



Head Office / Secretariat of the Regional Rural Development Standing Working Group in South-Eastern Europe (SWG) – Skopje

Terms of Reference

Expert in post-harvest handling of fresh fruits and vegetables

1. Introduction

The Regional Rural Development Standing Working Group (SWG), as a platform for networking and regional cooperation, has been established during the Agricultural Policy Forum 2005 (“Rural Development Opportunities for Co-operation in the SEE”) held in Macedonia and Serbia in June 2005.

With the International Agreement in March 2009, the SWG is registered as an International Intergovernmental Organization, with its managing and coordinative body – SWG Head Office/Secretariat based in Skopje, Macedonia. On September 7th, 2009, the Law on Ratification of the SWG Agreement has been decisively completed by the Parliament of the Republic of Macedonia.

The main SWG strategic framework is composed of the following elements:

SWG vision is to promote innovative and sustainable agriculture and rural development through regional cooperation, to improve rural livelihoods in the SEE countries.

Mission - to increase horizontal cooperation among respective countries and territories of South Eastern Europe, by coordinating regional initiatives related to agriculture and rural development and supporting the process of social and economic development of rural areas in the SEE region.

General objective of SWG is to facilitate close cooperation between the Ministries of Agriculture and other stakeholders in agriculture and rural development and to support EU integration in SEE. The SWG has four specific objectives on which the organization has focused its work:

- To improve the common understanding on agriculture and rural development policies;
- To assist in the improvement of implementing structures and systems for agriculture and rural development, with specific emphasis on cross-border cooperation;
- To improve the understanding and use of implementation tools for agriculture and rural development;
- To identify and share information and application of good practice in agriculture and rural development to broaden the rural agenda.

2. Background

In August 2021 the German Federal Ministry for Economic Cooperation and Development approved the realization of a 3-year regional programme with the title “**Support to the economic diversification of rural areas in Southeast Europe (SEDRA II)**”. The project strives to strengthen the regional and national capacities through facilitating theme-specific policy dialogues

providing technical expertise on issues related to rural economic diversification in SEE countries in their EU approximation process.

The project's overall goal is to encourage competitiveness and employment in the Western Balkan region by strengthening networking capacity for rural development and promoting the economic diversification and competitiveness of rural areas. Participation of the local actors in less favoured rural areas in promotion of the cross-sectoral innovation and inter-regional knowledge exchange through the implementation of local projects, will ultimately contribute to inclusive, environmentally and climate-friendly economic diversification, increase the attraction of the areas, improve the market access, encouraging young people and women to get more involved and contribute to reduced out-migration.

The project activities are focused on the further support of the regional platforms for political and policy dialogue and mechanisms for more intensive and broader cooperation, strengthening the regional stakeholders' competencies and expertise related to the EU CAP and Green Agenda for Western Balkans as per adopted Action plan, as well as further alignment of the agriculture and rural development policies of the SEE countries to the EU CAP.

The regional project includes the Southeast European countries/territories and the lead executing agencies are the ministries competent for agriculture and rural development, through their membership in the regional organisation Standing Working Group for Regional Rural Development (SWG RRD), which at the same time is the main implementing partner.

The three main project outputs are:

- 1) to improve evidence-based policy-making processes for sustainable development of rural areas in the context of the EU approximation of the Western Balkans. The impact logic is that an enabling policy framework, agreed upon at the regional level and implemented at the national level, will promote economic diversification and competitiveness in rural areas.
- 2) to build networking capacity for rural development. The impact logic is that bottom-up engagement of local actors in less favoured rural areas promotes cross-sectoral innovation and inter-regional knowledge exchange through the implementation of local projects, thus contributing to inclusive, environmentally and climate-friendly economic diversification.
- 3) to improve the qualification offer for rural MSMEs as well as for the population in seven cross-border rural areas. The impact logic is that increased regional value creation and local resilience building, especially in less favoured rural border areas, will change the socio-economic decisions of poor and vulnerable population groups in particular so that they see improved prospects for themselves and their families.

3. Specific Situation

Strengthening institutional capacities of selected stakeholders for supporting EU-compliant economic diversification in rural areas in WB countries/territories is key for agricultural and rural development and further alignment to EU policies and instruments such as the recent EU policy on food safety and quality and market standards.

The EU accession process is the main motivation for the harmonization and adjustment of rural development policies and instruments of Western Balkan countries, (Albania, Bosnia and Herzegovina, Kosovo*, Macedonia, Montenegro and Serbia) the needs of their rural areas and the people living there. One of the EU policies is also marketing standards for fresh fruits and vegetables applicable throughout the production, storage and marketing chain. They are intended to make sure that fresh produce offered to the consumer is accurately labelled of acceptable quality and that unsatisfactory produce is kept off the market. The marketing standards form part of the EU marketing rules which apply across the marketing chain, from pack-house or point of import, through wholesale and distribution to retail outlets. Retailers that offer fresh fruits and

vegetables are responsible for ensuring that these products meet the requirements of specific or general marketing standards. Reduction of food losses and waste, as one of the goals of sustainable development (SDG), is a global priority that should contribute to ensuring a sustainable future. Food that is grown and produced but does not end the market and does not find consumers are considered "lost", as well as food that has reached the consumer, but for various reasons was not consumed, has also been estimated as waste.

The quality of the fruits is achieved by the technology of fruit and vegetable production and cannot be improved during storage. Keeping the quality of fresh fruits and vegetables and preventing losses is the final phase after picking, and processes start during harvest and continue in the so-called "Post-harvest" period. In practice, different methods and ways of preserving the quality of fresh fruits and vegetables are used in order to preserve the characteristics of the product in accordance with market quality standards.

The project seeks to develop a platform for engagement and involvement of expert knowledge, use of good practices and innovative technologies in the agricultural and food production sector. The objective of the experts hiring is to ensure the transfer of knowledge and innovation in the post-harvest period for fresh fruits and vegetables is applied. The main output of the engagement of the experts for post-harvest is the preparation of written instructions/guidance on how to maintain the agricultural quality of fresh fruits and vegetables from harvest to market. This is an important issue for all Western Balkan countries, equally for the domestic and export market, where the producers of fresh fruits and vegetables face increasing market requirements for their products.

4. Tasks for the Experts

Postharvest handling is the final stage in the process of producing high-quality fresh produce. The ability to maintain the level of freshness from farm to consumption is a challenge for all producers and traders, and only those who can meet these challenges can expand their marketing opportunities and be able to better compete in the market. The ability to store fruits after harvest depends on the fruit/vegetable species, varieties and treatment during the process of harvest and storage. Thus, raspberry fruits can be stored in fresh condition for only a few days, even in ideal conditions, and apple fruits can be kept for up to 2 years in the roots. However, in the period from harvesting to delivery of fresh fruits and vegetables for consumption, certain losses arising. These losses are divided into:

- Losses that cannot be avoided but can be reduced: losses due to physiological processes in fruits (breathing, transpiration, etc.). These losses can be reduced by proper treatment - storage in appropriate conditions;
- Losses that can be avoided: inadequate fruit harvest (premature or overdoor vintage); Inadequate harvest technology; squeezing fruits, throwing fruits in packaging, overpaying fruits from packaging in packaging; transport of fruits inadequate transports; food packaging in inadequate packaging; food storage in inadequate conditions, etc.

In countries with developed agriculture, losses of fresh fruit and vegetables after harvesting are up to 20%, and mostly these are losses that cannot be avoided. In countries with less developed agriculture, such as the countries of the Western Balkans, post-harvest losses reach up to 50% and relate mainly to avoidable losses. Therefore, it is necessary to apply modern techniques and knowledge in the entire chain, from the moment when fruits and vegetables are properly prepared for harvesting (determines the optimal moment), the method and flow of harvesting, transportation, storage and placing on the market.

For this operation, **the SWG Secretariat seeks up to four (4) experts to prepare technical instructions for producers, advisory services, traders and consumers, which include all measures necessary to maintain the quality of harvested fruits and vegetables as long as possible, i.e. that losses after harvesting are reduced to the lowest possible extent.** Expected results of the engagement of experts are prepared illustrated Post-Harvest Manuals related to the maintenance of marketing standards by including post-harvest knowledge and techniques in maintaining the quality of fresh fruits and vegetables and their impact on agricultural production and market, including recommendations for improving marketing policy for fresh fruits and vegetables in the Western Balkans.

Post Harvest Manuals will be prepared as technical instructions for up to seven economically most significant types of fresh fruit (apple, plum, pear, raspberry, strawberries...), and up to four economically most significant species of fresh vegetables (tomato, paprika, cucumber and watermelon) and table grapes.

Technical instructions that indicate good conservation of product quality conservation during and after the harvest of fresh fruits and vegetables must contain at least the following information:

- Best harvest practices for maintenance of fruit/vegetable quality;
- Factors that affect the post-harvest quality such as the rod load, the correct weather supply, in wrong handling, internal changes due to respiration, moisture loss caused by the imbalance of pathogens;
- Preservation of fruit/vegetable quality in orchard/open field and closed space (vegetables) after harvest;
- Transport and logistics at the place of production and on the road to a warehouse or sales
- Cooling, storage and manipulation in a cool chain;
- Storage facility and storage parameters.

The prepared material should not be extensive, must be written in clear and understandable language, richly illustrated to understand much easier what is written, that can be shared to harvest workers or tractor drivers, etc, and also to advisors who will distribute it in the field.

The experts will receive the necessary logistical and organizational support from the staff of the SWG regional offices in the Western Balkans countries.

For the accomplishment of the above-mentioned outcomes, a Works Contract is foreseen. The total number of days foreseen for the engagement of the experts is approximately 70 (+/- 10%).

5. Place of assignment

The place of assignment is the Western Balkans region.

6. Timeframe

The Expert should accomplish the deliverables in the timeframe from the 15th of June 2023 to the 31st of March 2024.

7. Working language

The working language for the assignment is English.

8. Expert's profile

- A university degree in Agriculture or a closely related economic or biotechnical science discipline relevant to the assignment;
- Proven professional experience in policy assessment;
- High-quality analytical and document drafting
- Proven practical professional experience in applying agricultural and rural development policy;
- Understanding of the situation as well as the relevant legislative and policy framework in the respective country/territory;
- Understanding and in-depth knowledge of the fruits and vegetable growing potentials of the rural areas of the Western Balkans;
- Practical experience in the fruit and vegetable sector production technologies, food safety and quality and market standards;
- Practical professional experience in the fruit and vegetable production cycle, processing, and market access;
- Practical professional experience in the post-harvest handling of fresh fruit and vegetable products;
- Excellent communication and reporting skills;
- Fluency in English;
- Computer literacy
- Ability to work in a team.