

ERASMUS+ 610383-EPP-1-2019-1-DE-EPPKA2-CBHE-JP (2019-2086)
**Enhancement of Postgraduate Studies on Sustainable Agriculture and Future
farming Systems (SAGRIS)**

1st BLOCK SEMINAR on MODULE 2
«CROP AND LIVESTOCK SYSTEMS UNDER CLIMATE CHANGE»

BURYAT STATE ACADEMY OF AGRICULTURE NAMED AFTER V.R. PHILIPPOV
Ulan-Ude, Republic of Buryatia, Russia

KOSTANAI REGIONAL UNIVERSITY NAMED AFTER A. BAITURSYNOV
Kustanai, Kazakhstan

September 20-24, 2021

PROGRAMME

Sunday, September 19, 2021

Arrival at the airport
Transfer to the hotel

Monday, September 20, 2021 г.

| Day1 | | Visits to progressive agrarian enterprises of the region to demonstrate how they respond to climate change |
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| GMT+6 | GMT+8 | |
| 09:00 - 13:00 | | <u>In Russia:</u> <u>Excursion to LLL "Zhemchug"</u> |
| | | <u>In Kazakhstan:</u> <u>Excursion to the dairy farm "Beck+"</u> |
| 13:00 | | Lunch |
| 14:00 - 18:00 | | <u>In Russia:</u> <u>Excursion to "The Sayan Maral Farm" @sayanskiy_maral</u> |
| | | <u>In Kazakhstan:</u> <u>Excursion to the farm "Terra", "Troyan" LLP</u> |
| 19:00 | | Dinner |

Tuesday, September 21, 2021

| Day 2 | | | Opening of the block seminar |
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| GMT+2 | GMT+6 | GMT+8 | |
| 03:00 | 07:00 | 09:00 | Meeting participants at the venue of the block seminar, online connection: <i>Conference ID:</i> Zoom https://us02web.zoom.us/j/82825854637 <i>Meeting ID:</i> 828 2585 4637 |
| 03:30 | 07:30 | 09:30 | Seminar programme and its goal. Information reference <i>Erzhena Imeskenova</i> (project coordinator of the Buryat State Academy of Agriculture) |
| 03:45 | 07:45 | 09:45 | Discussion of the group case study. Group work: the case study has been given to PhD/doctorate students in advance A supervisor is assigned in each group for discussion and consultation. |
| 05:00 | 09:00 | 11:00 | Coffee-break |
| 05:30 | 09:30 | 11:30 | Open discussion "Climate Change Problems" <i>Gulshat Shaikamal</i> (project coordinator from A. Baitursynov Kostanai Regional University, Kazakhstan) |
| 07:00 | 11:00 | 13:00 | Обед |
| 08:00 | 12:00 | 14:00 | Welcome Address: - Belikto Tsybikov (Rector of V.R. Filippov Buryat State Agricultural Academy, Russia) - Alma Doshchanova (Acting Chairman of the Board - Rector of A. Baitursynov Kostanai Regional University, Kazakhstan) - Heinrich Schühle , (project leader), Anna Borsuk (project manager), University of Nuertingen-Geislingen, Germany - Michal Lošták (EU module leader, Czech University of Life Sciences, Czech Republic) - Olga Altayeva (Module 2 supervisor, V. R. Filippov Buryat State Agricultural Academy, Russia) - Indira Aitzhanova (Module 2 supervisor, A. Baitursynov Kostanai Regional University, Kazakhstan, Russia). |
| 09:00 | 13:00 | 15:00 | Discussion of scientific article (Panel discussion): <i>"Agriculture's Contribution to Climate Change and Role in Mitigation Is Distinct From Predominantly Fossil CO2-Emitting Sectors"</i> . <i>Moderator: Prof. Dr. Michal Lošták</i> , Czech University of Life Sciences (Czech Republic) |
| 10:30 | 14:30 | 16:30 | Coffee-break |
| 11:00 – 12:30 | 15:00 – 16:30 | 17:00 – 18:30 | Natural resource assessment in the context of climate change <i>Prof. Axel Schwert</i> (Warsaw University of Life Sciences, Poland) |
| 13:00 | 17:00 | 19:00 | Dinner |

Wednesday September 22, 2021

| Day 3 | | | Session: The Impact of Climate Change on Food Security |
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| GMT+2 | GMT+6 | GMT+8 | |
| 03:00 | 07:00 | 09:00 | Socio-historical aspects of the global food problem <i>Olga Altayeva (Module Leader, V.R. Filippov Buryat State Agricultural Academy)</i> |
| 04:00 | 08:00 | 10:00 | Climate-optimized agriculture for food security <i>Inga Ryumkina (Novosibirsk State Agrarian University, Russia)</i> |
| 05:00 | 09:00 | 11:00 | Coffee-break |
| 05:30 | 09:30 | 11:30 | Case study work in groups of postgraduate and doctoral students |
| 07:00 | 11:00 | 13:00 | lunch |
| | | | Session: Impact of climate change on agricultural production systems |
| 08:00 | 12:00 | 14:00 | Case study work in groups of postgraduate and doctoral students |
| 09:00 | 13:00 | 15:00 | Impact of climate change on agricultural practices <i>Damira Aitmukhanbetova (Kazakh National Agrarian Research University, Kazakhstan)</i> |
| 10:00 | 14:00 | 16:00 | Coffee-break |
| 10:30 | 14:30 | 16:30 | Soil additives that improve the conduct of elements and compounds in soil and the quality of agricultural products under climate change <i>Pavel Tlustoš (Czech University of Life Sciences, Czech Republic)</i> |
| 12:00 | 16:00 | 18:00 | Case study work in groups of postgraduate and doctoral students (optional) |
| 13:00 | 17:00 | 19:00 | Dinner |

Thursday, September 23, 2021

| Day 4 | | | Presentations of postgraduate/doctoral students' reports. Purpose: interaction and integration of postgraduate and doctoral students in the scientific community |
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| GMT+2 | GMT+6 | GMT+8 | |
| 03:00 | 07:00 | 09:00 | Losses in agriculture due to climate change <i>Bulat Tzydypov (PhD student, V.R. Filippov Buryat State Agricultural Academy, Russia)</i> |
| 04:00 | 08:00 | 10:00 | Impact of agriculture on soil fertility <i>Aida Dukeyeva (PhD student, ZKATU, Kazakhstan)</i> |
| 05:00 | 09:00 | 11:00 | Coffe-break |
| 05:30 | 09:30 | 11:30 | Case study work in groups of postgraduate and doctoral students |
| 07:00 | 11:00 | 13:00 | Lunch |
| Session: Sustainable Livestock Systems and Animal Welfare | | | |
| 08:00 | 12:00 | 14:00 | Effects of climate change on animal physiology and animal welfare (case of temperature shocks) <i>Prof. Marketa Sedmikova (Czech University of Life Sciences, Czech Republic)</i> |
| 09:30 | 13:30 | 15:30 | Devising an English rural food system framed by the United Nations Sustainable Development Goals and climate change challenges <i>Holly Barlow, a PhD students, Czech University of Life Sciences (Czech Republic)</i> |
| 11:00 | 15:00 | 17:00 | Coffee-break |
| 11:30 – 13:00 | 15:30 – 17:00 | 17:30 – 19:00 | Films on climate change and their discussion |
| 13:30 | 17:00 | 19:00 | Dinner |

Friday, September 24, 2021

| Day 5 | | | Presentation of cases. Stakeholder roundtable discussion |
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| GMT+2 | GMT+6 | GMT+8 | |
| 03:00 | 07:00 | 09:00 | Presentation of cases by postgraduates/doctoral students |
| 07:00 | 11:00 | 13:00 | Lunch |
| 08:00 | 12:00 | 14:00 | Round table with the participation of stakeholders. Topic: "Challenges for the Future of Agriculture in a Changing Climate. Representatives: <ul style="list-style-type: none"> - Stanislav Garmaev (Head, Department of Agriculture, Tunkinsky District, Russia) - Bair Baiminov (Director, Tunkinsky National Park, Russia) - Valentin Batomunkuyev (Deputy Director for Science, Baikal Institute of Nature Management, Siberian Branch of the Russian Academy of Sciences, Russia) - Bulat Garmaev (Director General, Sayansky Maral, Russia) - Tamir Shagdarov (Director General, Zhemchug LLC, Russia) - Kabi Shaykenov, Head of Livestock Breeding Department, State Institution "Territorial Inspection of Agroindustrial Complex of the Ministry of Agriculture of the Republic of Kazakhstan - Ануарбек Бисембаев, к.с.х.н., директор ТОО Научно-производственного центра животноводства и ветеринарии - Руслан Гарайханов, главный зоотехник ТОО «Олжа Агро» (Представители с животноводческих предприятий) - N.N., representative from the Association of practicing ecologists |
| Moderator: Gulnara Yunusova, Ph.D. Sci. Biol. | | | |
| 10:30 | 14:30 | 16:30 | Concluding comments and feedback from the block seminar participants |
| 11:30 | 15:30 | 17:30 | Summing up and closing of the block seminar |
| 13:00 | 17:00 | 19:00 | Dinner |

Saturday, September 25, 2021

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| Day 6 | Departure of the participants |
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MODULE 2 BLOCK-SEMINAR 2
«CROP AND LIVESTOCK SYSTEMS UNDER CLIMATE CHANGE»

A.BAITURSYNOV KOSTANAY REGIONAL UNIVERSITY
Kostanay, Kazakhstan

June, 06-10th, 2022

June, 6th, 2022

| Day 1 | Opening of Block-Seminar | |
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| GMT+2 | GMT+6 | |
| 05:00-08:30 | 09:00-12:30 | Meeting of participants, university tour, Research Institute of AB, innovation laboratories, Smart Center |
| 08:30-09:30 | 12:30-13:30 | Lunch |
| 09:45-10:00 | 13:45-14:00 | Meeting of participants at the venue of the block seminar, online connection: To connect the Zoom conference: https://us02web.zoom.us/j/88233089237?pwd=VEVuaGFsV08ld1RVOGZ4VzZ0b2tPdZ09 Conference identifier: 882 3308 9237 Pass code: 269251 |
| 10:00-10:30 | 14:00-14:30 | Greeting: Galiya Ismuratova <i>Acting Vice-Rector for Research and Innovation and international development of ABKRU, Kazakhstan</i> |
| | | Heinrich Schuele <i>scientific leader of the project, University of Nürtingen-Geislingen, Germany</i> |
| | | Michal Lostak <i>EU module leader, Czech University of Life Sciences, Czech Republic</i> |
| | | Indira Aitzhanova <i>project coordinator, module leader, ABKRU, Kazakhstan</i> |
| | | Agenda, Background Information and Objectives of the Seminar |
| 10:30- | 14:30- | Agroforestry for climate change adaptation and mitigation |

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| 12:00 | 16:00 | <i>Prof. BohdanLojka</i> |
| 12:00 | 16:00 | Coffee-break |
| 12:30-13:30 | 16:30-17:30 | Screening and discussion of the film on the topic “Regenerative Agriculture Revolution” https://www.eitfood.eu/projects/the-regenerative-agriculture-revolution-2020 |
| | 18:00 | Dinner |

June, 7th, 2022

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| Day2 | <i>Excursion to the enterprise</i> | |
| | GMT+6 | |
| | 09:00-14:00 | Excursion to the agricultural enterprise CF "Sadovod", Kostanay region, Kostanay, 33, Kurganskaya Str. Acquaintance with the management of the enterprise |
| | 14:00-15:00 | Lunch |
| | 15:00-17:30 | Presentation of project assignments for doctoral students Group work over the assignment |
| | 18:00 | Dinner |

June, 8th, 2022

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| Day 3 | <i>Impact of climate change on food security and agricultural production systems</i> | |
| | GMT+2 | GMT+6 |
| 05:00-06:15 | 09:00-10:15 | International systems of indicators characterizing food security and methodological aspects of their calculation <i>D.A. Aitmukhanbetova, Deputy Dean of the High School "Business and Law", associate professor of KazNARU</i> |
| 06:15-07:30 | 10:15-11:30 | Influence of atmospheric precipitation on the yield of spring wheat and barley in the dry steppe zone of the Northern Kazakhstan <i>Zhumagulov I.I., Candidate of Agricultural Sciences, Associate Professor of KATU named after S. Seifullin</i> |
| 07:30 | 11:30 | Coffee-break |
| 08:00-09:30 | 12:00-13:30 | Crops yield stability and resilience become more important under climate change <i>Prof. Josef Hakl</i> |
| 09:30-10:30 | 13:30-14:30 | Dinner |
| <i>Sustainable use and management of resources</i> | | |

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| 10:30-11:30 | 14:30-15:30 | Food systems, food chains, food losses and waste | <i>G.B.Yunusova, c.b.sc., Head of the Department of Biology, Geography and Chemistry, ABKRU</i> |
| 11:30 | 15:30 | Coffee-break | |
| 12:00-13:30 | 16:00-17:30 | Group work over the assignment for doctoral students | |
| | 18:00 | Dinner | |

June, 9th, 2022

| Day4 Environment ally friendly crop production | | | |
|---|--------------------|--|--|
| GMT+2 | | GMT+6 | |
| 05:00-06:00 | 09:00-10:00 | The influence of weather conditions on the productivity of millet in the dry steppe zone of Kazakhstan | <i>Irina Zhirnova, doctoral student of KATU named after S. Seifullin</i> |
| 06:00-07:00 | 10:00-11:00 | Biotechnologies in fisheries and aquaculture of the West Kazakhstan region | <i>Ashat Zhumabayev, 1st year doctoral student of WKATU named after Zhangir Khan</i> |
| 07:00 | 11:00 | Coffee-break | |
| 07:30-09:00 | 11:30-13:00 | Mountain value chains under climate change - a case study of bee-honey in Slovakia | <i>Dr. Diana Surova</i> |
| 09:00-10:00 | 13:00-14:00 | Lunch | |
| Sustainable livestock systems and animal welfare | | | |
| 10:00-11:00 | 14:00-15:00 | Advanced Research in Agriculture (Practical lesson) | <i>G.B. Yunusova, c.b.sc., Head of the Department of Biology, Geography and Chemistry, ABKRU</i> |
| 11:00-12:00 | 15:00-16:00 | Organization of feeding on feedlots | <i>Rustem Urazov, LLP "AkTep" Director</i> |
| 12:00 | 16:00 | Coffee-break | |
| 12:30-13:30 | 16:30-17:30 | Risk Factors for Decreased Welfare in the Context of Climate Change | <i>Beibit Kulataev, Candidate of Agricultural Sciences, Professor, KazNARU</i> |
| | 18:00 | Dinner | |

June, 10th, 2022

| Day 5 Presentation of group projects | |
|---|-------|
| GMT+2 | GMT+6 |

05:00-08:00 **09:00-12:00** Presentation of group projects developed by the doctoral students

08:00-09:00 **12:00-13:00** **Lunch**

Round table with participants of the block seminar and stakeholders

09:00-11:30 **13:00-15:30** Round Table
Topic: «Crop and livestock systems in the climate change»

Stakeholders:

- Daniyar Zhantleuov, Head of the Livestock Department, North Kazakhstan Scientific Research Institute of Agriculture LLP
- Andrey Dvurechensky, Director of Alexandrovskoye LLP
- Viktor Simanenko, head of the farm "Sadovod"
- Ruslan Garaykhanov, chief livestock specialist of "OlzhaAgro", LLP
- Zhadyra Baydildina, Chief Specialist in Animal Husbandry of Agrogenetics LLP

Moderator: N.V.Papusha, Candidate of Agricultural Sciences, Associate Professor, ABKRU

11:30 **15:30** **Coffee-break**

The final part of the Block Seminar

12:00-13:00 **16:00-17:00** Closing comments and feedback from Block Seminar participants
Summing up and closing the seminar.

18:00 **Dinner**