total volume of 69837 tonnes (2010-11) with an export realization of around 157.22 million US\$ registering a 33% growth over the previous year. It indicates that farmers started adopting organic farming slowly and steadily.

The small and resource poor farmers are located mostly in the Eastern and Northeastern regions of the country, they have no choice expect to farm without chemicals fertilizers or pesticides. In Maharashtra, Madhya Pradesh and Karnataka, organic farming provides them with an alternative as low cost farming avoids debt trap and suicides. In Kerala, organic farmers are adopting the export agribusiness development route, as most of the organic spices black pepper, cardamom, nut meg etc are exported from Kerala to foreign country. Uttaranchal, Uttar Pradesh, Madhya Pradesh, Chattisgarh, Kerala are promoting organic farming on a large scale. Sikkim, Mizoram and Pondicherry have declared their state as 100% organic farming state.

**3. Organic Market and Consumption**

The turnover with organic products has more than four fold since 1999, when it was estimated to be US\$15 billion. In 2011, the global market for certified organic food and drink was estimated to be US\$63 billion according to Organic Monitor (Sahota, 2013). US have largest market with € 21 billion of organic food sales, followed by Germany with € 6.6 billion and France with € 3.8 billion (FiBL-AMI-IFOAM, 2013). However, the highest annual per capita consumption is Switzerland (€ 177) and in Denmark (€ 162). Denmark, Switzerland and Austria have the highest share of organic food sales.

**4. Conclusion**

Organic agriculture has been proved to be beneficial in the long run in view of steady increase in yield and profitability.

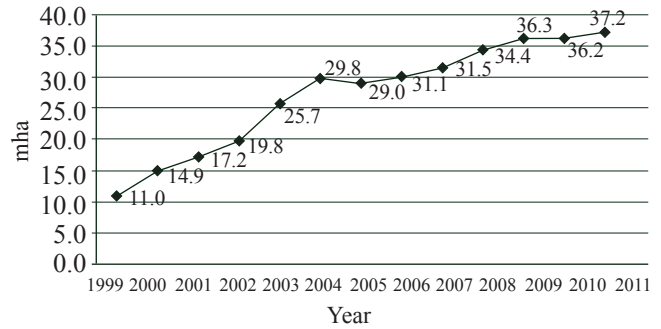


Figure 1: World Development of organic agriculture land 1999-2011

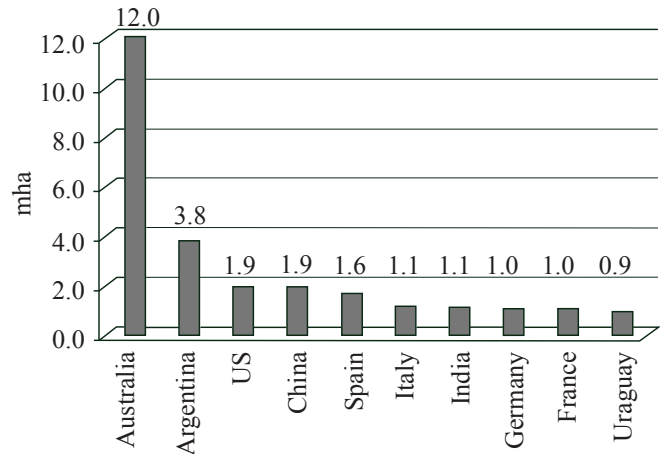


Figure 2: Ten countries with the largest agriculture land in 2011 (the data for Australia, US and Uruguay is for the year 2009, 2010, 2006, respectively))

However, the penalty in yield in the initial stages has to be compensated by governments to promote it on a large scale. The most successful organic modules have to be popularized among farming community through upscaling and outscaling extension strategies in the specially delineated organic zones. Appropriate backward and forward linkages must be in place to encourage the growers towards organic farming. Awareness has to be created regarding guidelines for certification process. Government must devise mechanisms like minimum support price to encourage the producers and/or subsidy on organic produce to bring it to the reach of masses and create a market pull for organic commodities.

**5. References**

FiBL, IFOAM., 2013. Data on organic agriculture world-wide. In: FiBL& IFOAM (2013): The World of Organic Agriculture. Statistics and Emerging Trends. Frick and Bonn.  
 FiBL, AMI IFOAM., 2013. Organic market data. In: FiBL& IFOAM (2013), The World of Organic Agriculture. Statistics and Emerging Trends. Frick and Bonn.  
 Sahota, A., 2013. The Global Market for Organic Food and Drink. In: FiBL& IFOAM (2013): The World of Organic Agriculture. Statistics and Emerging Trends. Frick and Bonn.