Editorial

Food System Techniques and Agricultural Practices: Towards Environmental, Economical and Social Sustainability

Prof. Dr. El Sayed El Habbasha, Agronomist, Field Crops Research Department, National Research Center, Egypt. He is a member of a number of National and International Research Projects. He is a member of the Editorial Board of the Future of Food: Journal on Food, Agriculture and Society.

Agriculture faces many challenges, making it more and more difficult to achieve its basic targets, such as the production of food, feed, fiber and other goods. An increasing the population must also be taken into account. Global population size will increase from nearly seven billion today to more than eight billion by 2030; many people are likely to be wealthier, creating demand for a more varied, high-quality diets requiring additional resources to produce. On the production side, competition for land, water and energy will condense, while the effects of climate change will become increasingly apparent and global food systems are increasingly menaced by different stresses. The food system continues to provide plentiful and affordable food for the majority of the population in the world. Now the world population is at a unique time in history as diverse factors assemble to affect the demand, production and distribution of food through the next decades. The needs of a growing world population will need to be satisfied as critical resources such as water, energy and land become increasingly scarce. Agriculture must change to meet the rising demand of the people, to contribute more effectively to the reduction of poverty and malnutrition, and to become ecologically more sustainable and increase the prosperity and the level of well-being. There are two major ways which require categorical action on food production systems:

- Hunger remains widespread, more than one billion people experience hunger, they lack
access to sufficient of the major micronutrients and may be another billion are suffer from ‘hidden hunger’, which important micronutrients are missing from their diet.

- Many food production systems are unsustain-able, the global food system will continue to degrade the environment and compro mise the world’s capacity to produce food in the future, as well as contributing to climate change and the biodiversity destruction. There are many problems which are widespread i.e. soil loss due to erosion, loss of soil fertility, salination and other forms of degradation.

The food system is not a single designed structure, but rather self-organized groups of interactive parts. The food systems of different countries are now linked at all levels, from trade in raw materials to processed products and increase the efficiency of communication networks between different countries is very vital because this will make the process of import and export is easily and this will meet the desires of many people from the products. Besides on-farm production, capture fisheries and aquaculture are also important, and provide livelihoods, with about a billion people depending on fish as their main source of animal protein. Most of the economic value of food products, particularly in high-income countries, is added beyond the farm stage in food processing and in retail, which together comprise an important section of world economic activity. At the end of the food chain, the consumer exerts choices and preferences that have a recondite influence on food production systems and supply, while companies in the food system have great political and societal influence and can shape consumer preferences. The food system must become sustainable, whilst adapting to climate change and substantially contributing to climate change mitigation. There is also a need to redouble efforts to address hunger, which continues to affect so many of the world population.

Agricultural Practices are specific methods which are applied to agriculture to increase the amount of crop yield or the quality of the products or both at same time to create food for consumers or further processing that is safe and wholesome. These agricultural practices includes soil preparation, sowing methods and date, fertilization. In this direction these challenges can be tackled in part of a Good Agricultural Practice (GAP), practices that improve environmental, economic and social sustainability of on-farm production and results in safe and quality food and non-food agricultural products. GAP stands on four main columns: economic viability, environmental sustainability, social acceptability and food safety and quality. The Good Agricultural Practice approach can contribute significantly to implementing sustainable agriculture and rural development while addressing the demand-side priorities of consumers and retailers, the supply-side priorities of producers and labourers, and those institutions and services that are bridging supply and demand. While a Good Agricultural Practice approach may respond to the growing demands of increasingly globalization and incorporated agricultural sectors, it is also very important for local, national and international markets. In recent years, the concept of Good Agricultural Practice has evolved to address the concerns of different stakeholders about food production and security, food safety and quality, and the environmental sustainability of agriculture. These stakeholders include governments, food retailing industries, farmers and consumers who seek to meet specific objectives of food safety, food production, production efficiency, livelihood and environmental benefits. There are some benefits related to Good Agricultural Practice these benefits include, appropriate promotion and adoption of these practices from farm to fork will help improve the safety and quality of food and agricultural products, adoption of these practices will help promote sustainable agriculture and contribute to meeting national and international environmental and social development objectives and adherence to food quality and safety will protect people’s health.

I am delighted to be a member of the editorial board of the “Future of Food: Journal on Food, Agriculture and Society”. Herewith, we are pleased to publish our Volume 4 Number 2, on the theme of “Food System Techniques and Agricultural Practices”. The selected research papers presented in this issue will provide further insight on food system techniques and agricultural practices in regional and global perspectives. Furthermore, this edition is enriched with book reviews that bring a critical outlook on thematic books.