Terms of Reference

Development of a Project Document for the implementation of Precision Agriculture practices in Albania

In the framework of the project

"Promoting the Sustainable Management of Natural Resources in South-eastern Europe, through the use of the Nexus approach"

funded by the Austrian Development Agency (ADA),

implemented by the Global Water Partnership-Mediterranean (GWP-Med)
in partnership with the United Nations Economic Commission for Europe (UNECE)

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1. Introduction & Background

The Water-Energy-Food-Ecosystems Nexus ("Nexus") approach has been introduced in the natural resources management agenda in order to enhance water, energy, and food security, while preserving ecosystems and their functions. The Nexus approach provides for an integrated and coordinated approach across sectors, with a view to reconciling potentially conflicting interests as they compete for the same scarce resources, while capturing existing opportunities and exploring emerging ones.

The Nexus approach is quite pertinent in South-East Europe (SEE), especially given the Region's rich water and forest resources, the high share of hydropower in the energy mix, the key role of agriculture and the many pristine natural areas, as well as the commitment of the Economies in the Region towards sustainable development and integrated management of natural resources.

The overall aim of the "**SEE Nexus Project**"[1] is to introduce the Nexus approach in and catalyse action for its adoption and implementation in SEE. With activities focusing on the transboundary basins of the Drin and Drina rivers and in Albania, the Project facilitates Nexus Dialogue Processes involving a broad range of stakeholders, and the development of technical Nexus Assessments exploring cross-sectoral interlinkages, while enabling conditions for financing actions to address issues of priority.

Aiming to maximise its usefulness for the beneficiaries and lead to tangible outputs, the SEE Nexus Project supports the preparation of full Project Documents for the implementation of solutions addressing Nexus-related issues/challenges with cross-sectoral benefits. The individual issues have been identified in consultation with key institutions and stakeholders in the respective areas of focus, and based on the findings of the Nexus Assessments as well as on key strategic policy documents and action programmes.

More information on the Project and its activities is available at https://gwp.org/seenexus

2. Objective of the Assignment

To prepare a full Project Document -as described in detail below- for the implementation of Precision Agriculture technologies in a pilot location in Albania. Viable opportunities for financing will also be identified. The exact location will be selected in coordination with national authorities and stakeholders.

3. Background, scope and aims of the proposed Project

3.1 The scope for precision agriculture in Albania

Agriculture is one of the most important economic sectors with more than a third of the population employed in the sector. Albania's climatic conditions and annual precipitation patterns make water irrigation necessary for crop production. The total area equipped for irrigation is approximately 360,000 ha, however farmers have actual access to irrigation for only around 250,000 ha. Most of the pumping stations for irrigation are operating poorly and with low efficiencies, or even out of order, due to high electricity costs, poor maintenance and ageing equipment. There is an imperative need for the rehabilitation, upgrade and modernisation of irrigation infrastructure to meet the water needs of the farmers while providing them with the conditions for sustainable growth of the agricultural crops, as noted among the objectives of the National Strategy for Irrigation and Drainage 2019 – 2031, as well as of the National Sectoral Programme for Water.

[1] Funded by the Austrian Development Agency (ADA) and implemented by the Global Water Partnership-Mediterranean (GWP-Med) in partnership with the United Nations Economic Commission for Europe (UNECE)

Given these challenges and beyond the need for rehabilitation of infrastructure, it is increasingly important to increase overall efficiencies in the use of natural resources and reduce the use of water, fertilizers and pesticides and related environmental impacts. Precision Agriculture is emerging as an innovation-driven solution in that regard. It involves the introduction of new data-based technologies that help farmers manage their farms in a sustainable way, based on the optimized management of inputs in a field according to actual crop needs. Components of such applications include remote sensing technology, geo-mapping, high precision positioning system, smart sensors and a range of IT-applications combined with high-tech engineering and variable rate technologies. The technology is quite new in the country and for its adoption gaps related to know-how, capacities, financing sources and institutional framework need to be addressed.

3.2 Components of and activities for the preparation of the Project Document

The Project Document to be developed under the present Assignment, should describe in detail –to the level of a pre-feasibility study- an intervention on the application of Precision Agriculture technologies in a pilot location in Albania. The exact scope and focus of the intervention, as well as the location of the pilot area, will be defined in consultation with key national stakeholders during the inception phase of the assignment. In any case, the Project Document is suggested to include the basic components mentioned below (the consultant is expected to enrich and appropriately clearly define these as part of the Inception Report):

1. Description of the pilot area in terms of geography, socio-economic aspects (including gender dimensions), climatic conditions, soil type, water balance, crops cultivated, irrigation & drainage infrastructure, ownership and management of the farms etc.
2. Mapping of related national and local strategies, plans and support schemes relevant to precision agriculture; identification of potential gaps and barriers for the adoption of such practices
3. Identification and detailed description of a comprehensive technical solution for installing Precision Agriculture technologies in the pilot area for 3 different types of crops, regarding soil preparation, seeding, crop management (irrigation and application of fertilisers) and harvesting. The solution should also include the development of a digital platform and related tools and services for data analysis and evaluation to be used by the involved farmers
4. Techno-economic analysis (pre-feasibility study) of the proposed solution, including an assessment of the benefits from reduced use of energy, water and other resources
5. Training of the farmers to be engaged and preparation of related materials
6. Enhancing capacities and awareness of all related stakeholders and professionals and facilitation of knowledge and experience sharing.

4. Methodology and tasks

For the preparation of the Project Document, the consultant is expected to perform the following tasks:

Task 1: Policy review, identification of stakeholders and potential financing sources, finalisation of structure of Project Document – Inception Report

The consultant will:

a. identify all the key stakeholders and beneficiaries that need to be engaged and/or consulted for the development of the Project Document; identify required data and information, and related sources; hold initial consultations with national authorities to identify the location for which the Project Document will be developed

b. identify and review all national policy documents, strategies and action plans (including local priorities) that are related to the issue to be addressed by the project proposal
c. identify recent projects in South-East Europe and beyond related to Precision Agriculture and review their findings and recommendations
d. identify key financing sources and instruments, including International Financing Institutions (IFIs), that could finance the proposed Project; explore their prerequisites in the context of an application for financing and suggest potential restructuring or supplementary materials in the content and structure of the Project Document (Annex 1) in order to fully align it with the specific requirements of the financing source/instrument
e. suggest potential restructuring of the content and structure of the Project Document (Annex 1) as well as potential provision of supplementary materials, as necessary to address any needs arising from the technical nature of the project, and which are currently not covered in Annex 1.

The above will be captured in an **Inception Report** which will include among others:

- the information collected under (a) - (c) above
- identification of the types/technologies of the Precision Agriculture applications to be designed, based on an assessment of available options
- a description of the approaches/methods to be followed for the development of the Project Document
- list of stakeholders to be consulted and draft plan of consultations
- information gaps that were identified and suggestions to overcome them
- key relevant financing sources and instruments
- suggestions to restructure the content and structure of the Project Document (Annex 1)
- detailed work plan for the preparation of the Project Document.

GWP-Med can assist in the identification of related policy documents, projects and/or stakeholders.

Task 2: Consultations and development of Concept Note

The consultant is required to plan and conduct consultations (physical or virtual) with the key stakeholders identified under Task 1. Overall, the consultations will assist the consultant to harvest and understand the needs and expectations of the stakeholders and beneficiaries related to the project proposal, so as these are reflected in the exact definition of the scope and focus of the eventual project and in the Project Document to be prepared. Albania's Water Resources Management Agency and the Ministry of Agriculture and Rural Development will be invited to have the coordinating role for the consultations.

Based on the outcomes of these consultations, as well as on the findings of activities under Task 1, a **Concept Note** will be prepared outlining how the Project Document will address the **components and activities** mentioned in Section 3.2 "Components of and activities for the preparation of the Project Document" above, and will have in an Annex a report on the consultations. The Concept Note will then be discussed with the beneficiaries and GWP-Med. Once finalised, it will be the basis for the development of the full Project Document (see next task).

Travel costs associated to the missions will be covered by the consultant (to be included in financial offer) at no additional expenses to the contractor.

Task 3: Development of the full Project Document and of a Note on Potential financing and partnership mobilisation

Based on the results from Tasks 1 & 2, the consultant will draft the full Project Document. It should follow the required content and structure of the **Annotated Table of Contents for the Project Document (Annex 1 to the ToR).** It should also include as Annexes **the LogFrame, the Workplan and the Budget** of the eventual Project. Templates for these are available as **Annexes 2-4** to the present ToR. Note that as indicated under Task 1, the documents included in Annexes 1-4 may be restructured, or supplementary

materials may be included, following a related proposal of the consultant and agreement with GWP-Med**.**

The draft Project Document should be accompanied by a draft **Techno-economic Note** for the proposed solution.

The draft Project Document and accompanying material will be submitted to the beneficiaries for comments. The final Project Document and accompanying material should address all comments that may be received.

In parallel, the consultant will develop a **Note on Potential financing and partnership mobilisation**. In this Note, the consultant should:

i. identify the most relevant available sources and instruments of financing (public, blended and private) which could support the eventual implementation of the Nature-based solution to be described in the Project Documentation
ii. propose viable partnerships with relevant technical and/or developmental institutions and organizations

For each of the key sources or instruments of financing identified under (i), the following information should -the least- be provided: Name/title, Structure, Objectives and Programmatic scope, geographic scope, selection criteria, Programme cycle, available budget, recent relevant projects, application procedure and requirements, identification of gaps in terms of eligibility and/or required documentation.

In the Note, reference should also made to relevant public-private partnerships (PPP) experience in the countries of focus, including on business support programmes.

5. Deliverables/Outputs

The deliverables/outputs of this assignment are:

1. **Inception report**, as described under Task 1 above
2. **Concept Note as a result of the desk study & consultations,** as described under Task 2 above, including as Annex the reports of the consultation meetings
3. **Draft full Project Document** as per the requirements described in Task 3 above, for commenting purposes.
4. **Note on Potential financing and partnership mobilisation,** as described under Task 3 above**.**
5. **Final version of the full Project Document** where comments are fully addressed.

6. Contract price, duration, schedule of deliverables and payments

The maximum fee for this assignment is **40,000 EUR**. This amount includes all other costs, income taxes and any other amount payable or cost that may be required for the completion of the work/service, including VAT.

The overall duration of the contract will be for a maximum of **4 months** after contract signature.

Payments will be made upon acceptance and verification of the related deliverables, as laid out in the table below.

Table: Schedule of deliverables and payments

Tasks	Deliverables	Deadline	Payment Schedule
1. Desk studies and identification of stakeholders – Inception Report	D1. Inception Report (See under "4. Methodology and tasks" for details)	1 month after contract signature	Tranche 1: 20%
2. Consultations and formulation of a concept note	D2. Concept Note, including reports of consultations (See under "4. Methodology and tasks" for details)	2 months after contract signature	Tranche 2: 30%
3. Development of the full Project Document and of a Note on Potential financing and partnership mobilisation	D3. Draft Project Document and Techno-economic Note	3 months after contract signature	Tranche 3: 50%
	D4. Note on Potential financing and partnership mobilisation	3 months after contract signature	
	D5. Final Project Document and Techno-economic Note	4 months after contract signature	

7. Selection Criteria (pass / fail)

Successful participant (Natural or Legal Person or Entity):

- Must have a record of minimum 4 projects over the last 10 years of comparable nature and degree of complexity related to the design and/or implementation of modern and efficient practices in agriculture.
- Must be enrolled in one of the official professional or trade register kept in their country of registration.
- Their cumulative annual turnover for the last two financial years must be at least equivalent to the maximum amount of this call.

8. Qualification and Experience

Participants in the call are required to have solid experience in developing and managing complex projects in the field related to the tasks described in the ToR. This needs to be demonstrated in the **Technical Offer** to be submitted as part of the application.

The Technical Offer Form consists of the following sections:

- Section 1: Expertise and work experience
- Section 2: Approach and Methodology

Regarding Section 1: Expertise and work experience:

The scope of work requires an interdisciplinary team of skilled experts with previous experience in activities similar to those that this assignment entails.

The required and desired qualifications for all experts, including the Team Leader, to be engaged in this assignment are presented in Table 1 below. The inclusion of experts so as the team responds to every area of expertise defined in the table below is mandatory. Qualifications additional to the minimum requested per category will receive additional score under the evaluation process as described in the

section Evaluation Process and Awarding Criterion. In addition, the Participant may propose -as they deem appropriate- additional experts covering other specific areas of expertise.

Failure to provide the minimum required qualifications is considered ground for disqualification.

Table 1 – Required and desired qualifications for the Team of Experts

Expert #	**Qualifications**
1. Team Leader	○ At least post-graduate diploma (MSc or equivalent) in a field relevant to the Assignment (e.g. Agriculture and Rural Development, Land Management, Natural resources management, Environmental Sciences and Policy) **(Required)** ○ Minimum 10 years of professional experience and 3 assignments / projects related to the design and/or implementation of modern and efficient practices in agriculture. **(Required)** ○ Minimum 1 assignment / project in the last 5 years directly relevant to Precision Agriculture practices **(Required)**
2. Expert 1	○ At least University degree in a field relevant to the Assignment (e.g. Agriculture and Rural Development, Land Management, Natural resources management, Environmental Sciences and Policy) **(Required)** ○ Minimum 7 years of professional experience related to the design and/or implementation of modern and efficient practices in agriculture, or to the assessment of agricultural policies. **(Required)** ○ Related experience in Albania **(Desired)**
3. Expert 2	○ At least University degree in a field relevant to the Assignment (e.g. Agriculture and Rural Development, Land Management, Natural resources management, Environmental Sciences and Policy) **(Required)** ○ Minimum 7 years of professional experience related to the design and/or implementation of modern and efficient practices in agriculture or to the assessment of agricultural policies. **(Required)** ○ Related experience in Albania **(Desired)**

9. Awarding Criterion and Evaluation Process

The Award criterion is the most economically advantageous tender on the basis of best price / quality ratio.

Offers qualified in terms of exclusion grounds and selection criteria will be further evaluated on the basis of the requirements presented under section "Qualification and Experience", as follows:

(1) Criterion	**(2) Weighting (w)**	**(3) Points of criterion (c)**	**(4) Score** = (2) x (3)
Section 1: Expertise and work experience	**70% total**		
Team Leader			
(Required) At least post-graduate diploma (MSc or equivalent) in a field relevant to the Assignment (e.g. Agriculture and Rural	5		

Development, Land Management, Natural resources management, Environmental Sciences and Policy)			
(Required) Minimum 10 years of professional experience and 3 assignments / projects related to the design and/or implementation of modern and efficient practices in agriculture.	10		
(Required) Minimum 1 assignment / project in the last 5 years directly relevant to Precision Agriculture practices.	20		
Expert 1			
(Required) At least University degree in a field relevant to the Assignment (e.g. Agriculture and Rural Development, Land Management, Natural resources management, Environmental Sciences and Policy)	2.5		
(Required) Minimum 7 years of professional experience related to the design and/or implementation of modern and efficient practices in agriculture, or to the assessment of agricultural policies.	10		
(Desired) Minimum 2 projects directly relevant to modern agricultural practices or related policies in Albania	5		
Expert 2			
(Required) At least University degree in a field relevant to the Assignment (e.g. Agriculture and Rural Development, Land Management, Natural resources management, Environmental Sciences and Policy)	2.5		
(Required) Minimum 7 years of professional experience related to the design and/or implementation of modern and efficient practices in agriculture, or to the assessment of agricultural policies.	10		
(Desired) Minimum 2 projects directly relevant to modern agricultural practices or related policies in Albania	5		
Section 2: Approach and Methodology	**30% total**		
Approach to the requested Assignment: detailed description of the methodology how the Participant will achieve all objectives and tasks and deliver all outputs as described in the Terms of Reference of the assignment, keeping in mind the appropriateness to local conditions.	25%		
Risks / Mitigation Measures: description of the potential risks for the implementation of this assignment that may impact achievement and timely completion of expected results as well as their quality. Describe measures that will be put in place to mitigate these risks.	5%		

Failure to provide the minimum required qualifications is considered ground for disqualification.

Scoring for each evaluated section will be made as following:

Section 1 – Expertise and work experience: For Section 1 score starts at 100 points (when minimum requirements are met) and can reach 150 points depending on the description of the participant and the number of projects implemented in excess of those required as a minimum. (100p Base +10p for extra criteria over base up to 50 additional points)

Section 2 – Approach and Methodology: For Section 2, score starts at 100 points and can reach 150 points depending on the length, detail, depth, and structure of the information provided.

Each Section/evaluation criterion is evaluated autonomously. The final scoring of each evaluation criterion is the outcome of its scoring multiplied by the corresponding weighting factor. The overall score of the technical offer is the sum of the final scoring of all the Sections/evaluation criteria.

The overall score of the technical offer is calculated on the basis of the following formula:

Bi = w1 x c1 + w2 x c2 +……

For the overall score which will determine the ranking of offers, technical evaluation will be weighted with 80%, and the financial offer with 20%.

The final listing of the most advantageous offers will be made on the basis of the following formula:

Λi = 0.8* (Bi/Bmax) + 0.2 * (Kmin/Ki).

Where:

- Bmax: the max score received by the best of the technical offers received
- Bi: the score of the technical offer
- Kmin: The cost of the financial offer with the minimum price offered.
- Ki: The cost of the financial offer

The most advantageous offers is the one with the greater value of Λ.

In case of equality of overall scores, the winning proposal is the one whose corresponding technical proposal received the highest rating.

10. Monitoring and Progress Controls

Mr. Tassos Krommydas, Senior Programme Officer and Mr. Meivis Struga, Programme Officer at GWP-Med, will be providing oversight and guidance from the side of the Project Team. Coordination calls between the consultant and the Project Team will be held at least monthly, to monitor the progress with regard to the workplan submitted with the Inception Report.

Services will be rendered to the Senior Programme Officer Mr. Tassos Krommydas and will be considered completed upon approval of the deliverables by the Senior Programme Officer and the Project Coordinator.

11. Place of Performance

This assignment is home based, with possible field missions for consultations. The tasks will be carried out from a place of the Consultant's preference.

12. Terms and Conditions

- *Language*

The language of the deliverables/outputs is English.

- *Data and information*

GWP-Med can assist in the identification of related policy documents, projects and/or stakeholders.

The consultant is responsible to collect all additional information and data necessary for the completion of this assignment. Missing information (from any side) would not be considered as eligible reason for not completing the tasks.

- *Submission of data, reports and other material produced*

All primary data, reports, and other documentation produced during this assignment shall be made available to the Project Team in electronic format. All data acquired, and products developed during the assignment will be in the ownership of the SEE Nexus Project and cannot be used by the Consultant and its team without prior written permission.

- *Cooperation requirements*

The Consultant is expected to work closely with the Project Team and the beneficiaries (visited during the field missions).

- *Review and quality assurance*

Review of the work carried out by the Consultant throughout the implementation of the assignment as well as review of the deliverables may be carried out by an independent external expert or expert team. Review of the project final deliverables may be carried out by relevant experts or Expert Working Groups of the beneficiaries.
All relevant comments and suggestions made by the reviewer(s) will have to be taken into consideration by the Consultant and integrated in the final versions of the deliverables.

- *Public consultations / meetings*

The responsibility for organizing any required workshops or working meetings will be shared between the Consultant and the Project Team. The Consultant shall be responsible for: preparation of working material invitations, agenda, technical specifications etc. ensuring participation of the key team members as required, preparation of minutes etc. The Project Team will be responsible for: distributing the invitations and enabling participation.

13. Annexes

Annex 1 – Annotated Table of Contents of the Project Document

Annex 2 – LogFrame Matrix template (for the Project Document)

Annex 3 – Workplan template (for the Project Document)

Annex 4 – Budget template (for the Project Document)