**Terms of Reference (ToR)**

**Environmental Specialist (Ecologist) – Situational Analysis**

**Position Summary**

* **Position Title:** Environmental Specialist (Ecologist) – Situational Analysis
* **Project:** Climate-Resilient Integrated Water Resources Management (CR-IWRM) in the Zarafshan River Basin
* **Assignment Title:** Comprehensive Environmental Analysis to Inform the Zarafshan River Basin Development Plan
* **Duty Station:** Home-based, with required travel to Samarkand, Navoi, Bukhara, Kashkadarya, and Djizzakh Provinces (Zarafshan River Basin)
* **Duration:** August – November 2025 (up to 45 working days)
* **Reports to:** Zarafshan River Basin Council Board and designated Technical Advisors from Caritas Switzerland and CAREC
* **Type of Contract:** Individual Consultant

**1. Background**

Caritas Switzerland, in partnership with the Regional Environmental Centre for Central Asia (CAREC), is implementing the project *“Climate-Resilient Integrated Water Resources Management in the Zarafshan River Basin (CR-IWRM)”*. The initiative supports sustainable water governance and the development of a Basin Development Plan (BDP), based on multidisciplinary situational assessments, including environmental and ecosystem health.

Ecosystems and biodiversity are under increasing pressure from water abstraction, pollution, land degradation, and climate change. Understanding these pressures is critical for planning resilient and integrated management solutions.

As part of the broader technical team, the consultant will work under the overall guidance of the **Expert Group Coordinator – Water Resources Management Specialist**, who is responsible for consolidating sectoral findings into a unified Basin Development Plan. All experts will collaborate closely to ensure alignment and consistency across thematic assessments.

**2. Objective of the Assignment**

The main objective of this consultancy is to perform a comprehensive environmental analysis of the Zarafshan River Basin. The consultant will evaluate ecosystem health, biodiversity, and anthropogenic and climate pressures, and will develop actionable recommendations for protecting and restoring ecological integrity as part of the Basin Development Plan.

The consultant will collaborate closely with the Agriculture Specialist and other sectoral experts to ensure that climate adaptation and environmental resilience are embedded in basin-wide planning.

**3. Scope of Work and Key Tasks**

The Environmental Specialist will perform the following tasks:

1. **Review and Analyze Secondary Data:**
	* Environmental reports, ecological surveys, and biodiversity databases;
	* Satellite imagery, GIS layers, and hydrometeorological data.
2. **Assess Ecosystem Health and Biodiversity:**
	* Status of wetlands, forests, rangelands, and aquatic habitats;
	* Distribution and condition of key species and habitat types.
3. **Evaluate Anthropogenic Pressures:**
	* Impact of agriculture, industrial development, mining, and urban expansion on natural ecosystems;
	* Identify pollution sources (point and non-point) affecting water quality and biodiversity.
4. **Analyze Climate Change Impacts:**
	* Use available climate projections, studies, and models to assess ecological vulnerability;
	* Identify ecosystem-based adaptation measures in collaboration with the Agriculture Specialist.
5. **Conduct Field Investigations:**
	* Field visits to selected sites in the basin to validate secondary data, collect samples, and document ecosystem conditions.
6. **Develop GIS Maps and Environmental Risk Profiles:**
	* Map ecologically sensitive zones, degraded lands, and pollution hotspots;
	* Identify conservation and restoration priorities.
7. **Coordinate with Sectoral Experts:**
	* Contribute to cross-sectoral dialogue, especially regarding land use, water allocation, and adaptation planning.
8. **Reporting and Recommendations:**
	* Draft a comprehensive environmental situational analysis report with integrated policy and planning recommendations.

**4. Deliverables and Timeline**

1. **Inception Report** – Detailing methodology, fieldwork plan, and data needs
*Due: Within 3 weeks of contract signing*
2. **Interim Report** – Summarizing progress, findings, and field observations
*Due: By the end of October*
3. **Final Report** – Including:
	* Assessment of ecosystem health and biodiversity;
	* Environmental degradation trends and climate risks;
	* GIS-based maps and graphics illustrating findings;
	* Practical recommendations for BDP integration
	*Due: By the end of November*
4. **Stakeholder Presentation** – Summary of results and recommendations for validation and feedback

**Language and Format:** Deliverables must be submitted in **English or Russian**, in both **digital and printed** formats. GIS files must be provided in editable formats (e.g., shapefiles or GeoTIFF).

**5. Required Qualifications and Experience**

* **Education:**
Advanced degree in **Ecology, Environmental Science, Natural Resources Management**, or a related field.
* **Professional Experience:**
	+ At least **5 years** of experience in ecological assessments, biodiversity monitoring, or environmental planning;
	+ Experience conducting fieldwork and analyzing climate-environment interactions.
* **Technical Skills:**
	+ Familiarity with **climate risk assessment**, **ecosystem services evaluation**, and **environmental indicators**;
	+ Proficiency with **GIS tools** and mapping of ecological features.
* **Other Competencies:**
	+ Experience working with multidisciplinary teams;
	+ Knowledge of the **Zarafshan River Basin** or similar ecosystems in Central Asia is an advantage;
	+ Strong report writing, communication, and stakeholder engagement skills.

**6. Duration, Reporting, and Logistics**

* **Duration and Level of Effort:**
The consultancy will take place from **August to November 2025**, with a level of effort of up to **45 working days**.
* **Duty Station and Travel:**
The consultant will work remotely, with required field visits to **Samarkand, Navoi, Bukhara, Kashkadarya, and Djizzakh Provinces**.
All travel and fieldwork logistics are the **responsibility of the consultant**, including budgeting for transportation, accommodation, and sampling needs.
* **Supervision and Reporting:**
As part of the broader technical team, the consultant will work under the overall guidance of the **Expert Group Coordinator – Water Resources Management Specialist**, who is responsible for consolidating sectoral findings into a unified Basin Development Plan. All experts will collaborate closely to ensure alignment and consistency across thematic assessments.

The consultant will report to the **Zarafshan River Basin Council Board** and designated Technical Advisors from **Caritas Switzerland and CAREC**. Collaboration with other experts (especially agriculture and hydrogeology) is required.

* **Support and Coordination:**
While the project will help establish initial contacts with key stakeholders, the **consultant is responsible for managing all data collection, field arrangements, and communications** necessary for fulfilling the assignment.