

Organic Agriculture as a Strategy for Improving Small Farmers' Livelihood in Iran

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Abstract

Organic agriculture includes all agricultural systems that promote the environmentally, socially and economically sound production of food and fibers. These systems take local soil fertility as a key to successful production. By respecting the natural capacity of plants, animals and the landscape, it aims to optimize quality in all aspects of agriculture and the environment. Organic agriculture dramatically reduces external inputs by refraining from the use of chemosynthetic fertilizers, pesticides, and pharmaceuticals. Despite organic farming is the oldest form of agriculture on earth; few attentions have been paid to develop this approach. In fact, while organic farming has promoted as environmentally-friendly approach and developed during the last few years in most developed countries, there are few emphasizing on developing countries such as Iran. Traditional agriculture in Iran is a kind of non-certified organic, because almost all practices and processes in these agro-ecosystems are compatible with organic agriculture, but it has not been certified as organic. Iran occupies a vast area of land with a diverse climatic conditions and hence a rich biological diversity. It has been evidenced that this country has been one of the centers of evolution of agriculture and human was for the first time settled in this part of the world some 10000 years ago for agricultural activities. Traditional small scale farming was the main structure of farming communities for centuries and this has caused a tremendous accumulation of indigenous knowledge in farming practices and food production. Iranian traditional agriculture looks a lot like organic agriculture in many ways. For example, some products from the mountainous regions are completely organic. There are several reasons to argue that there is a good capacity in Iranian field crop cultivation for making the transition to organic agriculture.

Key words: Organic agriculture, Small Farmers, Rural Livelihood, Iran.

Introduction

The main part of the world's population (58 per cent) lives in Asia, as does the bulk of the world's poor (73 per cent). High population growth, widespread poverty and illiteracy characterize the social landscape of the lower-income countries of Asia. The region is afflicted by both urban and rural poverty; however, rural poverty accounts for three-quarters of the total.

Small farmers produce much of the developing world's food. Yet they are generally much poorer than the rest of the population in these countries, and are less food secure than even the urban poor. Furthermore, although the majority of the world's population will live in urban areas by 2030, farming populations will not be much smaller than they are today. For the foreseeable future, therefore, dealing with poverty and hunger in much of the world means confronting the problems that small farmers and their families face in their daily struggle for survival.

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Studies from developing countries in Asia show that small farmers who adopt organic agriculture earn higher income and achieve better living standards. In addition, organic food trade is now the most rapidly growing food sector worldwide due to mounting concerns surrounding food safety and quality. As a result, new opportunities for global partnerships that aim to reduce poverty through safe-food production in developing countries are rapidly emerging. As an engine for sustainable development, organic agriculture has a role to play in the areas of poverty alleviation, human development, gender equality and environmental protection.

About 86 percent of farmers in Iran are smallholders which manage near 40 percent of arable lands, mainly use for producing high-value cash crops such as rice and saffron. Organic agriculture will enables Iranian smallholders to achieve household food security and gain modest incomes while regenerating the land, enhancing biodiversity, and supplying quality food to local communities. Benefits have been demonstrated by diversified and integrated organic farm systems that are economically viable, environmentally sound and supportive of cultural traditions. These environmental, economic and social objectives are essential to rural development in Iran. In the context Organic agriculture combines modern scientific research with traditional farming techniques in a sustainable, efficient farming system. By working with natural processes and making use of locally available assets, poor smallholder farmers can build up the fertility and productivity of their farms while avoiding dependence on expensive external inputs. Growing markets for certified produce mean that organic agriculture offers an important opportunity for the rural poor in developing countries to benefit from international trade.

Organic Agriculture in IRAN

Organic farming can be seen as an approach to agriculture where the aim is to create integrated, humane, environmentally and economically sustainable agricultural production systems. the term 'organic' is best thought of as referring not to the type of inputs used, but to the concept of the farm as an organism, in which all the components, the soil minerals, organic matter, microorganisms, insects, plants, animals and humans, interact to create a coherent, self-regulating and stable whole. Reliance on external inputs, whether chemical or organic, is reduced as far as possible. (Lampkin *et al.* 1999). Organic farming is a method of crop and livestock production that involves much more than choosing not to use certain pesticides, fertilizers, genetically modified organisms, antibiotics, and growth hormones that are not permitted by organic standards.

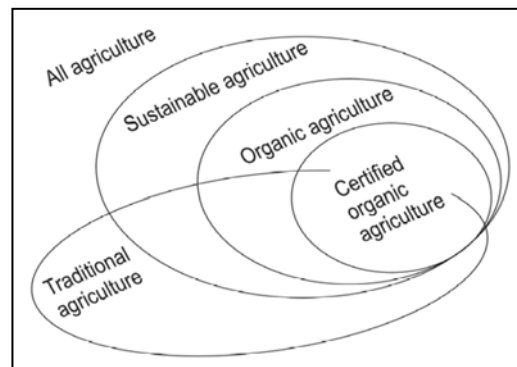
In developing countries, certified organic agricultural production is limited. However, significant shares of agricultural land are under traditional or alternative production methods. Such areas could be converted to certified agriculture relatively easily, provided that certification costs can be kept low (Vossenaar and Jha, 2007).

Iran occupies a vast area of land with a diverse climatic conditions and hence a rich biological diversity. It has been evidenced that this country has been one of the centers of evolution of agriculture and human was for the first time settled in this part of the world some 10000 years ago for agricultural activities. Traditional small scale farming was the main structure of farming communities for centuries and this has caused a tremendous accumulation of indigenous knowledge in farming practices and food production (Koocheki, 2004).

Iranian traditional agriculture looks a lot like organic agriculture in many ways. For example, some products from the mountainous regions are completely organic. There are several reasons to argue that there is a good capacity in Iranian field crop cultivation for making the transition to organic agriculture. Nevertheless, at present, producers do not pay certification costs; these are borne by the exporter (in limited extent), who has to arrange for inspections by foreign certification bodies. Now, there is 1113 ha certified organic agricultural land in the country (Willer and Kilcher, 2009). Furthermore there are other non-certified organic cases such as an 85 ha olive orchard which its products are sold in local markets as organic as well as a 22,000 ha fig orchards.

In relation to the distinction above, we emphasize that not all traditional farming systems that do not use artificial pesticides and fertilisers are 'non-certified organic' by default, because they may very well be unsustainable due to soil degradation, etc. On the other hand, non-certified organic food systems may be more in line with the organic values and principles than certified systems,

because the latter also face pressures of market competition and globalization. (Liaghati, *et al.*, 2008) (fig. 2).



Stevenson, 2006

Fig. 2. Relationship among Systems of agriculture

The role of Organic Agriculture in improving small farmers' livelihood

About 32 percent of the populations of Iran live in rural areas, and for most of the rural poor agriculture is a critical component in the successful attainment of the rural sustainable development. Even though structural transformations are important in the longer term, more immediate gains in poor households' welfare can be achieved through agriculture, which can help the poor overcome some of the critical constraints they now face in meeting their basic needs. Thus, a necessary component in meeting the improving small farmers' livelihood in many parts of the world is a more productive and profitable agricultural Sector (Rosegrant et al, 2005)

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As an engine for sustainable development, organic agriculture has a role to play in the areas of poverty alleviation, human development, gender equality and environmental protection (Vossenaar and Jha, 2007).

About 86 percent of farmers in Iran are smallholders which manage near 40 percent of arable lands in Iran, mainly use for producing high-value cash crops such as rice, saffron and vegetables. Some of the smallholders use no chemical inputs in their farms. If they could shift to organic farming, would earn better income and other benefit of organic agriculture. For instance, in Estahban region situated in south of Iran, where is famous for Fig products, those farms that shift their production to organic management make a good opportunity in market competition and further profits. Moreover, there are the same situation regarding another crops such as Grapefruits in Jiroft, vegetables in north of Iran, Pomegranate in Neyriz and etc.

Organic operation is labour intensive; therefore organic agriculture can improve the employment especially for woman compared with the conventional production system. Organic agriculture will enables Iranian smallholders to achieve household food security and gain modest incomes while regenerating the land, enhancing biodiversity, and supplying quality food to local communities. Benefits have been demonstrated by diversified and integrated organic farm systems that are economically viable, environmentally sound and supportive of cultural traditions. These environmental, economic and social objectives are essential to rural development in Iran. In the context Organic agriculture combines modern scientific research with traditional farming techniques in a sustainable, efficient farming system. By working with natural processes and making use of locally available assets, poor smallholder farmers can build up the fertility and productivity of their farms while avoiding dependence on expensive external inputs. Growing markets for certified produce mean that organic agriculture offers an important opportunity for the rural poor in developing countries to benefit from international trade.

Thus, Organic farming as a Strategy for a Multi-functional Agriculture play a key role to achieve the rural poverty alleviation, especially in developing countries such as Iran.

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