FOREWORD

As living standards rise, communities tend to place greater emphasis on environmental concerns. Human population growth caused the *World Commission on Environment and Development* to call attention to necesity of changes in strategies for attaining security in food production and conservation of natural resources and enviromental protection.

Modernization of agriculture often disrupted the balance between ecology and agricultural production, ignoring or neglecting ecological principles. An increasing number of agricultural experts realized that modern agriculture will soon face a crisis, and public in many countries became concerned about the continuation of the current agricultural production system. Amongst these negative consequences, the most important are: depletion of soil, ground water pollution, reduced number of family farms, deteriorated working and living conditions of rural population, production costs growth and destruction of economic and social conditions in rural communities.

The evidence have accumulated showing that system that favours highly productive and competitive capital intensive technologies and production, also causes ecological, economic and social problems. The nature of the current agricultural structure and prevailing strategies in agriculture have led to damaging the environment, mostly favoring large farms, specialized production, crop monoculture and mechanization.

Sustainable agriculture is a system of agricultural production which arose as a reaction to adverse effects of the industrial model od agriculture. Besides having underniable positive effects on the crop yield and food protection, the intensification of agricultural production, which was especially pronounced in the second half of the 20th century, also had a negative impact on natural resources and the environment. This impact was reflected in excessive accumulation of plant nutrients and pesticides in the soil, surface and ground water, high rate of energy consumption, reduction of biodiversity, etc.

Unlike industrial agriculture, sustainable agriculture manages natural resources (soil, water, energy and biological resources) more efficiently, has a less damaging imapct on the environment, is economicaly sustainable and socially accetable.

Agroecology has the potential to include many ecological principles in the development of environmentally sound agriculture. Transfer of ecological research into agricultural practice will required a multidisciplinary approach. Therfore, sustainable agriculture requires the balancing of a variety of goals as well as time to achieve benefits at a local and global levels.

To secure a sustainable future it is necessary to adopt new technologies, improve curent management and focus research on those agroecosystem with the use of which we can secure lowest environmental treats.

Current technological, economical, social and especially environment trends will encourage farmers to reconsider their farming practies and look for alternatives. For that reason the intersets in sustainabe agricultural methods is growing, particularly areas where

present systems have degraded resources essential to agricultural production (land, air and water).

Among many alternatives to the present farming practies, organic agriculture has been the most promenent and most widely accepted systen for overcoming many disadvantages of convencional agriculture and for reaching sustainability. Compared with conventional farming, organic agriculture will require new management skills, more inputs, greater resilience of labor and consequently support from polocy makers.

Sustainable agriculture is usually defined as an agricultural methodology that is economically viable, meets human need for food, and at the same time has positive impact on the environment and quality of life. Sustainable agriculture goals may be shortly abridged to stable market supply by biologically quality food, on employment of rural population and suppressing of poverty, as well as natural resources management and environment protection on local and global level.

Despite the growing awareness of the effects of modern technologies on the environment, due to pesticides in food chain and plant nutrients in rivers and groundwaters, there are still those who oppose the challenges of the 21st century, arguing that intensification of agriculture should continue.

Researchers are increasingly showing that it is possible to provide a balanced environment, sustainable production and yield, achieved by biological soil fertility and natural pest control through the organization of diversity in agroecosystems, using technologies that require less investment.

To protect the environment, it is necessary to promote agricultural studies in the field of agroecology, environmental protection, sustainable and eco-agriculture. Educated staff must have a sense of belonging to nature, and should be aware that each production and other activities within the eco-agriculture should be in function for at the same time achieving positive economic effects and exercise responsibility to protect the environment. In line with this, high professional education in agricultural studies need to be customized for "ecologization" of agriculture, conservation and protection of the environment, biodiversity and agricultural resources.

We hope that this edition will contribute to a better understanding, the importance of ecology, ecosystems as well as organic farming and its role in the conservation of biodiversity and environmental protection in the times to come, and that the manufacturers, professional, scientific community and the general public know how to preserve and enhance what has for centuries real.

Also, we hope that this Journal will bi useful to researches in scientific institutions and universities, graduate, postgraduate and doctoral students and all those who are interested in scientific areas such as Meteorology, Climatology, Agricultural studies, Plant pathology, Aeronomy, Ecotoxicology, Ecology, Terrestric ecosystems, Biogeochemical cycles, Global warming and its effects, Energy conservation and environment.

It will be our great pleasure to renowned experts and researchers all over the world publish their Research papers, Review papers, Short Communications, Mini reviews or Case reports in *Journal of Environment & Agricultural Studies*.

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