

LIFE FARMITANK

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PP	Restricted to other programme participants (including the Commission Services)	<input type="checkbox"/>
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EXECUTIVE SUMMARY

The objective of this document is the definition and description of the actions to be carried out once the LIFE FARMITANK project is completed to establish a plan for the continuation of actions that ensure the replicability, transferability, communication, and dissemination of the project. This plan stems from the commitment of the partners to ensure the future success of the project. It is aimed at the general public and has been written in Spanish and English for the understanding of both national and international audiences.

The success of the project execution has been demonstrated thanks to the development and execution of the proposed actions and the achievement of the project objectives. However, the replicability of the technology must be demonstrated once the project is completed and based on the established business plan, so it is essential to follow a plan that allows us to achieve this final goal in the 2024-2027 period.

INTRODUCTION

This document is structured in three differentiated parts.

First, a brief introduction is included with the generic information of the LIFE FARMITANK project.

Next, the lines of action to be followed in this after-life plan are established, whose fulfillment will optimize and maximize the scope of the project in terms of replicability, transferability of results, communication, and dissemination.

Finally, the actions or activities to be carried out to achieve each of the objectives are collected and analyzed, including a summary of the planning and the role played by the partners in each of the actions.

To monitor the actions to be carried out according to the programming of this after-life plan, a plan of biannual meetings is established in which all the project partners will participate, and which will tentatively be held in the months of July and January of each year in the period 2024-2027.



1. PROJECT SUMMARY

1.1 OVERVIEW

Reference: LIFE20 ENV/ES/000810 – LIFE FARMITANK

Location: Milagro (Navarra)

Duration: September 2021 – February 2024

Total budget: €1,532,650

EU contribution: €820,827

Website: lifefarmitank.eu



1.2 BENEFICIARIES

Coordinated beneficiary: [Parcitant S.A.](#) – Villarrobledo (Spain)

Associated beneficiaries: [Florette Ibérica SLU](#) – Milagro (Spain)

[Centro Nacional de Tecnología y Seguridad Alimentaria](#) – San Adrián (Spain)

[Hermanos Torres Cornago S.L.](#) – Cadreita (Spain)

[Floréale Holding](#) – Lessay (France)



1.3 THE PROJECT

Farmitank is a vertical farming system developed by PARCITANK S.A. between 2017 and 2021 through national technological R+D projects. During the development of the LIFE project (2021-2024) this technology has been validated through the operation of a full-scale prototype installed at FLORETTE's headquarters in Spain and has made it possible to demonstrate the environmental and socio-economic advantages of this system, compared to existing vertical farming systems on the market and with standard cultivation techniques in soil.

The environmental problem addressed by LIFE FARMITANK is the excessive use of resources in the agricultural sector. This sector contributes significantly to the EU's economy and food security, but with an ever-increasing population to feed it faces several environmental issues. In this situation, vertical farming emerged as a sustainable solution to address current and future problems.

The results of the project are available in the Layman's report, which is available on the project website and on social media.



2. LINES OF ACTION

This section defines the 7 lines of action to be addressed during the period 2024-2027, which are listed below:

- Continuity of the operation of the prototype at Florette facilities.
- Follow-up of the operation of the prototype and the results obtained.
- Transferability of project results.
- Technology Replication.
- Communication and dissemination.
- Social awareness and environmental education.
- Search for collaboration projects, stakeholders, and networking.

3. ACTIONS

Below are the actions planned during the next 3 years of the after-life period, with the aim of increasing the scope, giving continuity to the benefits obtained by the project, and maximizing their impact. These actions have been established at the time of completion of the project but are open to possible updates according to the advance of the after-LIFE period and after the decisions taken in the follow-up meetings.

3.1 ACTION 1. CONTINUITY OF PROTOTYPE OPERATION

3.1.1 OBJECTIVE

Once the LIFE FARMITANK project has been completed, a maximum period of 4 months is established from the date of end of the project for FLORETTE to assess whether it will continue the operation of the prototype. In that case, FLORETTE will acquire the prototype and launch the products grown in the prototype to the market. If this solution does not fit into their current business plan, it will proceed to dismantle the prototype and PARCITANK will try to give it a second life by reusing the system in some other company interested in the technology. The main intention on the part of both PARCITANK and FLORETTE is to continue operating the prototype and launch the products obtained on the market, thus beginning a period of return on investment of the LIFE project.

3.1.2 PLANNING

In June 2024, FLORETTE will decide whether the operation of the prototype will continue. In this case, the following schedule will be followed:

- Start of the complete operation of the prototype for microgreens production. In this way, most of the production demand for FLORETTE microgreens would be carried out in Farmitank.
- Launch of the crops produced on the market, mainly aimed at the restaurant or supermarket sector.
- Depending on the demand and the return on investment obtained, the replication of the technology to increase production capacity if the market requires it would be assessed. This would be done within a target period of between 1 and 3 years.

The table below shows the possible scenarios, depending on the decision taken by FLORETTE:



Case	Term	Probability	Scenario
Acceptance of the continuity of the operation of the prototype. Acquisition of the prototype and launch of the products to the market	4 months from the end of the project	High	Realistic and desired
Cessation of the operation of the prototype because it does not fit into FLORETTE's current business plan	4 months from the end of the project	Low	Unwanted
Expansion of production capacity (replication)	1 to 3 years	Medium	Ideal and ambitious

3.1.3 RESOURCES

The continuity of the operation of the prototype, once the LIFE FARMITANK project is completed, will be the responsibility of FLORETTE using its own resources, both in terms of personnel, consumables, and maintenance. PARCITANK will continuously monitor and advise FLORETTE with the aim of achieving the success.

3.2 ACTION 2. FOLLOW-UP OF THE OPERATION OF THE PROTOTYPE AND THE RESULTS OBTAINED

3.2.1 OBJECTIVE

The objective of this action is to provide the necessary support to FLORETTE for the development, optimization and analysis of the production results obtained. To this end, the responsibilities of each of the partners are defined.

3.2.2 PLANNING

Possible actions are foreseen for each of the partners, at the request of FLORETTE:

- PARCITANK: It will be responsible for the analysis of the results obtained in each of the harvests together with FLORETTE and will provide support in the calculation of production costs and the contact with consumables suppliers, all with the aim of obtaining the expected yields and demonstrate the economic viability. It is also committed to providing personal support when FLORETTE requires it, both at an agronomic and technical level.
- CNTA: As during the execution of the project, it will lead the analytical campaign if FLORETTE needs to carry out analyses of quality, nutritional parameters, conservation or shelf life of the products obtained in Farmitank that are going to be launched on the market.
- HERMANOS TORRES CORNAGO: It will provide support at the agronomic level and in the development of new crops thanks to his knowledge and experience in horticulture. It will also be available to FLORETTE in case it needs to replicate any of the crops in soil to compare results and/or carbon footprint.

Beneficiary	Task	Methodology
Parcitantk	Technical advice, analysis of results, economic feasibility study and business plan	Continuous monitoring
CNTA	Analysis of quality, nutritional parameters, conservation, and shelf life	On demand and as contracted
HTC	Agronomic advice and crop replication	On demand



3.2.3 RESOURCES

PARCITANK and HERMANOS TORRES CORNAGO will provide support to FLORETTE if required, free of charge, except in those cases that require the purchase of consumables or have associated travel expenses and subsistence allowances. CNTA will offer its services to FLORETTE, after contracting its services and according to its usual rates, except in those cases where only technical advice is required.

3.3 TRANSFERABILITY OF RESULTS

3.3.1 OBJECTIVE

This action aims to continue the actions of dissemination and transfer of results and benefits of the project at national and international level and is aimed at researchers and professionals in the agricultural sector in general and in the field of agriculture in a controlled environment in particular.

3.3.2 PLANNING

The following actions are proposed:

- Technical and scientific dissemination of the results of the project in congresses, conferences or seminars: At least one annual action is planned. The events where assist will be defined during the partners' follow-up meetings and both PARCITANK and FLORETTE will participate in this action. On the part of CNTA, as an entity specialized in technology transfer, it will consider the assistance and participation of PARCITANK or FLORETTE if any event related to the LIFE FARMITANK project is held.
- Organization of visits to the prototype by both public and private entities: These visits will take place both at the FLORETTE facilities and at the prototype that PARCITANK has in its facilities. In both cases, the visits will be accompanied by a presentation of the project where the results of the project or the layman's report will be presented. The aim is to receive the visit of at least 50 professionals a year between the two entities.
- Meetings or visits with professionals or potential clients: Complying with the business plan established in the project, PARCITANK will conduct meetings or visits with the stakeholders in the project. In the same way, FLORETTE, CNTA and HTC will transfer the results, impact, and benefits of the project to interested parties, as they are public and therefore will be available to those who request it.
- Participation in results transfer events to which the consortium will be invited.

Task	Objective	Partners
Congresses, conferences and seminars	At least 1 assistance/year	Parcitant, Florette and CNTA
Visits to the prototype	At least 50 visits/year	Parcitant and Florette
Meetings and presentations with clients or professionals	At least 10 meetings/year	All partners

3.3.3 RESOURCES

All entities will allocate their own personal and material resources for the transfer of results. PARCITANK will make available to the rest of the partners all the materials developed during the project, such as the layman's report, posters, and brochures.



3.4 TECHNOLOGY REPLICATION

3.4.1 OBJECTIVE

The objective of replicability involves the implementation of the Farmitank technology and the business model developed in other entities, in order to try to comply with the business plan established during the project, which establishes a target of 12 small-scale tanks and 2 large-scale tanks in operation during the year 2027.

3.4.2 PLANNING

To meet this objective, 4 scenarios are established, ordered chronologically:

- Objective 1: Replication of the technology in Spain. The first scenario proposed is the replication of the technology at a national level, since during the development of the project a large number of contacts and visits from potential national customers have been achieved. This is also the ideal scenario, since if we are able to demonstrate the technical and economic viability in different locations in Spain, where the conditions are conducive to cultivation in soil and where we find horticultural products at a lower price, we will be demonstrating that the project is replicable to other countries.
- Objective 2: Farmitank replication in a company of the AGRIAL group. Given the involvement of AGRIAL (French cooperative group to which FLORETTE belongs) in the project and the participation of FLOREALE in the project during 2021 and 2022, there is continuous exchange of information with the AGRIAL staff and they are aware of the progress and results of the project. Over the next few years, we will continue to transfer results with this cooperative so that they can continue assessing the possibility of replication of the technology in one of their associated companies.
- Objective 3: Replication of the technology in FLORETTE (installation of more tanks). In the event that FLORETTE continues operating the prototype over the next years, a possible replicability will be assessed through the expansion of the facilities currently in operation (installation of more annexed tanks) or the installation in some other production and logistics center that FLORETTE has at a national level.
- Objective 4: Replication of the technology in European countries. This would be the final goal of replicability established for the after-LIFE period and, ultimately, the most relevant from the point of view of PARCITANK once the project is completed. This objective would be the result of all the actions of transfer of results, communication and dissemination carried out throughout the 30 months of duration of the project and the after-life plan.

Scenario	Scope	Target year
National replication	Spain	2024
AGRIAL replication	France	2024/2026
FLORETTE replication	Florette	2025/2027
International replication	Europe	2025/2027

3.4.3 RESOURCES

PARCITANK will be responsible for the replication of the solution, as the owner of the technology. To do this, it will look for clients at a national and international level, making its national and international sales department available to the project. For its part, FLORETTE will be responsible for transferring its business plan results to the AGRIAL group and for assessing the expansion of its cultivation area.



According to the business plan, PARCITANK will manufacture and install the technology with its own funds, so there are no plans to seek external funding at short-term. Clients who wish to replicate the technology should assess whether the investment is made with their own funds or through external financing, as PARCITANK will sell the product or technology to obtain a return. PARCITANK will advise its clients on financing opportunities available.

3.5 COMMUNICATION AND DISSEMINATION

3.5.1 OBJECTIVE

Following the objectives established in the project's communication and dissemination plan, this action aims to give continuity to participation in activities and the development of materials that maximize the scope of the project.

3.5.2 PLANNING

3.5.2.1 UPDATING AND DISSEMINATION OF THE LAYMAN'S REPORT AND LEAFLETS

An annual update of the leaflets of the Farmitank product will be carried out. The layman's report is intended for the general public and will be distributed at events of any kind in which any of the project partners participate. This report is written in both English and Spanish for maximum impact and scope. The leaflets are more technical and specialized documents than the layman's report and are therefore there are intended for professionals in the sector, both public and private, and will be distributed mainly in visits to potential customers, fairs, congresses and/or seminars. These leaflets will be updated annually to collect the latest advances or developments in technology.

3.5.2.2 REGULAR UPDATING OF THE PROJECT'S WEBSITE AND SOCIAL NETWORKS

The website and its contents will be kept updated for at least 3 years with the aim of maintaining the dissemination of the results and increasing the impact of the project in the medium and long term. In this way, professionals from the public and private sectors will be kept informed of developments related to the project and the general public will continue to be informed of the activities and results, so the scope is aimed at all stakeholders. On social networks, at least one publication will be made every 2 months with the aim of continuing to generate interest among the audience and attract new followers.

In addition to the dissemination of publications on the project's website and social media, each of the partners will be responsible for the dissemination of the publications, sharing updates related to the project on their profiles.

3.5.2.3 PARTICIPATION IN FAIRS AND EXHIBITIONS

The following trade fair participation plan is established for the next 3 years:

- PARCITANK: It will attend at least 2 annual fairs (1 national and 1 international) and will participate as an exhibitor in at least 1 fair during the after-LIFE period. In these fairs the resources developed during the execution of the project will be used such as posters, virtual reality software, leaflets, etc.
- FLORETTE: As a leading company in the production, processing and marketing of horticultural products Spanish market, FLORETTE attend many fairs both as exhibitors and visitors. At those fairs where they



receive requests of interest in the Farmitank technology from customers, FLORETTE will be responsible for connect PARCITANK and the potential customer to assess the possibility of the Farmitank replication. In the same way, FLORETTE will have at their disposal leaflets of the project for dissemination at these events.

- CNTA: As a national reference center, it is present at many national fairs and events, so it will play the same role as FLORETTE through the contact of interested parties with PARCITANK and the dissemination of leaflets and reports of the project.

3.5.2.4 PRESS RELEASES, PUBLICATIONS, INTERVIEWS AND CASE STUDIES

In the short term, a press release is scheduled about the completion of the project during the third quarter of 2024 and will be published after learning the FLORETTE's decision regarding the continuity of the operation and the launch of production to the market. This will be a joint press release between all partners and will be published in national and international media.

Following this press release, it is planned to make a new publication for each replication that PARCITANK makes, if there is no confidentiality agreement with the client that prevents it.

PARCITANK intends to publish at least 1 case study or interview every semester, through agriculture-related media. For example, an interview with the media "Urban Vine" is pending publication and a case study with the company "Circular Carbon", which carried out the comparative life cycle analysis between the crops produced in Farmitank and those produced in soil during the development of the project.

Task	Target	Partners
Layman´s report and Leaflets update	1 per year	Parcitantk
Website and social media update	1 publication every 2 months on the project's website and social media. All partners will share publications and news on their own websites and social media.	Parcitantk
Participation in trade fairs	At least 2 attendances per year. At least 1 participation as exhibitors in the period.	Parcitantk
Press Releases & publications	1 press release for each replication	All partners involved will collaborate in the drafting and dissemination
Interviews & case studies	2 publications per year	Parcitantk and Florette

3.5.3 RESOURCES

The marketing and communication departments of each of the entities will be responsible for the actions described above, under the supervision of the technical staff involved in the project.

3.6 SOCIAL AWARENESS AND ENVIRONMENTAL EDUCATION

3.6.1 OBJECTIVE

This action is intended to continue with the objective of raising public awareness about the multiple advantages and benefits of the controlled environment agriculture, as well as the need for the development of these technologies to be able to feed the world's population in the coming years and given the current scarcity of resources and the pollution associated with production processes and food transport.

3.6.2 PLANNING

The following actions are proposed, which will be specified in the follow-up meetings:

- PARCITANK will promote an awareness event in collaboration with the University of Castilla La Mancha.
- CNTA, as an event organizer and present in a multitude of awareness-raising activities, will try to give visibility to the LIFE FARMITANK project.
- FLORETTE will consider its participation in any of the events organized by its associated public or private entities with which it has a close relationship.
- Maintenance of the project boards.
- Distribution of the Layman's report and project brochures in activities related to agriculture and the environment.

Task	Target	Partner
Social awareness and environmental education events	1 per year	Parcitant, Florette and CNTA

3.6.3 RESOURCES

PARCITANK will be the entity responsible for printing the layman's report and the brochures. In the same way, it will use its own funds for the expenses associated with the organization of the events and travel and subsistence costs.

3.7 SEARCH FOR COLLABORATION PROJECTS, STAKEHOLDERS AND NETWORKING

3.7.1 OBJECTIVE

The objective of this action is to maintain and expand the network created during the LIFE FARMITANK project, made up of public and private entities, public administrations, research centers and universities at a regional and national level, but also in Europe.

3.7.2 PLANNING

The actions to be developed are the responsibility of PARCITANK as a coordinator beneficiary of the project and the main interested and beneficiary of the replicability of the technology. Among the initiatives to be developed are the following:

- Support of initiatives, projects or regulations related to the vertical or sustainable farming sector, for example, by sending letters of support or interest.



- A study will be made of the projects in execution or in the proposal phase, both nationally and internationally, that may be interesting or related to the theme of Farmitank. PARCITANK will be looking for companies interested in leading and applying for projects related to urban agriculture, sustainability, or agriculture in a controlled environment where they can participate as a partner or collaborator by making their technology available or transmitting their experiences and/or technical knowledge.
- Promotion of possible collaborative activities or projects between companies, universities and/or public administrations and analysis of alternative projects or improvements of Farmitank technology among the project partners.
- Analysis of strategic partners for the sale of the technology.
- Networking with other projects through participation in events, technical conferences and visits to the entities of the network.

Task	Frequency	Partner
Support for initiatives related to vertical farming	Continuously	Parcitantk
Search for related projects to provide knowledge and experience as a partner or associated beneficiary	Continuously	Parcitantk
Exchange of documents and project experiences	Continuously	Parcitantk
Promotion of joint activities and collaboration between companies-universities-administrations, and especially between partners	Continuously	All partners
Participation in technical conferences and visits to entities in the network of contacts	Continuously	Parcitantk

3.7.3 RESOURCES

PARCITANK's R&D and commercial departments will be responsible for carrying out these actions. These tasks will be carried out continuously during the after-life period.

