



LIFE 15CCM/ES/000032



LIFE
SARMIENTO

INTERMEDIATE ASSESSMENT ON PROJECT PERFORMANCE



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1. Introduction

This report is intended to collect and evaluate the implementation of the project and its management and coordination activities. It offers a quick view on the performance of the project. The Intermediate report on project performance covers the project activities from 01/09/2016 to 31/10/2018.

- **Intermediate report on project performance**

Name of the Deliverable	Number of associated action	Deadline
Intermediate assessment on project performance	F1	1/11/2018

Table 1: Deliverable features

Deliverable 18; name: *Intermediate assessment on project performance*

Beneficiary responsible: EUROVERTICE

Action F1: *Project management*

From month 1 – month 48

2. List of key-words and abbreviations

ER	El Rosario Cooperative
EV	EuroVértice Consultores
MCG	Microgaia Biotech
CB	Coordinating beneficiary
ABs	Associated beneficiaries

Table 2. List of abbreviations



3. Executive summary

3.1 General progress

LIFE SARMIENTO is based on the demonstration of an innovative solution to reduce GHG emissions in vineyards while improves the soil in arid areas. The project started on 1 September 2016 and will last until 31 December 2020. The partnership is constituted by three beneficiaries:

- Microgaia Biotech S.L. (Coordinating Beneficiary)
- Cooperative Virgen del Rosario (Associated Beneficiary)
- EuroVértice Consultores S. I. (Associated Beneficiary)

The main objective of the SARMIENTO project is to contribute to the mitigation and adaptation to climate change through the achievement of significant reductions on the emissions of CO₂ in vineyards and the improvement of climate governance with new land-use practices that additionally improve the profitability of vineyards, halt soil degradation and improve the soil resilience and soil biodiversity in arid climatic conditions.

Currently, the project is being developed within the Bullas POD, in the Region of Murcia (Spain). The final objective is that, at its end, farmers, cooperatives and other stakeholders are able to manage on its own the vine shoot management system and support its sustainability, which will be also implemented in other areas thanks to the replication strategy developed by the project.

The actions that are being carried out to achieve the project objectives are the following:

Preliminary actions, they include the obtention of licenses and permits, definition of logistic plan, farmers training and required works to makes possible the technical implementation.

Demonstration actions, designed to implement the proposed solution to reduce GHG emissions. During the implementation phase, the vineyards pruning waste are being collected following the logistic plan developed, delivered for composting to the transformation site and final products (organic substrate) are obtained. The demonstration of the use of substrate is being carried out in the vineyards plots, urban gardens and it is expected that starts in seedbeds during the winter of 2019.

Monitoring actions, aimed at assess the impact of the project. The monitoring is being carried out according to the Key Performance Indicators of the project and its being



developed at two different levels. On one hand, the technical monitoring of the management system evaluates the impact of the project, taking into account parameters such as CO₂ emissions, soil and plant status and variation in vineyards yield. On the other hand, a socio-economic and environmental assessment is being developed since the beginning of the project.

Communication and dissemination actions required for the communication and replication of the project comprises the Dissemination and Communication Plan, the Dissemination pack and other dissemination tools and materials focused on supporting the replication of the project.

Project management actions, they are the baseline to coordinate all project activities and the project partnership. The management of risks for the project development is carried out through the risk management and contingency plan developed.

3.1.1 Deliverables and milestones

The following table shows the accomplishment of the deliverables and milestones due for this reporting period:

TYPE	NAME	ACTION	RESPONSIBLE	STATE 31/10/2018
Milestone	Project starts	F1	MCG	✓
Deliverable	Logistic plan for the management of vineyards, including all the information needed to start the process	A1	MCG	✓
Deliverable	Training material for farmers and technicians for the initial training stage	A1	MCG	✓
Milestone	Training sessions start	A1	MCG	✓
Deliverable	List of building permits and permits achieved to develop composting achieved	A1	MCG	✓
Deliverable	Web page	E1	EV	✓
Milestone	Web page launched	E1	EV	✓



Milestone	Composting process starts at the transformation site	C1	MCG	✓
Milestone	First application of substrate on vineyards finished	C2	MCG	✓
Deliverable	Communication plan	E1	EV	✓
Milestone	Communication plan launched	E1	EV	✓
Deliverable	Notice boards	E1	EV	✓
Milestone	Transformation site finished	A1	ER	✓
Deliverable	List of farmers and letters of support of partners implementing the management system	A1	ER	✓
Milestone	350 ha and 200 parcels included in the demonstration activities	A1	ER	✓
Deliverable	Project leaflet (1500 leaflets distributed)	E1	EV	✓
Milestone	Start of soil, plant and yield analysis	C1	MCG	✓
Deliverable	First report on demonstration activities in vine yards, including data about quantity of substrate delivered and area where it has been applied, time (total, per ha, per farm) needed and first feedb	C2	MCG	✓
Milestone	First workshop launched	E2	MCG	✓
Milestone	First compost is ready	C1	MCG	✓
Deliverable	Initial analysis of management practices, including data about area managed, compost produced, soil and plant status, yield records, characterization of the compost and overall quality analysis	C1	MCG	✓



Milestone	First application of compost to soil (with compost produced by project actions)	C1	MCG	✘
Milestone	First application of substrate produced in the cooperative on vineyards finished	C2	MCG	✘
Milestone	First cycle of plants grown up in seedbeds completed	C2	MCG	✘
Milestone	Fist networking event developed	E2	EV	✓
Deliverable	Draft protocol and cooperation agreements with stakeholders for the replication of the management system	E1	EV	✓
Deliverable	Intermediate report and assessment on dissemination activities	E2	EV	✓
Deliverable	First report on demonstration activities in urban farming and seedbeds	C2	MCG	✓
Deliverable	Guidelines for the replication process	E1	EV	✓
Deliverable	Strategy for replication	E1	EV	✓
Milestone	Strategy and resources are ready to be applied	E1	EV	✓
Milestone	First complete cycle of use of the substrate is finished	C2	MCG	✘

Table 3: Deliverables and milestones due by 31 October 2018

As it can be observed in the previous table, all deliverables due by 31 October 2018 has been developed during this project period. Nevertheless, there are still four milestones that have to be achieved to meet the established milestones structure on schedule and undertake the project with a view to assuring its success.

The milestones which have to be reached yet are those related to the application of the soil amendment produced by project actions in vineyards plots and seedbeds and, therefore, the completion of the first cycle of use of the substrate in the aforementioned locations. The delay



on these activities is due to the inconveniences associated to pruning waste handling. DOP territory is large, and whereas vineyards agricultural practices are not fully synchronized, vine shoot pruning does not occur simultaneously in all vineyards at once and there are many small plots very distant from each other. For this reason, a protocol for waste chopping and collection to optimize the transport and use of the machinery required for it is been established. However, and despite of the optimization of the pruning collection, machinery and routes developed, the production of the first compost was delayed due to the prolongation of the first vineyard pruning process, delay in the transport of the vine shoots to the collection points, as well as the adverse weather that occurred during the collection period.

The retardation on the pruning collection and, consecutively, on the production of the first compost has affected the completion of the substrate production cycle and its application on soils.

In order to improve the management of the mentioned activities and be able to accomplish the milestones established by the project, the vineyards pruning management system is being revised and the main risks are being identified during the coordination meetings held with the aim of improving its efficiency. Different alternatives for the managing of this action are being evaluated, like the use of alternative machinery to collect and chop the vine shoot in a more efficient way, the reduction of the number of collection points and a better optimization of the transportation routes to deliver the pruning waste to the transformation site.

Despite the difficulties encountered, the first compost produced is ready to be applied in soils and the second composting process has already started. During the winter 2018 - 2019 the substrate will be applied in the vineyards soil and contact has been made with seedbeds from the area in order to apply the substrate produced as soon as possible.

4. Administrative part

The management and coordination structure established during this reporting period is aimed at addressing the needs settled on the project:

- **Steering group**, assures that all partners participate in the project management and monitoring.
- **Project coordination**, for efficient and transparent project management. Is addressed by Coordinating beneficiary (MCG).
- **Action coordinators** ensure that the technical needs are addressed.



The project management tasks followed during the implementation of the project activities are those established and defined in the Partnership Agreement.

The project manager, appointed by Microgaia, is the responsible of the overall management of the project. Among its responsibilities are the following:

- Setting the project schedule and boosting the project actions
- Representing the project in events and with stakeholders
- Receiving and applying the recommendations of external experts, LIFE unit and other stakeholders
- Communication with the LIFE office in the UE in order to inform and accomplish all the commitments derived from the agreement
- Developing networking activities
- Support to dissemination
- Development of the After-LIFE Communication Plan
- Establishment of a complete view over the work progress and ensuring timely and quantitative achievement of the project results and objectives
- Coordination of reporting
- Conflict resolution within the consortium
- Supervision of legal issues
- Organization and chairing of coordination meetings.

At the implementation level Action Coordinators will deal with the activities defined in their actions and will coordinate with other ACs to ensure overall coherence in the project. They are responsible for:

- Coordinating their work packages and acting as “driving force”.
- Monitoring the completion on the tasks in their work packages.
- Producing deliverables on time and specified quality.
- Reporting continuously to the Project manager.
- Report immediately to the Project Manager if problems/ delays arise.



The following table shows the role of each project partner:

NAME	COUNTRY	ROLE IN THE PROJECT
MICROGAIA	Spain	<p>Coordinating beneficiary:</p> <p>Coordinator of actions C2, C3, D and F.</p> <p>Project leader, technical responsible of the implementation and monitoring of the management system and the replication strategy.</p>
“VIRGEN DEL ROSARIO” COOPERATIVE	Spain	<p>Associated beneficiary:</p> <p>Coordinator of actions A1 and C1.</p> <p>Responsible of the vineyards pruning waste management, training of farmers and managers and a key element for disseminating in the farming sector.</p>
EUROVÉRTICE	Spain	<p>Associated beneficiary:</p> <p>Coordinator of actions E1 and E2.</p> <p>Responsible of the design of the dissemination activities and monitoring of the project performance. A key support for project management and assessment of the monitoring results.</p>

Table 4: Role of Partners

There has been a change in the project’s management structure. The project management responsibilities have changed from Sabina Romero to Noelia Ortiz Hernández as the current project manager.

Nevertheless, the management organogram remains the same for the general coordination structure of the project and this change has not involved any setback for the development of the project or the achievement of the planned results.

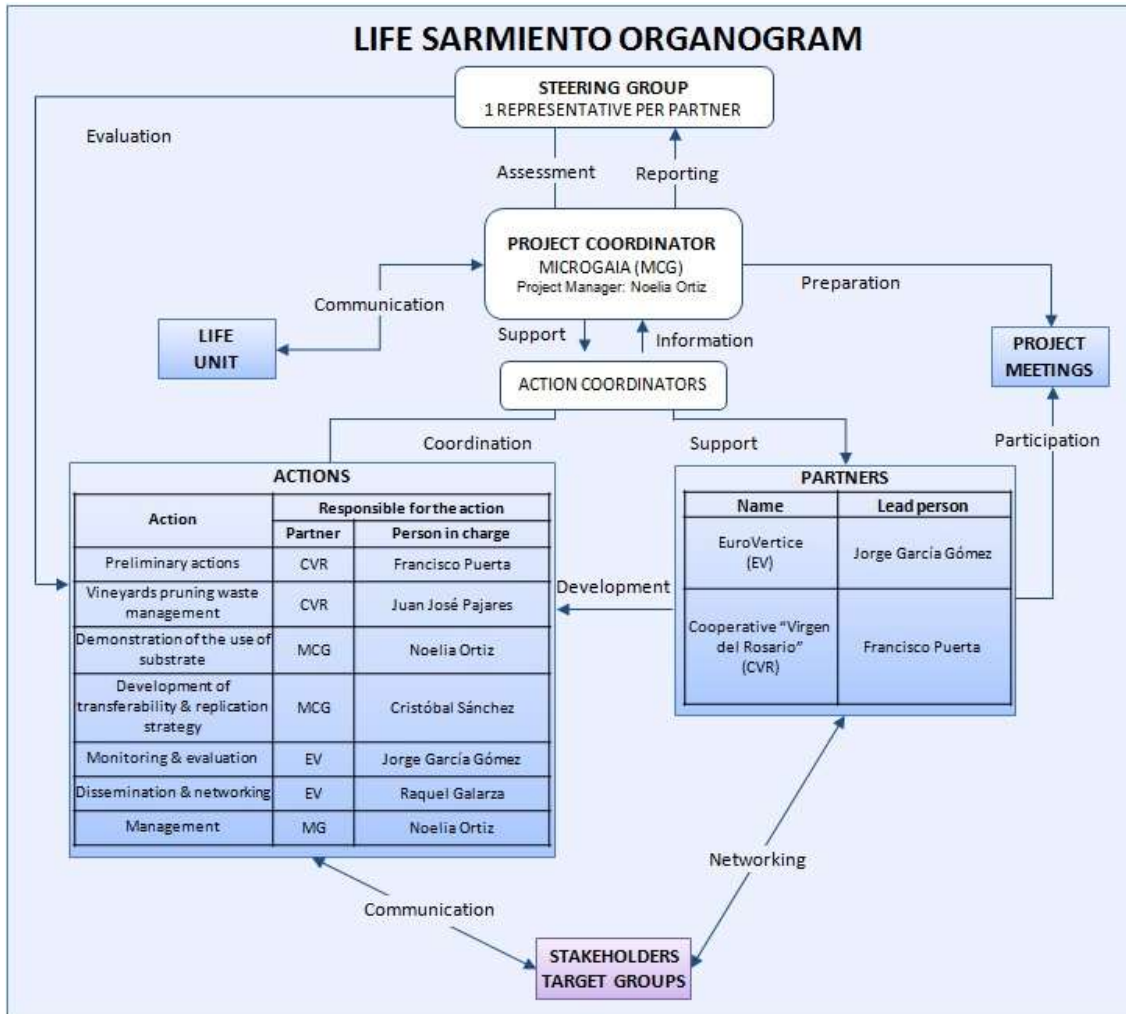


Image 1: Project organogram

The objective of the **action F. Project management** is to ensure the technical, administrative and financial implementation of the project, the proper performance and adherence to contractual terms, credibility and legitimacy upon the process.

For this, it establishes a management and coordination structure with planning and financial monitoring systems.

This action is being carried out throughout the entire project and is divided in 3 tasks:

1. Task F1.1 Project management by MCG.
2. Task F1.2 Project monitoring by EV.
3. Task F1.3 After-Life plan by EV.



MCG, as coordinating beneficiary, is the coordinator of this action, while all partners participate in the management tasks and EV is responsible of the task “project monitoring” and the "After-life plan".

Task F1.1 Project management by MCG

Project partners have met regularly in management or coordination meetings in order to review, coordinate and prepare activities.

During the life of the project, the following meetings have been held:

DATE	PARTICIPANTS	OBJECTIVE
22/09/2016	MCG - ER - EV	Presentation of the project,
11/10/2016	MCG - ER - EV	Kick off Meeting of the project
3/11/2016	MCG - ER - EV	Technical meeting
23/01/2017	MCG - ER - EV	Coordination meeting
21/02/2017	MCG - ER - EV	Coordination meeting
27/03/2017	MCG - ER - EV	Coordination meeting
08/05/2017	MCG - ER - EV	Coordination meeting
15/05/2017	NEEMO - MCG - ER - EV	First visit of the Monitoring Team
12/06/2017	MCG - ER - EV	Coordination meeting
14/09/2017	MCG - ER - EV	Coordination meeting
24/10/2017	MCG - ER - EV	Coordination meeting
05/12/2017	MCG - EV	Monitoring meeting
14/12/2017	MCG - ER - EV	Coordination meeting
11/01/2018	NEEMO - MCG - ER - EV	Second visit of the Monitoring Team
13/02/2018	MCG - EV	Monitoring meeting



05/03/2018	MCG - EV	Monitoring meeting
20/03/2018	MCG - ER - EV	Coordination meeting
24/04/2018	MCG - ER - EV	Coordination meeting
18/06/2018	MCG - ER - EV	Coordination meeting
09/07/2018	MCG - ER - EV	Coordination meeting
24/07/2018	MCG - ER - EV	Coordination meeting
05/09/2018	MCG - ER - EV	Coordination meeting
19/09/2018	MCG - EV	Monitoring meeting

Table 6: Organization of management meetings

The **kick off meeting** of the project took place on 11th October 2016. Main points addressed were the preparation of partnership agreements, revision of budget, actions and responsibilities of each partner and management process.

A first **technical meeting** was held in Bodegas del Rosario (Bullas, Murcia) on November 2016 between the three beneficiaries of the project to train on pruning and compost management and to discuss and set the base for the logistic plan.

During this reporting period thirteen **Coordination Meetings** have been held. In these coordination meetings partners make a revision of the activities, deliverables and milestones, and discuss the main setbacks or limitations that may arise from technical or financial constraints. Conclusions and tasks derived from the meeting are recorded in a minute that is emailed to partners to get their approval and have in mind next steps agreed.

Apart from these meetings, email communication is produced regularly to keep partners updated about technical and communication activities, to coordinate actions and to share information coming from the EC.

The first **monitoring visit** of the NEEMO external team took place on 15 May 2017 in which Mrs. Dolores Hedo could make a first-hand assessment on the project status both for technical and financial implementation. On 11 January 2018 took place the second monitoring visit which verified the general status of the project, the executed and ongoing actions.

The **monitoring meetings** are held by EuroVértice and Microgaia, in which the status of the project's action is reviewed in order to improve their management in the following years.



Regarding the **financial reporting**, partners agreed to upload supporting documentation and updated financial reports to a shared Dropbox. However, some people has not space enough in their individual accounts and the information was moved to a Google Drive folder.

Task F1.2 Project monitoring by EV

EV is responsible for monitoring and assessment of the project performance, preventing deviations, managing problems and ensuring the high quality performance of the project, following a protocol based on project management tools.

A Work Breakdown Structure (WBS) was developed at the beginning of the project. It defines all project's tasks as well as its responsibilities and deadlines.

Templates and models for project's documents have been developed and provided to project's partners.

Pending tasks are checked by using meetings minutes and through email and telephone communication with partners.

EV keeps on working with the rest of partners in the financial implementation of the project by evaluating expenditures and supporting documentation whenever is required.

Task F1.3 After-Life plan by EV

Not proceed. This task begins at the end of the project.

5. Technical part

Regarding the technical progress, the main achievements during this reporting period have been: the elaboration and development of the logistic plan, the characterization of soils included in LIFE Sarmiento project, the elaboration of the first compost from grape pruning waste, the starting of the second cycle of composting from grape pruning waste, the development of technical visits to the project in the winery premises, the s the elaboration of the strategy for replication and sustainability and the guideline for the replication process in other areas.

The following is a summary of the general progress, main activities developed, achievements and results obtained in the actions of the project.

- **Action A1. Preliminary actions**



The **logistic plan** was elaborated and its execution is being carried out and improved with the experience from previous years.

Project partners have a regular contact with technicians from the Regional Environmental Ministry and from Municipality of Bullas in order to proceed with the required **permits and licenses** to develop the composting activity. To date, the application for Sectorial Environmental Authorization (D.G. of Quality and Environmental Assessment of Autonomous Community of Murcia) is pending on resolution as well as the application for Works and Activity License (Municipality of Bullas).

The **transformation site** is located in the winery facilities in Bullas. It is finished and no problems have been reported.

Initial training to farmers and managers was developed at the beginning of the project and training materials were also distributed. During this first meeting, the project objectives and actions were introduced to the stakeholders. As a general rule, interested farmers maintain a regular contact with the technician of the cooperative. Initially, 47 collaboration letters were signed by vineyards owners although the number finally participating in the first pruning collection was higher (55 farmers). A second meeting was developed at December 2017 aimed at enhance the participation of stakeholders for the second pruning cycle of the project, as result, the number of participant has increase to 71 farmers during the second pruning cycle of the project.

Regarding the training to technicians and managers, a technical meeting was held on November 2016 between MG, ER and EV (10 participants) in the cooperative's facilities. Main characteristics of the composting process and the needs of the logistic plan were discussed.

- **Action C1. Vineyards pruning management**

Regarding **waste collection and transport** this is an action in continuous improvement in order to optimize the process. The stack points, already mentioned in this report, such as the use of alternative machinery to collect the pruning waste, the reduction of the number of collection points and a better optimization of the transportation routes are being evaluated. The purpose is optimizing cost and time and reducing the period that the farmer has pruning in his/her parcel waiting for collection.

The **first composting process** has been satisfactorily developed and composting has evolved correctly.



During the **first vineyards pruning management cycle** 224 hectares have been managed and 230 tons of vine shoot have been collected. The result of this pruning management cycle has been the obtention of 12.600 kg of compost to be applied in soils. During the first cycle, one winery has been involved in the project, Cooperative El Rosario and 47 viticultors has participated in the project, avoiding the emission of 446,55 tons of CO₂.

During the **second vineyards pruning management cycle**, a total surface of 314 hectares have been managed, thanks to the adhesion of new plots from three wineries to the project (Bodegas El Carrascalejo, Bodegas Lavia and Bodega Monastrell). 367 tons of vine shoot have been collected and 9 more viticultors have joined the project, making a total of 56 viticultors participating in the project.

- **Action C2. Demonstration of the use of substrates**

Demonstration activities about the effects produced by vineyard compost application have already started. Compost from a previous project (ALMOST) was applied in a representative plot of the area. Soils were characterized before the application to have a starting point and their evolution is being monitored throughout the project.

The application of the compost obtained during the first cycle of the project will take place during winter 2018 – 2019, coinciding with the fertilization season. It is expected that compost obtained from the second management cycle of the project will be ready on January 2019 so it will be applied in vineyards plots which did not receive compost from the first cycle.

The compost obtained from first cycle has been applied in urban gardens of the Municipality of Bullas they are been periodically monitored.

- **Action D1. Monitoring and assessment of results**

Technical monitoring of the management system is being executed. Information on waste collection and transport of the pruning waste is being collected, as well as, information on the development of the composting process and characterised tests plots.

Regarding the **socioeconomic assessment**, a first survey to test the social perception of the project was distributed to farmers after the first pruning collection period. Currently, a second survey is being developed in order to get farmer's opinion after the management of the second pruning collection. The surveys will be distributed after the harvest season.

- **Action E1. Dissemination planning and execution**



The **Dissemination and Communication Plan** has been created and is being implemented. Also, the **Dissemination pack** and other dissemination tools and materials have been created and distributed/installed. Website of the project is being updated regularly and the e-newsletter, in English and Spanish, is periodically launched as well.

Itinerant exhibition: 8 descriptive roll-ups of the project have been created to support dissemination activities of the project developed at Bodegas El Rosario. The travelling exhibition has been exposed also in two different locations of Bullas in order to widely disseminate the activities of the project. The exhibition has been located at The Wine Museum of Bullas and at Museum-house Don Pepe Marsilla at the Municipality of Bullas facilities.

The **social media profiles** of the project were created and are constantly used to disseminate the most relevant events and to keep all followers informed about the progress of the project.

Appearance in media has been also permanent throughout the project lifetime.

Regarding to the development of **sustainability and transfer tools**, the Strategy for replication and sustainability of the project has been created, the Guideline for implementation of the project in other areas is also developed and the draft protocol and agreement, framework for setting the cooperation scheme between project partners and stakeholders, has been designed as well.

- **Action E2. Dissemination, transfer of results and lessons learnt**

Regarding to the **information and awareness raising activities**, dissemination to the general public have been based on the publication of news related to project topic and project events.

In relation with the technical dissemination, project partners have participated in different events to present the project, as the World Bulk Wine Exhibition or the First Day on Sustainable Wine and Market. Besides, five technical visits to the demonstration site have been developed with students from the Integrated Training Centers and Agricultural Experiences of the Region of Murcia and with students of the green marketing course developed in the framework of the Flaga Project.

A first workshop with the urban gardening group of the Municipality of Bullas was also carried out, after which, the compost produced during the first cycle of the project was delivered to the users of the urban gardens for its application.



On the other hand, **networking meetings with other project and initiatives** are being carried out since the beginning of the project. A list of the networking events executed can be found below:

1. LIFE 25th Aniversary event in Murcia. Held on 8th June 2017.
2. Life Platform Meeting AgriForest on Climate Change Adaptation in Agriculture and Forestry in the Mediterranean Region, Madrid. Held on 13 – 14th March 2018.
3. Networking Session with LIFE Vineyards for Heat Project, Villafranca del Penedès – Catalonia. Held on 23th March 2018.
4. First technical workshop (networking) with LIFE ADVICLIM and LIFE PRIORAT + MONSANT, Bullas (Region of Murcia). Held on 31th of May 2018.
5. Networking Session with SwitchMed Project from Lebanon, Bullas (Region of Murcia). Held on 24th of July 2018.

- **Action F1. Project management**

Project management and monitoring has been successful during this period. Coordination meetings allow a close collaboration among the partnership to deal with technical and administrative issues that may affect the project implementation. Expenditures related to the project are updated in a timely manner to monitor the financial implementation of the project in a satisfactory way.

6. Conclusions

In accordance with what is stated in this report, the project management action is being highly satisfactory.

Although the delay occurred in some actions due to the inconveniences found in the handling of the pruning waste, the rest of the activities have been successfully developed and have been delivered in the foreseen period.

The most remarkable achievements during this period are the creation of a replication strategy which can be carried out thanks to the guide created in this project and the adhesion of new wineries.