

## TERMS OF REFERENCE

<b>Title:</b>	<b>Study of climate change, land degradation, and water nexus in the Aral Sea region</b>
<b>Project number and title:</b>	00119833, "Biodiversity and Ecosystem Services Network (BES-Net) Phase II Implementation of Component I in Kazakhstan."
<b>Type of contract:</b>	Contract for Services (UNDP template)
<b>Place of work:</b>	At the location of the company in Kazakhstan with travels to the project sites (Aral Sea region).
<b>Period:</b>	Four months (tentatively October 2022 - January 2023)

## BACKGROUND

The Nairobi-based Global Policy Centre on Resilient Ecosystems and Desertification (GC-RED) is one of UNDP's Global Policy Centers. GC-RED manages the Biodiversity and Ecosystem Services Network (BES-Net), a capacity-sharing "network of networks" initiative that promotes dialogue and cooperation between science, policy, and practice communities for effective biodiversity and ecosystem services (BES) management, contributing to long-term human well-being and sustainable development.

Building on the achievements of BES-Net I to date, an agreement was signed between the Government of Germany that is complementary to the UNDP Trust Fund Funding Windows for Nature Climate and Energy. The BES-Net II aims to contribute to the implementation of the IPBES's Rolling Work Programme up to 2030, particularly the platform's Capacity-building Rolling Plan. More specifically, BES-Net II seeks to formalize the scientists-policymakers-practitioners partnership and strengthen synergy and complementarity in their BES-related decisions, actions for sustainable BES conservation, and subsequent impacts in target countries. The consortium partners of BES-Net II, namely UNDP, UNEP-WCMC, and the UN Educational, Scientific and Cultural Organization (UNESCO), are committed to working on the four main activities:

1. Activity: Improve access to policy-relevant BES evidence-based and utilization of new knowledge in the target countries through the national ecosystem assessments
2. Activity 3: Strengthen triangular multi-sectoral stakeholder dialogue and network at the regional level to analyze the IPBES products and translate the relevant messages into concrete regional/national science, policy, and practice decisions and actions
3. Activity 4: Enhance BES knowledge sharing through increased generation, dissemination, and communication of resources by BES-Net and its partners among science, policy, and practice communities

Kazakhstan is a signatory to three key Rio global environmental conventions and several other environmental agreements. The Ministry of Ecology, Geology, and Natural Resources of the Republic of Kazakhstan is a focal point and responsible governmental body for the implementation of the country's commitments under the environmental conventions and agreements. UNDP is a longstanding partner of the Ministry and it has been providing technical support with the integration of the international obligations into the national policies and their further implementation through leveraging expertise and projects. However, issues are still there with the harmonization, integration, and implementation of the conventions/treaties due to many reasons. For instance, many National Action Plans (NAPs) incorporated a number of policy directions but those are still weak when it comes to programmatic content because of the lack of in-depth studies of the underlying causes of emerging environmental problems. Furthermore, it is for this reason that many environmental treaties in the country have not been successfully linked to Kazakhstan's national development strategy and other long-term strategic documents. Therefore, according to the Annual Work Plan for 2022, the Project will support the Government to prepare an explorative study of climate change, land degradation, and water nexus in the Aral Sea regions to further inform the policy making for addressing the land degradation issues.

## OBJECTIVE

The main objective is to explore the role of growing land degradation and climate change impacts on economic livelihoods and jobs in the Aral Sea regions. To the extent possible, the study will examine the extent to which these impact chains can result in social, economic, and water-related links. In addition, causal relationship methods will be used to investigate the negative impacts of climate change and unsustainable land management policies and practices on the land-dependent economic sectors in wider Aral Sea regions. In addition, the focus will be also on effective response measures in the Aral Sea area to reduce destructive causal relationships and to explore and demonstrate what terrestrial green growth, water management practices, and LDN principles can build a social safety net for the marginalized community in the Aral Sea regions by creating jobs, generating alternative incomes, and reducing land abandonment, and the link to water.

## SCOPE OF WORK

Under the overall guidance of the Head of EE Unit and under the direct supervision of the UNDP Project Manager, and in close collaboration with other UNDP Project teams, the Committee of Forestry and Wildlife under the Ministry of Ecology, Geology and Natural Resources of the RK and stakeholders, the Contractor will perform the following tasks:

### Section 1. Stakeholder mapping and consultations

- A. Desk review of the scientific literature (photo copy of purchased literature/books and etc should be presented) to determine the process of land degradation, and climate change impact through existing research literature and consultation (phone calls covering 12 experts, 30 min or more per expert should be spent, list of experts phoned should be reported in a brief minutes form) with the sectoral experts from the research institutes, NGOs, and CSOs (Kazakhstan Soil Research Institute (2 -persons), International Aral Saving Committee (4-persons), Crop Husbandry Research Institute (2-persons), Committee of Water Resources (1-person), Kyzylorda Rice Research Institute (1 -person), UNDP (1- person), CAREC (1-person), Regional Akimat of Kyzylorda (1-person) and relevant specialists and freelancers.
- B. Mapping of stakeholders (at least 15 potential stakeholders should be enlisted from the science, policy, and practice sectors that are dealing with the Climate Change, Land Degradation, and water nexus in the Aral Sea regions.
- C. Organize 2-day workshop for experts for brainstorming and in-depth analysis of impact chains with the participation of at least 12 people or sector specialists in Kyzylorda.
- D. Conduct 2 (two) consultation 2-day workshops with the participation of at least 22 people or sector specialists to determine priority areas and value chains that need to be developed to create resilient practices to ensure the link between the LDN and water resources in Kyzylorda. The questionnaire should be agreed upon with UNDP in advance.
- E. Conduct face-to-face interviews with relevant institutions and practitioners such as climate and water specialists (at least 10 interviewers should be taken on board to conduct interviews) in Kyzylorda and Aral-Syrdarya district.
- F. Conduct validation and summary of impact chain data (both diagram and detailed explanatory notes on those diagrams and summary indicators) in Kyzylorda. At least 20 participants: from the NGOs (2), and CSOs (2), Kazakhstan Soil Research Institute (2 -persons), International Aral Saving Committee (4 persons), Crop Husbandry Research Institute (2 persons), Committee of Water Resources (1 person), Kyzylorda Rice Research Institute (4 -person), UNDP (1- person), CAREC (1-person), Regional Akimat of Kyzylorda (1-person) and relevant specialists and freelancers.
- G. Final workshop with stakeholders to discuss results of the study, actions, and recommendations with the participation of not less than 40 participants in Kyzylorda: from the NGOs (4), and CSOs (4) (Kazakhstan Soil Research Institute (5 -persons), International Aral Saving Committee 8-persons), Crop Husbandry Research Institute (5-persons), Committee of Water Resources (1-

person), Kyzylorda Rice Research Institute (2 -person), UNDP (1- person), CAREC (1-person), Regional Akimat of Kyzylorda (1-person) and relevant specialists (4) and freelancers (4).

- H. Consult and agree on the final products with the representative of the Committee of forestry and wildlife under the Ministry of Ecology, Geology, and Natural Resources of the Republic of Kazakhstan. (The representatives of the Committee of forestry should be always included or engaged in the activities, workshops, and validation meetings).

## **Section 2. Data collection, analyses, and reports.**

- A. Analyze and provide evidence on the increase in unemployment and conflicts due to land degradation and water scarcity.
- B. Perform analysis of existing models on climate impacts on the Aral Sea watershed, agriculture, water, and health sectors in the Aral Sea regions.
- C. Outline existing green land technologies and sustainable water management practices to provide the best possible scenario models (at least two scenario models) regarding land degradation and water nexus impacts and mitigation.
- D. Analyze the extent of unsustainable land-use practices contributing to conflict and instability.
- E. Determine priority areas and value chains suitable for Aral Sea regions.
- F. Provide a list of land-based green jobs (at least 20 region's specific potential jobs) (including for women and youth) as a viable and cost-effective alternative to unemployment, water conflicts, and land abandonment.
- G. Analyze regional economic sectors and which value chains should be prioritized to create environmentally-friendly and economically attractive opportunities (food processing, eco-products, medical plants collection, eco-tourism, greenhouses, etc.) and promote a circular economy.
- H. Analyze what kind of skills are needed to match rural young entrepreneurs' new employment opportunities and qualifications.
- I. Analyze and suggest the best mechanisms, structures, and partners for addressing terrestrial ecological practices and sustainable value chains at the regional level.
- J. Provide information on how priorities should be set in the context of COVID-19.

## **Section 3. Knowledge management and awareness-raising campaign.**

- A. Organize one wider public awareness campaign with the participation of at least 100 participants around the results of the media research and social media coverage in one of the Entertainment and Trading Centers (for instance: TEC of MEGA in Almaty). (Agenda and methodology should be agreed upon with UNDP in advance). Printing materials should be agreed with the UNDP in advance.

### **DURATION**

Services under this assignment will be provided for a period not exceeding four months (tentatively October 2022 – January 2023). Any changes in the assignment timing must be agreed upon between UNDP and the Contractor. The amendment will only come into effect after a preliminary discussion with the parties and consent.

### **EXPECTED RESULTS AND PAYMENT TERMS**

The deadlines for completing tasks and payment will be carried out according to the following table:

#	Deliverables	Timeframe	Approving officer	% of payment
1.	<p>- Conduct expert mapping of the literature review.</p> <p><b>Results:</b></p> <ol style="list-style-type: none"> <li>1. Detailed work plan with an indication of all project activities and a brief description of the implementation approach is submitted and agreed with UNDP.</li> <li>2. Methodology and the schedule for the implementation is submitted and agreed with UNDP.</li> <li>3. List of key stakeholders and literatures is submitted and agreed UNDP .</li> </ol>	One week after signing the contract	Programme specialist/ head of E&E unit	40%
2.	<p>- Organize one workshop for experts for brainstorming and in-depth analysis of impact chains with the participation of at least 12 specialists. (agenda, LOP, and questionnaire should be agreed upon with UNDP in advance).</p> <p>- Conduct 2 (two) consultation workshops with the participation of at least 22 people or sector specialists (agenda, and LOP should be agreed with UNDP in advance).</p> <p>- Conduct one interview with relevant institutions and practitioners such as climate and water specialists. (at least 10 interviewers should be taken on board to conduct interviews).</p> <p>- Conduct validation and summary of impact chain data workshop (at least 20 participants). (Agenda and LOP should be agreed with UNDP in advance).</p> <p>- Perform analysis of existing models on climate impacts on the Aral Sea watershed, agriculture, water, and health sectors in the Aral Sea regions.</p> <p><b>Results:</b></p> <ol style="list-style-type: none"> <li>1. Submitted the photo and narrative reports over the conducted events activities 1-5 - activities towards achieving deliverables(a table of content for the photo and narrative reports should be prepared and agreed upon with the UNDP in advance).</li> <li>2. The first draft of the comprehensive study report (a table of content for the comprehensive study report should be prepared and agreed upon with the UNDP in advance).</li> </ol>	Six weeks after signing the contract	Programme specialist/ head of E&E unit	40%

#	Deliverables	Timeframe	Approving officer	% of payment
3.	<p>- Organize a public awareness campaign about the results of media research and social media coverage.</p> <p>- Final workshop with stakeholders for 40 participants.</p> <p><b>Results:</b></p> <ol style="list-style-type: none"> <li>1. Submitted the photo and narrative reports over the conducted public awareness campaign. (a table of content for the photo and narrative reports should be prepared and agreed upon with the UNDP in advance).</li> <li>2. Submitted final workshop report (agenda, LOP and minutes of the final workshop should be presented to UNDP).</li> <li>3. The final comprehensive research report on Climate Change, Land Degradation, and water nexus in the Aral Sea regions (the outline and content of the report should be agreed upon through a national stakeholder workshop and then agreed with the UNDP in advance).</li> </ol>	Twelve weeks after signing the contract	Programme specialist/ head of E&E unit	20%

**Reports and materials** must be provided in accordance with the following requirements:

- in the Russian language in electronic format in MS Word (2003 or later)
- font used: 11 "Arial"

### PLACE OF WORK

At the location of the company in Kazakhstan with travels to the Aral Sea region (Kyzylorda). 2 business trips to the Aral Seas regions for 2 days by 5 key personnel. The travel is required to visit Aral Sea regions (Kyzylorda) to conduct analyses, sampling and other studies and impact chain evaluation analyses.

### MANDATORY CONDITIONS

- The Contractor should fully accept and agree with the ToR's requirements and the UNDP General Terms and Conditions for Contracts
- When performing this assignment, the Contractor must ensure safe and lawful use and production of the required results (reports and products).
- It is necessary to ensure compliance with the laws and regulations of the Republic of Kazakhstan on copyright (and other related rights).
- All rights to manufactured products, including originals of documents and their copies, cannot be transferred to any third party after all work has been completed in accordance with this Terms of Reference without prior consent and approval of UNDP.
- The Contractor bears full responsibility for the accuracy and legality of the information provided (including links to the information sources that were used) and for the timely provision of reports.
- Coordinates all his actions and reports with the Project Manager .
- The Contractor should work closely with the UNDP EE unit.
- Ensures timely and high-quality fulfillment of the requirements of the technical assignment.
- At the time of award of Contract, UNDP reserves the right to vary the quantity of services by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

**Reputation of the Bidder:** Company must not be included in the UN Security Council 1267/1989 Committee's list of terrorists and terrorist financiers, and in UNDP's ineligible vendors' list

**IMPORTANT!** In connection with the COVID 19 pandemic, the Contractor undertakes to provide all the necessary protective equipment for its employees and comply with all the norms and recommendations of the WHO, as well as local authorized bodies of the Republic of Kazakhstan for performing work during the period

of the introduction of quarantine measures and emergency situations. The service provider is responsible for the proper and timely provision of its employees involved in this Terms of Reference with all necessary personal protective equipment in accordance with the current WHO recommendations (masks, gloves, sanitizers, passing the COVID-19 test (if necessary) for the period of Contract.

### **REQUIRED EXPERIENCE/EXPERTISE OF THE CONTRACTOR**

The Contractor can be a company/organization duly registered and meeting the following requirements:

- have the legal capacity to conclude contracts (certificate of registration / re-registration, Charter of the organization).
- Have at least 3 (three) years of working experience in research of land degradation and water resource management issues.
- At least 2 (two) years of proven experience in Central Asian River basin management, space monitoring, and historical data archives.
- Working experience with the Aral Sea regions would be an advantage.
- Have financial stability: be solvent, not subject to liquidation, its property should not be seized, and its financial and economic activities should not be suspended in accordance with the law (certificates confirming the absence of debts in tax authority, audited financial statements for 2020-2021). If the company is exempted from the audit, then a confirmation certificate issued by the Contractor, profit and loss statement, balance sheets for 2020-2021. Certificate of VAT (if applicable). Otherwise, written confirmation that the company is not a VAT payer;
- A list of completed similar services/work over the past three years. Indicate Customers, years of service provided, the cost (if possible), and the Customer's contact details.
- Provide two letters of recommendation from previous clients for similar services (on official letterhead, signed and dated);
- Availability of qualified personnel with the necessary work experience and qualifications according to the table below with the provision of a detailed resume, documents confirming the expert's qualifications (diplomas, certificates of advanced training in the subject area, other certificates), as well as written confirmation from each employee that they will be available during the entire term of the contract.

**Availability of qualified personnel according to the requirements below (Core personnel):**

#	Key personnel	Number of people	Minimum acceptable level of education and field of study	Special skills/experience
1	Team leader	1	Higher education in social sciences, economics, agriculture, water, law, or business administration.	Three years of experience in coordinating projects, research, livelihood development At least two years of experience in land degradation and transboundary water management. Working experience in the Aral Sea regions would be an asset. Excellent knowledge of Russian language (level to be indicated in CV)
2	Water expert	1	Higher education in water and land reclamation, or related sciences.	At least three years of experience in research, water, and land management Knowledge and experience of the Aral Sea regions would be an asset.

#	Key personnel	Number of people	Minimum acceptable level of education and field of study	Special skills/experience
3	Agriculture economist	1	Specialized secondary education in economics or other related sciences.	Three years of experience in agriculture and economic development. Knowledge and experience of the Aral Sea regions would be an asset.
4	Climate expert	1	Higher education in environmental sciences, geography or agronomy, or related sciences.	Three years of experience in hydrometeorology and agrometeorology.
5	Health specialist	1	Higher education in Medical Sciences, biology, physiology, or related sciences.	Three years of experience in health and human physiology.

### RECOMMENDATIONS FOR OFFERS SUBMISSION

1. A duly completed Bid Submission, the UNDP template (Annexes 2A and 2B) must be used.  
The financial proposal (Annex 2B) must include the full set contract amount, including all indirect and direct costs (including VAT and/or other applicable taxes), as well as a template breakdown; **the financial proposal must be password protected!**
2. Registration / re-registration certificate, copy of the Charter.
3. Audited financial statements for 2020-2021. If the company is exempted from the audit, then a confirmation certificate issued by the Contractor, profit and loss statement, balance sheets for 2020-2021.
4. Certificate of absence of tax in tax authorities.
5. VAT certificate (if available). If the company is not a VAT payer, a written confirmation must be provided.
6. Profile of the Contractor with detailed activity information confirming the following:
  - ✓ at least three years of working experience in research of land degradation and water resource management issues.
  - ✓ at least 2 years of proven experience in Central Asian River basin management, space monitoring, and historical data archives.
  - ✓ working experience with the Aral Sea regions would be an advantage
7. Methodology for applying the approach to the implementation of the expected results of the ToR.
8. Detailed work schedule (should include the composition of the project team and the distribution of responsibilities, a description of the stages of work, effectiveness, and expected results)
9. Reputation – a table/list of clients for the last three years for similar services required by UNDP, indicating the Client, the name of the services/work, the year of the service, and the client's contact information (email, phone number, and full name of the contact person);
10. Two letters of recommendation from previous clients for similar services (on official letterhead, signed and dated);
11. **Detailed CV, diplomas** and certificates of the proposed key personnel, as well as **written confirmation** from each employee that they will be available for the entire duration of the contract.
12. Any other documentation of qualifications and experience as required under "REQUIRED EXPERIENCE".

### PAYMENT SCHEDULE

The quotation submitted in local currency (KZT) must include all costs of the company (indirect and direct, VAT if applicable) with a detailed breakdown by items specified in the below "Budget Breakdown Table",

filled in accordance with the requirements set in the ToR. All expenses related to trips should be included in the financial proposal.

This contract sets a fixed price based on the achieved result, regardless of the extension of its specified period.

Payments are to be made in 3 tranches upon satisfactory completion of each deliverable in accordance with the “Expected Results and Payment Term” section of the Terms of Reference and approval of the results by the UNDP Programme Associate after submission of the acceptance certificate and invoice.

Payments to a potential contractor will be made as follows:

#### Budget Breakdown Table

Deliverables	Payment%
Deliverable 1	40%
Deliverable 2	40%
Deliverable 3	20%

#### EVALUATION CRITERIA

Contractors will be assessed by a cumulative approach/Highest Combined Score based on technical qualifications and a financial proposal:

- weight of a technical proposal (70%),
- weight of a financial proposal (30%);

**Step I: Preliminary evaluation** (Pass/Fail). ONLY fully and timely submitted bids with all required documentation would be considered for the preliminary evaluation. The bids will be evaluated against ToR’s qualification requirements required for the Service Provider.

**Step II: Technical Evaluation** with maximum 700 points, including:

- Expertise of the Firm (30%);
- Proposed Methodology and Work Plan (40%);
- Qualification of Key Personnel (30%)

Applications that will accumulate at least 490 points of the maximum 700 points during the technical evaluation process will be qualified for financial evaluation.

Criteria	Weight %	Maximum number of points
Professional experience in the company	30%	210
Proposed methodology and work plan	40%	280
Organizational structure and key personnel	30%	210

Technical evaluation of the proposal		Obtained Points
1. Competence evaluation of the Company / Organization (30%)		210
1.1	At least three years of experience in research in land degradation and water resource management projects in the Aral Sea regions:  3 years - 63 points 4-5 years – 76.5 6 years and more - 90 points	90



1.2	At least 2 years of proven experience in Central Asian River basin management, space monitoring, and historical data archives in the Aral Sea Region:  2 years – 63 points 3-4 years – 76.5 points 5 years and more – 90 points	90
1.3	Working experience with the Aral Sea regions would be an advantage:  Not available – 0 points Available experience – 30 points	30

2. The proposed methodology and schedule of work (40%)		280
2.1	Understanding of the essence, methodology and expected results of the project is consistent with the Terms of Reference and reflected in the proposal:  availability of the work methodology - 98 points proposed work methodology clearly shows the algorithm of achieving results (does not duplicate the ToR), detailed and justified approaches for performing the work, considering the specifics of the services - 140 points	140
2.2	Works schedule (must include the team composition and the distribution of responsibilities):  available works schedule – 98 points provided works schedule has a logical framework for achieving the results, including the team composition and distribution of responsibilities - 140 points	140

3. Organizational structure and key personnel (30%)		210
3.1	<b>Team leader</b>	50
3.1.1	Higher education in social sciences, economics, agriculture, water, law, or business administration:  Bachelor's degree – 10.5 points Master's degree - 13 points Higher qualifications - 15 points	15
3.1.2	Three years of experience in coordinating projects, research, livelihood development:  3 years - 7 points 4-5 years – 8.5 points 6 years and more – 10 points	10
3.1.3	At least two years of experience in land degradation and transboundary water management:  2 years - 7 points 3-4 years – 8.5 points 5 years and more – 10 points	10
3.1.4	Working experience in the Aral Sea regions would be an asset:  Not available – 0 points Available experience – 5 points	5

3.1.5	Excellent knowledge of Russian language (level to be indicated in CV): Excellent knowledge – 10 points	10
<b>3.2</b>	<b>Water expert</b>	<b>40</b>
3.2.1	Higher education in water and land reclamation, and other related sciences. Bachelor's degree - 9.8 points Master's degree - 12 points Higher qualifications -14 points	14
3.2.2	At least three years of research, water, and land management knowledge and experience in the Aral Sea regions  3 years – 14 points 4-5 years – 17 points 6 years and more – 20 points	20
3.2.3	Knowledge and experience of the Aral Sea regions would be an asset.  Not available – 0 points Available – 6 points	6
<b>3.3</b>	<b>Agriculture economist</b>	<b>40</b>
3.3.1	Specialized secondary education in economics or other related sciences Specialized Secondary education – 9.8 points Bachelor's degree - 12 points Master's degree and Higher qualifications – 14 points	14
3.3.2	Three years of experience in agriculture and economic development.  3 years – 14 points 4-5 years – 17 points 6 years and more – 20 points	20
3.3.3	Knowledge and experience of the Aral Sea regions would be an asset  Not available – 0 points Available – 6 points	6
<b>3.4</b>	<b>Climate expert</b>	<b>40</b>
3.4.1	Higher education in environmental sciences, geography or agronomy, and other related sciences. Bachelor's degree - 10.5 points Master's degree – 13 points Higher qualifications - 15 points	15
3.4.2	Three years of experience in hydrometeorology and agrometeorology. 3 years - 17.5 points 4-5 years – 21.5 points 6 years and more – 25 points	25
<b>3.5</b>	<b>Health specialist</b>	<b>40</b>
3.5.1	Higher education in Medical Sciences, biology, physiology, and other related sciences. Bachelor's degree - 10.5 points Master's degree – 13 points Higher qualifications - 15 points	15

3.5.12	Three years of experience in health and human physiology. 3 years - 17.5 points 4-5 years – 21.5 points 6 years and more – 25 points	25
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**Step III: Financial Evaluation** with 300 points maximum.