Agroecology – the basis for sustainable development of agriculture in the Republic of Moldova

B. BOINCEAN - Research Institute of Field Crops "Selectia", Beltsy, Republic of Moldova

Narrow disciplinary (simplistic) approach to agriculture both in research education and real agricultural production has led to different negative consequences to the environment and health of people. The existing agricultural systems became unsustainable from economic, energetic, social and environmental points of view. As a rule modern farming systems are externalising the negative consequences on the environment and health of people. Who will pay for this and how long such a situation can last? We must realize that we are living in the world of limited resources. The humanity began to realize how sensitive is the balance in natural and agroecosystems and how important is to use properly renewable and nonrenewable sources of energy in the world of limited resources.

The agroecology is offering a systemic (holistic) approach to modern farming systems both for research, education and real agricultural production. By respecting the principles of agroecology it is possible to achieve a more sustainable farming systems. Very important is to achieve higher sustainability not only for production sector in agriculture, but for the whole food systems (from producer to consumer). The agroecology is suggesting an interdisciplinary approach to sustainable agriculture and food system.

The experimental data obtained in the long-term experiments of the Research Institute of Field Crops “Selectia”(Bălţi, Republic of Moldova) are proving the possibilities of transition to a more sustainable farming system.