



Lomonosov Moscow State University

Eurasian Center for Food Security

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In the June issue of the Newsletter we summarize the results of the Fourth Annual International Conference on Agriculture, Food Security, and Nutrition in Eurasia, which took place on May 28, 2019, at Lomonosov Moscow State University. We also share with you photos and speakers' presentations.

The case study project has started! We are pleased to announce eight winners of the 2019 competition. The second article discusses this research as well as a workshop on methodology for successful contestants.

Furthermore, ECFS experts talk about the ASEAN-Russia project, dedicated to soil-geographic databases, and discuss how the project is moving forward. The third workshop of this project took place in Myanmar this May.

An updated event calendar concludes the June issue.

Rural Revitalization: The Theme of the Fourth Annual IFPRI Conference

By Svetlana Sapanova

The Fourth Annual International Conference on Agriculture, Food Security, and Nutrition in Eurasia took place on May 28, 2019, at the Faculty of Economics at Lomonosov Moscow State University ([LMSU](#)). This year the main theme of the conference and of the 2019 *Global Food Policy Report*, which was presented there, was Rural Revitalization.

The event was organized jointly by the [International Food Policy Research Institute \(IFPRI\)](#), the [Eurasian Center for Food Security \(ECFS\)](#) of [LMSU](#), and the

[World Bank](#), with the support of the [Ministry of Finance of the Russian Federation](#) and the participation of two research programs of the Consultative Group on International Agricultural Research (CGIAR): [Policies, Institutions, and Markets \(PIM\)](#) and [Agriculture for Nutrition and Health \(A4NH\)](#). The conference was attended by over 80 food security and nutrition experts from the Eurasian region and international organizations.

The development of rural areas



Conference participants, Faculty of Economics
Lomonosov Moscow State University

is important for many countries of the world, especially for developing ones,” said **Sergey Shoba**, Director of ECFS and Corresponding Member of the Russian Academy of Sciences, at the opening of the conference. “Residents of rural areas face problems in obtaining high-quality nutrition, introducing efficient resource-saving technologies that would ensure the preservation of the environment and soil cover, as well as in adapting to climate change and creating a favorable environment for life and work.”

According to **Andras Horvai**, Country Director and Resident Representative for the Russian Federation at the World Bank, one of the main problems of rural development is the income gap between the village and the city. According to the World Bank, an average of 40 percent of extremely poor people live in rural areas around the world. At the same time, in the Eurasian region this figure reaches 50 percent.

Shenggen Fan, Director General of IFPRI, presented the *2019 Global Food Policy Report*, which discusses major changes in global food policy that took place in 2018. Despite strong economic growth in 2018, undernourishment rose for the third year in a row: 821 million people in the world now face chronic food deprivation. To address this issue, in 2018 the development community

focused on rallying support for Sustainable Development Goal 2 – Zero Hunger; for example, by convening the first [Global Parliamentary Summit against Hunger and Malnutrition](#). In addition, IFPRI-FAO held a conference on Accelerating the End of Hunger and Malnutrition. These initiatives reflect a continued shift toward transforming the entire food system. Rural revitalization could serve as the linchpin of such an approach.

IFPRI’s report argues that rural areas can become major innovation centers in less than a decade. The report’s authors recommend revitalizing rural areas, paying special attention to five components: creating employment opportunities in rural areas in both the farm and nonfarm sectors; empowering women; addressing environmental issues; improving access to energy; and investing in effective governance.

The IFPRI Director General provided examples of successful, community-based integrated rural development in the Republic of Korea, as well as the use of e-commerce to foster entrepreneurship and create flexible employment opportunities in the villages of China. “Using the successful experience of other countries, each state, nevertheless, should develop its own national policy, which will strengthen the ties between the city and the village,” he added.

After the presentation of the report, **Sergey Kiselev**, Chair of Agroecconomics Division of the Department of Economics of LMSU, spoke. According to Kiselev, in Russia there is a serious threat to the sustainable development of rural areas. "As part of the overall economic growth, rural development may suffer. Why? Because rural areas grow more slowly than urban areas. And from the point of view of a general approach, it is necessary to develop what develops quickly. Therefore, at the same time, the government is trying to mitigate this situation with the Sustainable Rural Development Program," said Kiselev.

Meanwhile, Shenggen Fan claims that the country's GDP could be doubled just by reducing the development gap between the village and the city. However, politics remains focused on other issues and problems.

One of the conference sessions was devoted to policy challenges and opportunities for rural revitalization in the countries of the Eurasian region. The experts spoke about the different models of support and development that exist in their states. For example, rural tourism has begun to develop in Armenia, contributing to the emergence of new jobs in rural areas and an influx of young people. "Thus, thanks to the revitalization of the village, not only young people come to work in tourism, but also the older generation, which, in turn, contributes to the development of agriculture," said **Samvel Avetisyan**, Senior Expert at [the AMBERD Research Center of the Armenian State University of Economics](#).



Samvel Avetisyan and Panel Discussion members

Since 1991, Kazakhstan has been conducting phased state programs for the development of rural areas. Over time, the focus has shifted from the problem of employment to improving the quality of life in villages. According to the Deputy Director of the Kazakh Research Institute of Agricultural Economics and Rural Development, **Galiya Akimbekova**, the implementation of state programs is bearing fruit. However, because of the change of ministers, some effective projects (for example, the creation of farmers' cooperatives) are no longer funded. The project that created cooperatives was particularly relevant because small farms dominate in the densely populated southern part of Kazakhstan.

Damir Esenaliev, Senior Research Associate of [the International Security and Development Center](#), spoke about one of the models of rural development in the Kyrgyz Republic. According to Esenaliev, the country has developed a system of cooperation, thanks to which many decisions are made by independent communities at the local level. In such communities, as a rule, there is an awareness that after the donor organization leaves, there should be a mechanism by which farmers can continue to improve the work of the farm.

Session speakers agreed that integrated development of villages that combines the developments of rural tourism, improvements to the quality of life in rural areas, and the development of farmers' cooperatives is necessary to revitalize rural communities.

At the next session, **Stanislav Buben**, Director of the Agricultural Policy Department of [the Eurasian Economic Commission](#), spoke about food security and nutrition in the countries of [the Eurasian Economic Union \(EAEU\)](#). He presented a draft concept of food safety for the EAEU and called upon the scientists participating in the conference to make proposals for improving this concept.

ECFS experts **Evgeny Tsvetnov** and **Alexey Belugin** also called for cooperation among the



Yerlan Syzdykov, Expert from the FAO Kazakhstan Country Office, at one of the sessions

conference participants. Scientists presented work on an Integrated Food Security Index for Eurasia and distributed special questionnaires to food safety experts. The survey results identified the most important components of the future index.

Throughout the conference, the need for innovation in agriculture was repeatedly mentioned. Deputy Director of the [International Center for Agricultural Research in the Dry Areas \(ICARDA\)](#) **Jacques Wery** spoke about specific achievements and developments. "Often different dry lands

have different ecosystems. Unfortunately, this is not always taken into account when developing appropriate strategies and programs," Wery said. "For the rural revitalization a systematic approach is required. During our projects, we use various planting techniques, protection against pests, techniques of growing feed crops, and programs to reduce the risks associated with adverse weather conditions and other natural phenomena."

Summing up the conference, Sergey Shoba recalled the central role of the rural population in ensuring food security, because rural areas make up the places where food is produced; the food is then disseminated across the globe. Shenggen Fan, in turn, called on the participants of the event to work together to create a global integrated index that would reflect the sustainability of the development of agricultural systems.

More details on the presentations of [the conference speakers](#) can be found by following the link.

From Science to Practice: Case Studies Help Facilitate Dialogue between Scientists and Policy Makers on Issues of Food Security

By Yulia Mitusova and Anna Kontoboytseva

In 2019, the fourth round of the annual competitive selection of case studies on food and nutrition security policy in Eurasia was launched. This is a joint Eurasian Center for Food Security (ECFS) and World Bank project, and its objective is to foster collaboration between researchers in the Eurasia region to generate analytical evidence for policy makers and to produce a set of short analytical, educational case studies on a relevant food and nutrition policy topic.

This year, proposals were invited to explore policy options regarding the use of the following sustainable agriculture practices: organic agriculture, climate-smart agriculture, biological agriculture, and ecosystem-based agriculture.

Out of 75 applications received during the call for proposals, eight winners were selected by the Expert Council. This year's case studies will cover food policy issues in Armenia, the Kyrgyz Republic, Moldova, Russia, Tajikistan, and Uzbekistan. As before, the call was open to researchers, lecturers, and professors with an active research agenda on a broad range of topics relevant to food and nutrition security.

On May 29, a workshop on the case study methodology was held at the Moscow office of the World Bank. Case study authors selected during this year's call for proposals were invited to participate in this workshop. The event was led by **Jonathan Wadsworth**, Lead Agriculture Specialist at the World Bank, and **Roman Romashkin**, Deputy



Case study authors and Review Committee members,
The World Bank Office in Moscow

Director for Development at ECFS. Members of the Expert Council who took part in reviewing case study proposals—**Pavel Sorokin**, Professor at the Russian State Agrarian University – Moscow Timiryazev Agricultural Academy and **Evgeny Tsvetnov**, Senior Researcher at ECFS—took part in the discussion of the selected studies.

One of the 2018 case study authors, **Alexey Naumov**, Professor at the LMSU Faculty of Geography, actively participated in the discussion, sharing his experience in working on “Ensuring Sustainable Development of the Agri-Food Sector in the Russian Far North: The Case of Yakutia” (written with co-author Daria Sidorova). Alexey Naumov mentioned that the administration of the Republic of Sakha (Yakutia) expressed gratitude for the study and considered the policy options and recommendations provided to be extremely useful, especially those concerning private-public partnership. In addition, this case study is currently used for educational purposes at the Faculty of Geography.

In Russia, organic agriculture is quite a popular topic, primarily because last year the Federal Law No. 280-FZ “On Organic Products and Amendments to Certain Legal Regulatory Acts of the Russian Federation” was adopted. Three out of the eight cases selected during this round discuss issues related to organic agriculture.

Artur Rykalin (ECFS) and **Sergey Meloyan** (the Armenian National Agrarian University) plan to

discuss the role of marketing cooperatives in the development of Russia’s organic agriculture value chain. The authors will analyze how cooperative development may help shorten the supply chain in this sector, and as a result reduce the price of organic products for the final consumer.

Jalil Piriev, **Nigina Mirakilova**, **Nematullo Fayzov**, and **Sherzod Mirakilov** (all from the Agricultural Economics Institute of the Tajik

Academy of Agricultural Science) will look at the development of organic agriculture in Tajikistan. The case study authors will suggest policy options for introducing public-private partnership mechanisms for developing organic agriculture in the northern part of the country.

Nurbek Omuraliev, **Baktybek Seyitbaev**, and **Samarbek Syrgybaev** (all representing the K. Karasaev Bishkek State University) are devoting their research to the development of organic agriculture in the Kyrgyz Republic. They will assess the potential of that country in developing organic agriculture and discuss the roles of various stakeholders (scientific institutions, local and central government authorities, and financial institutions, among others) in advancing the production of environmentally friendly and organic agricultural products in the country.

This year four cases are devoted to sustainable land and water management practices and climate-smart agriculture.

The case study conducted by **Lyubov Orlova** (the Russian Academy of Natural Sciences), **Anna Kontoboytseva** (ECFS), and **Elena Nechaeva** (Samara State Agrarian University) will be devoted to analyzing the practical experience of farmers using no-till technology in Russia. This technology is widely used in countries with a high level of agricultural development (Argentina, Australia, Brazil, Canada, and the United States, among others), and is considered a successful climate-smart

agriculture practice that helps save resources and reduce greenhouse gas emissions. In their study, the authors will suggest policy options necessary for a wider application of the no-till method in Russia.

Tatyana Khamzina (the “UZGIP” Institute), **Maria Konyshkova** (ECFS), and **Maria Nechaeva** (the “UZGIP” Institute) will analyze the effects of climate change on soil productivity and farming activities in the Aral Sea region. The intensity, duration, and frequency of droughts in Uzbekistan have increased almost twofold in recent decades, threatening soil productivity and food security in the country. In their case study, the authors will discuss policy options aimed at mitigation and adaptation to climate change, as well as options to develop climate-smart agriculture in Uzbekistan.

Yuri Moshoy (the Nicolae Dimo Institute for Soil Science, Agrochemistry and Soil Protection) and **Nina Masyutenko** (the Kursk Federal Agricultural Research Center) will discuss how conservation agriculture methods should be introduced in black soil areas and which policy measures are needed to implement resource-saving technologies for targeted soil improvement for sustainable farming. Several farms in Russia and Moldova will be used as examples for this study.

The case study conducted by **Zulfiyor Bakhtiyorov** and **Yuldoshboy Yusupov** (both from the Khujand Science Center, Academy of Sciences of the Republic of Tajikistan) and **Arfan Arshad** (the Institute of Remote Sensing and Digital Earth, University of Chinese Academy of Sciences) is devoted to the rational use of water resources for

food production in Tajikistan (using the example of grapes). The authors will discuss implementing deep till technology in the dry areas in the north of Tajikistan. Biological and ecological characteristics of plants will be analyzed, which is necessary to justify the use of this technology. Finally, the authors will suggest policy options needed to ensure the sustainable use of atmospheric and natural water resources for agricultural production in dry areas in Tajikistan.

Finally, the eighth case study is conducted by a group of authors from Armenia and Tajikistan (**Astghik Pepoyan**, **Akram Rakhmatov**, and four others representing the Armenian National Agrarian University and the Institute of Botany, Plant Physiology and Genetics of the Tajik Academy of Sciences), who will look at the seed trade in selected regions of Armenia and Tajikistan and analyze data on the production and the export/import of genetically modified seeds. In their case study, the authors will try to answer the following question: what policy measures are needed regarding genetically modified crops to ensure food security in these countries?

The case study authors will present their research results at [the Annual Eurasian Food Security Conference](#), which will be held on October 29–31 in Yerevan, Armenia. Toward the end of 2019, the case studies will be published in the annual publication titled *Food Security in Eurasia: Case studies*, which will be registered in the Russian Science Citation Index. We would like to thank all authors for their interest in the project and wish them a productive summer!

ASEAN-Russia: Development of Expert Systems Based on Large-Scale Soil-Geographic Databases

By *Irina Alyabina and Oleg Golozubov*

A Third International Workshop of the [ASEAN-Russia](#) Joint Project on the Development of Expert Systems Based on Large-Scale Soil-Geographic

Databases took place in Naypyidaw, the capital of Myanmar, on May 13–14, 2019. The workshop was attended by representatives of the Ministry of



Aung Tu, Minister of Agriculture, Livestock and Irrigation of Myanmar, 2019

Agriculture, Livestock and Irrigation of Myanmar and the Land Development Department of the Ministry of Agriculture and Cooperatives of Thailand, as well as experts from the Faculty of Soil Science and ECFS of LMSU.

The workshop was devoted to the area of collecting soil information in Myanmar, the work of the working group on creating a soil geographic information system in the country, and the successes achieved, as well as new issues facing specialists.

This important event, which showcased Myanmar's role in international soil research, was addressed by His Excellency **Aung Tu**, the Allied Minister of Agriculture, Livestock and Irrigation of Myanmar. Through this event, prospects for cooperation between the Ministry of Agriculture, Livestock and Irrigation of Myanmar and LMSU's Soil Data Center were identified.

The ASEAN-Russia project was developed in accordance with the ASEAN-Russia Cooperation Program in Agriculture and Food Security – Plan of Action 2: "Promote capacity building and technology transfer through seminars and conferences in areas of mutual interest."

The use of information technology (IT) in modern soil sciences—in particular, the digital inventory of soil and land data—is extremely relevant worldwide, including in the project countries Myanmar and Thailand. Therefore, Russia approved the 2017–2030 Strategy for the Development of an Information Society in the Russian Federation. The Ministry of Agriculture of Russia presented the

Digital Agriculture project in November, 2018. Thailand opened the Centre of Excellence for Soil Research in Asia (CESRA) on World Soil Day, December 5, 2018. And a working group has been established in Myanmar to organize a soil geographic information system.

At the first workshop of the ASEAN-Russia project, held in Moscow in May 2018, the Russian participants presented the original methodology of the [Soil-Geographic Database of Russian Federation](#) informational system. This includes operational support, the organization of infrastructure, the interoperability of data, and information exchange between different organizations that collect soil information. It also uses harmonized soil data to create expert systems for analyzing, evaluating, and predicting natural changes in the context of increasing anthropogenic impacts. The reports of regional experts were also presented as best practices.

At the second workshop, which was held in Bangkok in December 2018, specialists from Thailand shared their experiences with presentations on digital soil mapping, precision farming, applying fertilizer, creating and operating an online agrimap, using geostatistics for soil data processing and management for crop production, standardizing and harmonizing soil analyses, learning methods of using agricultural development results, and applying soil research and land use planning in large-scale mapping, as well as in Thailand's soil geographic information systems.

Project participants are highly interested in continuing the collaboration.



Participants of the third workshop in the framework of the ASEAN-Russia project Development of Expert Systems Based on Large-Scale Soil-Geographic Databases

Event Calendar 2019/2020

Date	City, Country	Event
June 20–21	Istanbul, Turkey	International Conference on Agronomy and Food Science and Technology (AgroFood)
June 26–28	Halle (Saale), Germany	IAMO FORUM 2019: Small Farms in Transition: How to Stimulate Inclusive Growth?
July 2–5	Stavropol and Kislovodsk, Russia	Strategies and Tools for Ecologically Sustainability Economic Development: 15th International Scientific and Practical Conference of the Russian Society of Ecological Economics
September 10–13	Leeuwarden, the Netherlands	Saline Futures Conference: Addressing Climate Change and Food Security (some grants for fees and travel costs are available for young researchers and farmers)
September 25–27	Braunschweig, Germany	59th GEWISOLA Annual Conference 2019
October 9–11	Hannover, Germany	Extreme Events: Building Climate Resilient Societies
October 23–24	Bishkek, Kyrgyz Republic	2019 Life in Kyrgyzstan Conference
October 29–31	Yerevan, Armenia	The Eurasian Food Security Conference 2019
December 5–6	Sochi, Russia	World Soil Day–2019 (conference website will be available later)
June 16–19, 2020	Montpellier, France	4th International Conference on Global Food Security Achieving local and global food security: At what costs?