

Leveraging synergies from integrative land-biodiversity-climate action for improving monitoring, reporting, and investments into sustainable agri-food system transformations in Central Asia

INCEPTION WORKSHOP REPORT



12-15 March, 2024
Tashkent, Uzbekistan

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1. Introduction

Overview of the study and workshop objectives

IRRI and ICARDA are jointly implementing the study titled "Leveraging synergies from integrative land-biodiversity-climate action for improving monitoring, reporting, and investments into sustainable agri-food system transformations in Central Asia". This study is supported by the GIZ under the framework of the regional programme on Integrative and Climate-Sensitive Land Use in Central Asia (ILUCA) and the ELD Initiative.

The study builds on interconnectedness among climate change, biodiversity loss, and land degradation by underscoring the urgent need for coordinated action across national and global levels to address challenges, highlighting the significant economic and environmental costs involved. Central Asian countries' participation in international frameworks such as the Rio Conventions and commitments like the Bonn Challenge demonstrate their engagement in sustainable land management and restoration efforts. The study aims to assess the potential synergies among Land Degradation Neutrality (LDN), Nationally Determined Contributions (NDC), and National Biodiversity Strategies and Action Plans (NBSAP), focusing on the five Central Asian countries: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. By adopting integrated approaches, the study aims to inform decision-makers, enhance regional engagement in global discussions, and contribute to the goals of sustainability and climate resilience in the region through land restoration and sustainable land management.

The proposed study seeks to address the following set of questions which were discussed with the relevant national government organizations and technical experts during the launch of the study for ground-validation and fine-tuning:

- 1) What is the current extent and costs of land degradation in Central Asia? Where are land degradation hotspots? How land degradation hotspots and costs varied over the last 20 years?
- 2) What are the total financing needs and current funding gaps for restoring degraded lands in Central Asia, including under the national commitments for land restoration in LDN, NDC, and NBSAP/GBF action agendas?
- 3) Which degraded locations provide the highest returns for land restoration investments?
- 4) How do the costs and benefits from the current segmented approach to land restoration compare with the costs and benefits of nationally coordinated planning and implementation?

The inception workshop objectives were several-folds:

- to launch the study;
- to present study's approach and aims;
- to understand realities on the ground, most important issues by decision makers, to identify synergy scenarios jointly, to cater the study process to the needs of decision makers to support uptake and implementation, in order to create most meaningful results for actors in Central Asian countries.
- to create interest and ownership on the part of the relevant national partner organizations in the region and beyond to foster future implementation of an integrated land use management approach across the land-climate-biodiversity-agriculture nexus.

The target groups of this inception workshop were focal points of the three Rio Conventions in target countries, related technical staff of Ministries and partner organizations, including development partners, e.g., UNDP, World Bank, ADB, and others involved in land restoration projects.

Brief description of the topics covered

During planning process of the inception workshop the teams of involved organizations learned about similar regional efforts from related organizations. Aligned with the study objectives, the teams explored synergies in organization of planned events.

Namely, UNCCD Global Mechanism, in partnership with the Regional Environmental Centre for Central Asia (CAREC) were planning regional event in Tashkent with expected participation of focal points representing Rio Conventions from 5 Central Asian countries coinciding with the same week of March 11, 2024 when inception workshop was tentatively scheduled. Such occasion provided effective opportunity to leverage synergies and present study objectives to the wider audience of stakeholders than originally planned and seek inputs from presentations, interactions and intended group discussions. Hence, back-to-back event was organized to consist of two workshops held in the same venue:

- “Capacity-building workshop on developing integrated projects and programs to attract financing for Central Asia” to take place on 12-14 March 2024;
and
- Inception workshop of the study on “Leveraging synergies from integrative land- biodiversity-climate action for improving monitoring, reporting, and investments into sustainable agri-food system transformations in Central Asia” to take place on 15 March 2024.

These workshops aimed to sensitize regional stakeholders to cross-border cooperation approaches and rationale, funding opportunities, and map potential priority locations, project ideas and entry points for activities in the region. All the four days were dedicated to discussing integrated actions on land, biodiversity and climate to improve monitoring, reporting and investment in sustainable transformation of the agriculture and food system in Central Asia from diverse angles.

Combined workshop objectives included:

- Sensitize the participants to land degradation neutrality (LDN), sustainable land management practices, and other related concepts and international frameworks.
- Discuss opportunities for investment synergies integrating land-biodiversity-climate action agendas.
- Regarding land and ecosystems restoration, provide a platform for countries to jointly discuss related issues and priorities, and share information to get an overview of current regional strategies and activities and the national status of implementation, identify current gaps.
- Establish an agreement on the most urgent (cross-border) priorities and cooperation opportunities to focus on, including ecosystem restoration.
- Advance regional approaches for Integrated Drought Management and plan the further implementation of the Regional strategy for drought risk management and mitigation in Central Asia for 2021-2030.
- Create transparency as to related ongoing activities and projects in the region.
- Build participants’ capacity in understanding and knowledge about different funding mechanisms and resource mobilization opportunities available.

- Discussion of financial, institutional and administrative mechanisms for implementing integrated approaches in i) land use, ii) biodiversity protection and iii) climate change adaptation and mitigation.

More specifically, to formulate and concretize project ideas and a roadmap for Central Asia, the workshops were organized around the following five topics:

1. **Combatting sand and dust storms through LDN targets.** Sand and dust storms in Central Asia require regional cooperation for source mitigation, as outlined in the Regional Strategy for SDS, with a focus on improving LDN targets.
2. **Environmental dashboard.** An environmental dashboard, utilizing open-source data infrastructure, supports informed decision-making and LDN TSP 2.0 implementation through data management and visualization.
3. **Sustainable resource management in climate-security hotspots: the Ferghana Valley and high mountain areas.** Joint measures in the Ferghana Valley and high mountain areas include dialogue, workshops, and pilot restoration projects to address conflict mitigation and ecosystem restoration.
4. **Integrated Drought Management and the implementation of the Regional Strategy for Drought Risk Management and Mitigation in Central Asia for 2021-2030.** Central Asia aims to tackle drought challenges with a coordinated approach through the Integrated Drought Management Programme, aligning with the Regional Drought Strategy.
5. **Creating synergies across land-biodiversity-climate action agendas.** Integration of land, biodiversity, and climate agendas is essential for addressing challenges effectively, with projects aimed at synergizing actions across sectors for land restoration and sustainable management.

2. Workshop Structure

Description of the workshop format, including sessions, presentations, discussions, and activities

Workshops were organized for four days (12-15 March 2024) in hybrid format to allow physical as well as virtual presence for participants. Arrangements included simultaneous translation with English and Russian options. Sessions consisted of presentations and group discussions to collect ideas and feedback to presented materials. To engage participants attending the workshop in virtual mode logistics were organized in a way to involve them in group discussions too.

The following is the outline of how workshop days were planned, more detailed breakdown and timeline is provided in the Annex.

Day 1 – 12.03.2024

- Opening Session:
 - Keynote speakers from various organizations
 - Introduction to Peace Forest Initiative
 - Background, objectives, principles, impact areas
 - Institutional setting, synergies with other restoration initiatives
 - Site-specific and global deliverables 2023-2024
 - Overview of relevant regional frameworks
- Presentation of the RESILAND project
 - Overview by World Bank and State Committee on Forestry of Uzbekistan
- Country presentations on ongoing national activities
 - Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan
- Breakout groups per country for rapid analysis
 - Discussion and mapping of regional transboundary priorities
 - Defining thematic focuses
- Overview of current programs, projects, and collaboration opportunities
 - Insights from various organizations and partners

Day 2 – 13.03.2024

- Overview of key donors in Central Asia and sustainable finance mechanisms
 - Presentations by UNDP, EDCF, AfCO, ADB
- Mixed breakout groups on adaptation and land-biodiversity-climate synergies
- Introduction to collaborative elements under PFI
- Mixed breakout groups to discuss PFI elements
 - Reflections and discussions on sand and dust storms, Ferghana Valley, environmental dashboard, etc.

Day 3 – 14.03.2024

- Mixed breakout groups: deep-dive into PFI elements
 - Refinement of scope and activities, formulation of project ideas
- Donor/partner reflections on proposed PFI elements
- PFI Road Map for COP16: agreeing on the next steps and a pathway towards UNCCD COP16
- Feedback, final wrap-up, next steps

Day 4 – 15.03.2024

- Opening session:

- Keynote speakers from ICARDA-CAC, GIZ, IRRI, UNCCD
 - Introduction: Overview and objectives of the workshop
 - Recap of discussions during previous days
- Setting the scene by Waltraud Ederer from ELD and GIZ
- Interactive discussion using Mentimeter
- Leveraging synergies from integrative land-biodiversity-climate action in Central Asia:
 - Presentation of incoming results of the study by Alisher Mirzabaev from IRRI
 - Interactive discussion of the study's results
- Group Work 1 in country groups:
 - Discussion of mapping results
- Introduction to the synergy scenarios by Alisher Mirzabaev from IRRI
- Break-out group discussions per country on the 6 scenarios/synergy mechanisms for integrated land restoration:
 - SWOT analysis with guiding questions and template to document findings per group
- Plenary presenting the outcomes of breakout group discussions

3. Summary of the main points, insights, and conclusions drawn during the workshop

Day 1 – Introduction and overview

The workshop aimed to address pressing issues surrounding land degradation and climate change in Central Asia, with a particular focus on fostering regional cooperation and concrete actions to promote sustainability. Presentations highlighted initiatives such as the UNCCD's Peace Forest Initiative (PFI), which serves as a catalyst for transboundary cooperation, and the Action Program for Assistance to the Countries of the Aral Sea Basin (ASBP-4), emphasizing the urgent need for joint efforts to combat the negative impacts of climate change and inappropriate use of natural resources.

Practical solutions and integrated regional approaches were stressed as essential by experts, with the World Bank's RESILAND PROGRAM focusing on designing regional programs to address land degradation along transboundary corridors. Projects like the "Uzbekistan Resilient Landscapes Restoration Project" and the "Regional Programme on Protection of Environment for Sustainable Development of Central Asia" underscored the importance of collaborative efforts in tackling issues such as water and air pollution, waste management, and ecosystem degradation. As the region faces increasingly complex challenges, the workshop aimed to lay the foundation for coordinated action and mutual support to build a more resilient and sustainable future.

U. Kang, Global Mechanism of UNCCD:

- After UNCCD's Peace Forest Initiative (PFI) was launched in 2019 at UNCCD COP14, funded by Korea Forest Service. it works as a catalyst for transboundary cooperation between countries and the secretariat is ready to roll out more activities and assist at regional level including Central Asia with joint efforts where regional transboundary cooperation is necessary to face challenges of climate change.
- Purpose of the workshop: deliberate and agree on plan to concrete actions that would promote regional cooperation. (Discuss the approach to deal with global challenges).
- Outcome of the workshop: formation of the basis for developing a large-scale, regional project.
- The project aims for joint efforts to promote regional cooperation. Being more resilient as sustainable society. The project would help to transform joint commitments made under conventions into real actions.
- It's matter of urgency to work together in the environment protection ensuring coherence, synergy and coordination between countries.

S. Park:

- Practical solutions are necessary from experts. It's important to have integrated regional approach. To have practical recommendations, practical Mapping of sources of the issues related to land degradation and sand storms. On behalf of the Uzbekistan Government: to have a practical roadmap would be a good outcome of the workshop that will be used as guidance for policy, for government.

Zafar Makhmudov, CAREC:

- Not all proposed joint projects would be convenient for all countries of Central Asia but it's necessary to find some compromise to achieve goals in the conditions of climate change and inappropriate use of natural resources.

W. Foerch, GIZ:

- German Development cooperation runs several programs in Central Asia and open to discuss opportunities, joint approaches and see how to link up joint efforts during the critical time of regional cooperation in terms of land restoration, biodiversity, and climate action.

Wonyeong Song, Korea Forest Service:

- Korean government launched Forest initiative to save ecosystems for the next generations. Ecosystems should be restored by joint efforts. Korea wants to share its successful experience with other countries.

P. Upla, UNCCD ([Link](#)):

- Peace Forest Initiative (PFI) aims to contribute to peace and prosperity through sustainable resource management and restoration in different parts of the world.
 - o PFI promotes joint land degradation neutrality and ecosystem restoration targets, mobilizing commitments and partnership with multiple stakeholders.
 - o Supports SDGs # 13,15,16, etc.
 - o Supports UN Decade on Ecosystem Restoration.
 - o PFI promotes cooperation for sustainable development, resilience and peacebuilding through joint planning, resource mobilization and implementation
- PFI global deliverables:
 - o Policy/technical background study on the Land-Security-Peace nexus to inform operational development.
 - o Identify potential PFI sites.
 - o Project/programme/information/data dashboard to track progress
 - o Develop a global community of practice with strategic partners for sharing lessons learnt and knowledge management.
 - o Policy/partner roundtable for resource mobilization at UNCCD COP16.
- PFI site specific deliverables:
 - o Co-design natural resource asset management plan with joint/common target setting and agreed governance measures
 - o Translate the plan into investable project/programme to support resource mobilization
 - o Support plan/project/programme launch. PFI can support with donor outreach, partner roundtable events and/or communication-related activities.
 - o Monitoring and documenting/reporting on progress (N.B. UNCCD and PFI doesn't implement).

S. Bekmaganbetov, Representative of the Republic of Kazakhstan in the Executive Committee of the International Fund for Saving the Aral Sea:

- Action Program for Assistance to the Countries of the Aral Sea Basin (ASBP-4) 2020-2030:
 - o International fund for saving Aral Sea is chaired by Kazakhstan for the 3 years.
 - o Climate change and inappropriate use of water resources may have negative affect on economies of the countries of the Aral Sea basin, cause migration and create other socioeconomic problems. Investment needed for multiple projects led in the frame of saving the Aral Sea.

World Bank:

- RESILAND PROGRAM. GDP of Central Asian countries fell because of land degradation. The major part of land degradation is happening on the borders between countries and in zones of conflict. World Bank started designing the regional program together with the countries in the transboundary corridor. 4 projects have been approved by WB for Central Asian countries. Transboundary corridors are of high importance.

B. Kuziev ([Link](#)):

- "Uzbekistan Resilient Landscapes Restoration Project" (RESILAND UZ)
- The project will be developed in six regions of Uzbekistan focusing on land restoration.

U. Ulugov ([Link](#)):

- REP4SD-CA-Regional programme on protection of environment for sustainable development of Central Asia for the period 2020-2030.
- Main issues that the programme addresses: water pollution, air pollution, waste management, eco systems of mountains, land degradation.

Country presentations

During this session, representatives from Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan offered detailed insights into their respective national activities and priorities in land and ecosystem restoration within the context of regional frameworks.

Kazakhstan addressed the pressing issue of soil erosion, particularly focusing on water and wind erosion as well as degradation of pastures. The government has recently enacted legislation and established committees and research centers to combat these challenges effectively. Kyrgyzstan emphasized the importance of addressing land degradation in agriculture, highlighting the need for farmer training and recommending measures such as biodiversity protection and water-saving technologies. Tajikistan outlined the diverse impacts of climate change across various sectors and proposed common solutions for the region, including the development of unified information platforms and reinforcement of climate monitoring systems. Turkmenistan highlighted the significant risks posed to agriculture by climate change, such as drought and soil erosion, and proposed solutions such as water resource efficiency and strict regulation of water management. Uzbekistan presented ongoing efforts to restore degraded lands, particularly in the Aral Sea region, focusing on afforestation, desertification mitigation, and socio-economic benefits for local communities.

These presentations underscored the shared challenges faced by countries in the region and highlighted the importance of collaborative efforts to address land degradation and ecosystem restoration effectively.

Kazakhstan, NFP of UNCCD, Ministry of Agriculture ([Link](#)):

- Issue to address: soil erosion in Kazakhstan.
- Types of soil erosion in Kazakhstan: water erosion of soil due to human intervention, wind erosion of soil, degradation of pastures.
- Government of Kazakhstan recently adopted relevant legislation acts to save pastures and deal with degradation of pastures. Several committees exist to monitor and analyze state of soil. Analytical and research centers were created to use resources properly, prevent degradation of soils and improve microclimate.

Kyrgyzstan, Executive Secretary of the expert working group on the implementation of the UNCCD:

- Issues to address in agriculture: land degradation.
- Training for local farmers important to improve.
- Recommendations: Protection of biodiversity, neutralization of land degradation, implementation of water saving technologies, improvement of pastures, professional training and mobilization of funds

Tajikistan, Committee for Environmental Protection ([Link](#)):

- Areas affected by climate change:
 - Agriculture and water resources
 - Forestry and biodiversity (ecosystems)
 - Health
 - Energy sector and Industry sectors
 - Transportation
- Common possible solutions in the region:
 - Creation of the unified information platform for Central Asia
 - Modernization of the climate monitoring systems
 - Reinforcement of potential
 - Development of information products/ knowledge products
 - Implementation of mechanisms for evaluation of climate investments
 - Information and educational activities
- Recommendations: UN early warning system, alert on transboundary movement of animals species, protection of key biodiversity areas

Turkmenistan, Ministry of Nature Protection ([Link](#)):

- Main risks for agriculture of Turkmenistan and impact of climate change:
 - Drought, increase of temperature and erosion of soil
 - Increased demand for irrigation;
 - Decrease in yield/productivity
 - Decrease of income in rural areas
 - Possible migration of population
 - Increase of price on food
 - Decrease of water flows
 - Early or late freezing weather conditions
 - Dust storms
- Possible solutions:
 - Increase efficiency of water resources, reuse of water, recycling and management of demands
 - Transboundary water sources
 - Strict regulation for filtering and cleaning of used water and sewage system
 - Implementation of water saving technologies
 - Improve water management system

Uzbekistan, Ministry of Ecology ([Link](#)):

- Ongoing national activities on land/ecosystem restoration and national priorities within regional frameworks, including status of national LDN targets and implementation: case study Uzbekistan
- Main issues:
 - Drought and Aral sea issue exacerbated by climate change and water mismanagement.
 - Irregular rainfall patterns and high evaporation rates contribute to water scarcity, affecting agriculture and livelihoods.
- Objectives:
 - To rehabilitate degraded lands in the Aral Sea region through afforestation and reforestation.
 - To mitigate desertification and soil erosion in the area. Reduce the wind erosion in the area.
 - To improve local ecosystems and biodiversity.

- To provide socio-economic benefits to local communities through job creation and sustainable land use practices.

Overview of current programs and projects, future priorities, and collaboration opportunities with key partners in Central Asia

This session covered presentations from several international organizations on the topics dealing with the landscape of sustainable development in Central Asia. Representatives delved into insightful presentations from key stakeholders such as GIZ, IRRI, Adelphi, OSCE, GGGI, Better Cotton Initiative, BEZK, WMO, and more, each offering unique perspectives and initiatives to address the region's pressing challenges. From climate-sensitive land use to disaster risk reduction and green investment projects, participants explored innovative approaches and collaboration opportunities aimed at fostering resilience and sustainable growth in Central Asia.

GIZ Deputy Head of Regional Programme “Integrative and Climate-sensitive Land Use in Central Asia” ([Link](#))

IRRI - Senior Scientist, Policy Analysis/Climate Change: Leveraging synergies from integrative land-biodiversity- climate action:

([Link](#)) – The contents of the presentation are discussed in detail under Day 4 below.

Adelphi – Senior Adviser on Climate Diplomacy and Security

OSCE and Adelphi, Climate Affairs Adviser ([Link](#)):

- ‘OSCE project on climate change and security’

GGGI - Country Representative to Uzbekistan ([Link](#)):

- ‘Green Rehabilitation Investment Project for Karakalpakstan Republic to address impacts of the Aral Sea Crisis’

Better Cotton Initiative, Senior Programme Manager ([Link](#)):

- ‘To help cotton communities survive and thrive, while protecting and restoring the environment’.

BEZK, Czech Republic ([Link](#)):

- ‘Overview of the project to improve early warning systems and disaster risk reduction in Central Asia. The project aims to strengthen regional cooperation between the Central Asia countries to better prepare for and respond to natural disasters’.

BEZK, Czech Republic ([Link](#)):

- ‘Green Bonds Readiness Initiative for Kyrgyzstan’

World Meteorological Organization (WMO) ([Link](#)):

- ‘Integrated Drought Management’

Environmental Dashboard (GEOGUARD) ([Link](#)):

- ‘Monitor trends in water scarcity and conflict throughout Iraq to enable data driven, multilateral decision-making’

UNDP Regional Hub for Europe and Central Asia, UNDP-GEF portfolio in Central Asia ([Link](#)):

- ‘Cooperation on Sustaining Peace through Land Restoration and Forestry’

FAO ([Link](#)):

- CAWLN programme objectives 'Measures to increasing the resilience of Central Asia's agri-food systems by introducing measures to restore ecosystems and improve agriculture'.

Global Environment Facility (GEF) ([Link](#)):

- 'GEF Funding Windows and Project Cycle Elements'

Day 2 – Sustainable finance mechanisms

The first day of the workshop was a dynamic exploration of sustainable development initiatives in Central Asia, featuring presentations from a diverse array of organizations. Participants received information on the range of perspectives and innovative projects, spanning climate-sensitive land use, disaster risk reduction, green investment, and beyond. Engaging discussions and networking opportunities allowed attendees to exchange ideas and forge potential collaborations. Feedback from participants highlighted the value of the presentations in deepening their understanding of the region's challenges and opportunities.

The Day 2 agenda provided further exploration of critical topics and collaborative initiatives aimed at advancing sustainable development goals in Central Asia.

Green Climate Fund ([Link](#))

- ‘Accelerating Climate Innovation and Investment’

EDCF ([Link](#))

- ‘Project Portfolio, Cooperation Plan in Uzbekistan and case study’

Asian Forest Cooperation Organization (AFCO) ([Link](#))

- ‘Ongoing work in Central Asia and AFoCO 10-Year Climate Action Plan’

Asian Development Bank ([Link](#))

- ‘ADB’s Approach to Climate-Food-Nature Nexus’

UNCCD ([Link](#))

- ‘UNCCD Action on Combating Sand and Dust Storms’
- ‘Synergies and tradeoffs’
- ‘Project idea for regional project on Sand and Dust storms’

Integrated Drought Management for Central Asia (IDCA) ([Link](#))

Group discussion sessions ([Link](#)):

- ‘Rapid analysis of regional priorities’
- ‘Preliminary PFI elements/entry points’
- ‘Deep-dive into PFI project ideas’

Rio synergy study

As joint collaboration between GIZs Regional Programme Integrated and Climate Sensitive Land Use (ILUCA), the Economics of Land Degradation Initiative (ELD) with the CGIAR centers International Rice Research Institute (IRRI) and International Center for Agricultural Research in the Dry Areas (ICARDA) the study process on "Leveraging synergies from integrative land-biodiversity-climate action for improving monitoring, reporting, and investments into sustainable agri-food system transformations in Central Asia" was launched at the workshop.

The study builds on interconnectedness among climate change, biodiversity loss, and land degradation by underscoring the urgent need for coordinated action across national and global levels to address challenges, highlighting the significant economic and environmental costs involved. Central Asian

countries' participation in international frameworks such as the Rio Conventions and commitments like the Bonn Challenge demonstrate their engagement in sustainable land management and restoration efforts. The study aims to assess the potential synergies among Land Degradation Neutrality (LDN), Nationally Determined Contributions (NDC), and National Biodiversity Strategies and Action Plans (NBSAP), focusing on the five Central Asian countries: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. By adopting integrated approaches, the study aims to inform decision-makers, enhance regional engagement in global discussions, and contribute to the goals of sustainability and climate resilience in the region through land restoration and sustainable land management.

This mixed break out group session was used to discuss about the topic of synergies and to identify together with the workshop participants the most relevant scenarios for the use of synergies that shall be analyzed during the study process.

Synergy here means joint and coordinated efforts to increase cost-effectiveness and outcomes. The international experience shows that when implementing land restoration projects, transaction costs, such as research and training, project writing, monitoring and evaluation, maintenance of information portals, websites and other tasks can reach 65%.

Based on these discussions, 6 mechanisms were identified for creating potential synergies from integrated land-biodiversity-climate action agendas for land restoration:

- 1) National coordination mechanism (energizing the activities of existing ones when available).
- 2) Common information platform (several suggestions were made that such information platform needs to be at the regional level).
- 3) Collaboration in research and capacity building/sharing.
- 4) Common approaches for Monitoring, Reporting, and Verification around the Rio Conventions' land targets.
- 5) Environmental education and behavioral change (in a very broad sense).
- 6) Joint efforts for funding mobilization.

Above listed mechanisms were formulated based on the inputs from break out groups. Group discussions were preceded by presentation ([Link](#)) about synergies to optimize financial resources. Economic efficiency is not only an indicator but also presents ground for cooperation. Groups convened to reflect upon presented information to formulate ideas on how to reach synergies, below are overviews from each group tables:

— Tajikistan

- Cooperation at national level is important i.e. among institutions, civil society, public organizations and scientific research institutes. Many projects are implemented in Tajikistan nowadays and every project is led by a certain entity or organization. There's cooperation in the frame of every single project but every entity has its own priorities, interests and values. It would be important if donors of the projects define synergy in the frame of their priorities as one of the main tasks or criteria for implementation of the project so that transparency would take place for every entity to understand its duties and prioritize synergy at work to prevent duplication of actions (i.e. when several entities work on same purpose).
- Informational transparency such as platform/database on results at every national level containing relevant data would be one possible solution for other projects.

- CAREC
 - Cooperation and synergies may help optimize costs, however, joint work on implementation of a project requires more people involved in coordination, joint planning of work, interaction among staff members of different entities, more time on clarification and coherence.
 - Which technical means/electronic tools are used for different entities to work in one space? How administrative and organizational work is done in joint way? i.e. preparing documents together by different entities, budget planning together, collection of financial reports together.

- Kyrgyzstan
 - Shared their experience with a regional committee on natural heritage covering natural reserves of the three countries Uzbekistan, Kazakhstan and Kyrgyzstan. The committee prohibits any activity that may harm the environment. One proposal is to develop an intergovernmental document/framework that would be effective for use even after the end of one project so that work doesn't stop with closure of certain projects. It's important to create new experiences as well as develop the existing ones.

- Turkmenistan
 - Research on desertification processes has started long time ago in Turkmenistan with relevant methodologies. Synergy is understood as follows: resolving one problem under Rio convention may resolve same issues under other existing conventions mainly related to conservation of biodiversity and climate change.
 - One type of desertification is overgrazing of livestock on natural/primary pastures that causes degradation of the latter with subsequent emerging of dunes and sands. Therefore, the most fragile ecosystems disappear. Current methodologies are directed to restore natural/primary ecosystems that existed on the territories earlier for many years and can provide sustainability. Any economic activity/human intervention is stopped on the lands for 4-5 years minimum for natural restoration. Works on watering the ecosystems such as building water collectors, drainage system are being done too. The dynamic shows improvement of processes in biodiversity and land restoration becoming economically efficient and sustainable.

- Kazakhstan
 - Some parts of land are considered as private territories. It's proposed to involve private sector / entrepreneurs in the implementation of projects because bureaucracy in governmental structures may affect efficiency. e.g. try with one or two entrepreneurs first to see if it works well.

- Tajikistan
 - Proposal was to enforce constant scientific and technical cooperation among research institutions in Central Asian countries. Alignment and continuous work is necessary. Awareness about financial possibilities including information dissemination mechanisms for relevant parties are necessary to understand processes and ways to receive funds.

- Uzbekistan
 - Proposed to improve information sharing i.e. have one platform with open scientific data for Central Asian countries to see current gaps and points to improve in order to avoid same processes starting again and again in different periods of time.

Afternoon group discussions

Afternoon session with group discussions focused on preliminary Practical Financing Initiative (PFI) elements. As an output of the group work discussion agreement was around Sand and Dust Storms (SDS) that affect whole Central Asia. With increasing frequency it is important to identify sources of SDS and regional cooperation to jointly devise mitigation approaches. Increased frequency of SDS were mentioned to be caused by livestock sector, unsustainable agricultural practices, deforestation, poor water management. The group listed possible solutions consisting of:

- National/regional strategies on sand and dust storms.
- Reforestation and afforestation.
- Water saving technologies.
- Increase planting of trees and crop species that are resilient to drought and salinity.
- Capacity building and awareness.
- Sustainable financing.
- Strong collaboration between countries for efficient water management, develop regional agreements.

[\(Link\)](#)

Day 3 – Deep-dive and refinement of the scope of group discussions

On Day 3 of the workshop, participants engaged in mixed breakout groups to delve deeper into the Practical Financing Initiative (PFI) elements introduced on Day 2. These sessions were designed to refine the scope and activities proposed during the previous day's discussions, focusing on formulating concrete project ideas aimed at advancing sustainable development goals in Central Asia. By combining diverse perspectives and expertise, participants collaborated closely to identify key priorities, assess potential challenges, and develop comprehensive project proposals that addressed critical issues such as climate-sensitive land use, disaster risk reduction, and green investment. Through interactive dialogue and collective brainstorming, the breakout groups fostered a dynamic environment conducive to innovation and collaboration, ultimately contributing to the ongoing efforts to promote sustainability and resilience in the region.

Mixed breakout groups

Several discussion groups were formed to delve into details of the previous day exchanges. The groups were tasked to reflect on several steps:

- Step 1. What are the outcomes/ outputs and goals of your project/programme?
- Step 2. What is required for full project proposal development (e.g. joint trainings, regional assessments, feasibility studies, joint strategies going forward)?
- Step 3. Which donor you would like to sell the proposal? Deep dive into identified PFI priorities and proposals and match with strategic priorities of the donors. What would be your pitch?
- Step 4. What is your strategy for mobilizing resources? By identifying the potential donor, work on fundraising activities, specific milestones, timeframe.
- Step 5. Report back to plenary.

The key break out session from the perspective of our study was the one on synergies for integrated land-biodiversity-climate action agendas for land restoration. After a brief discussion opener by Alisher Mirzabaev, senior scientist (IRRI), the participants discussed and brainstormed potential mechanisms for achieving synergies from integrated action across the three Rio Convention focus areas in Central Asia. The following six synergy mechanisms were identified:

These synergy mechanisms were then discussed in more detail during the 4th Day of the Workshop.

- 1) *National coordination mechanism (energizing the activities of existing ones when available)*
- 2) *Common information platform (several suggestions were made that such information platform needs to be at the regional level)*
- 3) *Collaboration in research and capacity building/sharing*
- 4) *Common approaches for Monitoring, Reporting, and Verification around the Rio Conventions' land targets*
- 5) *Environmental education and behavioral change (in a very broad sense)*
- 6) *Joint efforts for funding mobilization*

Mixed breakout group presentations

Results of group discussions were presented to collect donors and partners reflections on proposed PFI elements.

1st Group outputs – Action plan for Environmental Dashboard

The group discussed environmental dashboard. Mapping of currently existing platforms at national and regional levels. Points were added about national data providers:

- National cadastral centre of Kyrgyz Republic providing satellite images.
- National operator in Kazakhstan that provides satellite images.
- Discussing the needs to cope with land degradation, glacier melting and temporary changes in vegetation and forest cover.

Practical steps to proceed with development of a data platform:

- Data sharing issue and current status of data sharing between the five countries.
- Three countries are collaborating nowadays on how to manage world heritage site jointly in Tian Shan mountainous area.
- Funding and sustainability of creating data platform considering that there were number of already existing regional platforms. Main concern was maintenance costs that have to be covered by the governments after the project ends.
- Establishment of expert groups in the countries to discuss current needs for the environmental dashboard, legislative aspects regarding data sharing and the use of satellite images.
- Communication channels with UNCCD through national focal points.

Suggestion for national representatives:

- Take these notes to the national providers of satellite data.
- Organize online meeting inviting deputy ministers of all countries together with technical experts working on data management to discuss these points further.
- Country representatives requested that if the dashboard moves on, field visits would be done to all the five countries.
- Early warning system: it's necessary to clarify what is being already done on early warning system at national level in order to avoid duplication in the projects.

Action points for UNCCD and UNDPPA:

- To clarify and elaborate the use of such dashboard better.
- UNCCD could send letters to the ministries suggesting collaboration (standard procedure in UNCCD: senders can send a letter describing their needs and UNCCD secretariat responds on the requests).

2nd Group outputs – Action plan for Transboundary Project

- Consolidate in one document ideas and suggestions that were already proposed earlier.
- Hold a series of in person meetings with relevant parties, relevant governmental institutions and civil society in every country of Central Asian region in order to understand current situation in agriculture and water supply.
- Prepare a concept note after the visits to understand current situation in every country. Most CA countries have updated strategies.
- Carry out research on key issues that were announced, work that had been done earlier and evaluate existing gaps.

The above data may serve as basis for development of project framework. The following key directions for proper functioning of transboundary project:

- Improvement of life activities of local communities as they are the key users of natural resources.
- Issues of water supply and use in Central Asian countries and transboundary territories are the priorities for the future project.
- Restoration of degraded lands was important to define activities for already degraded lands and for the lands of medium degradation level (that can be restored) separately. Support technical and intellectual potential of local communities i.e. transboundary study tours and seminars where representatives of local communities can share their experiences and practices for sustainable use of land.
- Create and implement practices to users of natural resources for careful use of water resources, restoration of land, pastures and forest ecosystems.
- Key donors were defined but local communities are not always aware which donors that can work in the region and can help them with the issues. Meetings with international partners are important to understand range of donor's activities that can provide support on a particular issue.
- Governmental institutions, scientists and all relevant parties should define sectors where support is necessary.
- Key donors were defined but meetings with potential donors to discuss procedures, criteria and development of the project framework are acceptable only after the exact proposals are defined and necessary rationale for the actual problems is provided.
- Broader work requires deep dive meetings with experts of every country separately.

3rd Group outputs – Environmental and water management

- Activities around institutional aspects for managing water resources, environmental issues such as sand and dust storms to address at national and regional level, improve collaboration for managing water resources.
- Technical side i.e. water saving technologies, planting of trees and crop species, draught and salinity resilience, investments in capacity development and awareness raising of local populations, farmers and making linkages with private sector for supporting financing possibilities of these activities.
- When types of activities are defined, then possible to think about the number of projects which can address the necessary activities under framework program that will constitute approach to address transboundary issue of SDS.
- Key project outputs could include:
 - Development of assessments to understand the sources, the impacts and the risks of SDS in each country in the Aral Sea region and linkages between countries at regional level. The assessments will help to identify the hotspots that suffer the most, degraded lands and economic losses.
 - Biodiversity element through cadastre of animals at national and regional level to understand how population of animals is distributed and develop plans how to protect animals.
- Possible funding institutions: GCF (good as it contributes to capacity building needs), Adaptation Fund, World Bank, Islamic Development Bank, the EU that has experience of work with large consortium of organizations that would be needed to implement the complex program with different activities on both institutional and technical side.
- The long-term programs rely on country willingness to take on loans.
- To involve all relevant ministries and ministries of finance at national level to think about cross sectoral linkages and how to move towards the governmental approach to address these complex challenges.
- Invite potential donors to the next workshop for developing further these ideas and discuss their contribution directly.

Comments from participants:

- Central Asian countries have already done assessment works on current condition of ecosystems at national levels. The assessment process is a key data source but it takes a lot of time and would need bigger expenses.
 - Suggestion: to check existing reports, evaluations and analysis at national level first as basis for project framework. That would take less time and require less expenses.
- Strategy on management of SDS and drought in Central Asia. Preliminary results of the mid-term strategy indicate frequency, sources, hotspots and lists counter measures for implementation. The Strategy has been already developed in 2020-2021. The strategy will not require any financial needs. All Central Asian countries have the strategy. This is the most recent material that includes national data and data provided by international partners. The results of the studies show that SDS as well as drought is actual problem in Central Asia that requires solution.

Day 4 – Leveraging synergies from integrative land-biodiversity-climate action

The fourth day of event was fully devoted to the study on “Leveraging Synergies for Sustainable Agri-Food Systems in Central Asia”. Sessions aimed to harness integrative land-biodiversity-climate actions to enhance monitoring, reporting, and investments for sustainable agri-food system transformations in Central Asia. Key objectives were to:

- Discuss incoming study results; and
- Brainstorm synergy opportunities for integrated approaches.

Setting the scene

After the opening session delivered by GIZ, UNCCD and IRRI to provide with the outline of the day, objectives and recap of previous discussions, Waltraud Ederer set the scene ([Link](#)) with insights on the Economics of Land Degradation Initiative (ELD) and GIZ active engagement in promoting sustainable land management in Central Asia through various activities, including reports, trainings, and workshops. The strategic partnership between Germany and Central Asia emphasizes areas such as climate, regional cooperation, economy, and people-to-people contacts. Within this framework, GIZ's Integrative and Climate-sensitive Land Use in Central Asia (ILUCA) project focuses on leveraging synergies for integrated land-biodiversity-climate action, garnering global interest. This effort includes kick-off studies at UNCCD COP 15 and presentations of preliminary results at CBD COP 15 and UNFCCC SB58. The overall objectives aim to improve framework conditions for implementation and investment in Central Asia, with outputs including economic comparisons, investment cases, and in-depth studies in Uzbekistan to inform policy making and investment decisions.



Preliminary results for discussion

The session continued with preliminary results discussion based on presentation by Alisher Mirzabaev from IRRI of initial findings, addressing the extent and costs of land degradation, financing needs for restoration, and more. Participants were provided with additional details that were not announced during the first days of the seminar ([Link](#)).

- Preliminary results for discussion. Research objectives in global and regional context (related to Convention on Climate Change):
 - Determine extent and cost of land degradation in Central Asia (it's necessary to show/map places of degradation and determine costs/amounts accordingly)



- Financing needs and gaps for land restoration including most profitable locations for land restoration (funds are limited thus we need to prioritize which places need financial assistance first).
 - Comparison of segmented vs. coordinated land restoration (define if separate or combined way is more efficient to implement for land restoration) and policy-relevant evidence for coordinated action on land.
- Data sources used for the research
 - Satellite data (MODIS)
 - Databases on economic data indicating costs of ecosystem service and land restoration actions: ESVD, ZEF-ELD datasets, ECON-WOCAT, ZEF-ELD + own compilations.
 - Carbon data: Spawn and Gibbs
 - Transaction costs
 - Summary of key changes
 - It's important to consider changes when % of grassland degradation that causes increase of barren land is higher than % of barren land improvement and transformation into grassland, cropland to grassland and grassland to cropland transformation depending on point of view and context.
 - Analytical approach
 - Firstly, tracked the extent and costs of land degradation through land use and land cover change (2001-2020) using satellite data.
 - Secondly, compared the costs and benefits of restoring the degraded lands using economic data.
 - Thirdly, in the process of developing modelling scenarios for synergies (during the 4th day of the seminar).
 - Comprehensive analysis of land degradation extent and costs, ecosystem services, land restoration costs, calculation methodologies for degradation/improvement, losses from land use change, identification of hotspots and bright spots, restoration cost calculations, investment requirements for 2020-2050, economically efficient restoration targeting, and changes in above and below ground carbon from 2001-2020.

Interactive discussions

Presentation was followed by the interactive discussions with participants engaged through Zoom and live presence, raising questions on data sources, climate change impacts, and land restoration technologies. Key exchanges through questions, comments and recommendations from participants are captured below.

Questions from several participants included:

- *How will climate change impact the investment requirements? How shifts (i.e. forest-grassland, etc.) depending on necessities will be considered?*
- *Data on cost of land degradation is important. Are land restoration technologies covered in the research? What are the technologies?*
- *Possibility of acquiring higher resolution satellite images at around 10m? Is it possible to include national data in the analysis too?*
- *Which definition is used for forest and which economic value is used in the analysis? Is this primary forest or plantation? Or average value is used?*
- *What level of impact does degradation of pastures affect quality of air? Recent dust storms in Uzbekistan come from border areas.*



Responses and clarifications were provided to several questions, including:

- *Survival rate plays a key role in the calculation of investment needs. The survival rate (60% now) may decrease even further in climate change conditions such as drought, increase of temperature.*
- *WOCAT dataset with list of technologies in English (grassland, forest land management with relevant numbers, etc.), including with many technologies from Central Asia.*
- *Usage of data with higher pixel definition of satellite will increase quantity of observations that will subsequently increase time necessary for work with huge number of data.*
- *Definition is used from the International Geosphere-Biosphere Programme (IGBP) list of definitions for each type of ecosystems. Economic value used are based on natural primary forest (not plantation)*

Similarly, number of valuable comments and recommendations were provided by participants:

- *Regarding the ecosystem service it's important to differentiate forest in terms of biodiversity and in terms of natural ecosystems. Those two forests will have different values. Therefore, it's important to differentiate relevant values. Satellite data cannot be the only source for decision making because the photos show only upper part of forests without showing damaged roots, disappearance of bushes and grass or degradation of the ecosystem whereas the forest may already disappear in several years.*
- *It's also necessary to consider additional factors in ecosystem services where degradation of ecosystem and decrease of biodiversity cause social tensions and migration of population thus decrease in number of people in rural areas because population in rural areas depend on surrounding ecosystems.*
- *It's important to understand the real costs. The real information is necessary for decision making whereas finance people may show only economic indicators, amounts/numbers only from their point of view that is different from scientific values.*
- *It's important to note saxaul planting in Aral Sea area as a new anthropogenic ecosystem.*
- *Most decision-making people are economists and it would be good to show the real picture of how much is lost and how much is gained due to various decision making. This kind of data would be practical and important for government officials to see.*

- *Analysis of ecosystem services in several parts of mountainous forests of Uzbekistan has been done in the frame of UN development program and Global Environment Facility, GEF and it can be found online for further use.*
- *Uncertainties and marginal errors happening are recognized. Before developing the action plan it's important to define what kind of data was used, whether national experts and specialists were involved and at what extent. It's important to find out possible sources and methods to compensate the outcome of the uncertain data.*
- *Evaluation and analysis of ecosystem services was done in Tajikistan several years ago, and the results can be used too. Practical actual data in fields should be used as well to compare it with the data from satellite.*
- *Data collection for this research on land degradation was based on recommended international methodologies whilst national statistics uses quite different indicators.*
- *One way to cope with land degradation is reforestation. Indeed, forest planting is effective in Kazakhstan with survival rate 60% in eastern and central parts. Southern part of Kazakhstan suffers from lack of water resources thus survival rate is very low in those parts. Considering that southern parts are highly populated in Kazakhstan, it is suggested to provide water supply constantly to the area in the frame of synergies so that local communities would start agriculture and cope with land degradation themselves. The suggestion is to make sure water resources reach the dry areas instead of planting trees there.*
- *Uncertainty and shortcomings in data is normal. Approximate data from satellite is better than no data at all. Uncertainties in data on the maps was noted in previous year too but with around 30% difference. It's difficult to show exact data because numbers change every year. However, it's necessary to proceed the work to decrease uncertainty and differences in actual data.*
- *It's important to differentiate what type of forests are considered for the analysis.*
- *Maps should show clearer picture of countries, water resources, areas and borders to discuss issues and synergies in deep.*

All points were well received, these were excellent and constructive suggestions that are worth exploration:

- *Scenarios can be considered to show various amounts of uncertainty (min-max results) because errors and shortcomings happen in all databases. It's essential to acknowledge the multifaceted nature of ecosystem services and the importance of differentiating between biodiversity-rich and natural forests and plantations. The study should explore that decision-making processes consider the broader socio-economic impacts, including population dynamics in rural areas.*
- *Additionally, the study should reach out to participants to request data to incorporate the real costs of degradation and restoration efforts, providing comprehensive data for informed policy decisions.*
- *The insights regarding saxaul planting in the Aral Sea area and the effectiveness of reforestation in addressing land degradation, especially in water-stressed regions, were valuable considerations for future actions.*
- *The study should continue to address uncertainties in data in analysis, striving for more accuracy and reliability.*
- *Lastly, the study shall work towards improving the clarity and comprehensiveness of maps to facilitate deeper discussions on issues and synergies.*

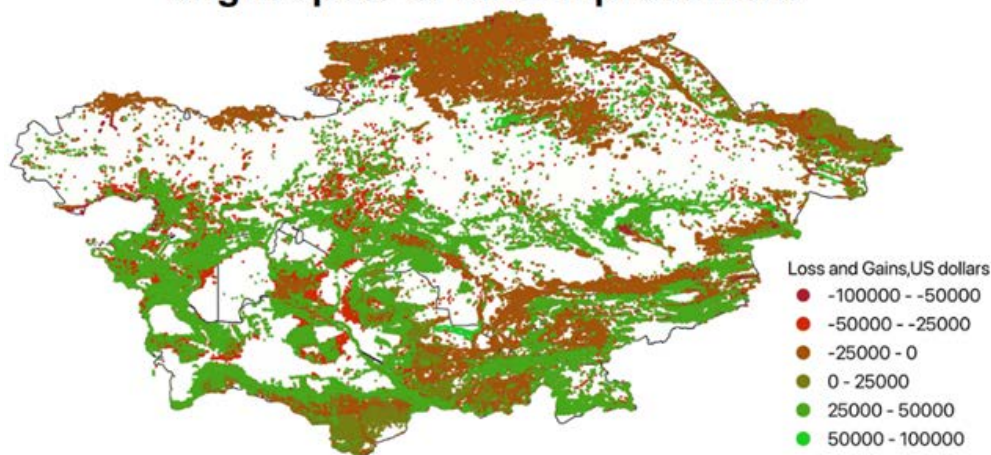
Group Work for countries to delve into mapping results and breakout discussions on six synergy scenarios for integrated land restoration

In this session focused on group work by countries, participants engaged in a collaborative analysis of a map depicting economic data concerning land improvement and degradation across the Central Asian region. The following questions and map were presented to groups representing each country separately:

- Do positive / negative changes make sense?
- What are causes in these specific locations? (human/natural)
- What can we learn about them for land restoration?
- What other type of information is useful to have in maps (the given map reflects data from economic point of view)?



Hotspots of land degradation and bright spots of land improvement



Group work with the map (economic data) and suggestions from participants generated diverse perspectives, ranging from the need to include additional geographical features such as forest areas and water arteries to the importance of incorporating data on climate, land use, and population density. Participants underscored the map's utility as a tool for informing national strategies, action plans, and research efforts aimed at combating land degradation and promoting environmental sustainability. Insights were shared regarding the significance of monitoring and updating the map's data over time, leveraging IT tools for dynamic analysis and informed decision-making. The session highlighted the collaborative spirit among participating countries and the shared commitment to addressing land degradation challenges through coordinated action and resource mobilization.

During plenary presentations, groups shared outcomes and offered suggestions for map enhancements, culminating in the following set of recommendations and clarifications from group discussions.

Tajikistan group feedback:

- *It would be good to mark forest areas, pastures, indicators, geographical signs such as mountain ranges, flatlands on the map (administrative centers could be added if it won't overload the map) because it would help to navigate on the map and serve as a helpful tool for preparation of action plan, national strategies for protection of environment by government, for scientists to track progress under various methodologies and serve as basis for new projects.*
- *LDN index (measurement of land degradation) would be a useful additional detail on the map.*

Kazakhstan group feedback:

- *The given map shows land improvement and land degradation in monetary equivalent. The given map shows land degradation in the northern part of Kazakhstan at around 85% and 15% show land improvement, 8.3 million hectares show land degradation. For the period of 20 years (2001-2020 years) the land degradation costs amounted to 20 billion US dollars in monetary equivalent according to the data on the map. Land improvement is shown only at around 5 billion US dollars. The degradation in northern part of Kazakhstan according to the map happened most probably due to human activity. Cultivation of wheat is spread in the area.*
- *Southern part near Caspian Sea shows land improvement at 85% at around 14 billion US dollars as per the given map. However, the area near Caspian Sea consists of pastures with small parts for livestock grazing because the land wasn't used for agriculture/crops thus the map shows natural improvement of land without human intervention.*
- *The map helps to monitor degradation and improvement of lands throughout the 20 years period of time. Suggestions to include the following additional points on the given map:*
 - *Decrease period of monitoring on the map: 5 years period instead of 20 years for the monitoring in the form of map would be enough.*
 - *Divide/mark regions on the map so that target areas could be identified by relevant parties.*
 - *Add water arteries on the map because water supplies make big impact on land degradation and improvement. The map isn't full without water resources.*
 - *Include data on amounts of precipitation in various regions as shortage of precipitation influences land degradation.*
 - *Include and show data on how the land is used in various regions on the map (pastures, natural forests, agriculture, plantation).*
 - *Show density of population on the map.*
 - *Show biodiversity on the map to see mark the consequences of land degradation.*
 - *Reflect/mark subsidies/financial support from local governments in certain areas/regions.*

Uzbekistan group feedback:

- *Do positive / negative changes make sense? 50% some changes make sense.*
- *What are causes in these specific locations? (human/natural) both anthropogenic factor/human activity and natural factors that may cause degradation or restoration of ecosystems depending on factors.*
- *What can we learn about them for land restoration? The map shows one of the possible methods to determine land degradation or restoration as well the possible method for evaluation -monetary equivalent. The method is very important for development of national strategies, action plans as well research at regional level.*
- *What other type of information is useful to have in maps (maps show data from economic point of view)?*
 - *To include informative legend and title onto the map including monetary data for 1 pixel.*
 - *To create several thematic maps such as climate maps, ecosystem maps, water supply maps, etc. Because too much data on one map would overload it and make impossible to read and understand.*
 - *To make clear which territories we're talking about because different approaches are used for mountainous and flatland areas.*
 - *Mark urban areas to distinguish them on the maps and see on the maps what is going around the populated areas.*
 - *Change time range for monitoring i.e. breakdown into the shorter time slots to monitor general tendencies and annual trends on the maps for comparison and tracking.*
 - *Indicate climate as important role in land degradation: check current situation, make retrospective analysis for several years backwards and make planning ahead with the help of the various climate maps.*
 - *The map is an instrument for further work and it's important to understand what the map is made for and how the instrument will be used in future (as guarantee for investments from government or for forecasting of changes in ecosystems and economic losses.*

Turkmenistan group feedback:

- *Some data on land degradation on the map is surprising and needs checking.*
- *Most probably anthropogenic factor could be main cause as per the given map.*
- *Lack of data.*
- *The following points should be included into the map:*
 - *To include water arteries into the map*
 - *To include demographic points*

- *To include map of agricultural lands because it's difficult to determine anthropogenic or natural causes without having layout of land use on the given map*

Kyrgyzstan group feedback:

- *The given map is a good instrument for initial joint work. It needs detailed discussion for further results and analysis.*
- *Map should include soil conditions.*
- *The following items to add onto the given map:*
 - *Ecological part can be included in columns into the map to see losses and profit in monetary equivalent and provided economic services.*
 - *Include hotspots of biodiversity in Central Asia. The map with the locations of biodiversity already exists. This will help with analysis.*
 - *To categorize various types of land/soils on the map to analyze the purpose of land use.*

There were additional comments and suggestions from the audience including representatives of international organizations:

Comments:

- *Scientists have lots of databases, cartographic documents and analysis. The data either disappears when time passes or becomes difficult to use or access or there're too many of such databases. There were many unique projects (reforestation, management of pastures) that were held by international organizations on the territory of Central Asia with good results and every project accumulated big amount of relevant data, materials, lessons learnt that disappeared or became very hard to find nowadays. Probably synergies and joint works would help to think how to keep the data stored. It's important to determine which entity will keep/store the joint map for further use so that the practices could be used by future generations.*
- *The given map should depict urbanization because building of roads and other infrastructures causes land degradation. Some countries may have more human factors causing land degradation whilst other countries experience natural causes.*

Question and answers:

- *Every country develops such maps for their own policies and strategies at national level. Every specialist knows where and by which entities the map will be used. Why was the regional map created depicting one whole territory? What is the potential use of the given map?*
 - *The map can be regarded separately for each country. The purpose of the common map is to attract attention and investments, financial support to cope with land degradation.*
- *Is it possible to implement constant update of the map with help of IT tools for the relevant parties to monitor the dynamics?*
 - *Possible through for example dashboard and database with graphs visualizations.*

Identified synergy mechanisms in Central Asia

Groups reflected upon scenarios of synergies to reach common national objectives for land restoration in the frame of conventions (UNFCCC, UNCBD, UNCCD):

- 1) National coordination mechanism (energizing the activities of existing ones when available).
- 2) Common information platform (several suggestions were made that such information platform needs to be at the regional level).
- 3) Collaboration in research and capacity building/sharing.
- 4) Common approaches for Monitoring, Reporting, and Verification around the Rio Conventions' land targets.
- 5) Environmental education and behavioral change (in a very broad sense).
- 6) Joint efforts for funding mobilization.



Tajikistan

Every coordinating institution is well defined for work on monitoring and reporting and provides periodical reports as per template of the secretariat. Biodiversity center provides reports to CBD convention. The indicators provided by secretariats are pointed out in the report templates that is convenient for the convention. Such reporting forms are adequate for analysis and reporting of the convention but not appropriate for national reporting. Therefore, all the big reporting work is done for secretariats. National development strategies require to include similar data as it's requested by the conventions thus national reporting uses either same data or provides additional monitoring and analysis that requires additional financing and human resources.

There's no need to open new coordination centers. It's enough to organize what is available now, make it accessible and transparent for use. Monitoring system in Tajikistan is concentrated under one institution that deals with 3 Rio conventions.

- National hydrometeorology agency responsible for UNFCCC.
- National biodiversity center responsible for UNCBD convention.

Scenario for synergies	Current situation	Strengths	Weaknesses	Threats/barriers	Opportunities
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Unified national coordination mechanism					Transparency in coordination and data management, clear structure and understanding by all relevant parties about responsibilities of every relevant entity (i.e. which entity is responsible to provide certain information), whom to cooperate with and request data from (this would help to avoid duplication of work on studies and analysis), would help to save funds, human resources and speed up process of reporting and monitoring.
Unified platform for informational exchange					
Cooperation in the field of applied studies					
Common monitoring, evaluation and reporting					
Cooperation in the field of education and capacity building					
Joint mobilization of funding					

Kyrgyzstan

National monitoring system in Kyrgyzstan:

- National coordination council on water resources and land.
- National commission on sustainable development.

Scenario for synergies	Current situation	Strengths	Weaknesses	Threats/barriers	Opportunities
Unified national coordination mechanism	National coordination council on water and land together with National commission on sustainable development. Agreement on interaction in coordination on Rio convention was signed with Ministry of Nature	Coordination, action planning, monitoring and reporting, rational allocation of funds	Big workload of ministries.	Workload distribution and. Mechanism of interaction between institutions. and. Mechanism of interaction between institutions. and. Mechanism of interaction between institutions.	Increase awareness of officials taking decisions and public awareness. Enhance political will.
Unified platform for informational exchange	Can be	-	-	-	-

Cooperation in the field of applied studies	Competitive environment at national	Joint workshops to share experiences	Competition for the results of scientific research	Scientific results can be used by other entities to receive funds	Increase financing in priority areas
Common monitoring, evaluation and reporting	-	-	-	-	-
Cooperation in the field of education and capacity building	-	-	-	-	-
Joint mobilization of funding	-	-	-	-	Increase financing in priority areas

Kazakhstan

Scenario for synergies	Current situation	Strengths	Weaknesses	Threats/barriers	Opportunities
Unified national coordination mechanism	A responsible governmental institution isn't yet appointed	In case national commission is established, it could elaborate all necessary mechanisms for cooperation and synergies	A responsible governmental institution isn't appointed	Human factors and competence of human resources would play big role	To establish national commission for land restoration that would interact with UN conventions and international organizations
Unified platform for informational exchange	-	-	-	-	-
Cooperation in the field of applied studies	-	-	-	-	-
Common monitoring, evaluation and reporting	-	-	-	-	-
Cooperation in the field of education and capacity building	-	-	-	-	-
Joint mobilization of funding	-	-	-	-	-

Turkmenistan

Scenario for synergies	Current situation	Strengths	Weaknesses	Threats/barriers	Opportunities
Unified national coordination mechanism	Yes, exists	Concentration of efforts in one mechanism	Lack of responsibility for land use at legislative level. Control for quality of land is done by two institutions and makes it difficult.		Strong political will and participation in international conventions.
Unified platform for informational exchange		n/a	n/a	Lack of data. Local methodologies are different from methods of	-

				international conventions.	
Cooperation in the field of applied studies	n/a	-	-	-	Could be done in well-structured format
Common monitoring, evaluation and reporting	Done either by local focal points or by international projects with support from government	-	Verification of data	Relevant monitoring system is not established at legislative level.	-
Cooperation in the field of education and capacity building	Subject on use of land is weakly present in scholastic programs	-	-	-	Readiness to update current programs
Joint mobilization of funding	-	-	-	-	-

Uzbekistan

Scenario for synergies	Current situation	Strengths	Weaknesses	Threats/barriers	Opportunities
Unified national coordination mechanism	-	-	-	-	Coordination mechanism for unified platform and joint research.
Unified platform for informational exchange	-	-	-	-	-
Cooperation in the field of applied studies	No joint studies. Research is done separately.	-	-	-	-
Common monitoring, evaluation and reporting	No common monitoring and evaluation. It's done separately under each convention.	Ministry of Ecology collects data on land degradation and desertification	-	-	
Cooperation in the field of education and capacity building	-	-	-	-	To develop.
Joint mobilization of funding	-	Certain projects are led by different donors separately	-	-	-

4. Workshop Visibility

The workshop co-organizers developed a unified blog to share across their individual media networks. They also linked their blogs together to enhance visibility. The following post appeared on several organizational sites:

- Workshop on transboundary cooperation: Land degradation and sustainability of agri-food systems in Central Asia:
 - CAREC <https://www.carececo.org/en/main/news/seminar-po-transgranichnomu-sotrudnichestvu-na-povestke-voprosy-degradatsii-zemel-i-agroprodovolstve/>

- ELD <https://www.eld-initiative.org/en/news/news-detail/workshop-transboundary-cooperation-central-asia>
- ICARDA <https://www.icarda.org/media/events/workshop-regional-cooperation-central-asia>
- GIZ ILUCA
https://m.facebook.com/story.php?story_fbid=pfbid0RfZHRGzMdiFX5iGTvh8SaumDsCutyx5T2YLyT9aoRTj2j74g3MXT6HW2FXHu9HGI&id=100063482711020

5. Workshop's key highlights and takeaways

- Workshop focused on addressing land degradation and climate change in Central Asia, promoting regional cooperation and sustainability.
- Highlighted initiatives like the UNCCD's Peace Forest Initiative and the ASBP-4 for transboundary cooperation.
- Emphasized practical solutions and integrated regional approaches, with insights from experts and national presentations.
- Explored collaboration opportunities with international organizations for sustainable development and resilience in Central Asia.
- Presentations from organizations like the Green Climate Fund, EDCF, AFCO, ADB, and UNCCD highlighted climate innovation, cooperation plans, and ongoing work in the region.
- Interactive discussions and group work sessions allowed participants to exchange insights and collaborate on mapping land degradation and restoration efforts.
- Workshop visibility was enhanced through a unified blog shared across organizational networks, promoting transboundary cooperation and sustainability in agri-food systems.



Specific points relevant to the “Rio synergy study” voiced during the workshop are compiled below:

Group discussions identified 6 mechanisms for creating potential synergies from integrated land-biodiversity-climate action agendas for land restoration:

- 1) National coordination mechanism (energizing the activities of existing ones when available).
- 2) Common information platform (several suggestions were made that such information platform needs to be at the regional level).
- 3) Collaboration in research and capacity building/sharing.
- 4) Common approaches for Monitoring, Reporting, and Verification around the Rio Conventions’ land targets.
- 5) Environmental education and behavioral change (in a very broad sense).
- 6) Joint efforts for funding mobilization.

Feedback to preliminary results presented for discussions generated the following takeaways:

- Determine extent and cost of land degradation in Central Asia.
- Financing needs and gaps for land restoration including most profitable locations for land restoration.
- Comparison of segmented vs. coordinated land restoration and policy-relevant evidence for coordinated action on land.
- The study should continue to address uncertainties in data analysis, striving for more accuracy and reliability.

- Work towards improving the clarity and comprehensiveness of maps to facilitate deeper discussions on issues and synergies.

6. Acknowledgments

We extend our sincere appreciation to the following individuals and organizations whose dedication and invaluable contributions significantly contributed to the success of the workshop:

- United Nations Convention to Combat Desertification (UNCCD) for their continuous support and partnership in advancing sustainable land management practices.
- Central Asia Regional Economic Cooperation (CAREC) for their collaborative efforts in fostering regional cooperation and sustainable development initiatives.
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) for their commitment to promoting environmental sustainability and facilitating knowledge exchange.
- Economics of Land Degradation (ELD) initiative for their comprehensive approach to assessing and addressing the economic costs of land degradation.
- International Rice Research Institute (IRRI) for their pioneering work in leveraging synergies for better implementation of Rio Conventions.
- International Center for Agricultural Research in the Dry Areas (ICARDA) for their partnership facilitation, expertise and guidance in agricultural research and development.
- Korea Forest Service for their leadership in forestry management and their dedication to promoting global forest conservation efforts.
- Country stakeholders for their active participation and engagement in advancing regional cooperation and sustainable land management practices.
- National Coordinators of the Integrative and Climate-Sensitive Land Use in Central Asia (ILUCA) project in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan for their facilitation and commitment to support country engagements for project objectives.
- Focal Points of the Rio Conventions in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan for their dedication to look for synergies in promoting biodiversity conservation, climate change mitigation, and combating desertification at the national level.

Together, their collective efforts have significantly contributed to fostering collaboration, sharing knowledge, and advancing sustainable land management practices in Central Asia and beyond.

7. Appendices

Additional supporting materials.

Workshop agenda

Day 1 – 12.03.2024		
8:30 – 9:00	Registration	
9:00 – 9:30	Opening session: <ul style="list-style-type: none"> • Suna Park, Ministry of Ecology, Environmental Protection and Climate Change, Uzbekistan • Utchang Kang – The Global Mechanism of UNCCD • Zafar Makhmudov, CAREC • Wiebke Foerch, GIZ • Wonyeong Song, Korea Forest Service 	UNCCD/CA REC
9:30 – 9:40	Introduction to Peace Forest Initiative Utchang Kang, Programme Management Officer, The Global Mechanism of UNCCD Paulina Upla, Consultant for Peace Forest Initiative, UNCCD <ul style="list-style-type: none"> • Background, objectives, principles, impact areas • Institutional setting, synergies with other restoration initiatives • Site-specific and global deliverables 2023-2024 	UNCCD
9:40 – 10:00	Brief overview of relevant regional frameworks: <ul style="list-style-type: none"> • Environmental Programme for Sustainable Development in Central Asia for 2020-2030 (REP4SD-CA) – Ulugbek Muradov, Director of Scientific and Information Center, Interstate Commission on Sustainable Development, Republic of Uzbekistan • Action Program for Assistance to the Countries of the Aral Sea Basin (ASBP-4) 2020-2030 – Serik Bekmaganbetov, Authorized Representative of the Republic of Kazakhstan in the Executive Committee of the International Fund for Saving the Aral Sea 	ICSD EC IFAS
10:00 – 10:15	Coffee/tea break	
10:15 – 10:45	Presentation of the RESILAND project <ul style="list-style-type: none"> • World Bank – Paola Agostini, Lead Natural Resources Management Specialist World Bank • State Committee on Forestry of the Republic of Uzbekistan – Abduvokhid Zakhadullayev, Head of department 	World Bank
10:45 – 11:40	Country presentations: Ongoing national activities on land/ecosystem restoration and national priorities within regional frameworks, including status of national LDN targets and implementation (good practices and lessons to share, current gaps and needs): <ul style="list-style-type: none"> • Kazakhstan – Berik Mukhanov, Ministry of Agriculture of the Republic of Kazakhstan • Kyrgyzstan – Ryspek Apasov, Executive Secretary of the expert working group on the implementation of the UNCCD and the preparation of project applications under the GCF • Tajikistan – Khakdod Latipov, Head of the Department of Reserves and Parks of Specially Protected Natural Areas of the Committee for Environmental Protection under the Government of the Republic of Tajikistan • Turkmenistan – Sultan Veisov, the National Institute of Deserts, Flora and Fauna of the Ministry of Nature Protection of Turkmenistan 	County reps

	<ul style="list-style-type: none"> Uzbekistan – Abduvokhid Zakhadullayev, Head of department for the International relations and ecotourism development of the State Committee on Forestry of the Republic of Uzbekistan 	
11:40 – 12:30	<p>Breakout groups per country for rapid analysis of regional restoration priorities:</p> <ul style="list-style-type: none"> Based on country presentations, discuss and map regional transboundary priorities and programmes (define 2-3 thematic focuses) Brief presentations 	County reps, facilitated by resource persons
12:30 – 13:30	Lunch break	
13:30 – 15:15	<p>Overview of current programs and projects, future priorities, and collaboration opportunities with key partners in Central Asia:</p> <ul style="list-style-type: none"> GIZ – Wiebke Foerch, Deputy Head of Regional Programme “Integrative and Climate-sensitive Land Use in Central Asia” IRRI - Alisher Mirzabaev, Senior Scientist, Policy Analysis/Climate Change: Leveraging synergies from integrative land-biodiversity-climate action adelphi – Beatrice Mosello, Senior Adviser on Climate Diplomacy and Security OSCE – Patrizia Albrecht, Climate Affairs Adviser GGGI – Aaron Russell, Country Representative to Uzbekistan Better Cotton Initiative, Rachel Beckett, Senior Programme Manager Q&A, discussion with countries 	Donor/partner reps
15:15 – 15:30	Coffee/tea break	
15:30 – 17:00	<p>Overview of partner projects and priorities (continued):</p> <ul style="list-style-type: none"> UNFCCC/NBF – Pavel Cincera, Consultant WMO, GWP, IDPM – Valentin Aich, Senior Water and Climate Specialist UN-DPPA – Peter Waring (online) - Consultant at DPPA Innovation Cell FAO – Daler Domulodzhanov, Water and land expert Aziz Nurbekov, National project coordinator FOLUR GEF – process, eligibility, application window - Ulrich Apel (online), Senior Environmental Specialist Q&A, discussion with countries 	Donor/partner reps
18:30	Networking event between partners and countries	
Day 2 – 13.03.2024		
8:30 – 9:00	Registration	
9:00 – 9:10	Recap of Day 1, participant feedback, today’s agenda	CAREC, UNCCD
9:10 – 10:45	<p>Overview of key donors in Central Asia and sustainable finance mechanisms:</p> <ul style="list-style-type: none"> UNDP - Walid Ali, Regional Policy Specialist on Climate, Peace and Security for Europe and Central Asia EDCF - Jae-Hyung Yoo, Chief Representative, Tashkent Office AFoCO - Lee Yeongjoo, Director for Planning and Operations Division Asian Development Bank - Niloofar Sadeghi, Water Resource Specialist; Dongmei Guo, Environment Specialist, Agriculture, Food, Nature and Rural Development, Sectors Group (online) 	Donor reps
10:45 – 11:00	Coffee/tea break	
11:00 – 12:30	<p>Mixed breakout groups (in parallel):</p> <ul style="list-style-type: none"> Adaptation Fund project: Integrated Drought Management in Central Asia 	WMO/GWP /UNCCD/ CAREC/FAO GIZ/IRRI/

	<ul style="list-style-type: none"> Land-biodiversity-climate synergies: The Economics of Land Degradation Initiative (ELD) under the Integrative and Climate-Sensitive Land Use Program (ILUCA) of GIZ 	ICARDA
12:30 – 13:30	Lunch break	
13:30 – 13:45	Brief introduction to collaborative elements under PFI (SDS, Ferghana Valley, high mountains, environmental dashboard, land-biodiversity-climate synergies, drought, financing)	UNCCD
13:45 – 15:00	Mixed breakout groups to discuss PFI elements – first reflections: <ul style="list-style-type: none"> Discussion topics/questions relate to sand and dust storms, Ferghana Valley/high mountains, environmental dashboard. Information sharing and joint analysis of the current situation. Opportunities and activity components for regional/cross-border cooperation: rationale. Identification of other topics for collaboration prioritized by countries (if any). Based on donor and partner presentations, identify potential funding sources. 	Country reps, facilitated by resource persons
15:00 – 15:30	Coffee/tea break	
15:30 – 17:00	Mixed breakout group presentations: first reflections of PFI elements <ul style="list-style-type: none"> Q&A, discussion 	Country reps
Day 3 – 14.03.2024		
8:30 – 9:00	Registration	
9:00 – 9:15	Recap of Day 2, participant feedback, today's agenda	CAREC, UNCCD
9:15 – 10:15	Mixed breakout groups: deep-dive into PFI elements – refinement of scope and activities discussed in Day 2, formulation of project ideas	Country reps
10:15 – 10:45	Coffee/tea break	
10:45 – 12:00	Mixed breakout group presentations <ul style="list-style-type: none"> Q&A, discussion 	Country reps
12:00 – 13:00	Lunch break	
13:00 – 14:30	Donor/partner reflections on proposed PFI elements <ul style="list-style-type: none"> Q&A, discussion 	Partner reps
14:30 – 15:00	Coffee/tea break	
15:00 – 16:00	PFI Road Map for COP16: agreeing on the next steps and a pathway towards UNCCD COP16 <ul style="list-style-type: none"> Concept development, validation, announcement 	UNCCD
16:00 – 16:30	Feedback, final wrap-up, next steps	CAREC, UNCCD

"Leveraging synergies from integrative land-biodiversity-climate action for improving monitoring, reporting, and investments into sustainable agri-food system transformations in Central Asia"

Day 4 – 15.03.2024		
9:00 – 9:30	Opening session: <i>Rustam Ibragimov, ICARDA-CAC</i> <i>Wiebke Foerch, GIZ</i> <i>Valerien Pede, IRRI</i> <i>Utchang Kang, The Global Mechanism of UNCCD</i>	

	<ul style="list-style-type: none"> • Introduction: Overview and objectives of the workshop • Recap of the discussions during the previous days 	
9.30-9.50	Setting the scene - Waltraud Ederer, ELD and GIZ	
9.50-10.10	Interactive discussion using Mentimeter	
10.10-10.30	Coffee break	
10.30-11.00	Leveraging synergies from integrative land-biodiversity-climate action in Central Asia: Incoming results of the study: hotspots and economic costs of land degradation investment needs for restoration <i>Alisher Mirzabaev, IRRI</i>	
11.00-11.30	Interactive discussion of the incoming results of the study Zoom and live discussion Menti Questions	
11:30-12:30	Group Work 1 in country groups Discussion of mapping results	
12:30-13:30	Lunch, Networking	
13.00-13.50	Leveraging synergies from integrative land-biodiversity-climate action in Central Asia. Introduction to the synergy scenarios: <i>Alisher Mirzabaev, IRRI</i>	
13.50-16.00	Break-out group discussions per country on the 6 scenarios/synergy mechanisms for integrated land restoration under Land Degradation Neutrality (LDN), Nationally Determined Contributions (NDC), and National Biodiversity Strategies and Action Plans (NBSAPs) SWOT with guiding questions and template to document findings per group	
15.00-15.15	Coffee break during group work	
16.00-17.00	Plenary presenting the outcomes of breakout group discussions	
18:00	Networking event between partners and countries	