Agricultural Higher Education in the 21st century:

A global challenge in knowledge transfer to meet world demands for food security and sustainability

Ervin Balázs
MTA ATK, Hungary

Zaragoza, Spain June 15-17, 2015

Conference sponsored by: OECD CRP
The World population continues to grow at about 1.5 % a year. The projected 7 billion for last year were reached and the UN statistics are estimating 8 billion for 2020. Nowadays contrary to the advanced agriculture and the extensive use of agrochemicals more than 40 % of the crop productivity is lost due to the competition with weeds to pests and pathogens. Additional loss is attributed to the postharvest period. This could reach a very high figure in developing countries due to the lack of advanced storage facilities. The challenge is here, because we have to double our food production on less per capita land, with less water, and under non-adequate environmental conditions.

**Aims and scope of the conference**
Today one can realize in the northern, developed countries that the societies of the farmers are aging. Less and less young people are interested in to learn agronomy. This is an alarming issue in the OECD countries, where the agricultural knowledge are advanced, but its transfer via the higher education system is far behind and cannot attract the new generations. This issue raises concerns about communications, and a gap in understanding between the agriculture and the society as a whole.
The way forward

In the Mediterranean countries and also in the developing countries more classical agricultural educations are needed with an emphasis on the advanced techniques, too.

The aim of the conference and the workshop is to exchange the ideas and views.
We take a broad definition of “Agricultural higher education” and focus on the European definition of Bioeconomy, which encompasses the production of renewable biological resources and the conversion of these resources and waste streams into value added products, such as food, feed, bio-based products and bioenergy. The bioeconomy must be managed with due regard to environmental sustainability. In this context:

The purpose of today’s general discussion for Session I (Challenges for agriculture in the XXI century) and Session II (Are current agricultural educational models suitable to meet global challenges?) is to focus on the following three questions:
General Discussion: Monday June 15, 17:15 – 18:45

1. How should agricultural higher education adapt to the key challenges of agriculture in the 21st century?

2. What are agricultural higher education programs not doing well to meet these challenges?

3. What are some characteristics of programs that are being successful in addressing these challenges?

This discussion will support the development of Agricultural Core Curricula for BS + MSc + PhD cycles.

To enrich the dynamics of the discussion, we ask you to write down and post key points addressing these questions. To that effect, we have provided you with post-its and markers. Please write down just one point per post-it, and place it in the corresponding board at each side of the hall before the general discussion.