



Family Farming for Sustainable Livelihood - Food Doesn't Come from a Grocery Store

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The sustainability of our food supply is under intense pressure due to population growth, extreme climate change and limited natural resources. Recent projections suggest that agricultural production needs to increase as much as 70% through 2050 to meet the food demands of up to 9 billion people. Family farming is a worthy initiative which does not require hi-tech inventions or dependence on technologies that are yet to be invented. It is essential to recognize the productive potential of family farming. Food security is a global concern and is defined as a condition when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Family farming includes all family-based agricultural activities performed to earn their livelihood and is also linked to many areas of rural development. Family farming is a means of organizing the production of agriculture, forestry, livestock, pastoral and artisan fishers which is managed by family members and primarily depends upon family labor, including women, men and sometime children too. The farm and family co-exist with economic, productivity, environmental, communal and traditional goals and purposes. It is similar to other family businesses owned and operated by the family, where the ownership is passed to coming generations via inheritance. It is one of the most principal forms of agriculture practiced globally in both emerging economies and developed countries. Farm sizes vary from large holdings to only a few hectares or even less. Nevertheless, globally, average farm size and smallholder contributions to global food production is significant [1]. For example in China there are about 240 million farmers working on 400 million acres of agricultural land; approximately 93 percent of Chinese farms are family farms largely under 2.5 acres and in India, there are 290 million farms [2,3].

It is noteworthy that 70% of the world food production is provided by the family farmers and 40% of households depend on family

farming [4,5]. Thus, family farming has an important socio-economic, environmental and cultural impact across the globe. There are a number of factors that are pivotal for a successful development of family farming. These include agro-ecological conditions and territorial characteristics, the policy environment, access to markets, land, natural resources, technology and extension services, finance availability, demographic, economic and socio-cultural conditions, and accessibility of specialized education among others.

Recognizing the global significance of family farming, the United Nations designated 2014 the International Year of Family Farming (IYFF) with the objective of elevating the profile of family farming through showcasing its role in alleviating hunger and poverty, providing food security and improving livelihoods, while protecting the environment and biodiversity. During this year, awareness was raised in support of small-holding farmers around the world and to appreciate their efforts towards achieving sustainable development. The 2014 IYFF promoted broad discussion and cooperation at the regional, national and global levels in enhancing understanding of the challenges faced by the smallholders and identifying effective measures to support family farming [6]. Family farming is the basic unit of the agricultural economy of much of human history and will continue to be so. Alternatives to family farms include those run by agribusiness, or corporate farming, which often has very different goals and objectives. In family farming, the family members are involved in agricultural activities to promote and sustain life process, to improve family nutrition and to provide shelter, clothing, and support for the community. Corporate farming goals are focused on earnings for the owners or shareholders, and rarely return anything to the community except jobs, which are usually low paying.

Global scenario

The vast majority of the EU's 12 million farms are family farms and are contributing significantly to socio-economic growth

without destroying the ecological balance [7]. The diversity of family farms in EU is vast; farm size, resources, human resource engagement, extent of marketing and profitability. Farms are operated in a range of agro-ecosystems, economic, social settings, safeguarding food diversity, quality and sovereignty, and therefore contributing toward sustainable development of communities. Because of their importance, the European Commission's Agriculture and Rural Development Directorate-General organized the Brussels conference on family farming in 2013. The objective of this initiative was to acknowledge the challenges and role of family farming in agricultural sustainability. It is notable to witness the role of family farmers in the United States where 84 percent of all crop harvest is produced by family farmers. They manage 78 percent of all farmland and contribute US\$ 230 billion in sales. In Brazil, family farms are providing around 40% of selected crops on less than 25 percent of the land mass. In Fiji family farms contribute 84 percent of major crops with only 47.4 percent of land [8].

In India and across the Asia-Pacific region there is increasing awareness of the role of family farmers and smallholders. The farming community, play in eradicating hunger and conserving natural resources [6,9]. Many of India's family farmers are subsistence producers who may struggle to grow to meet their own families' needs. In Pakistan, 56 to 78% family members are involved in rearing animals and cultivating crops, respectively, to support their farming community and also to promote food security [10]. In Africa 64% of family members are engaged in crop production to sustain their livelihoods [11]. These countries promote small-scale producers by arranging farmers markets where consumers purchase their products directly from the producers, eliminating the intermediary. The Kingdom of Thailand celebrated its National World Food Day with performances, demonstrations and exhibits honoring the important contribution to food security made by smallholder and family farmers [6]. We need to support family and smallholder farming to continue to make it sustainable for the better livelihood of communities.

Challenges and opportunities

Corporate and large farms have the resources to procure crop inputs at discounted prices, and sometimes earn high profit compared to smaller farms. The fluctuation in the economies of smallholder or family farmers is high and they risk great losses when there are floods, droughts, or low prices. Plants, seeds, water, fertilizer and other agricultural input prices may inflate greatly over the years. A similar problem is high oil prices which can significantly impact small or large mechanized farms.

If commodity crop prices can be predicted, the profitability of livestock or crops can be estimated ahead of the season and the economic viability of what to be grown is more certain. Another factor is the use of patented GM seeds. These are widely used on industrial-scale farms, and are much more expensive than open pollinated, non-patented varieties. Farmers who grow their own seed can realize even lower prices for this essential farm input. Farms growing large quantities of produce that can be sold directly to consumers have to fulfill a range of criteria for sale into the wholesale market, e. g. harvest timing, grading and product quality. This uniformity of product is easier for large farms than the small.

The corporate sector has heavily affected family farming feasibility. However, many countries, particularly US and EU governments, provide subsidies to the farming communities to mitigate the impact of market vulnerability. Population growth and urbanization has resulted in increased demand and high prices of centrally located farmland for intensive production. This situation has created intense pressure on many small farmers who can't afford such huge investments. Solutions to these high land prices in urban centers include creative lease arrangements, and "community supported agriculture" schemes, where consumers support farmers with up-front payments at the beginning of the season for fruits and vegetables grown on small plots of land in urban neighborhoods, or near-by suburbs.

In spite of such challenges, family farming and smallholders continue to be vital player in making countries food secure, alleviating hunger and poverty and safeguarding the environment. Family farmers and small land holders are groups of people who have displayed their incredible strength to adapt to the financial, ecological and community changes. Small farmers accomplish numerous purposes e. g. production of food or non-food items, sustaining traditional legacy, societal bonding and recreation, and conservation of precious biodiversity. Family farmers, smallholders and all other stake holders need to consider their role in providing sustainable livelihoods to rural citizens. Countries need to design national and international policies which can provide support to protect livelihoods, preserve the environment, economic health and sustained food supply. Meaningful research and outreach initiatives by the governmental or non-governmental organizations are needed to address the real issues of smallholder and family farmers. The FAO initiative of marking 2014 The Year of Family Farming provided a good starting point. Now we need to take the next necessary steps to empower the small farmers and increase their engagement in main stream dialogues to further their role in

poverty alleviation, safeguarding food security and mitigating ever increasing environmental issues.

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