Family Farming In Terms Of Sustainable Food Supply And Evaluation Of The Present Situation In Turkey

Nevin Demirbaş[1] Özge Can Niyaz[2] Yeliz Merve Apaydın[3]

[1] Ege University, Department of Agricultural Economics, 35100 Bornova/İzmir-Turkey.
nevin.demirbas@ege.edu.tr

[2]Canakkale Onsekiz Mart University, Department of Agricultural Economics, Canakkale-Turkey.
ozgecanniyaz@comu.edu.tr

[3] Ege University, Department of Agricultural Economics, 35100 Bornova/İzmir-Turkey.
yelizmerveapaydin@gmail.com

Abstract: Family farming has an important place in the agricultural sector of both developing and developed countries. Producing families make various socio- economic contribution to the agricultural sector and, thus, to the national economy. The latest actions on sustainability of the food supply are among these contributions. Despite the fact that the development levels are different, ensuring food security is the primary concern of every country.

In Turkey, which is a developing country, sustainability of the food supply is important in terms of meeting the food needs of increasing population along with the development of the food industry and export. This study reveals the importance of family farming across the world and evaluates the issue in terms of sustainability of the food supply in the example of Turkey. In the study some suggestions on enhancing family farming's possible contribution to the sustainability of the food supply are included. This study is a literature research made with the help of secondary sources.

Key words: Family Farming, Food Supply, Sustainability, Turkey.

1. Introduction

Family farming is a proportion of powers and abilities of all family members in rural areas, which takes form of agricultural production; it is inseparably connected with food security. Firms engaged in family farming are one of the most effective elements of the agricultural sector in both developed and developing countries. Producing families, despite the poor ability to access the factors of production, such as agricultural inputs and support, manage their land carefully to maintain the high levels of production. Indeed, many researches reveal inverse proportion between the size of the land and production (Ünal, 2008). Family farming is one of the solutions for food security, which is among the biggest future challenges; it has a great importance in terms of providing sustainable food especially for developing countries. In the future, a great contribution is expected from the firms engaged in family farming as a solution to problems of more severe hunger and poverty (FAO, 2015a; FAO, 2015b; Güneş ve Keskin, 2014).

Family farming, while providing help in preservation of the traditional food products, also contributes to the balanced nutrition, preservation of agro-diversity and sustainable usage of natural resources. Having adopted precisely the local ecology and land facilities, small family companies, by using their knowledge generally on the land of low value, apply complex and innovative land management techniques to maintain productivity. Along with the deep knowledge of the land and different sustainable land management skills, producing families contribute to the improvement of many ecological system services (FAO, 2015a; FAO, 2015b).

Family farming, especially when supported by the social protection- and public welfare- oriented policies, comes in sight as an opportunity for the revival of local economies. Producing families have strong economic links with the rural area. A significant part of the workforce is still employed in the agricultural sector, thus, producing families in developing countries make a great contribution to employment. Moreover, income made by family farming, in non-agricultural economy, is spent on housing, education and clothing (TOBB, 2015). Risk of hunger and poverty, being on the agenda, has increased the awareness

of importance of family farming on a global scale in recent years. There are over 500 million family farming facilities in the world, and developed countries consider family farming very important in terms of food security (FAO, 2015a; FAO, 2015b; FAO, 2015c).

Turkey, despite the 22 percent decline in rural population, still has high potential of rural population (TÜİK, 2015b). It also brings some social and economic problems. One of the most important of these problems is related to providing food security. Despite the potential of existing rural population, for many years the importance of family farming in terms of sustainable food supply in Turkey remained outside the agenda. The aim of the current study is to emphasize the importance of family farming and to evaluate this issue in terms of sustainable food supply in Turkey.

2. Family Farming and Its Characteristics

Family farming is defined differently. FAO as a whole introduces family farming as family-based agricultural activities associated with many areas of rural development (FAO, 2015a; FAO, 2015b; FAO, 2015c).

Family farming, managed and brought into existence by one family, is a method of organizing production activities which are mainly based on family labor oriented on agriculture, forestry, fishery, apiculture and aquaculture. In rural areas, 90 percent of family farming, which includes powers and abilities of all family members engaged in agricultural production, is composed of small farms. In these farms, family members cooperate with each other in production to the extent of their experience and knowledge (Örnek, 2016; Rehber 2014). Family farming has a key role from the point of food security and sustainability, it is also very important for local economy. It can be stated that provision of food security and disappearance of poverty depend on supporting family farming and small landowners (Food in Life, 2015).

Facilities engaged in family farming in underdeveloped countries, despite many problems, manage to survive in difficult conditions, such as feeding family members. It also plays role in transfer of the national natural resources to production and finding economic value. Family farming is the most important actor in the agricultural production both in developed and developing countries. Facilities engaged in family farming, along with being the largest food producing sector for the future of humanity, are also seen as an insurance of food security (Mert, 2015; Yıldırım, 2014a).

Facilities engaged in family farming yield the products to the regional markets, however, at the same time they are the biggest consumers for these markets due to their agricultural input demands and household expenses. Family farming plays role in employment creation both in agricultural and non-agricultural areas. Small family facilities ensure the preservation of the traditional food products in their regions. In addition, family farming gives an opportunity to the rural population to have balanced nutrition. These facilities also support protection and preservation of agricultural bio-diversity and make it possible to use resources sustainably. In addition, they are the source of cultural life (UN Information Centre, 2014; Örnek, 2016).

3. Family Farming Around The World

Food security is one of the most important strategic issues of the 21st century. Diminishing food resources have become one of the topics used as an element of pressure on society by developed countries and international companies. Dominance in food production is even more important than energy dominance; not taking necessary measures towards food security has led the countries to a danger of being powerless in commercial and military respect, because it is not possible to support the future of the country without ensuring food security. Whereas more than 40 percent of industrial agricultural production entering the supply chain is wasted due to rottenness and decay, small-scale family farms, despite the fact that they own only 20-25 percent of cultivated land, are able to feed 70 percent of the world population (Derdiyok, 2014).

Nowadays, rural areas in more than 70 percent of the countries in Africa, Asia, Latin America and Near East experience risk of hunger and food security problems. Small-scale family facilities in these countries,

where along with the risk of hunger poverty is also high, are generally businesses which have low income, lack necessary agricultural support and have difficulties to access natural resources. According to the study performed by the United Nations (the UN), provision of food security is possible providing that necessary social and economic support is granted to the farms engaged in family farming (FAO, 2015a; FAO, 2015b; FAO, 2015c).

Evaluating the issue on a global scale, it can be observed that developed countries also give importance to family farming. For instance, in the agricultural sector of the United States of America (the USA) share of the large livestock companies is about 3-4 percent. 96-97 percent of these facilities are family farms. The European Union (the EU) has a similar situation. 98 percent of the facilities are family farms. 84 percent of the workforce, employed by 12 millions agricultural facilities engaged in agricultural production, consist of family members (Yıldırım, 2014a). In the EU and the USA, people engaged in cattle breeding are the families that continue a livestock farming tradition throughout generations. The EU, the USA and other developed countries maintain the agriculture by accumulation technology and development of the habits passed from generation to generation. This is one of the most important reasons of achievements made in the agricultural sector (MacDonald, 2014; Yıldırım, 2014a). However, the main problem for family facilities and family farming is the aging of the agricultural population almost everywhere in the world. In the EU the average age is over 50. In Poland and France, which are the two most important agricultural countries in the EU, elderly agricultural population is the main problem (IFAD, 2014a; IFAD, 2014b). Consequently, the existence and sustainability of the family facilities in the agricultural sector is of great importance for all developed and developing countries.

As a matter of fact, family farming is the lynchpin of sustainable agriculture; the world has created a unique model based on small-scale family facilities and supports it. Whereas the USA and the EU countries give more importance to family farming and food security in their agricultural policy, developing countries, on the contrary, provide financial support to encourage agricultural industrialization (Yıldırım, 2014a; Yıldırım, 2014b).

Family farming is largely composed of small-scale agricultural facilities in developed countries it generally gains a place in the market as a part of a cooperative, while in underdeveloped countries the policy of reducing the number of small-scale family facilities has been pursued. This policy mistakes emerged over time; due to ruralization of cities farm lands remained empty, which led to social and economic problems increase. Despite the adequate food production in the world and sufficient production resources in these countries, the hunger problem could not be overcome. First, hunger and poverty existing in Africa started to spread to other nowadays underdeveloped and developing countries, and day by day it became a problem (Kaymakçı, 2014; Derdiyok, 2014).

In the new century, developed countries are meticulous and resolute on the subject of food production and security new policies aimed at family farming have been developed. In developing countries, food market is supported by domination of private companies and capital groups. As a result of the developments in this direction, the number of facilities engaged in family farming decreased gradually (Örnek, 2016).

However, the world economic crisis experienced in the recent years, sequential collapse of global companies, increased poverty even in developed countries, and hunger reaching the critical line- all these factors mobilized all the countries, with the United Nations being in the first place, and civil society organizations. The solution of the problem of food security endangerment based on the policies is at the top of the agenda. At this point the importance of family farming becomes obvious. Harm to family farming caused by faulty agricultural policies over the years came in sight. The importance of preservation, rather than elimination, of the essential part of small-scale family facilities, which ought to be a part of a cooperative, has increased (Yıldırım, 2014a; Örnek, 2016).

4. Evaluation of Family Farming in Turkey in Terms of Sustainable Food Supply

There is no official definition of family farming in Turkey. However, in the Ad Hoc Commission report on the Development Plan, in respect of the existence of small-scale agricultural facilities and demographic indicators per facilities, the agriculture is stated to be at subsistence level. Thus, according to the results of recent (2001) Agricultural Census, more than 80 percent of agricultural facilities in Turkey are small-scale facilities, and these facilities cultivate in 42 percent of total agricultural land (TÜİK, 2015a). In Turkey, despite the regional differences, most of agricultural population live in traditional conditions of production (DPT, 2007).

In Turkey, after 1950 the ratio of urban population started to increase rapidly, and a big number of population abandoned rural areas. In 2012, the proportion of urban and rural population was 77.3 percent and 22.7 percent respectively (TÜİK, 2015b).

After 1980, rapid expansion of large-scale agricultural facilities in Turkey along with the industrialization of agriculture, affected the rural population negatively. The policy pursued after 1980 caused gradual decrease of the number of facilities engaged in family farming (Derdiyok, 2014; Rehber, 2014). Family farming proved to make a significant contribution to rural development; in Turkey, on the grounds that the facilities are small-scale and the land area is fragmented, large-scale facilities gain more land, while the USA and the EU countries provide agricultural technological development and preserve family farming. Decrease of the number of facilities engaged in family farming in Turkey boosted problems, such as careless use of natural resources, hunger, change of urban structure and food security (ESK, 2014; Derdiyok, 2014). Despite the developments which emerged over the time, today the small-scale facilities in the agricultural sector are still kept in existence. As in other sectors of economy, in the agricultural sector the scale of a facility has always been a matter of discussion. Nowadays, when a smaller (due to separation) scale of agricultural facilities has increased the outflow from the agricultural sector, obtaining sufficient income in the agricultural sector requires cost reduction and, consequently, the scale growth; issues such as sustainable use of resources and food security increase the importance of family farming. This reveals the need of agricultural policy to monitor the projects and programs oriented to the multiple structure (Çivioğlu ve ark., 2014; Saçlı, 2014).

To solve some economic problems in Turkey caused by generally small and medium scale of family facilities and fragmented and dispersed structure of the land, in 2014 the Law amending the Law on Soil Preservation and Land Utilization No. 6537 came into force (Official Journal, 2014). The most important issues that arise under the law are identifying the level of "sufficient income" in parallel with determination of the facility scale (Saçlı, 2014). To retain residual population in rural areas in Turkey, effective policies aimed at supporting family farming should be developed. It should be recognized that the facility size is not a very important criterion, and significance of family farming ought to be acknowledged. Otherwise, problems related to food sustainability will increase, and the cities may become uninhabitable (Mert, 2014).

To ensure food security, in Turkey in recent years apart from the legislative regulations various studies have been performed. These studies include the grant-maintained Rural Development Investments Support Program. This program is aimed at ensuring the sustainable food supply by including small family facilities into the food supply chain (ESK, 2014). However, it is difficult to state that these studies are sufficient. Looking back at the history of Turkey, for over 40 years increasing the scale of small lands led to decrease of the number of small family facilities. Thus, small-scale production included in the food supply chain gradually diminishes. Nevertheless, budget support will ensure economic sustainability of family facilities and may provide them with appropriate subsidies. In Turkey, neither differentiation of facilities nor privileges to family facilities have been observed when providing support to the agricultural sector. Moreover, family facilities due to hypothec difficulties may be disadvantaged compare to large-scale facilities in terms of financing. Nevertheless, support of activities which conduce to employment, such as organic agriculture, good agricultural practices and livestock, contribute to family farming and agricultural sustainability. In addition, agricultural advisory services along with educating activities make a significant contribution to family facilities (Arısoy, 2014). Preparation and application of supporting legislation for small-scale agriculture and family farming is crucial. Besides, supporting farmers'

organizations is extremely important so as to be able to provide more facilities to its members and to proclaim the problems in political area. Nevertheless, implementation of consultancy services, including the research about technologies which meet needs of the small family farms, and formation of alternative sources of income for small-scale farms are also beneficial measures towards family farming preservation (SDC, 2016).

Evaluation in terms of sustainable food supply shows that in Turkey, along with the development of large-scale facilities, preservation of existing facilities engaged in family farming is needed. Maintaining the balance between the facilities engaged in family farming and large-scale facilities is the most important point of providing sustainable food in Turkey, for large-scale facilities makes a significant contribution to sustainable food supply, agro- industry and national economy. Assuming that instead of the existence of large-scale facilities importance is given solely to family farming, the development of agro-industry may be affected negatively, and unemployment may increase. Consequently, national economy will experience significant losses. Providing that the development of large-scale facilities does not quickly reduce the number of small family facilities, food supply will be positively affected by this integrated structure. In case the current number of the facilities engaged in family farming is not preserved, conditions are not improved and large-scale facility-oriented policy is continued, small producers will migrate to urban areas as it happened in previous years. Thus, socio-economic crisis will get worse. In particular, success of family farming in countries like Turkey, where a certain part of the population is employed in agriculture, provide benefits, such as social welfare, peace maintenance, prevention of excessive rural-urban migration along with reducing unemployment through establishment and development of rural industry (Güneş ve Keskin, 2014).

5. Conclusion And Suggestions

Facilities engaged in family farming manage to survive in difficult conditions, such as feeding family members. Transfer of the national natural resources to production and finding economic value also play an important role. On a global scale it can be observed that developed countries give a great importance to family farming, for it plays a key role in terms of sustainability of food supply and natural resources, and local economy. Ensuring sustainable food supply and disappearance of poverty is directly related to support of family farming and small landowners. For many years in Turkey small producers were not given place to in agricultural policy. Preserving the existence of both large-scale commercial enterprises and family businesses in the structure of agriculture will make a great contribution to agricultural sector and, consequently, to sustainable food supply.

Hence, national definition of family farming ought to be clearly described. Appropriate and adequate data ought to be obtained from the agricultural sector. Small family facilities should be well identified and recognized for their further development. Primarily, in the places where these facilities are located environmental conditions, soil characteristics, demographic structure, economic and socio-cultural conditions should be known well. Complementary support policies ought to be developed against lack of ability of small facilities to access markets, agricultural land, natural resources, financial resources, technology, other services and also vocational education. For all these purposes the effectiveness in solving problems and the importance of cooperatives should be increased. Facilities engaged in family farming must be transformed into soil preserving and soil developing production units that provide land economy through crop and livestock production and, thus, make a significant contribution to sustainable food supply.

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