# Serbia Competitive Agriculture Project (SCAP) Terms of Reference and Scope of Services

**Agri-Climate smart infrastructure: Study on early warning system and anti-hail infrastructure development as a climate risk related mitigation measure**

# Background

The Serbia Competitive Agriculture Project (SCAP), a US$50 million investment, was approved by the World Bank in December 2019 and ratified by the National Assembly of the Republic of Serbia in February 2020. The objective of the Project is to improve access to markets and information systems for agricultural producers in Serbia. This will be achieved through a) improving productivity of small and medium scale farmers by strengthening advisory and technical support; b) supporting market access of small and medium scale farmers (including finance and business planning capacity); c) improving government systems to strengthen the enabling environment for all agricultural producers (including capacity building for the Ministry, information systems, and data platform).

The Project will provide financial and technical support to all productive investments in agriculture in Serbia through the national rural development program1and will not finance direct payments (subsidies). This delimits the scope of Project interventions outside of all IPARD measures that the country has been accredited for or plans to be accredited for and puts it in the center of national rural development program.

Beneficiaries: Small and medium scale agricultural production units (including producers, producer groups, agribusinesses/agro-processors that can provide direct link to smallholder farmers) that has or can have commercial focus and are not covered by accredited IPARD measures. Although large producers will not be directly targeted, the project will also benefit them with the enabling environment it will create through the improvements in information systems and the financial services provided. Small and medium size producers are defined by the economic size of holding expressed in euros of standard output. For the purposes of this project and the context of Serbia, small producers are those with an economic size of up to EUR 8,000; medium producers are those with an economic size between EUR 8,000 and 25,000.

Project Description: The Project activities are structured into three Components. Component 1) will focus on improving the productive and entrepreneurial capacity of small and medium farmers by supporting business and financial planning for productive investments, as well as supporting market access and strengthening sector competitiveness. Component 2) will focus on improving the capacity of the Ministry of Agriculture, Forestry and Water Management (MAFWM) to provide core public goods for improving sector performance. This includes establishing and information system aligned with EU CAP requirements to enable evidence- based policy making and monitoring of results, enhance market information for stakeholders and build capacity for regulatory roles aligned with EU CAP. Component 3) will focus on project management.

1In 2018, the program received 8,000 applications from small and medium scale producers.

By addressing sector needs at the level of producers (Component 1) and the MAFWM (Component 2), the Project will support a broader policy reform process in the agriculture sector through: i) improved targeting of policy instruments to different typologies of producers, ii) strengthened enabling environment for investment for small and medium agricultural producers, by improving the delivery of services to these productive segments (advisory, financial, information, etc.), iii) improving the monitoring of public resources and their utilization, as well as sector performance. It is expected that this will bring about a significant shift in the utilization of public resources in agriculture from subsidies (direct payments) to rural development investments.

The Project will be implemented over a period of 5 years starting in December 2019. The Project has been prepared under the World Bank’s new Environment and Social Framework (ESF).

More information on the project can be found at: [https://projects.worldbank.org/en/projects- operations/document-detail/P167634](https://projects.worldbank.org/en/projects-%20operations/document-detail/P167634)

Anti-hail protection measures are an important aspect of agri-climate infrastructure, as they can help farmers adapt to the impacts of climate change and enhance the sustainability and resilience of agricultural systems. Furthermore, anti-hail protection is considered as part of the climate change mitigation infrastructure which refers to physical structures and systems that are designed and implemented to reduce the negative impact of climate change on the environment and human activities. Early warning systems, paired with the infrastructure development, together with the post review of the hail effects on the farmer’s production, represent the integrated system that SCAP wishes to introduce in order to prevent, combat and analyze the effect of weather changes and its effects to the agriculture production. Taking into consideration that 30% of all SCAP beneficiaries come from the regions in Serbia where hail is considered as one of the most devastating weather and climate related factors, the need to prepare and introduce these agri-climate-smart systems, for the Project itself and for the competitiveness of the Project’s beneficiaries, represents an urgent and relevant need. We are fully aware of the at present coping mechanisms, such as anti-hail shadings for the orchards, guarantees and securities provided by the insurance companies, damages refund from the local or national budgets; however, these do not represent sustainable solutions, which we aim to provide as a result of this assignment.

We are interested in external consultants as well as PSSS (Public extension and advisory services) colleagues being trained, in addition to be adequate support to our beneficiaries. As a result, in addition to strengthening users, it is critical to improve the training of external consultants and associates in agricultural services.

# Objective of the assignment

# The main objective of this project task is to define the roadmap for improving the agri-climate infrastructure in selected regions of Serbia by establishing more efficient and effective anti-hail protection. Therefore, it is expected from the consultant to elaborate the Study on Anti-Hail Protection with following information presented:

# Background: A brief overview of the problem of hail damage in the area under consideration, including the frequency and severity of hailstorms, the economic impact of hail damage, and the current measures being used to mitigate damage.

# Strategic and legal framework: Overview of the policies, laws, and regulations that guide the implementation and enforcement of measures aimed at mitigating the impact of hail on crops, infrastructure, and people.

# Relevance of anti-hail protection as part of agri-climate infrastructure: Explore the relevance of anti-hail protection for the resilience and sustainability of agricultural systems.

# Overview of currently implemented anti-hail measures: overview of measures and technologies designed to mitigate the damage caused by hailstorms such as hail nets, chemical treatments, weather monitoring and forecasting, insurance, crop management practices, public awareness campaigns, technical advisory, etc.

# Data collection: This would involve collecting data on the hail damage in the study area, such as the frequency, intensity, and spatial distribution of hailstorms, the types of crops or buildings affected, and the economic losses incurred, survey of agriculture producers attitudes and opinions on available measures and systems, interview the relevant stakeholders in agriculture system.

# Objectives: The study would outline the specific objectives to be achieved in anti-hail protection, such as identifying the most effective anti-hail protection measures, evaluating their costs and benefits, and providing a preliminary assessment of feasibility and sustainability.

# Overview of modern and/or new/innovative technologies and approaches in anti-hail protection: Provide list with a short description of several modern and innovative technologies and approaches in anti-hail protection that are being developed and tested. The study should analyse the available technologies for anti-hail protection and determine their suitability for the identified region. This will help in identifying the most effective technology for use in the region

# Analysis: This would involve analyzing the data collected using appropriate statistical or modeling techniques, such as regression analysis, cost-benefit analysis, or risk analysis, to determine the most effective anti-hail protection measures and their cost-effectiveness.

# Main findings: Findings would present the main findings of the survey, including the most effective anti-hail protection measures, their costs and benefits, and the feasibility and sustainability of their implementation.

# Conclusion and recommendations: This would summarize the main findings and contributions of the study, draw conclusions on the justification of anti-hail protection measures and propose the most feasible measures and approach

# Additional relevant information and recommendations: The study should provide any additional relevant information and recommendations deemed necessary for the successful implementation of the anti-hail protection system. The Study will be used as a basis for additional financing request expected to be submitted by MAFWM to the WB for SCAP.

# The objective of the assignment is closely linked to the loop type of support: SCAP will support selected users to improve their level of competitiveness, and as a result of these activities, users will support SCAP to reach the end target PDO indicators, and end target Intermediate Result Indicators, as explained in the result framework.

# Scope of Services

# The Consultant/Firm shall:

# - Develop an implementation plan as a document outlining how a project/study elaboration will be carried out with proposal of activities, methods of implementation and draft structure of Study Report. The proposal must contain a detailed plan for involving relevant stakeholders (e.g. external consultants, relevant Ministries representatives, other relevant national institutions, and other parties who are directly or indirectly interested as well as the concept and questionnaire for surveying agriculture producers opinions on anti-hail protection.

# Implementation plan should be discussed and accepted by the PMT.

# Time frame: No longer than working 15 days after signing the contract.

# Desk analysis/overview of legal, strategic, and policy frameworks - national and local laws and regulations related to agriculture, disaster risk management, and environmental protection, policies and strategies developed at the national level (Government, ministries, national institutions and agencies) or by non-governmental organizations and other stakeholders related to anti-hail protection.

# Survey of agriculture producers attitudes on anti-hail protection comprises the collecting data on a range of factors that might influence their attitudes towards these measure (knowledge and awareness, attitudes and perceptions, previous experience, costs and availability of technical support, etc.).

# Implement semi-structured interviews with relevant stakeholders (assessing current measures from the perspective of efficiency and effectiveness, accessibility and affordability to small-scale farmers, modernization, etc.).

# Collect and analyse the statistical and other relevant data on hailstorms and damages from hailstorms.

# Identify and present in the Report new/modern technologies and methods in anti-hail protection as well as recommend the most feasible option for modernization of anti-hail protection in Serbia.

# Identify and discuss goals of anti-hail protection as part of anti-climate change infrastructure in Serbia.

# Prepare a draft Study Report for addressing recommendations on key findings and consult on the draft Report SCAP PMT

# Time frame: No longer than working 60 days after signing the contract

# Finalization of Study Report and integration of revisions proposed by PMT.

# Time frame: No longer than working 90 days after signing the contract.

# Logistic and Timing

The Consultant/Firm will handle all activities relevant for the Study Elaboration.

1. **Deliverables**

The selected Consultant/Firm shall prepare and deliver the following documents in the corresponding stages of the assignment.

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| --- | --- |
| **Deliverables** | **Due dates** |
| Deliverable 1:  Implementation plan with the draft structure of the Report and survey concept | **15** working days after signing the contract |
| Deliverable 2:  Draft Study Report containing analysis/overview of legal, strategic, and policy frameworks, results of survey of agriculture producers’ attitudes and interview results, relevant data on hailstorms damages, information on new/modern technologies and methods in anti-hail protection, draft goals related to anti-hail protection as part of anti-climate change infrastructure | **60** working days after signing the contract |
| Deliverable 3:  Final Study Report revised in line with discussions and comments | **90** working days after signing the contract |

The selected Consultant shall be paid the lump sum contract amount linked to the defined deliverables.

1. **Reporting**

The Consultant/Firm will work under the authority of the MAFWM/Directorate for Agrarian Payments and will report to the Project Coordinator on a regular basis regarding the pace of the Project implementation. Reports should be submitted on time with all necessary information and provide predictive analysis for specific issue. Report and deliverables will be submitted: Reports in both Serbian and English, deliverables in Serbian and English language, sent via email as well as 2 hard copies for approval to the MAFWM. All reports shall be approved by the MAFWM (Project management Team – Project Coordinator).

1. **Qualification requirements**

The Consultant/Firm is to meet the following requirements:

* Shall be registered as a legal entity.
* Appropriate professional, organizational and logistical capacities necessary for carrying out the assignment on the territory of the Republic of Serbia.
* Experience in project management, donor cooperation, application of consultative processes and multistakeholder approach.
* Specific experience in the following thematic areas: agriculture, disaster and risk management, circular economy, climate change, technical assistance to government and local self-government bodies.
* Experience of participating/provision of consultations in at least three projects related to functional analysis of public administration/local self-government bodies, capital investment planning and surveys of citizens’ opinions/attitudes.

The Consultant/Firm shall provide a team of experts covering the following requirements:

Key Expert 1 - Team Leader

* Must have at least 10 years of professional experience in project cycle management, climate change and circular economy, disaster and risk management, and/or agriculture projects,
* Proven experience in leading projects related to business development, preferably in agriculture or climate change/circular economy,
* Work experience in national and international companies and donor projects,
* Working experience on a World Bank financed projects will be considered strong asset,
* Proven experience in elaboration and preparation of project proposals, studies and reports (functional analysis, feasibility analysis and other experts studies/reports), in anti-climate and circular economy, disaster and risk management, agriculture projects, or public administration modernization,
* A bachelor's degree in relevant fields for anti-climate and circular economy, disaster and risk management, agriculture, or a related field is required.

Key Expert 2 – Expert for anti-hail protection and disaster risk management

* Must have at least 3 years of experience as a manager, coordinator or similar managing position for the activity of automation and remote control of the anti-hail projectile system development,
* Must have at least 10 years of professional experience in project cycle management in IT, agriculture, climate change/circular economy sectors,
* Work experience in national and international companies and donor projects,
* Working experience on a World Bank financed projects will be considered strong asset,
* Proven experience in leading projects related to business development, preferably in agriculture,
* A bachelor's degree in agriculture, economics, organizational sciences, or a relevant related field.

Key Expert 3 – Expert for economy and analysis/surveys

* At least 5 years of relevant working experience in working in or with public-sector institutions at national and local level,
* At least 5 years of experience in analysis and surveys,
* Knowledge and understanding of the national legal framework, rules and procedures relevant for climate change and circular economy, disaster and risk management, or agriculture projects,
* Experience in market research and analysis, due diligence performance, and monitoring of performance indicators,
* Experience in working with a wide range of stakeholders (private, government, etc.),
* Experience in working with international organizations will be considered as an advantage,
* A bachelor's degree in economics, organizational sciences, agriculture or a relevant related field.

Key experts must provide adequate proof for all of the requirements presented and a statement of availability for the tasks.

1. **Logistic and timing**
   * **Location**

The Republic of Serbia

* + **Start date & period of implementation of tasks**

The intended start date is June 1, 2023 and the period of contract implementation will be 90 days from the contract signature.

1. **Selection**

The Consultant will be selected in accordance with CQS method set out in the World Bank’s Procurement Regulations for IPF Borrowers (July 2016, revised November 2017 and August 2018).

Expressions of interest will be evaluated based on the following criteria:

|  |  |
| --- | --- |
| Specific experience of the firm | 40 points |
| Qualifications of Key Experts | 60 points |
| **TOTAL:** | **100 POINTS** |