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DOCUMENTATION

Kick-Off Workshop

ECOLOGICALLY ORIENTED DEVELOPMENT IN THE ARAL SEA REGION

within GIZ Regional Project "Ecologically Oriented Regional Development in the Aral Sea Region" (ECO-ARAL) in cooperation with the Ministry of Agriculture of the Republic of Uzbekistan and the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan

January 26, 2021 | Uzbekistan, Kazakhstan, Germany



PROJECT CONTEXT AND OBJECTIVES

Within four decades (1980–2019), the average annual temperature in the Aral Sea region has risen by approximately 1.27 degrees Celsius, with much higher temperatures and less precipitation in summer. Nevertheless, the majority of the rural population still makes a living from irrigated farming, although the overuse of soil and water is leading to increasingly poor conditions. As a result, the Aral Sea is steadily drying out.

Both countries strive to diversify their economies through infrastructure development, promotion of innovation, economic liberalization, and the reduction of subsidies for water-intensive crops. Nevertheless, it remains difficult for rural land users to create profitable alternatives to their traditional and water-intensive ways of income generation. With a lack of consideration of ecological aspects and little cross-border cooperation an ecologically sustainable economic development of the Aral Sea region is threatened.

The primary focus of the project is on capacity-building measures for employees of micro, small and medium-sized enterprises as well as ministries and state agencies, with the aim of enabling them to make climate-adapted and ecologically oriented investment decisions. State-of-the-art satellite technology and images support the agricultural, forestry and water sectors, resulting in new opportunities for regional spatial planning. With the help of remote sensing techniques, for example, environment or climate-related production risks or cases of damage can be recognized and secured at an early stage. The project's measures directly and indirectly impact the two million people who live around the Aral Sea in Uzbekistan and Kazakhstan.

Partner organizations of the project are regional administrations in Karakalpakstan as well as in Khorezm, Qyzylorda and Mangystau, national authorities and ministries of the two countries, and inter-governmental authorities in the Aral Sea region.

KICK-OFF WORKSHOP OVERVIEW

The Project Kick-Off Workshop, organized in cooperation with project key partners - Ministry of Agriculture of the Republic of Uzbekistan and the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan, was aimed to:

- ✓ introduce the local experts from Uzbekistan and Kazakhstan to the project, its objectives and components,
- ✓ share an expertise from German Aerospace Centre in using remote sensing for an ecologically oriented development in the Aral Sea region,
- ✓ collect and document insights on 3 topics from the participants for further project implementation,
- ✓ help participants identify a degree of their interest and possible roles in further collaboration.

The program was targeted for the top-level expert community, including public sector, researchers, specialists from science fields and stakeholders related to nature resources of the Aral Sea region.

WORKSHOP AGENDA

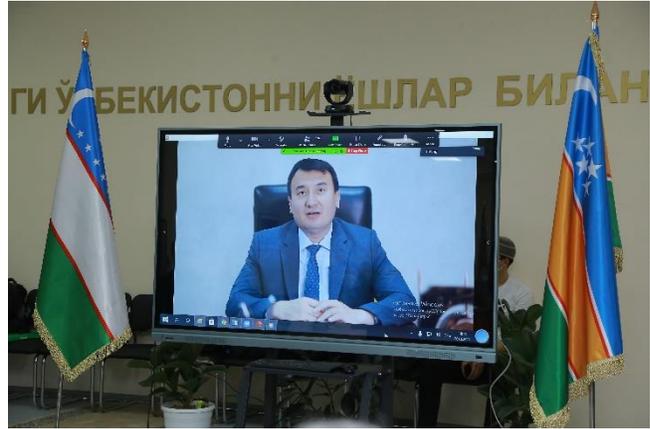
Moderators: Anastassia Goncharova, Alisher Shukurov

- 5 min **Welcome and Introduction to objectives and agenda of the workshop**
- 30min **Official opening speeches:**
- Mr. Khodjaev Jamshid Abdukhakimovich, Minister of Agriculture of the Republic of Uzbekistan
 - Mr. Muratov Yerlan Kurmanovich, Deputy Chairman of the Forestry and Wildlife Committee, Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan
 - Mr. Ametov Makset Janabaevich, Head of Department of the Committee for Environmental Protection and Ecology of the Republic of Karakalpakstan
 - Mr. Klaus Tanzberger, Senior Policy Officer, Central Asia Regional Programmes, Federal Ministry for Economic Cooperation and Development
 - Mr. Christopher Fuchs, Deputy Ambassador of Germany to the Republic of Uzbekistan
 - Mr. Jörg Pudelka, GIZ Country Director for Uzbekistan and Kazakhstan
- 20 min **Introducing the project: Main objective and components**
Mr. Paul Schumacher, Project Manager
Mr. Saibjabbor Khasanov, National Coordinator in Uzbekistan;
Mr. Kairat Yegezhanov, National Coordinator in Kazakhstan
- 15 min **Questions and Answers**
- 10 min **Using Remote Sensing for an ecologically oriented development in the Aral Sea Region –**
Examples for different sectors
Mr. Igor Klein, German Aerospace Center
- 10 min **Questions and Answers**
- 30 min Coffee Break
- 45 min **Working Groups – Guided discussion**
- Group 1: Capacity Development Needs for Private Sector to take Ecologically Oriented Investment Decisions*
Moderator: Alisher Shukurov, Advisor to the Minister, Ministry of Agriculture of the Republic of Uzbekistan
- Group 2: Capacity Development Needs on the Use of Remote Sensing for Land Use Management*
Moderator: Polat Reimov, Associate Professor, Department of Geodesy, Cartography and Natural Resources, Karakalpakstan State University
- Group 3: Enhancing Cross-Border Cooperation to Promote Development*
Moderator: Dr. Vadim Sokolov, Director, IFAS Agency in Uzbekistan
- 30 min **Feedback from Working Groups**
Main Discussion points from each group
- 15 min **Closure and next steps**
Presentation of Project Steering Committee Members

OFFICIAL OPENING SPEECHES: Key Messages

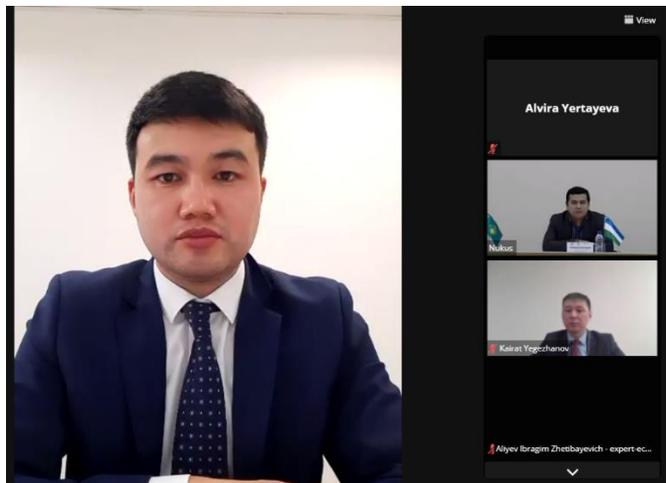
Mr. Khodjaev J.A., Minister of Agriculture of the Republic of Uzbekistan

- The approaches and solutions that will be decided today will affect the lives of millions of people in the Aral Sea Region.
- For a long time, the problem of Aral Sea was not in the focus of the International community. However, today the attitude toward the problem is changing. Central Asian countries are working on overcoming the consequences of the Aral Sea disaster.
- In 2015 at the UN summit, Uzbekistan initiated the creation of a special trust fund for the Aral Sea for international cooperation and mobilization of donors' funds.
- I express gratitude to GIZ and the Federal Government of Germany for fundraising to address the problem of the Aral Sea.
- Rural areas of Khorezm Region and the Republic of Karakalpakstan are experiencing the negative consequences of the disaster the most.
- The orientation of the project - to use ecologically sustainable approaches in the development of investment solutions in the Aral Sea region - is very important.
- We have to work closely with Kazakh partners, as we have institutional bases for this.
- The Ministry of Agriculture of Uzbekistan will undertake all necessary actions for the successful completion of the project.



Mr. Muratov E.K., Deputy chairman of the Forestry and Wildlife Committee of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan

- The Forestry and Wildlife Committee actively cooperates with international organizations including GIZ in implementing projects in forestry and biodiversity conservation.
- For example, GIZ implements "Pilot-based afforestation and reforestation of degraded forest areas in the border areas in Kazakhstan and Kyrgyzstan", in support of the national strategy on private afforestation.
- The problem of the Aral Sea is one of the actual ones in the country. Currently, one of the most effective measures of containment of sand-salt dust are phyto-melioration measures of the dried bottom of the Aral Sea.
- The regional project of GIZ "Ecologically oriented regional development of the Aral Sea Region" will allow solving several ecological problems in the region including rational usage of natural resources and biodiversity conservation.



Mr. Ahmetov M.J, Head of Department of the Committee for Environmental Protection and Ecology of the Republic of Karakalpakstan

- We are glad that the project is oriented on environmental sustainability, transborder economic development of the Aral Sea regions of Kazakhstan and Uzbekistan, particularly providing consultative services on the development and enhancing the effectiveness of usage of the resources in farming, small and medium enterprises, as well as in the implementation of cross-border activities using spatial planning tools for environmental sustainability and resource usage.
- Currently, measures are being implemented to develop economic and social infrastructures, improvement of the ameliorative condition of lands, increase the efficiency of natural resource usage, improve the ecological situation and mitigation of the ecological consequences of the Aral Sea crisis. Moreover, the measures on creation of a green belt on growing dried bottom of the Aral Sea are being implemented.
- Spatial planning and regular surveys of the dried bottom using modern technology have helped to learn the botanical vegetation of the area and identify further measures.



Mr. Klaus Tanzberger, Senior Policy Officer, Central Asia Regional Programmes, Federal Ministry for Economic Cooperation and Development

- Our Ministry has been engaged for many years in regional projects in Central Asia in the priority sector Sustainable Economic Development.
- General guideline is to support regional cooperation especially where it adds value for all countries involved and contributes to economic and social development. We see this as a German contribution to the implementation of the European Union's Central Asia Strategy.
- The use of regional water resources in Central Asia is per se a crucial issue that can only be solved on a regional basis. We are all aware that to find solutions for a fair and sustainable use of regional water resources is a challenge that will decide about a prosperous future, peace or conflict for everybody – not only in Central Asia, but everywhere in the world. Climate Change exacerbates these challenges even more.
- The History of the Aral Sea is a striking example of how things develop if ecological aspects are not considered in policymaking, economic development and investment decisions.
- Now is the chance to turn things around and make the international efforts targeted into the development of the Aral Sea region a success story and showcase how to reduce stress on our planet's ecological boundaries
- This project is an excellent form of cooperation between Uzbekistan and Kazakhstan and an example for Central Asia and the international community how to lead by example.

Mr. Christopher Fuchs, Deputy Ambassador of Germany to the Republic of Uzbekistan

- We are proud that we have the opportunity to support the constructive and positive changes in the Aral Sea Region.
- As you know our embassy works since many years to improving people's life and nature.
- As diplomats, we will support the success of this activity now and in the future.



Mr. Jörg Pudelka, GIZ Country Director for Uzbekistan and Kazakhstan

- GIZ works in Uzbekistan from the beginning of the 1990s. Since then, there have been a lot of various projects. One of our main areas cover the promotion of sustainable economic development of the countries taking into account environmental sustainability and professional education.
- Regarding professional education one of the aims is to introduce a dual education programme. In Kazakhstan, an initiative “Merkel-Nazarbayev” was created. In Uzbekistan this year we will start a new project in this area as well.
- Furthermore, we implement projects on transborder management of water resources, trade, and law.
- Development cooperation funding in the region and, particularly, in Uzbekistan, is to grow in the coming years. We can look at the future confidently regarding the implementation of this kind of projects.



ICEBREAKER: mentimeter



How long have you been working on Aral Sea region issues?

- up to 3 years: 23 persons
- 3 – 5 years: 5 persons
- 5 – 10 years: 11 persons
- 10 – 20 years: 6 persons
- more than 20 years: 4 persons



What is the field of your expertise?

- biodiversity, water management, climate change, forestry, GIS, ecology, international development, agriculture, hydrogeology, green economy, livelihood development, ecological education, biology, knowledge dissemination, project management, sustainable forest management, spatial monitoring, environmental finance, melioration, environmental protection, sustainable resources use, agriculture monitoring, infrastructure development, elimination of waste, health, resource management, adaptation of plants, forest economics, agriculture development, ecosystems, remote sensing, desert afforestation, agricultural business development, biotechnology, GHG, soil degradation

PRESENTATIONS: Key points

INTRODUCING PROJECT: main objectives and components

Mr. Paul Schumacher, Manager of the regional project ECO-ARAL

- Our main political partners in the target countries are the Ministry of Agriculture of the Republic of Uzbekistan and the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan, and our project will have an implementation agreement with both of them.
- Additionally, we will have a steering committee with a number of other ministries and institutions as members. We are open to cooperate with others to join our project activities or to become beneficiaries.
- Our main objective of the project is that the economic development of the Aral Sea Region is improved across borders by taking into account all three dimensions of sustainability.
- The project is not a pure environmental project, but with a focus on creating ecologically viable economic incentives.
- The approaches to achieve the main results can be distinguished between Capacity Building, Implementation of measures, and Policy Advice.
- With regard to Capacity Building we will focus on the public and on the private sector, especially micro, small or medium sized enterprises. One example would be, that enterprises know and can apply how to consider climate risks in their business plans.
- With regard to measures implementation, we will focus on the use of remote sensing and GIS in different sectors.
- With regard to policy advice we will focus on supporting the amendment or development of policies or strategies for the Aral Sea region for different sectors.



Mr. Saibjabbor Khasanov, National coordinator of ECO-ARAL in Uzbekistan

- The main components of the project comprise: (i) strengthening the capacity of the authorities and the institutions, (ii) improving the use of GIS and satellite applications and advisory services, (iii) piloting environmentally-oriented economic development activities and (iv) the development of guidance and a legal and regulatory framework across borders.
- The project's goal and objectives are fully aligned and contribute to the UN commitments to mitigate the Aral Sea crisis. The project makes a significant contribution to SDGs 2, 13, and 15
- Alignment of the project with selected national strategies of Uzbekistan: Development Action Strategy for 2017-2021, State Programme for the Development of the Aral Sea Region 2017-2021, Special Programme for the Comprehensive Socio-Economic Development of Muynak District and Resolution of the Cabinet of Ministers of Uzbekistan "Institutional aspects of green zones".



Mr. Kairat Yegezhanov, National coordinator of ECO-ARAL in Kazakhstan

- The project is fully in line with the main strategies of Kazakhstan: (i) "Kazakhstan-2050", (ii) Strategic Development Plan of the Republic of Kazakhstan 2025, and (iii) Kazakhstan's national strategies such as "Green" economy and environmental protection.
- The project can help to address some of the challenges by providing policy advice, providing geographic information for the sustainable use of water and land resources, diversifying the regional economy and agriculture, and opening new markets for agricultural and other products.



- Sustainable development through cross-border cooperation on existing regional problems through, for example, the Regional Environmental Program for Sustainable Development in Central Asia 2020-2030.
- The key ideas of the project are the development of cross-sectoral and cross-border cooperation, strengthening national and local institutional capacity, strengthening the capacity of private sector, disseminating knowledge and practices, all in a gender balanced way.

See Annex 1. for PPT: Introducing project. Main objectives and components

EXAMPLES OF APPLYING REMOTE SENSING AND GIS IN DIFFERENT SECTORS

Mr. Igor Klein, Representative of German Aerospace Center

- Remote sensing can be used for different topics in the context of ecologically oriented development. Potential disciplines are water resource management, climate change adaptation, agriculture, forestry, landscape, infrastructure, natural conservation and tourism.
- Remote sensing can be e.g. used for drought forecasting or assessing soil quality. This information can help to develop climate change adaptation strategies.
- It is important to define topics and variables of interest in order to decide what kind of satellite data and approaches are most appropriate for this project.
- It is also important that existing local or regional data is assessed.



See Annex 2. for PPT: Using Remote Sensing for an ecologically oriented development in the Aral Sea Region

GROUP WORK RESULTS

What does “ecologically oriented” mean?

→ To consider ecological aspects and climate risks in **any** policy or investment decision. The term “ecologically oriented” means to integrate environmental information in planning processes and take future impacts of climate change into account. By acting ecologically oriented, resilience will be a key topic accompanying every step in business, planning, and investment decisions.

Guiding questions for the working groups

1. Which actors need capacity development the most?
2. Are there any already existing sources available for Capacity Development and ecologically oriented investments?
3. Which business or public areas offer the best opportunity for Capacity Development and ecologically oriented investments now?
4. What economic incentives do you find the most efficient for enhancing cross-border cooperation and ecologically oriented investments?

Group 1: Capacity Development Needs for Private Sector to take Ecologically Oriented Investment

Moderator: Mr. Alisher Shukurov, Advisor to the Minister of Agriculture
Group presenter: Ms. Yelena Kan, NGO KRASS

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| Beneficiaries of Capacity Building Measures to gain or disseminate knowledge: | <ul style="list-style-type: none">- people with limited access- farmers- rural youth- water users' association- women's business association (local)- clusters- Universities (e.g. Agrarian University, Urgench State University)- Karakalpak Fishing Association- Multipurpose Cooperatives- scientific research institutions- NGOs. |
| Creating incentives | <ul style="list-style-type: none">- subsidies, e.g. for green technology- introducing low taxes policy in combination with special green credit programmes- payments for ecosystem services |
| Areas of interests for private sector | <ul style="list-style-type: none">- Introduction of drought and salt-tolerant medical plant production, like halophytes- Supporting farmers to grow licorice legally to generate income and make their farming profitable and sustainable- Reuse of water (e.g. in Germany water is used 7 times; in central Asia for rice and cotton, they just wash up with this water, they use it once) |
| Enhancing cross border cooperation | <ul style="list-style-type: none">- Topics to cover: underground water conservation, community forestry, nature-based ecotourism (in a conceptual way that people understand the meaning of ecotourism)- Using mechanisms for public hearings (e.g. strengthening the hearings when the people who make decisions and the people who will use them sit in one room) |

Group 2: Capacity development needs in the use of remote sensing for land use management

Moderator: Mr. Polat Reimov
Group presenter Mr. Atamuratov A., Tashkent State Agrarian University

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|--------------------------------|--|
| Capacity needs | <ul style="list-style-type: none">- There is a general need for GIS technologies, starting from farmers to local administration and clusters.- Land use classification is needed; e.g. identification of salty and not salty fields.- Forecast models are needed. There are specialists in Uzbekistan and Kazakhstan, scientific work has been carried out by local and international projects, but not any single model can give 100% forecast on yield, on salinity, on groundwater, etc. |
| Data Access and sharing | <ul style="list-style-type: none">- Universities and centers which conduct monitoring of land exist, but better cooperation and data sharing is needed within both countries and across.- Scale needs to change: Moving away from small scale analysis to large scale monitoring and modeling |

- It is important to set up a Remote Sensing / GIS Center which can do the research and facilitate data sharing (suggestion: to set up such a center at the Karakalpak State University)

Group 3: Enhancing Cross-Border Cooperation to Promote Development

Moderator: Dr. Vadim Sokolov, Director of the IFAS Agency in Uzbekistan
Group presenter Dr. Vadim Sokolov V.

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| Support / Capacity Needs of existing intergovernmental agencies (e.g. IFAS, ICSD, ICWC): | <ul style="list-style-type: none">- Facilitate exchange with existing successful models of transboundary cooperation- Support the acquisition of funds to finance project proposal from existing developed programmes (e.g. Aral Sea Basin Plan 4, Regional Environmental Plan for Sustainable Development)- Organizing joint expeditions in the Aral Sea region- Support to the current reform process of the organizational and legal structures of IFAS. |
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Other suggestions and comments from offline and online participants

- We have to rebuild / improve cross border cooperation on GIS using the experience of existing cooperation from other parts of the world.
- We need to get trained in the use of innovative technologies in the field of Remote Sensing.
- There is a well-developed GIS Lab in Kazakhstan on the state level. We are ready to share our experience.
- We need a constant monitoring of land (e.g. for agricultural land or water bodies).
- We need to form a database to determine cadastral contours and ecological zones.
- In cooperation with Uzbek colleagues, we could create a list of rare plants that are endemic for the Aral Sea region, to keep them in storage in the conditions of in-vitro.
- The project should consider the reintroduction of the Turan tiger in Uzbekistan taking the experience of a WWF project focusing on the reintroduction in Kazakhstan.

CLOSURE AND NEXT STEPS

- Steering committee members have been presented and further suggestions for members given by participants (specially to consider scientific organizations and NGOs)
- Steering committee will meet at least once a year to discuss the interim results and the plans for the next year
- GIZ Project Manager Schumacher P. thanked all the participants for the fruitful discussion and valuable contributions. The project team will reflect on all the contributions and take it as a basis to develop an Operational Plan for 2021. The plan will be shared with the Steering Committee.

EVALUATION OF THE WORKSHOP: mentimeter



What values of the ECO-ARAL project do you see for yourself? - from point 1 (very unlikely) to 5 (more likely yes)

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| I learned new information | 4.1 |
| Project will help to strengthen the current activities of our organization | 4.1 |
| Project will help to expand the expertise of our organization | 4 |
| Project can strengthen our potential / approaches | 4 |
| Results will be useful for the programs development of our organization | 3.9 |

Did you meet your expectations of the workshop? Do you agree with these statements? - from point 1 (disagree) to 5 (fully agree)

| | |
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| It was interesting to learn about the project | 4.4 |
| I find the presented examples useful | 4.2 |
| I understand the opportunities offered by the project | 4.2 |
| I understand my potential role in the project | 4 |
| No answer | 1.7 |

FURTHER LINKS

- Project Facebook page post on kick-off workshop with pictures [here](#)
- Post on a website of Committee of Forestry and Wildlife of the Ministry of Ecology, Geology and Natural Resources of RK [here](#)
- Post on GIZ Kazakhstan Facebook page [here](#)
- Project information on GIZ website [here](#)