LIFE Project Number

LIFE19 GIE/IT/000977

Final Report

Covering the project activities from 01/09/2020 to 31/12/2025

Reporting Date

07/04/2026

LIFE PROJECT NAME or Acronym

LIFE_GRACE

Data Project

Project location:	Lazio region (Italy)
Project start date:	01/09/2020
Project end date:	31/08/2024 **Extension date:** 31/12/2025
Total budget:	€ 1,378,727
EU contribution:	€ 758,290
(%) of eligible costs:	55.00

Data Beneficiary

Name Beneficiary:	ARSIAL
Contact person:	Mr Claudio Di Giovanniantonio
Postal address:	Rome, Italy
Telephone:	
E-mail:	c.digiovannantonio@arsial.it
Project Website:	http://lifegrace.eu

This document is the public version of the Final Technical Report of LIFE GRACE. It includes all technical content and dissemination material intended for public release. Administrative and grant-management information not relevant to the dissemination of the project's technical results has been omitted.

1. Table of contents

2. List of key-words and abbreviations

AA	Appropriate Assessment
AGEA	Agency for Agriculture Supplies
AIFA	National Animal Protection Authority
ANCI	National Association of Italian Municipalities
ANIM	Italian National Butchers Association
ARSIAL	Agenzia Regionale per lo Sviluppo e l'Innovazione dell'Agricoltura del Lazio
B2B	Business-to-Business
BDN	National Data Base for Livestock Registration
CA	Comunità Ambiente
CAM	Minimum Environmental Criteria
CAP	Common Agricultural Policy
CC	Coordination Committee
CCIAA	Chamber of Commerce, Industry, Crafts and Agriculture
CREA	Council for research in agriculture and the agrarian economy analysis
CREA-ZA	Research Centre for Animal Production and Aquaculture
CSA	Community Supported Agriculture
CSR	Regional Complement to the National CAP Strategic Plan
DEB	Department of Environmental Biology – La Sapienza University
DGR	Regional Government Resolution
EC	European Commission
EVA	European Vegetation Archive
FAO	Food and Agriculture Organization of the United Nations
FIRAB	Italian Foundation for Research in Organic and Biodynamic Agriculture
GAI	Italian Aeronautical Group
GAS	Solidarity Purchasing Group
GDO	Retail supermarket chains
GF	Green Factor
GPP	Green Public Procurement
GROS	Gruppo Romano Supermercati
HD	Habitats Directive 92/43/EEC
HORECA	Hotellerie-Restaurant-Café
IGM	Military Geographic Institute
IIS	State Upper Secondary Education Institute
IPSEOA	State Vocational Institute for Hospitality and Food Services
KPI/LPI	Key Project Indicators/LIFE Project Indicators
LAG	Local Action Group
LDS	Local Development Strategy of LAGs
MASAF	Ministry of Agriculture, Food Sovereignty and Forests
MASE	Ministry of the Environment and Energy Security
N2000	Natura 2000
NIC	Natura in Campo brand
NRN	National Rural Network
NSP	CAP National Strategic Plan
NQS	National Quality System
ODAF	Order of Agronomists and Foresters
PAF	Prioritized Action Framework for N2000
PAT	Traditional Agri-food Products
PGAF	Forest Management Plan
PNALM	Abruzzo, Lazio and Molise National Park
PNRR	National Recovery and Resilience Plan
RDP	Rural Development Program

RVR	Regional Voluntary Register
SAC	Special Area of Conservation
SIEV	Veterinary Epidemiology Information System
SPA	Special Protection Area
UA	Agricultural University

3. Executive Summary

Project objective and overall approach

LIFE GRACE aimed to promote the long-term conservation of three semi-natural HD habitats (*6210 Festuco-Brometalia, *6220 Thero-Brachypodietea and *6230 *Nardus* grasslands) through their usage by seven hardy breeds threatened by genetic erosion (Maremma cow, TPR, Tolfa, Maremma and Esperia horses, Grey and Monticellana goats), within three SPAs in the Lazio Region (IT6020005 - Monti Reatini, IT6030005 - Comprensorio Tolfetano-Cerite-Manziate, IT6040043 - Monti Ausoni e Aurunci). This objective was planned to be achieved through the definition and testing of:

- a **cooperation model on marketing**, by involving 70 food distribution points in the improvement of market opportunities for meat coming from N2000, and 10 Public Administrations in the adoption of voluntary requirements for public canteens services. The model aimed to increase N2000 meat sales by 10% and to strengthen the visibility and market positioning of grass-fed products.
- a **cooperation model on biodiversity conservation**, engaging farmers in the adoption of best practices to improve the state of conservation of N2000 habitats through utilization of RDP funds. Specific agreements of 5 years were planned to be signed by 40 farmers of the 3 N2000 areas. The model aimed to restore/maintain at least 10% of the 3 EU habitats and to increase the population of the target hardy breeds by 5%.
- a **cooperation model on biodiversity monitoring**, by involving 100 farmers in the collection of 1.000 biodiversity monitoring records.

Replication activities were expected to involve 50 farmers outside the project area, by signing the Code of Conduct. All these main activities were planned to be accompanied by different stakeholders' involvement actions and wider **campaigns for public as consumers and for farmers**, with an outreach objective of 100 Hotellerie-Restaurant-Café (HORECA) representatives and 100.000 consumers.

Overall performance and comparison with expected results

LIFE GRACE successfully delivered the majority of its planned outputs and, in several areas, exceeded expectations, producing significant governance and capacity-building impacts. The project achieved particularly strong results in the development of the **marketing model**, **replication activities** and **communication campaigns**. Although the **conservation and biodiversity monitoring models** could not be fully operationalised – due to structural constraints beyond the project's operational scope, particularly regional governance gaps and delayed enabling measures – they nevertheless delivered all expected methodological outputs, generating a robust and transferable conceptual and technical framework.

External context and adaptive capacity

The context in which the project operated underwent several **significant unexpected external shocks and structural constraints**. Some of these were common to all EU member states, such as the impact of COVID-19, the rise in energy and raw materials costs linked to the conflict in Ukraine, and timeline shifts in the adoption of the 2021-2027 CAP National Strategic Plan (NSP). Others were structural to the national and regional implementation of the HD in Italy and directly affected the project's operational framework, such as the absence of habitat baselines, the ongoing definition of site-specific conservation objectives/measures, the revision of the AA framework, and the unavailability of N2000 support measures for most of the project period. Additional challenges – such as limited stakeholder availability, supply-chain fragmentation, generational decline in the livestock sector, and widespread misperceptions of extensive grazing – further influenced the pace and scope of several actions.

In response to this complex scenario, the partnership demonstrated a strong adaptive capacity. Activities were reorganised, methodologies refined and new operational pathways introduced to maintain feasibility and effectiveness. The 16-month amendment played a decisive role, allowing the consortium to recover delays, consolidate governance arrangements and strengthen the technical and territorial components of the project. This adaptive approach enabled LIFE GRACE to transform several constraints into opportunities for innovation, cooperation and capacity building, and to generate a wide range of additional, unplanned results that significantly expanded the project's scope and long-term impact.

Results of the Marketing Cooperation Model

LIFE GRACE expanded the level of **territorial and market cooperation** far beyond the initial scope, deploying a larger, more stable and diversified business network than initially planned:

- one **cooperation model on marketing** was developed, providing an operational framework for territorial co-marketing agreements and a practical guide to support local socio-economic development based on grass-fed livestock systems;
- following 12 World Café events and 11 informal initiatives, **3 GRACE Business Networks** were created mobilising **142 actors** across the supply chain (54 farmers/processors and 78 food distribution points) (vs 120 planned: 50 farmers/processors and 70 food distribution points);
- **aggregating entities** (biodistricts, cooperatives, associations) involved in the GRACE networks significantly expanded the network's effective reach beyond the number of formal signatories;
- **Guidelines for public canteens** and a (not planned) **tender model** for integrating CAMs into school catering procurement led to the written engagement of **15 municipalities** (vs 10 expected);
- **5 Box Schemes** and solidarity purchasing initiatives were activated (vs 3 planned);
- the involvement of **10 supporting institutional bodies** (i.e. Chambers of Commerce, municipalities, Agricultural Universities - UAs, Local Action Groups - LAGs, vocational schools) in the GRACE Business Networks consolidated a genuine multilevel cooperation framework, fostering integration and alignment between supply and demand. **Strategic collaborations** with National Association of Italian Municipalities (ANCI) Lazio and Slow Food, further strengthened the promotion of environmentally respectful extensive livestock farming;
- specifications for the inclusion of grass-fed livestock products from N2000 areas in the **Natura in Campo (NIC) brand** were developed and are now available for adoption by the regional authorities;
- the co-marketing strategy, based on the NIC brand and a suite of promotional tools ensured the necessary **visibility for the Business Network**;
- integration of GRACE principles into **Rome's Food Council**, influencing school catering and city-wide restaurant branding (not planned).

Socio-economic monitoring showed that companies within the GRACE network recorded an average **+27% increase in N2000 meat sales**. Although the aggregated target of +10% sales growth was only partially achieved (+1,2% overall volume), specific compartments saw exceptional growth, particularly bovine and equine meat increased by **+20,6%** and **+29,7%** respectively. Consumer awareness of N2000 increased from 28% to 43% (**+17%**).

Results of the Conservation Cooperation Model

The conservation model faced the most significant structural constraints, linked to: the absence of updated habitat baselines, the ongoing definition of site-specific conservation objectives and measures, the revision of the AA framework, and the unavailability of N2000 support measures for most of the project period. These constraints delayed authorisation procedures and prevented the full operationalisation of the model.

Despite these challenges, LIFE GRACE delivered a more advanced conservation governance model than originally envisaged:

- an unprecedented knowledge base for semi-natural grasslands was produced, filling a long-standing regional gap that had prevented any planning and implementation of management actions: detailed, updated, field-validated **habitat maps** for the three SPAs; a **diachronic analysis (1954-2024)** of vegetation transitions, funded with extra-LIFE resources; and an innovative analytical model on **livestock farming and grazing use** of the target habitats, integrating data from the National Data Base for Livestock Registration (BDN) and the Common Agricultural Policy (CAP) (not planned);
- a **three-tiered governance toolkit** was produced, representing a ready-to-use framework for future N2000 management: Environmental Agreement Model, One Cooperation Model, Grassland Management Guidelines (the latter not planned);
- a set of **operational tools** was provided to the Lazio Region to support the strengthening of the regional framework for Article 6 HD implementation, including a list of pre-assessed agro-pastoral interventions within the project sites (not planned) to support AA procedures for habitats restoration interventions;
- the initially planned cooperation with individual farmers was shifted to a **territorial agreement framework** that mobilised collective land managers and municipalities: 9 large-scale agreements were signed involving more than **775 breeders**, far exceeding the 40 breeders initially expected and creating a territorial governance structure stronger than originally envisaged;
- an additional group of **40 breeders** was engaged by signing individual GRACE deals (Business Accords and Codes of Conduct) within the project areas;
- direct **technical, scientific and administrative assistance** was provided to common land managers that had signed the agreements in restoration projects' design and authorisation procedures;
- **7,5 ha of grassland habitat 6210* were restored** by the Municipality of Rivodutri (with funds from the RDP measure 8.5), as a first application of the cooperation model;
- **a complete pipeline of technical and administrative documentation** was developed for over **300 ha** of habitats 6210*, 6220* and 6230*, ready for authorisation and future implementation;
- **funding mechanisms supporting breeders** in the habitat management and in the conservation of breeds at risk of genetic erosion were enabled, most notably by supporting the Regional Agriculture Directorate in the **first-ever activation of the N2000 grazing compensation scheme in the Lazio Region**, which received **1.162 applications** from farmers on **36.809 ha** (for a total of 6.768.075,64 € requested);

Although the target of restoring/maintaining 10% of the habitats could not be reached, the **post-restoration survey** in Rivodutri provided clear evidence of rapid floristic and structural recovery of habitat 6210*, including the presence of orchid populations, confirming the effectiveness of the restoration approach. Monitoring of local livestock breeds showed a **6% increase in breeding females** across the seven target breeds (vs the +5% expected) and the improvement of the Maremmano cattle genetic-erosion risk status from "endangered" to "vulnerable". These results demonstrate the strong ecological coherence between extensive grazing systems and the conservation of both semi-natural grasslands and hardy local breeds. Finally, the effectiveness of the governance effort is reflected in the socio-economic monitoring results, which recorded a **+51% increase in pasture movements** in the Ausoni-Aurunci SPA, indicating a marked shift towards more frequent and extensive use of pastures by livestock farms, and thus confirming that the cooperation model has already started to influence grazing practices, even where restoration targets could not be fully achieved.

Results of the Monitoring Cooperation Model

The multi-annual monitoring cycle could not be initiated due to the delays in the implementation of grassland restoration measures and therefore the model did not reach the expected quantitative targets in terms of number of farmers involved and monitoring records collected. Nonetheless, the model produced a coherent, transferable framework that can be readily scaled up and integrated into regional monitoring schemes as soon as institutional and administrative conditions allow:

- a fully operational participatory monitoring toolkit, including five simplified **field-validated protocols** for habitats and pressures, and a **customised mobile application** enabling farmers to record field data in a standardised and user-friendly way;
- **24 regional technicians** were trained on habitat monitoring, exceeding the expected 10, strengthening the Region's long-term monitoring capacity;
- two training events were organised for farmers in Campodimele and Monte Romano, involving **11 livestock breeders** in the practical use of the Collect Mobile app.

Capacity building and professional training

Capacity building emerged as a major, unplanned achievement, addressing structural capacity gaps, strengthening the skills of actors across the supply chain, creating a more informed and cohesive territorial network:

- **120 farmers** were informed on N2000, conservation measures, and GRACE objectives and activities;
- **35 municipalities** were trained, equipped not only of guidelines for public canteens, but also of a technical tender model for Minimum Environmental Criteria (CAM) implementation (not foreseen). This intervention directly addressed a structural constraint affecting many small and medium-sized municipalities: structural constraints in applying CAM/GPP, lack of operational tools for sustainable procurement, and difficulties in accessing MASAF (Ministry of Agriculture, Food Sovereignty and Forests) funding dedicated to school catering;
- **64 agronomists and foresters** were trained in pasture planning (not foreseen), significantly strengthening the pool of professionals capable of supporting municipalities, collective land managers and farmers in designing grazing plans, restoration projects and N2000 compliant interventions. This professional upskilling directly addressed one of the structural bottlenecks identified at project start – the lack of grazing plans or Forest Management Plans (PGAFs) integrating N2000 conservation requirements – and represents one of the most durable legacies of the conservation model;
- **117 students** of hospitality and agrifood institutes were trained, with **23 professional certifications** issued (not foreseen). This training was designed to fill the generational gap in the livestock and butchery sectors, equipping young professionals with the skills needed to strengthen the grass-fed supply chain and to act as ambassadors of its added value within catering and tourism circuits;
- **27 journalists** were trained through an accredited course on biodiversity communication (not foreseen). This helped correct entrenched misperceptions about extensive grazing, often confused with intensive livestock systems and strengthened the social legitimacy of grazing as a conservation tool.

Replication and Transfer

Replication efforts extended far beyond the initial targets, demonstrating the scalability of the LIFE GRACE governance models beyond the 3 project SPAs. The **Replication and Transfer Plan** provided operational guidance for scaling up the models. A **Road Show** of 5 seminars and 4 meetings led to:

- **38 farmers** (23 inside the project area, 15 outside) signed the **Code of Conduct**, translating ecological evidence into practical grazing guidelines;
- **3 large-scale agreements** with Abruzzo, Lazio and Molise National Park (PNALM), Selva del Lamone Natural Reserve, and LAG Anius Pregius;
- 1 restoration project integrated into the **Local Development Strategy** (LDS) of LAG Castelli Romani ("Terra Capitale" project);
- **533 farmers** involved (far exceeding the 50 expected for signing the Code) across a total of **103.659 ha**, including 300 ha in **Liguria and Umbria**;
- **1 restoration project implemented** in Selva del Lamone (re-establishment of the ecological conditions of habitat 6220* on 5.600 m^2);

- the **launch of a short supply chain** with the Anius Pregius LAG;
- the production of **20 testimonial videos** featuring farmers and other stakeholders in the supply chain further strengthened the model's transferability.

Communication, Outreach and Networking

LIFE GRACE delivered a communication and dissemination campaign that far exceeded expectations, significantly amplifying public visibility and stakeholder engagement across all target groups:

- **8.924 unique website visitors** (vs 5.000 expected) and **over 350 social media followers** (vs 200 expected);
- **over 1 million views** generated by the web and social media campaign (vs 100.000 expected);
- **28 press releases** (vs 22 expected) and extensive media coverage (press review collected 171 items), and **an article in the specialised magazine** *L'Informatore Agrario*;
- **about 48.500 printed materials** produced and disseminated (1.500 project leaflets, 2.000 farmer leaflets, 10.000 consumer leaflets, 1.000 HORECA foldables, 30.000 z-cards, 4.000 Grace cards), several of which not foreseen;
- **27 consumer-oriented events** involving 2.500 consumers, 45 entities managing collective canteens (vs 30 public canteens managers planned), and 100 HORECA operators;
- **32 farmer-oriented events** involving 155 farmers, 69 common land managers, 46 trade associations and 32 supply-chain actors, largely compensating the 3 field days not carried out;
- **38 networking events** involving around **1.400 participants** (vs 175 expected), strengthening synergies with major LIFE and EU initiatives;
- the **final workshop** gathered 137 participants (vs 100 expected) and generated an additional dissemination toolkit (USB sticks, shoppers, notebooks) not originally planned.
- publication and wide dissemination of the **Layman's Report** (649 direct recipients, 1.189 secondary recipients, largely exceeding the planned printed copies and digital submissions: 500 and 250 respectively) and of the **Guide "From our pastures to your table"** featuring 15 Nature/Food trails (not planned).

These additional or expanded achievements, many of which not foreseen in the original proposal, demonstrate the project's capacity to generate durable environmental, economic and social benefits and to leave a robust legacy of tools, partnerships and governance models ready for post-LIFE uptake.

Institutional impact and After-LIFE foundations

One of the most significant legacies of LIFE GRACE lies in its **institutional impact**. The operational needs and governance gaps encountered during the project acted as a **trigger** for a major internal reorganisation within ARSIAL, leading to the creation of a new office dedicated to **Agriculture-Environment relations, Collective Lands and Forests**. In parallel, the Lazio Region conferred new strategic responsibilities to ARSIAL, including the implementation of the **National Forestry Strategy** and activities related to civic-use lands.

These changes substantially expand ARSIAL's mandate in areas directly connected to N2000 grassland governance, providing the structural backbone for the **After-LIFE Plan**. The governance tools developed by the project – Environmental Agreement Model, Cooperation Model, Grassland Management Guidelines – can now be integrated into ARSIAL's ordinary functions, ensuring continuity in supporting municipalities, collective land managers and breeders. The strengthened institutional mandate also creates favourable conditions for future activation of N2000 support measures, streamlined authorisation procedures, and the progressive uptake of the monitoring and conservation frameworks tested by the project.

In this sense, LIFE GRACE not only delivered concrete results during its implementation but also contributed to reshaping the institutional framework necessary to secure the long-term conservation of semi-natural grasslands in Lazio. The structural changes initiated within ARSIAL – and triggered by the project's operational experience – constitute a durable enabling environment for

the After-LIFE strategy and for the future consolidation of extensive grazing as a driver of biodiversity conservation in the Region.

4. Introduction

4.1. Background, problems and objectives (as foreseen in the proposal)

Environmental problem/issue addressed and baseline situation

At the time of the proposal, semi-natural grassland habitats of EU interest (6210*, 6220*, 6230*) were deteriorating due to the disappearance of extensive grazing livestock farming (fallen by 50% in the last 25 years), which was often economically unsustainable and therefore abandoned, leaving the grasslands to evolve in shrubs and forests. Compared to those obtained in large intensive farms, livestock productions obtained from extensive grazing were not valued by the final consumer, whose search for the lowest price of meat reduces farmers' income. The consumption of meat per capita in Italy was mainly made up of pork and poultry meat coming from intensive farms (almost 60% of total meat consumption), while the consumption of horse, sheep and goat meat was only about 1 kg per capita/year. Undergrazing and abandonment were also leading to the genetic erosion of the local autochthonous breeds of agricultural interest, which are closely linked to pasture habitats, adapted to the local limiting conditions under a thermal, water and food profile, and whose centuries-old rational exercise of grazing resulted in the creation of these valuable semi-natural grassland habitats. The lack of funds financing the maintenance / restoration of pastures of EU interest inside the regional 2014-2020 RDP did not support the implementation of the conservation measures of these N2000 grassland habitats. Moreover, it was not possible to adequately monitor the conservation status of the grassland habitats/species of EU interest since farmers are not involved in their monitoring.

LIFE GRACE project aimed to promote the conservation of the three priority semi-natural habitats that share the need for grazing as a condition to avoid deterioration or loss, by:

- raising awareness among the general public on the role of agriculture as a driver of sustainable development and biodiversity conservation, including habitats in danger of disappearance and native livestock breeds with a high risk of erosion, and improve market opportunities for sustainable products
- raising awareness among farmers of best practices to be put in place in N2000 areas/habitats to improve the habitats conservation status through utilization of RDP funds
- encouraging farmers in citizen science actions, by collecting information for the monitoring on farmland biodiversity.

Information/communication strategy implemented in function of the environmental problem addressed by the project

The communication strategy of the project aimed not only to raise awareness, but also to prompt mechanisms to orientate a reorganization of the supply chain, for the production, distribution and consumption of N2000 meat. The LIFE GRACE project encompassed different but integrated messages to be communicated:

- The N2000 network aims at the conservation of pastures with a wide range of flora, and of native breeds at risk of genetic erosion
- The consumption of meat from extensive grazing livestock farming contributes to the maintenance of the landscape and the conservation of biodiversity
- The consumption of meat from extensive farms helps to reduce the intake of saturated fatty acids in the diet.
- Livestock farmers in N2000 areas are the custodians of common goods and ecosystem services
- Breeders in N2000 areas are allies of nature. Biodiversity is an ally of quality farming.

The key message (concept) to communicate was identified in: "the consumption of meat from the pastures of the network N2000 is good for environment and health." The campaign pay-off "Dai

nostri pascoli alle vostre tavole" ("From our pastures to your tables") also works as a *claim* that echoes that of the EC "From farm to fork" strategy.

Stakeholders targeted

The stakeholders targeted are those directly or indirectly involved in the management of the three N2000 grassland habitats, in the supply chain of the meat from the local breeds, as well as in the regional planning for the conservation of N2000 habitats and for rural development. These stakeholders were expected to implement the cooperation models (habitats conservation and monitoring, and meat marketing) proposed by GRACE:

- Operators in the agricultural sector: they include breeders and their associations, which operate within the three N2000 areas with the targeted habitats and breeds.
- The Lazio Region, as the managing body of the N2000 sites and the RDP management authority.
- Municipalities and other local public administrations.
- The distribution and sales network: it includes market channels as HORECA operators and retailers such as butchers, which close the meat marketing chain.

Monitoring of the project impact

LIFE GRACE was expected to monitor (C1):

- the socioeconomic impacts on farmers and market/consumers choices, compared to the baseline situation resulting from the socio-economic analysis (A2) and the market analysis (A3). In particular, the A3 analysis was expected to provide the baseline to evaluate the GRACE impact in increasing the market potential for meat originating from the N2000 areas. This monitoring was to be carried out through direct interviews of involved farmers/producers, consumers, and sellers.
- the environmental impacts on biodiversity (the 3 habitats and the 7 local breeds at risk of genetical erosion), compared to the baseline situation resulting from the environmental analysis (A2). This monitoring was also to be carried out through citizen science using the tools developed by the project (B3).

Socio-economic context

At the time of the proposal, the 3 N2000 areas progressively experienced significant economic, social and territorial changes. There was a socio-economic fragmentation in which depopulation continued in the most internal and mountainous areas. The progressive degradation of more traditional agro-silvo-pastoral systems has led to a significant reduction in pastoralism and grazing. In parallel with the decline of grazing, and its consequences for traditional breeds and habitats, the growing role of large-scale distribution in meat market had shifted consumption towards pork and poultry, which together accounted for almost 60% of total meat consumption. This shift was driven by supply chains based on fixed-housing farms, which ensured higher carcass yields and shorter, more concentrated production cycles following the full-in/full-out model. This led to a progressive loss of market shares in the local short supply chains, which are less competitive than the large-scale distribution. This evolution led to a drastic reduction in the demand and market value of the meat of the indigenous breeds bred on pasture, characterized by a lower index of weight increase, mainly intended for short local supply chains, despite the nutraceutical value and environmental of meat products obtained without antibiotics, without food forcing, in full respect of animal welfare and with the lowest ecological footprint. By contrast, the development of recreational activities, agritourisms and other facilities that offer catering services and eno-gastronomic experiences appeared to be triggering a 'reversal' process of an image too often discredited of these mountain territories, providing new tangible and intangible values.

4.2. Expected longer term results (as anticipated at the start of the project)

The GRACE strategy was the creation of a self-sustained virtuous model of socio-economic reborn based on sustainable production, in which the preservation of biodiversity of agricultural interest goes along with the preservation of habitat and species, guaranteeing to farmers a market for their product, and encouraging the extensive grazing, preventing the vegetation banalization and bush encroachment.
The conservation model tested by at least 40 farms was expected to be promoted to other farms, setting the stage for a broader replication after the end of the project. The best practices identified were expected to be transferred and replicated in similar context. The inclusion in the RDP of priorities for farmers was expected to trigger a catalytic process, increasing funding opportunities for sustainable management of agricultural practices and raising farmers' awareness of the benefit they could continue to obtain from the funds made available.
The monitoring protocols of habitats to be implemented by farmers were expected to provide a simplified tool that could be used after the end of the project and transferred to similar contexts. The farmers involved in the project were expected to continue the monitoring activities. The implementation of specific training was expected to provide farmers with knowledge and tools to initiate or strengthen healthy and sustainable business.
The marketing initiatives related to agricultural products deriving from sustainable environmental practices were expected to continue after the end of the project and the products were expected to be distributed.

5. Administrative part

LIFE GRACE involved 5 beneficiaries. **ARSIAL**, coordinating beneficiary, thanks to its institutional role of preserving agriculture biodiversity in the Region, has direct contact with farmers, ensuring their engagement in the project actions in particular in the implementation of agreements, follow farmers, training, etc. **CA** is a company with multi-year experience at national and Community level in the implementation of the Habitats and Birds directives and in the evaluation, monitoring and management of LIFE projects, and acted as technical and administrative manager of the project and supporting ARSIAL in ensuring a regular progress of the activities and the constant monitoring of deadlines and difficulties. **DEB** was responsible for all activities related to habitat conservation, the development of monitoring protocols for the target habitats, the training of regional staff and farmers in habitat monitoring, and the monitoring of impacts on biodiversity. **FIRAB** is a research foundation with a specific focus on organic farming innovation. It dealt with activities linked to marketing, monitoring of socioeconomic impact and to awareness raising among operators. **GF** is a company operating in the environmental field dealing with communication, studies and research in the field of the green economy. Its competencies ensured the proper implementation of dissemination, marketing and monitoring of socio-economic impact activities.
Governance of the project was ensured by a **Coordination Committee** (CC) chaired by the Project Responsible and supported by the Project Manager, it includes the Technical and Administrative Referents of each beneficiary, the Coordinator of Communication activities, the Administrative Manager and the Monitoring Responsible.

From the start of the project, one amendment to the Grant Agreement was made concerning the extension of the project duration, the revision of the timing of actions, deliverables and milestones, and the replacement of the legal representative of the coordinating beneficiary.

6. Technical part

6.1. Technical progress, per Action

A. Preparatory actions

A1 Realization of a scoping study on best practices on biodiversity conservation and monitoring activities implemented by farmers

Lead beneficiary: CA

Other beneficiaries involved: NA

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/09/2020	01/09/2020	31/01/2021	11/03/2021

Description of the activities undertaken and outputs achieved

The activities started in September 2020 with the creation of the format for drafting the case studies, the grid with the evaluation criteria of the cases and the guide for their drafting. In October the bibliographic search on the internet started based on the identified criteria, among which: target the EU grassland habitats, local breeds threatened by genetic erosion, involve farmers in conservation measures/monitoring, use EU funds, etc. A total of 23 case studies were identified, to which a score has been assigned in accordance with each criterion. The 5 cases to be drawn up were selected based on the score obtained. The drafting of the selected case studies ended on 26/02/2021 with the production of the expected *deliverable* "Scoping study on best practices". In one case it was necessary to integrate the information by contacting the project coordinators (case study on biodiversity monitoring by farmers in Austria). This also gave the opportunity to organize a networking meeting to deepen the issue (see D4). The study provides 5 examples of best practices in biodiversity conservation and monitoring implemented by farmers across the EU. Each case study provides a description and analysis of each identified good practice, the LIFE Grace actions which can benefit from each practice, and an overall assessment including strengths and weaknesses with respect to the LIFE Grace objectives. The case studies were used as basis and inspiration for the cooperation models (actions B). Those in which RDP measures are used to finance investments and commitments from farmers for the conservation and monitoring of N2000 habitats, were also the basis for initiating a dialogue with the regional RDP Management Authority in the drafting of the new RDP 2021-2027 (see B2).

Continuation after the end of the project

The action will not continue, as preparatory to the core actions, but the good practices identified in the Scoping study will be useful not only for the LIFE Grace cooperation models, but they can be used to be adapted and replicated in other territories by other subjects wishing to involve farmers in improving and monitoring the conservation status of EU grassland habitats. It can be assumed that the benefits of this action will continue beyond the duration of the project.

A2 Environmental and socioeconomic analyses of the 3 target areas

Lead beneficiary: DEB

Other beneficiaries involved: FIRAB, ARSIAL

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/09/2020	01/09/2020	31/12/2021	23/12/2022

Description of the activities undertaken and outputs achieved

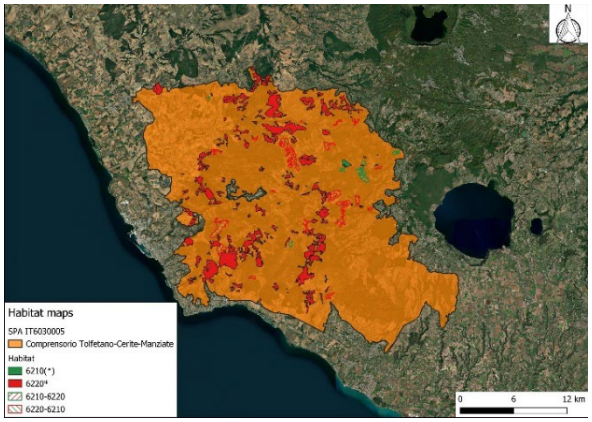
Environmental analysis

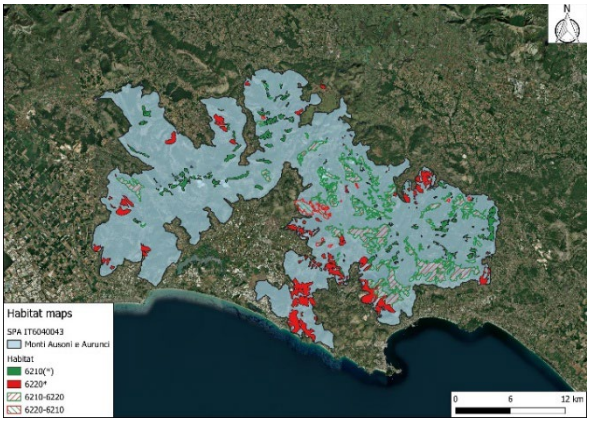
The environmental analysis was completed in December 2022. In the absence of a complete cartography of N2000 habitats in the Lazio Region, activities started with the identification of secondary grasslands referable to the N2000 habitats 6210, 6220, 6230 in the project area, by comparing the available vegetation and land cover maps with very high resolution satellite images and aerial photos. To assess the changes that occurred over the last two decades within the three SPAs, a land cover analysis was conducted through the Collect Earth platform, which allows a systematic and standardized comparison of satellite images acquired in different years. Satellite imagery from 2000 and 2020 was compared in order to detect variations in vegetation cover, including shrub encroachment and the reduction of open grassland areas. This step was specifically aimed at refining and validating the final habitat mapping. The results indicate that approximately 10% of the areas currently classified as secondary grasslands show signs of degradation, due to the expansion of shrub and woody species.

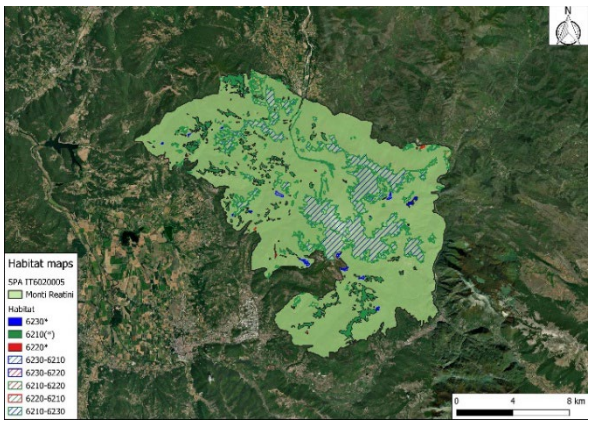
Based on preliminary results, 195 vegetation surveys were selected within the areas identified as the targeted habitats. These surveys included records of about 800 species. The selected relevés were extracted from EVA (European Vegetation Archive), a European vegetation database to which DEB contributes as a partner. The surveys were organized in a SQlite database (*deliverable*, "Vegetation database") which served as a baseline for the vegetation characterization of the target areas.

The areas preliminarily identified through the above comparison as potentially hosting one or more target habitat, were then surveyed during dedicated field campaigns carried out in spring and summer 2021 and 2022. These field activities were specifically conducted to validate and refine the potential maps produced in the earlier analytical phases. Phytosociological relevés were carried out following standard procedures for Natura2000 habitat monitoring and complemented with data from the Vegetation database.

Field surveys and additional ground truth points from photo-interpretation were used as training and test points for supervised classification of Sentinel 2 satellite images. The model obtained from Classification and Regression Trees was applied to obtain classified maps representing the distribution of target habitats in the three SPAs. Postprocessing was done by overlapping the classified map with a Digital Elevation Model and a slope raster layer. The modelling process resulted in raster maps with a spatial resolution of 10 m showing the distribution of the 3 habitats within the project area (*deliverable* "Habitat Modelling"). These maps were then used for the creation of habitat maps. To this end, the areas where the presence of one or more target habitats was found were manually digitized in the form of polygons, and represented on map at a scale of 1:25,000, superimposed on the boundaries of the SPAs and SACs that exist in the project area, and on the IGM (Military Geographic Institute) topography.







In addition, descriptive statistics relating to the extension of the target habitats in the single areas and to the distribution of the surfaces in terms of size of the single polygons of semi-natural grasslands were calculated. In total there are approximately 20.000 ha of semi-natural grassland hosting at least one of the target habitats, almost equally divided between habitat 6210 and habitat 6220, with habitat 6230 scattered in small patches. The area actually covered by the three habitats is significantly smaller, and amounts to 11.000 hectares approximately. The habitat maps provide also information on the conservation status of the target habitats and a clear spatial distinction between areas where the habitats are effectively present and areas characterised by degraded grasslands, post-cultivation stages or advanced shrub encroachment. This distinction allowed the identification of priority zones for conservation and restoration measures, as well as areas where recovery potential is limited or no longer feasible (see B2). Maps and the related report are provided in the corresponding *deliverable* ("Habitat Maps"). Based on the habitat maps, intersection maps were then produced between the areas hosting the target habitats and the conservation measures in force within the relevant protected areas (*deliverable*, "Maps overlaying the conservation measures of the target grassland habitats and the current and potentially grazing areas"). In the meantime, the list of local indicators, preliminary identified based on peculiar characteristics of each site (invasive species indicators of overgrazing, locally widespread shrubs, orchid species observed in the area etc) was subsequently completed through the analysis of vegetation data and by drawing on expert opinions and interviews with livestock farmers (*deliverable* "List of local indicators").

Socio-economic analysis

The analysis was carried on through:

- Questionnaires, administrated to farmers and meat producers, to identify critical issues and needs of livestock farms in relation to the economy of meat produced in N2000 sites. The activities involved: the formulation of the contents of the questionnaires, which were defined to integrate those needed for the market analysis and avoid overlaps (A3); the identification of the potential respondents; and the methods of delivery. The delivery started in April 2021 (*milestone*, "Start of questionnaires administration"), by sending via PEC or WhatsApp, due to the COVID pandemic, a link to fill in the questionnaire online on "sondaggi.firab". Visits and direct contacts were also used to resolve asymmetries in the compilation among the 3 SPAs. In December 2021, the collection of questionnaires was completed with 60 responses.
- Literature survey and analysis of regional and national databases for the 3 SPAs, aimed at contextualizing the extensive farming and production system. Starting from the preliminary

maps of the habitats, ARSIAL developed an original model to measure the presence/absence and intensity of anthropic use of each habitat (use-non-use, species of zootechnical interest) at a cadastral parcel scale, by linking a different set of databases (Land registry, AGEA graphic company files, AGEA graphic cultivation plans, BDN for livestock, Biological Information System - SIB for the organic method; Regional conservation network for breeds threatened by genetic erosion, SIV for slaughtering).

The results of the analysis were presented in the deliverable Report on socioeconomic assessment (*deliverable*, "Socioeconomic report"), which includes the farms profile, their commercial strategy, land management, critical issues, opportunities, and prospects. The outcomes show that transitional formations to forests represent a significant percentage (about 20% and 50%) of the grasslands surface in all the 3 SPAs, since the current level of grazing is not sufficient, due to a strong reduction in the number of small farms (30-40% in 20 years) and in livestock stocks (particularly sheep), with a marginalization of the local breeds. Furthermore, the absence of suitable structures for fattening, and the shortage of fodder (due to the abandonment of arable land and the raw materials crisis exploded in 2021, then exacerbated by the war in Ukraine) induce breeders to sell young animals to feeders outside N2000. Despite the high adherence to the organic method, most of the products are sold as conventional.

Continuation after the end of the project

The model developed by ARSIAL by using public databases, to measure the real-time evolution of the relationship between habitats and socio-economic dynamics, is replicable in all EU Regions, and benefits of this action will continue beyond the duration of the project.

The distribution maps of the target N2000 Habitats in the 3 SPAs, previously unavailable in the entire Lazio Region, represent a key reference tool for regional authorities and protected area managers, the integration of habitat-related information into territorial and sectoral planning instruments, and the definition of future conservation and restoration initiatives. Their structured format and methodological replicability ensure that the benefits of Action A2 will extend beyond the LIFE GRACE project duration, both within the Lazio Region and in comparable ecological contexts.

Complementary action outside LIFE

DEB was also involved in the regional project "Natura2000 Habitat maps for SACs in Lazio", funded under the RDP Lazio and started after the launch of LIFE GRACE, aimed at producing a regional-scale cartography of N2000 habitats. While both projects relied on floristic-vegetation surveys, they differed in objectives, spatial scale and operational purposes. Within LIFE GRACE, Action A2 specifically focused on the detailed detection, mapping and ecological characterisation of grassland habitats *6210, *6220 and *6230 in three SPAs, in support of conservation and restoration actions. The coordination of field surveys allowed methodological synergies and an optimisation of sampling efforts, while ensuring full separation of activities, outputs and financial reporting. The two projects are therefore complementary and non-overlapping, with LIFE GRACE providing site-specific, high-resolution outputs and the RDP project supporting regional planning needs.

Based on the first results of A2, ARSIAL developed, with own financial resources, new services through: acquisition of the 1954 GAI (Italian Aeronautical Group) flight from the IGM, for the entire Lazio Region and related orthorectification, and the assignment to the University of Molise of the analysis of long-term vegetation dynamics based on historical aerial imagery, including land-cover transitions for the period 1954-2016, starting from the 1954 GAI flight (see also the section 'Complementary action outside LIFE' under Action C1). The diachronic analysis was aimed at reconstructing medium- and long-term landscape trajectories, with particular reference to the persistence, contraction or transformation of semi-natural grasslands into shrublands or forest formations. This service has a dual purpose:

- For the three SPAs, this historical perspective allowed the interpretation of current habitat distribution patterns in the light of past land-use changes and management abandonment processes, providing a stronger contextual framework for the assessment of habitat conservation status. The integration of long-term transitions with recent habitat maps contributed to a more robust definition of priority zones for conservation and restoration measures and supported the design of targeted management actions under Action B2 and subsequent monitoring activities.
- For the whole Lazio Region, it can be used for to propose the recovery of areas affected by woodland transition pursuant to Legislative Decree n. 34/2018 and subsequent amendments (Testo Unico Forestale and related implementing decrees).

A3 Market analysis

Lead beneficiary: GF

Other beneficiaries involved: ARSIAL

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/10/2020	18/09/2020	30/06/2021	30/09/2022

Description of the activities undertaken and outputs achieved

The activities were launched in September 2020 with the bibliographic research of market surveys and sector studies relating to the stakeholders of the 4 target categories (meat farmers/producers, distributors and retailers, HORECA sector, including public canteens and general users/consumers) and the meat markets, in order to define the questionnaires. For the purposes of greater integration of the information, a single questionnaire targeting the meat farmers for actions A2 and A3 was defined. Subsequently, the subjects to whom administer the questionnaires were identified from different lists and databases: companies in the agricultural sector, actors in the supply chain, economic operators in the meat sector notified to the health authority and canteens operating in the region. The administration of the questionnaires to the subjects identified started at the end of April 2021 and was completed in December 2021, exceeding the expected number of 15 stakeholders for each category, for a total of 60 stakeholders: 60 breeders; 15 distributors; 16 HORECA operators; 23 consumers.

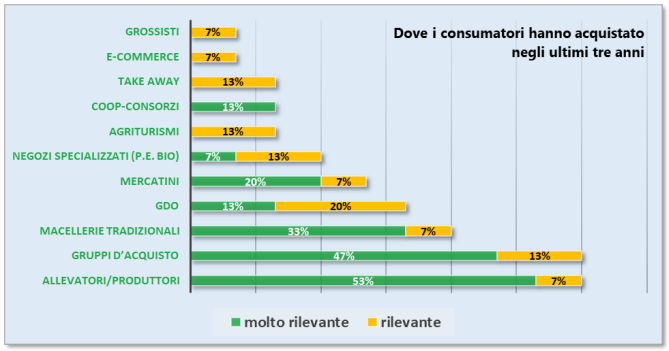
Starting from March 2022, 3 of the 5 focus groups planned were organized and carried out in streaming on the zoom platform: with distributors (7/03/2022, with 6 participants), with breeders (9/03/2022, with 14 participants), with consumers (28/03/2022, with 10 participants). The 4th focus group expected with the HORECA sector has been replaced with direct interviews (by telephone and in person) due to their unavailability to attend the focus group, reaching 15 people. For the same reason, the 5th (final) focus group, which served as a further moment of synthesis of the opinions collected, was modified in an extensive research in the press and on the web dedicated to the meat market, making it possible to complete the market analysis with more specific elements to be compared with the opinions expressed by stakeholders in the various stages of data collection. In this way, over 500 articles were classified, sorted by categories of interest, from market trends to meat sales and consumption strategies, consumer trends, and the opinions of stakeholders of particular attention.

Overall, 159 out the 120 planned stakeholders were involved through questionnaires (114), focus groups and interviews (45): 74 meat farmers/producers; 21 distributors/retailers; 31 HORECA operators; and 33 consumers.

Stakeholders reached	Completed questionnaires	Focus groups	**TOT**
Distributors/retailers	15	6	**21**
Consumers	23	10	**33**
HORECA operators	16	15	**31**
meat farmers/producers	60	14	**74**
TOT	**114**	**45**	**159**

In parallel, the analysis of the meat deriving from the 3 N2000 project areas was also carried out. The relationship between producers and the different links in the supply chain up to the final consumer was also deepened. The current consumption models in Italy and in the Lazio region, the quantity of sold meat from N2000 and the supply chain system in Lazio were investigated, with attention to both traditional and alternative direct sales channels such as farmhouses, retail and online sales. The level of adherence of individual farmers to quality certification models was also analysed, as it was the impact on the breeding system of the three SPAs of the NIC regional brand reserved for companies falling within Protected Natural Areas and N2000 sites. Important inputs were also obtained from direct talks with players in the supply chain, such as the Maremmana bio

consortium, and the Gruppo Romano Supermercati (GROS group) of the retail supermarket chains (GDO) in Rome.



The *deliverable* "Market analysis Report" was finalized on 30/09/2022. It includes the results of the analysis of both questionaries/focus groups and market data, reports, and studies. The results indicate that the meat sale is concentrated in the GDO, while the slaughtering sites within the N2000 areas are strongly reduced. The meat sector is not considered sustainable and information on the sustainability of meat from grazing livestock is lacking, while the National Quality System (NQS) models currently active for meat do not support grazing. However, consumers, HORECA and distributers recognize that livestock raised in areas of naturalistic value can be more appreciated by the market, and that the short supply chain and direct sales, are important tools to be enhanced for the maintenance and promotion of local activities and products.

Continuation after the end of the project

The action will not continue, as preparatory to the core actions. However, the monitoring of the press and web reviews will continue.

A4 Stakeholders involvement

Lead beneficiary: ARSIAL

Other beneficiaries involved: FIRAB, CA

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/09/2020	16/10/2020	31/12/2021	31/01/2023

Description of the activities undertaken and outputs achieved

A4.a Information to farmers and sharing views between farmers and the environmental authority

Sub-action completed in January 2022. Following preliminary contacts and meetings, the regional environment authority (21/05/2021) agreed to engage its staff in the information and training meetings for breeders, which were started in June 2021. Overall, 4 meetings were held in 4 municipalities falling within the 3 SPAs: Monte Romano 15/06/2021, Cantalice 14/04/2021, Leonessa 21/07/2021 and Fondi 29/09/2021. The meetings "Grasslands conservation through their use" were attended by about 30 local breeders each, and by local administrators and agricultural professional organizations. During the meetings the partners were supported by representatives of the Lazio Region and focused on the LIFE GRACE strategies, current grasslands decreasing trend, conservation measures for the 3 habitats, including the contractual measures, current and future RDP CAP measures, common lands and grazing management. All meetings were preceded by in-depth analysis on the issues in each of the territories involved. Further contacts and meetings were held (26/03/2021, 19/07/2021, 22/07/2021, 02/08/2021, 26/08/2021, 02/09/2021, 22/09/2021, 15/10/2021, 08/11/2021, 10/12/2021) with public authorities and territorial representatives to organize the meetings with the breeders, and to prompt a concrete collaboration of a wider audience of stakeholders with the LIFE GRACE project: the 30 municipalities and the 15 UAs managers of common lands (most of the 3 target habitats fall into common lands), the 2 regional parks, mayors, trade union organisations, LAGs, local associations, representatives of biodistricts, CREA-MASAF, etc..

Through the meetings and animation initiatives developed in all three SPAs in 2020 and 2021, as of 31/12/2021, 120 farmers were overall informed/trained and 30 grazing areas (10 for each SPA) have been identified (*milestones*). In particular, even though the absence of dedicated N2000 support measures reduced the immediate availability of economic incentives for local actors, in total on the three areas, the availability for activating the environmental agreement/contract model (B2) was obtained from 13 managers of common lands, each of which involving at least 40 different plots of land in permit to pasture to about 100 breeders, for over a thousand hectares of surface with 6210 and 6220 habitats.

A4.b Creation of at least one network of environmental breeder's enterprises

Sub-action completed in January 2023. In 2020/2021 due to the pandemic emergency and the ban on gatherings, the option of converting the World Cafés to online modality was evaluated. Following an online survey and information collected by facilitation experts in participatory events, the option was discarded as ineffective. On 15/06/2021 the methodological document on World Cafè (*deliverable* "World Cafe methodology") was drafted by adapting the interaction methodology in accordance with Covid restrictions. Accordingly, the 3 World Cafè were organized (*milestone*): on 03/05/2022 at Itri, on 13/06/2022 at Fiumicino, and on 30/06/2022 at Leonessa. The topics addressed ranged from the presentation of the MASAF call "Supply Chain and District Contracts", to the inclusion of livestock and agricultural enterprises in short supply chains, up to

the multiregional supply chain contract. The World Cafè were overall attended by 32 breeders, 6 food distribution points of the livestock supply chain, but also by other 14 stakeholders such as farmers' associations (Coldiretti, CIA, Confagricoltura, etc.), referents of community-managed lands, agronomists and foresters. It was considered appropriate to broaden participation to additional specific stakeholders, beyond breeders/first processors and food distribution points, as they play a key role in strengthening the role of livestock farmers and in supporting virtuous and sustainable livestock supply chains.
As a supplementary activity, preparatory to the establishment of the first business network, an additional World Café was held in Formia on 12/01/2023. To ensure broad participation, the event involved the IPSEOA "Celletti", the Chamber of Commerce, Industry, Crafts and Agriculture (CCIAA) of Latina and Frosinone, and Slow Food. The event was attended by 81 participants, including 11 livestock farmers, 6 supply chain operators and restaurateurs, and 64 other actors functional to create a territorial network, among which 10 category associations and local authorities (CCIAA, Slow Food, mayors) and 54 students (more details on the 4 World Café and those subsequently carried out under Action B1 are provided in the corresponding B1 deliverable).
As a result of the territorial animation activities, on 31/01/2023 the first business network was established in the Monti Ausoni e Aurunci SPA (*milestone*), thanks to the commitment of 9 local actors: 5 extensive livestock producers, 2 restaurants and 1 street-food operator (A4 GRACE_first business network). Additional stakeholders involved included nutritionists, the local section of the Italian Chefs Federation, and a Slow Food expert. Each actor signed the adhesion to the "GRACE business network", aimed at commercially enhancing products from extensive, pasture-based livestock systems, particularly in protected areas. This initial core group remained active until the end of the project (within the framework of Action B1), working to promote, supported by LIFE GRACE, the involvement not only of additional breeders but also of other relevant actors, with the objective of activating a broader supply chain.

A4.c Promotion of the integration of Green Public Procurement (GPP)
Sub-action completed in November 2022. Activities started in early 2021, with the acquisition from the health authority of the lists of public canteens in the Lazio Region, and preliminary studies of the national legislation on CAMs and of blockchain models to which the origin of meat from the pastures of N2000 areas can be linked. The possibility of giving local authorities access to MASAF contributions for the activation of organic canteens in their territories was also investigated. The preparation of "Guidelines for the drafting of specifications for public canteens" (*deliverable*) was started in November 2021 and completed on 16/05/2022. The document provides a methodological proposal for the implementation of CAMs for GPP in collective catering, in order to enhance products from N2000 areas of the Lazio region by integrating the topics of organic production and the short supply chain, to be used as an award criterion and assigned a significant share of the overall technical score. Starting form an in-depth analysis of the data on collective catering, the guidelines explain the new CAMs for collective catering services introduced by the DM 65/2020, the options that can be activated and provide an example of CAM implementation in public canteen contract for offices. In this way, we presented local administrations with the opportunity to promote local products in school menus, including meat and derived products from grass-fed animals raised in N2000 areas, and to support the organisation of an adequate and potentially sustainable school catering system, aimed at educating pupils towards consumption awareness and a healthy, balanced diet.
In order to spread the technical support to define the tender specifications to the municipalities: on 13/05/2022 a memorandum of understanding with Slow Food Lazio for common initiatives to promote "0 km" canteens in schools was signed (see D2); on 28/06/2022 was held a webinar organised in collaboration with ANCI Lazio, dedicated to the presentation of LIFE GRACE support service to municipalities for technical specifications with CAMs (see D2).
Following the online seminar and the dissemination of the "Guidelines for Public Canteens" through ANCI Lazio, a dialogue was initiated with representatives of several municipalities

(26/07/2022; 16, 19 and 28/09/2022), aimed at presenting the project's scope, identifying roadmaps and procedures for embedding local and organic food products into GPP, and providing concrete guidance for sourcing animal products originating from GRACE's N2000 areas. As a result of these meetings, several municipalities formally requested technical support. On 12/10/2022, the selection process to identify local administrations willing to integrate GPP with reward criteria was completed (*deliverable* "List of institutions available to integrate the GPP"), resulting in a group of 18 local authorities.

Continuation after the end of the project

The action will not continue, as it was preparatory to the core actions. However, the implementation of the CAM, with particular reference to short supply chains and zero-kilometre products in accordance with national Law No. 61/2022, as well as the procedures for accessing funds for organic school canteens, will continue to be disseminated through the guidelines for public canteens and through the dedicated support for accessing the platform for organic canteens, after the conclusion of the project, as a continuation of Action B1. The guidelines for public canteens are applicable at national scale, and therefore, benefits of this action will continue beyond the duration of the project.

B. Core actions

B1 Implementation of a cooperation model on marketing

Lead beneficiary: FIRAB

Other beneficiaries involved: ARSIAL

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/09/2021	06/05/2022	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved

Action B1 was implemented by FIRAB and ARSIAL through a progressive and integrated set of activities aimed at structuring cooperative marketing mechanisms for grass-fed extensive livestock farming systems in N2000 areas. Based on the findings of Action A3, the regional NIC brand was identified as providing most of the features required to label the products from grass-fed breeding in N2000 areas, and to promote their quality. To make the NIC brand more suitable for the purposes of the GRACE project, the *deliverable* "Specifications for the community brand use" was produced on 03/11/2022, defining the conditions for the use of the NIC brand and exploring the inclusion of grass-fed livestock products from N2000 areas. In this framework, ARSIAL initiated formal exchanges with the Regional Environmental Directorate and, later, with MASAF and ICQRF (June 2024) on mandatory and voluntary meat labelling options to highlight the link between products, pasture-based systems and N2000 areas using official databases (BDN). They clarified institutional constraints on traceability and informed subsequent communication and co-marketing strategies.

The core *deliverable* "One cooperation model on marketing" was finalised and delivered on 04/04/2023. Developed jointly by FIRAB and ARSIAL, the model provided an operational framework to support the creation of territorial co-marketing agreements (business network contracts, biodistricts, local development strategies), translating a shared strategic vision into flexible cooperation among farmers, processors, distributors and institutional actors. This model guided the activation of territorial Business Network Accords, conceived as voluntary and non-binding cooperation tools and formalised through signed agreements. The model was conceived to foster cooperation among farmers, processors, distributors and local communities, promoting ethical grass-fed meat value chains adapted to the ecological, productive and governance specificities of each area.

In parallel, ARSIAL developed a technical tender model to support municipalities in integrating the CAM and short supply chain valorisation into public school catering procurement. Although not originally foreseen in the project workplan, this tool was considered an effective way to provide more concrete support to local authorities and to strengthen the practical uptake of the project's objectives. Following formal requests for technical support, the *milestone* "Written engagement of 10 Public Administrations" was achieved on 02/08/2023. To date, the number of involved administrations increased to 15, confirming the growing institutional interest in sustainable and territorially rooted food procurement practices.

Short supply chains were strengthened through the activation of box schemes and Community Supported Agriculture (CSA) initiatives. The *milestone* "3 box schemes initiatives" was achieved on 30/03/2023 through the involvement of Gas-GAABE, GASP! Reti di Pace and Resistenza Campesina. By the end of 2025, the initiatives increased to 5, with the addition of Res Ciociaria and GAS BIBBI, indicating a positive evolution beyond the planned output.

Stakeholder engagement and territorial animation were ensured through participatory processes, notably World Café events and informal awareness-raising initiatives coordinated mainly by FIRAB, with the involvement of ARSIAL and local actors. 12 World Café events and 11 informal initiatives were organised, supporting dialogue among farmers, processors, HORECA operators, public administrations and civil society. These processes contributed to the consolidation of cooperation, the emergence of shared co-marketing strategies and the alignment of Action B1 with dissemination activities under Action D2, while keeping consumers as an indirect target group.

Based on the C.1.1 mid-term socio-economic evaluation, training and capacity-building activities were reinforced as additional actions to address structural weaknesses and support generational renewal. Between January and February 2024, FIRAB organised a 30-hour Learning Unit (UDA) at the IIS "San Benedetto" in Latina, involving training laboratories and show-cooking sessions, with the support of master butchers from ANIM (Italian National Butchers Association), members of the GRACE Network, and under the patronage of the CCIAA of Latina and Frosinone, Federcarni (Italian National Butchers Federation) and Confcommercio (Italian General Confederation of Commerce). Each training session was followed by a World Café event, and a total of 77 students was trained, 23 of which received participation certificates following the presentation of final theses on LIFE GRACE. Building on this experience, on 01/12/2025 a further training day combining theoretical sessions with practical laboratories was organised at the IPSEOA "Costaggini" in Rieti, resulting in 40 additional students trained and involving 21 teachers and local operators. The initiative generated significant interest and educational impact, with recorded materials disseminated to over 180 students.

The *deliverable* "Business Network Accords" was completed on 28/02/2025, documenting the formal adhesion of 75 actors: intended not as rigid or binding contracts but as voluntary and reciprocal collaboration frameworks aimed at creating economic opportunities for farmers while safeguarding N2000 grassland habitats. Each network was formalised through the signature of a shared agreement ("deal"). By the end of the project, a multi-level territorial network was operational, involving 54 farmers and processors, 78 food distribution points and 10 supporting institutions, including actors located outside the project areas to ensure market uptake and continuity. In several cases, formalisation extended to areas contiguous to N2000 sites, reflecting natural territorial and commercial expansion processes. Aggregating entities (biodistricts, cooperatives, associations) significantly expanded the network's effective reach beyond the number of formal signatories. Strategic collaborations with Biodistricts and with Slow Food Italy (through Slow Food Presidia) further strengthened the promotion of environmentally respectful extensive livestock farming.

To foster the integration of grass-fed products into local food policies, as another additional activity, FIRAB actively participated in the Food Council of Roma Capitale (Consiglio del Cibo di Roma Capitale) during 2024-2025, contributing to Working Tables 6 (School canteens) and 7 (Catering). Proposals included the introduction of pasture-raised meat into school menus and the definition of criteria for a city-wide umbrella brand for Roman restaurants, requiring at least 25% of meat products from extensive farming systems. While grass-fed meat was not included in the 2026 school catering tender due to current supply limitations (school canteens in Rome provide approximately 145.000 to 150.000 meals daily), the initiative raised institutional awareness and laid the groundwork for future uptake.

The *deliverable* "Report on the World Café activity" was finalised on 07/08/2025 (later than expected in order to include the participatory processes and events realised during the whole B1 duration), synthesising the participatory pathway and its contribution to network consolidation, co-marketing approaches and integration with local food policies.

Overall, the evaluation confirms that the main added value of Action B1 lies in the consolidation of territorial business networks, the generation of social capital and operational competencies, and the integration of extensive livestock farming into local food and procurement policies. Despite persistent structural constraints, especially in the ovine-caprine sector, the cooperative marketing model demonstrated that cooperative co-marketing networks can enhance pastoral system resilience and support active management of N2000 habitats. Based on C.1.1 results, companies within the GRACE network reported an average +27% increase in sales compared to non-network operators, although B1 economic impacts varied by species and territory. While the aggregated target of +10% sales growth was only partially achieved (+1,2% overall volume), significant increases were recorded for bovine (+20,6%) and equine (+29,7%) meat.

Continuation after the end of the project

Continuation is expected through the consolidation and gradual formalisation of the GRACE territorial networks. Relationships among producers, HORECA operators, municipalities, schools and institutions represent durable social capital supporting long-term governance of grass-fed meat value chains in N2000 sites.
The implementation of the CAM by municipalities, with particular reference to short supply chains and zero-kilometre products in accordance with national law 61/2022, as well as the procedures for accessing funds for organic school canteens, will continue to be disseminated by ARSIAL through the guidelines for public catering services, the model tender specification, and the dedicated support for accessing the platform for organic canteens. At least a 20% increase is expected in the number of municipalities that further integrate grass-fed meat into school catering.
The training model developed for hospitality schools is highly replicable and available for integration into ordinary curricula. While FIRAB will continue to promote this methodology through regional initiatives, its implementation within schools depends on the autonomous mobilization of resources by the educational institutions themselves. At policy level, FIRAB's participation in the Food Council of Roma Capitale will continue to ensure integration into urban food strategies (Rome Food Policy). FIRAB, operating within the Food Council of Rome, will promote the use of the "Case del Cibo" (Food Houses) – urban community spaces which offer food education, solidarity distribution, and emporiums, often in collaboration with local markets – to consolidate the GRACE Network's relationships and foster new connections between food policies, collective catering and the grass-fed supply chain, without creating new organisational structures.
Overall, LIFE GRACE laid the foundations for a replicable and scalable socio-economic model linking biodiversity conservation, extensive livestock farming and local markets.

B2 Implementation of a cooperation model on biodiversity conservation

Lead beneficiary: DEB

Other beneficiaries involved: ARSIAL, CA

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/06/2021	02/07/2021	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved

Based on the case studies identified under Action A1 and following the field campaigns and meetings with breeders and local authorities carried out under Actions A2 and A4, activities under Action B2 started in July 2021 with the planning and discussion of a cooperation model for the sustainable management and conservation of semi-natural grassland habitats in the three target SPAs. Initial activities focused on the analysis of the regulatory framework governing grassland management and conservation at regional and local level, with specific attention to the procedures required for the authorisation of conservation and restoration interventions within N2000 sites. The analysis of approved PGAFs (LR 39/2002) of the concerned municipalities highlighted the general absence of specific conservation measures for N2000 grasslands, including for interventions requiring AA (e.g. shrub removal), confirming the need for a dedicated and structured cooperation framework.

In parallel, good management practices for the recovery, restoration and conservation of semi-natural grasslands were reviewed, with particular reference to experiences from other LIFE projects, including practices aimed at reducing grazing selectivity and restoring structural and floristic diversity. On the basis of the conservation needs identified through the vegetation surveys carried out under Action A2, potential sites for restoration interventions were preliminarily identified.

From September 2021 and throughout 2022, a series of technical meetings were held with both the Regional Directorates for Agriculture and Environment of the Lazio Region to discuss possible conservation actions and to define a preliminary list of interventions suitable for submission to simplified screening (pre-assessment) procedures, with the aim of facilitating their implementation by farmers and local authorities. Technical support activities were also aimed at exploring financing opportunities for conservation measures to be implemented by breeders. These activities included contributions to the discussion on the new the CAP NSP and the related Regional Complement to the National CAP Strategic Plan (CSR), the analysis of N2000-related measures foreseen at different programming levels, and the promotion of site-specific instruments to support extensive livestock farming in N2000 areas. In this phase, ARSIAL also developed an additional analytical product (maps and report) aimed at representing the relationship between grazing systems and grassland habitats in the three SPAs (B2_Livestock Farming and Grazing), supporting the definition of conservation priorities and management needs.

From 2023 onwards, the role of Action B2 progressively evolved in response to emerging institutional and procedural constraints. Following requests from the Regional Environmental Authority, the LIFE GRACE partners intensified their support to the definition of contractual conservation measures and pre-assessment documentation in the context of delays in the adoption of regional guidelines for AA procedures. This process led to the delivery, between June-July 2023, of:

- the “Environmental Agreement Model” (*deliverable*), which establishes the guidelines and the fundamental principles to be considered in the conclusion of Agro-Environmental Agreements to be stipulated between managing bodies of the territories hosting the semi-natural grassland habitats (Region, Natural Parks) and exponential bodies of collective rights (UAs and/or Municipalities) representing the pasture-rights holders (breeders). The model is grounded in the legal framework of a ‘collaboration agreement’ between public administrations (Law n. 241/1990), and would have allowed the current intervention-by-intervention authorization scheme to be bypassed, because the AA procedure does not apply to interventions directly

connected with and necessary for the management of N2000 sites, as formally stated in the objectives of the agreement. The model also includes a service plan provided to contract holders by the managing authority through the technical assistance of the LIFE GRACE project, and a template to be used for drafting the agreements.

- additional products not foreseen by the project, submitted to the Regional Environmental Authority, until February 2024, to accelerate the transposition of the national AA guidelines and specifically the adoption of pre-assessed interventions. The documentation provided to the Region includes a fully review of the pre-assessed interventions in the agro-pastoral field adopted by other Regions and Autonomous Provinces, and a list of proposed regional pre-assessments for interventions in the agricultural sector, to be carried out through simplified screening procedures.

The agreement model and the pre-assessment procedure for interventions in the agricultural sector were not operational during the project period, resulting in a full AA procedure for each single restoration or conservation intervention within the GRACE areas. To overcome these obstacles, the GRACE partners developed alternative cooperation schemes (i.e. agreements and memoranda of understanding) involving ARSIAL as a contractual counterpart for collective land management bodies (municipalities and UAs), and providing technical assistance in carrying out the authorisation procedures, within the framework of the service plan. The deliverable "Environmental Agreement Model" was therefore integrated accordingly.

Building on these developments, in May 2024 DEB and ARSIAL finalised the *deliverable* "One cooperation model on best management practices for grassland habitats", which defines site-specific management guidelines for different ecological contexts and provides an operational framework supporting both contractual measures and cooperation agreements. This model was subsequently used to support local administrations in the identification of intervention areas and in the preparation of technical documentation for authorisation procedures. By the end of 2024, 9 collective land management bodies (7 Municipalities - Rivodutri, Vetralla, Campodimele, Sperlonga, Itri, Fondi, Lenola – and 2 UAs – Tolfa and Monteromano) had formally adhered to the cooperation framework through the signature of dedicated conventions with ARSIAL, overall involving more than 775 breeders. The support provided went far beyond the delivery of technical products (design of restoration interventions, preparation of authorization requests and AA screenings), becoming an integrated service of administrative, managerial and operational assistance, from continuous liaison with the Region and competent offices, to guidance on funding opportunities and technical training. This set of actions was essential to make the cooperation model truly applicable across different territorial contexts.

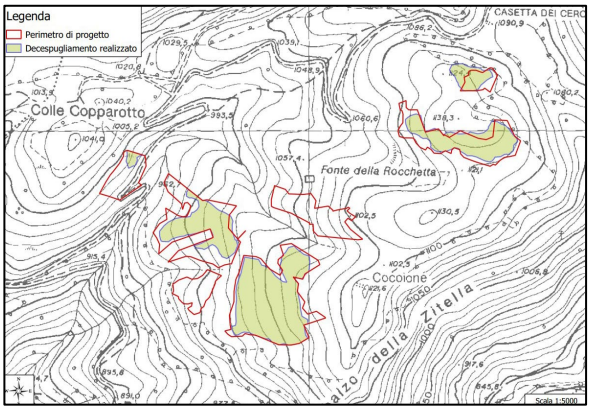
To better guide the restoration, improvement and management choices for the silvo-pastoral areas affected by passive rewilding processes, an additional governance tool, developed in collaboration with the Department of Agricultural and Forestry Sciences (DAFNE) of the University of Tuscia, was produced in July 2025, although not originally foreseen by the project: the "Guidelines for grasslands management and conservation in each N2000 site involved by GRACE". The document summarises the substantial body of knowledge gathered throughout the project and provides clear, accessible guidance for all competent stakeholders on the restoration, improvement and grazing management practices applicable to each project SPA.

As of 31/12/2025, the following results have been achieved in terms of conservation of the target habitats, as an outcome of the support provided to the bodies that signed the agreements:

- effective restoration of 7,5 ha of habitat 6210 in the Municipality of Rivodutri (SPA Monti Reatini), corresponding to 0,32% of the site's total habitat 6210 area (*milestone* Application of the best practices identified by the cooperation model), thanks to RDP funds (measure 8.5);
- activation of technical and administrative pathways for further interventions, including:
  - preparation of restoration projects and initiation of permitting procedures for 9,24 ha of habitat 6220 in UA Monte Romano (SPA Tolfetano–Cerite–Manziate), corresponding to 0,39% of the site's habitat 6220. Both the positive AA screening and the forest opinions were obtained from the Lazio region;

- technical-scientific and administrative groundwork for intervention packages in the Municipality of Itri (SPA Monti Ausoni-Aurunci), covering 156,65 ha of habitat 6210 (4,75% of the site's habitat 6210) and 167,24 ha of habitat 6220 (7,96% of the site's habitat 6220).

While the interventions in the Municipality of Rivodutri were successfully carried out, in other cases the length and complexity of authorisation procedures prevented the completion of planned actions within the project timeframe, despite favourable outcomes of screening procedures at regional level. These difficulties highlighted the structural constraints affecting the implementation of conservation measures in N2000 grasslands, but at the same time confirmed the relevance and robustness of the cooperation model developed under LIFE GRACE.



Areas subject to shrub-clearing interventions in Rivodutri

In parallel, since 2024 ARSIAL has carried out intensive institutional engagement with both the Regional Agriculture Directorate and the Regional Agriculture Department, contributing to the development of the N2000 measures within the 2023-2027 CSR and promoting the introduction of regulatory and financial instruments consistent with the conservation needs of grassland habitats. This work was conducted through numerous meetings and technical exchanges, including participation in institutional fora such as the regional partnership tables, the CSR Lazio Monitoring/Supervisory Committees, and the "Tavolo Verde" hosted by the Regional Agriculture Department. Key results include:

- **Activation of the CSR N2000 compensation measure**. To ensure its activation, ARSIAL provided technical support to the Regional Agriculture Directorate by preparing a study quantifying the additional costs and reduced revenues associated with grazing activities in N2000 areas. This contribution was instrumental in the publication, in January 2025, of the dedicated regional call, which marked the first-ever activation by the Lazio Region of the N2000 compensation measure since its introduction under the CAP. Furthermore, the support initially planned for 5.700 hectares of pasture was subsequently increased to 12.500 hectares, thanks to the enhanced financial allocation (which increased from € 6 mln to € 12,5 mln) secured during meetings with stakeholders.
- **Activation of the regional call for the purchase of breeding animals of local livestock breeds**. Not only were resources reactivated for the 2025-2027 period, but the financial allocation was also increased from €100.000 per year (up to 2022) to €500.000 per year for the reference triennium. This measure is essential for safeguarding local breeds at risk of genetic erosion and, once again, represents a success stemming from the institutional engagement activities and the role played by LIFE GRACE in conveying farmers' needs to regional authorities.
- **Approval of the measure dedicated to investments with environmental objectives**. ARSIAL played a key role in conveying the needs of farmers and land managers, promoting the inclusion of investments consistent with the conservation objectives of grassland habitats and N2000 areas.
- **Launch of the call for organic farming**, one of the most significant CSR operations for supporting extensive livestock farming in the region's inland areas, with particular attention to farms that contribute to the conservation of grassland and semi-natural habitats of EU interest.
- The **CSR animal-welfare measure** (SRA30) being maintained as an alternative to joining Classyfarm, which is a mandatory requirement for accessing CAP Eco-scheme 1 and is generally less favourable for extensive livestock systems due to their structural characteristics.

The institutional dialogue activities had a dual impact: on the one hand, they helped align economic measures with the conservation needs of grassland habitats; on the other, they strengthened the role

of LIFE GRACE as a technical reference platform for agro-environmental management at the regional level.
Despite the limited number of on-the-ground interventions completed within the project duration, Action B2 established a solid institutional, technical and methodological framework for the long-term conservation and management of semi-natural grasslands, whose benefits are expected to materialise progressively beyond the end of the LIFE GRACE project.
All activities and results of Action B2 have been summarised in the *deliverable* "Report on application of the cooperation model".

Continuation after the end of the project
After the end of the LIFE GRACE project, the cooperation framework established under Action B2 will be maintained through existing institutional and technical arrangements, in line with the After-LIFE Plan. The cooperation between scientific partners and local stakeholders will continue primarily through the involvement of ARSIAL, acting as the institutional reference for local authorities and collective land managers, and through the use of conventions, protocols and contractual conservation measures developed during the project.
The cooperation model and the related technical outputs (environmental agreement model, cooperation guidelines and management practices) will remain available as operational tools to support the planning and implementation of conservation and management actions for semi-natural grasslands within the target areas. DEB will continue to provide scientific and technical support, upon request, within the framework of ordinary institutional activities and in coordination with regional and local authorities.
Although no new project-specific funding is foreseen, the cooperation model developed is designed to be implemented progressively through ordinary programming instruments (e.g. CSR measures, PGAFs, contractual conservation schemes) and administrative procedures. In this perspective, the long-term benefits of Action B2 are expected to materialise through the integration of the model into routine management practices and policy instruments, rather than through the continuation of project-based activities. The model remains replicable in other territorial contexts, in coherence with the replication and transfer approach outlined under Action B4.

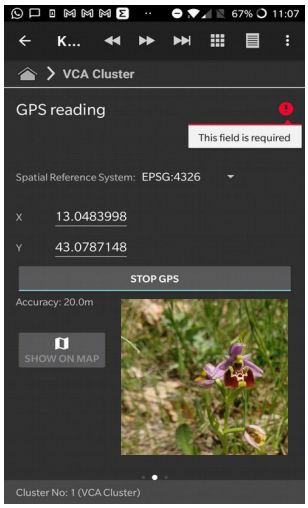
B3 Implementation of a cooperation model on biodiversity monitoring

Lead beneficiary: DEB

Other beneficiaries involved: ARSIAL

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/09/2021	03/09/2021	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved



A simplified monitoring framework was progressively developed by DEB based on a limited set of indicators related to habitat condition and pressures (e.g. shrub encroachment, invasive or less palatable species, presence of indicator species). The framework was implemented through a mobile application ("Collect Mobile", developed within the FAO – Google OpenForis initiative), customised for LIFE GRACE, and tested through initial field applications. On 15/03/2023, the *deliverable* "Simplified monitoring protocols" was completed, including one protocol for each of the three target habitats, derived from ISPRA national standards, and two additional protocols addressing the main pressures and threats to conservation. Around the same time (31/03/2023), the mobile application for participatory monitoring was finalised, together with the manual describing in detail all the steps required for the installation and initial configuration of the app and for entering and sending data. The application allows the simplified monitoring protocols to be applied through a simple and intuitive interface, thereby enabling livestock farmers to easily collect in the field data to monitor the evolution of the target habitats following the conservation and restoration activities.

Capacity-building activities were carried out between 2022 and 2023. The limited number of technicians within the Environment Directorate of the Lazio Region created an opportunity to broaden the training to additional public bodies, notably the managing authorities of regional parks and reserves, which not only have environmental responsibilities but also a more direct and continuous relationship with the territory. The *milestone* three-day training course for technicians of the Lazio Region was delivered by DEB from 18 to 20 January 2023 at the Botanical Garden of Rome. The objective of the course was to train participants in the use of the Collect Earth software tool for environmental monitoring through enhanced photo-interpretation. The ease of use and learning curve makes Collect Earth an ideal tool for carrying out rapid, reliable and cost-effective assessments. In total, 24 technicians were trained: 2 from the Environment Directorate of the Lazio Region – Biodiversity Protection and Management Unit; 12 from 8 regional Protected Areas; and 10 from ARSIAL. The initial objective of training 10 regional technicians was therefore exceeded, while also broadening the range of beneficiaries. In addition to the staff of the Environment Directorate, further institutional actors directly involved in territorial management were engaged, in particular the staff of the park authorities within the project areas and ARSIAL, which also holds environmental competences, thereby enabling the transfer and strengthening of technical and management capacities within these public bodies, all of which operate under the Lazio Region.

From late 2023 onwards, activities focused on testing the monitoring model through field-based training events. After preparatory coordination between DEB and ARSIAL and interactions with local administrations, two training events were organised in Campodimele (LT), within the SPA IT6040043 Monti Ausoni e Aurunci, on 24/10/2024 and Monte Romano (VT), within the SPA IT6030005 Comprensorio Tolfetano - Cerite-Manziate, on 30/10/2024, involving a total of 11 breeders. These events combined practical training on the use of the Collect Mobile application with field discussions on habitat condition and management issues, representing the first concrete application of the participatory monitoring model.
During 2025, further attempts were made and additional efforts were undertaken to organise additional training activities through continued interactions with local stakeholders (livestock farmers, municipal administrations, and managing bodies). Nevertheless, it was not possible to complete them within the project timeframe.
All activities and results of Action B3 were synthesised in the *deliverable* "Report on application of the monitoring model", submitted in December 2025.

Continuation after the end of the project
After the end of the LIFE GRACE project, the monitoring framework developed under Action B3 will be integrated into DEB's ordinary institutional activities, in coherence with the After-LIFE Plan. The cooperation established between DEB, ARSIAL, local authorities and farmers has contributed to building technical capacity and shared methodologies that can be further applied beyond the project duration, without the need for additional project-specific structures. The simplified monitoring protocols and the associated mobile application represent flexible instruments that can be used, where appropriate, within regional monitoring and control activities related to agricultural and environmental measures. In particular, the simplified monitoring protocols and the Collect Mobile application will be converted into internal operational tools of the DEB, supporting periodic ex-post monitoring campaigns on areas subject to habitat restoration interventions within the three SPAs. Such monitoring activities will be carried out directly by DEB technical staff, with the possible involvement of students within training and internship programmes, as foreseen in the After-LIFE Plan. Where municipalities or other managing authorities implement habitat restoration measures beyond the project duration, DEB may apply the monitoring methodology in order to assess vegetation dynamics, habitat recovery processes and conservation outcomes. The results of these monitoring activities will be made available to the competent local authorities and land managers concerned, contributing to adaptive management decisions, future planning instruments and environmental assessment procedures
In coherence with the After-Life Plan, DEB will ensure the maintenance, scientific updating and internal use of the *ex-post* monitoring framework within its institutional research and technical support activities on semi-natural grasslands, including its potential application in support of habitat management planning and environmental assessment procedures. In particular, DEB, in cooperation with ARSIAL, will continue to provide technical and scientific support to managing authorities, municipalities and other land managers upon request, particularly in relation to the interpretation of vegetation analyses and the implementation of future habitat restoration measures.
In this perspective, the benefits of Action B3 are expected to materialise progressively through the integration of the monitoring tools into routine management practices, rather than through the continuation of project-based monitoring activities.

More generally, the monitoring tools developed under Action B3 remain technically available and transferable. However, their post-project application will rely on university resources, rather than on a dedicated project-based structure. In this perspective, the legacy of Action B3 lies in the consolidation of a scientifically robust monitoring methodology and in its integration into routine ecological assessment and technical support activities, ensuring that knowledge generated through post-intervention monitoring can effectively inform local management practices.

B4 Development of a replication and transfer plan

Lead beneficiary: GF

Other beneficiaries involved: ARSIAL, FIRAB, CA

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/03/2021	17/02/2021	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved

The action started on 17/02/2021 with the launch of an in-depth technical analysis aimed at reconciling the ambitions of replication with the operational reality of the other B actions. The work focused on the need to create a methodological bridge that would allow the results of local experimentation emerging from actions B1, B2, and B3 to be transformed into a structured governance model ready for export. The research work continued throughout 2022 for identifying the so-called "qualifying points" of the GRACE model to be included in the Replication and Transfer Plan. A series of coordination meetings made it possible to define not only the architecture of the Replication plan, but also the criteria for selecting testimonials, key figures for narrating the project through videos. Throughout the first half of 2023, GF also conducted a screening of the replication plans of other successful LIFE projects, extrapolating best practices in terms of economic sustainability and institutional networking. The Replication Plan (*deliverable*) was finalized on 30/06/2023. The document went beyond suggesting "what" to do, but was structured as a comprehensive manual on how to make the project's best practices and models available in other areas and regions and transfer them to other territories, involving potentially interested bodies and agencies, stakeholders in the production and commercial chains, professionals, and the general public. The Plan outlined the tools to be used for transfer, the rules to be followed for effective promotion, and the methods and initiatives to be adopted.

In the meantime, in 2023 activities focused also on the development of the Code of Conduct. A comparative analysis was at first carried out, studying manifestos and charters of principles existing at the national and European level to identify the most robust structure and to isolate those elements of flexibility necessary to ensure voluntary but rigorous adherence. The definition of the Code then continued with the input of competences' fields of all partners, with the aim not to draft a simple bureaucratic protocol, but to create an ethical and technical pact between man and nature. The Code was also 'armored' from a scientific point of view: the results of the floristic-vegetation monitoring obtained in the previous phases of the project were translated into concrete management guidelines. The "nature steward" concept was thus linked to measurable practices, such as optimal grazing load and rotation of grazing areas, ensuring that each signature on the document corresponded to a real benefit for biodiversity. After a phase of refinement and formal review, also following suggestions from networking meetings and from farmers, the final version of the Code of Conduct was delivered on 04/04/2023 (*deliverable*). The final output summarizes the project's best practices in 5 key points, which farmers are encouraged to adopt by signing the Code, and which collectively promote sustainable grassland management, reinforce scientific collaboration and monitoring, and value-chain development. The Code was immediately disseminated through the website (action D1) and the initiatives arranged under the different project actions, leading to the signing of a total of 38 agreements, 15 of which were located outside the project target areas (*milestone*), and 23 operating inside the 3 SPAs. Among those signed outside the project area, particularly significative are the two Codes signed outside Lazio (in Liguria and Umbria, respectively), as well as the one signed by the Tenuta di Castel Porziano, wich covers over 6.000 ha in the homonymous SPA (IT6030084).

As visual communication and direct testimony serve as fundamental tools for overcoming skepticism in the agricultural world, between January 2023 and April 2024, GF managed a complex video production operation, to ensure a real fieldwork project involving 20 testimonials, including farmers, processors, chefs, and institutional representatives. Traveling throughout the territories allowed to collect real-life stories, transforming individual successes into a collective heritage.

These videos, completed in their final form in 30/04/2024 (*deliverable*), became the main tool for replication seminars, allowing potential new members to see the benefits of the GRACE model with their own eyes. The decision to give voice to the various stakeholders in the supply chain, and not just the farmers, proved to be a winning move because it allowed for a better representation and therefore understanding of the dynamics of the GRACE model, an approach that significantly facilitated the replication activities carried out in the subsequent phases.
The integration of these three pillars – the Code of Conduct, the Replication Plan, and the video testimonials – provided the project with a comprehensive "toolbox" enabling transfer of GRACE models.
The implementation of the replication plan with the Road Show (seminars and meetings) represented the phase of maximum operational expansion of the project, transforming technical documents into concrete political actions and socio-economic alliances. This process of rooting officially began on 05/04/2023, when FIRAB conducted an important hearing at the Special Commission of Municipio IX di Roma Eur. The goal was ambitious: to bring the grassland management model into an urban institutional context with large agricultural areas. The result of this first meeting was an immediate political success, with the unanimous approval of a resolution for the Municipality to join the project, marking the first step towards the integration of LIFE GRACE into local governance policies. On 18/06/2023, the Road Show moved to Accumoli (RI), where FIRAB organized a strategic meeting to discuss the value of organic farming in nature conservation. On this occasion, the project began to forge links with farmers and food distribution points, which signed the Code of conduct and the Business network accord, demonstrating how the GRACE model could offer concrete solutions even in areas severely affected by the earthquake and at risk of abandonment. The project's appeal was further confirmed in January 2024, when ARSIAL succeeded in including the "Terra Capitale" project, focused on the recovery of degraded or abandoned rural and agro-forestry areas, in the LDS of the Castelli Romani LAG. This action had a profound implication, as it made it possible to directly influence the programming of European funds for rural development, ensuring the financial sustainability of good practices beyond the life of the project.
The technical replication road show got underway with a national seminar held on 07/04/2024, in the Umbria Region (Bastia Umbra, PG), where LIFE GRACE discussed the cow-calf line and the new challenges posed by the Nature Restoration Law. This event made it possible to export the model beyond the borders of Lazio, attracting the interest of operators in Umbria. Subsequently, on July 05/07/2024, another seminar organised in Farnese (VT) resulted in the subsequent agreement signed between ARSIAL and the Municipality of Farnese, which is the management body of the Selva del Lamone Reserve, as well as of the N2000 site falling inside its territory. This formal commitment led to a restoration project that successfully passed the AA procedure and, in October 2025, resulted in the restoration of 5.600 m^2 of secondary grassland degraded by long-term grazing abandonment, re-establishing the ecological conditions typical of habitat 6220*. The scope of action was further expanded on 10/09/2024, when ARSIAL formalized a strategic collaboration with the PNALM. The agreement aimed to replicate conservative grazing practices in the seven municipalities on the Lazio side of the park. The final year of the project saw the achievement of exceptional goals in terms of territorial scale. On 02/07/2025, two consecutive seminars in Anticoli Corrado and Bellegra (RM) marked the birth of a local short supply chain under the aegis of ARSIAL. On this date, an agreement with the Anius Pregius LAG, a governance body covering 27 municipalities, was activated and, subsequently, on 28/10/2025 the first operational meeting was held with the LAG and CREA-ZA to develop a local value chain capable of supplying the proximity market.
Overall, the roadshow consisted of 5 seminars and 4 meetings, which led to: 3 conventions signed with PNALM, the Lamone Reserve, and the Anius Pregius LAG; 1 restoration project ("Terra Capitale") included in the LDS of the Castelli Romani LAG; 1 restoration project implemented in Farnese (Lamone Reserve); and the launch of a supply-chain initiative with the Anius Pregius LAG. Considering both the agreements and the Codes of Conduct signed by farmers operating outside

the three project SPAs, replication extended to 103.659 ha, involving 533 farmers and several N2000 sites. The results of the replication activities are summarised in the *deliverable* “Report on replication activities”.

Continuation after the end of the project

The consolidation of agreements and the integration of the GRACE model into territorial policies represent the main legacy of the action, transforming the Replication and Transfer Plan into the methodological reference for all future initiatives. In this framework, ARSIAL and DEB will continue periodic consultations with the Managing Authorities of grazing areas to provide technical-scientific support for habitat management (6210, 6220*, 6230*). In parallel, the synergy between ARSIAL and FIRAB will aim to expand the GRACE Network through “light-accompaniment” and co-marketing activities, promoting the Code of Conduct among existing farmer networks and valorising grass-fed meat as a driver for environmental protection. FIRAB, in particular, will act as a methodological connector, fostering the integration of sustainable grazing principles into new project proposals and leveraging grass-fed and extensive production to strengthen the GRACE Network without requiring new organizational assets, thus ensuring a lasting environmental and local economic impact.

C. Monitoring of project impact

C1 Monitoring project impacts

Lead beneficiary: DEB
Other beneficiaries involved: ARSIAL, FIRAB, GF

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/03/2022	03/04/2022	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved

C1.1 Monitoring of socio-economic impact

The sub-action monitored and assessed the socio-economic dynamics of extensive livestock farming systems across the three project SPAs. The monitoring framework followed an integrated approach, maintaining continuity with the A2 and A3 baseline actions to track the evolution of three main axes: market trends, the structural development of farms within the SPAs, and the perceptions of supply chain actors. The work followed a rigorous chronological progression, beginning with the design of targeted survey templates for local operators, consumers, retailers, and HORECA actors. The surveys were diversified for three specific stakeholder groups (producers, sellers, and consumers), and the survey tools were streamlined from those used in A2 and A3 actions using dual-entry matrices and counterfactual questions to maximize engagement, to ensure data consistency, to measure the effectiveness of ongoing actions. These tools were developed through internal consultations to align with project targets and KPIs and, after a pre-test phase, were digitized via the Limesurvey platform.

Starting from 21/07/2023 (*milestone* "Questionnaire administration"), distribution was carried out through a multi-channel strategy combining digital tools – email, WhatsApp, social media, and the official project and FIRAB websites – with direct administration. Face-to-face interviews were conducted for consumers/sellers at local farmers' markets and other local food distribution points, but also for operators to overcome the digital divide and the "islands" mentality of breeders, with dedicated farm-visits or at World Café events and other informal initiatives. The survey at markets closed on 30/06/2024 (*milestone* "Interviews with consumers"), while the online survey for agro-livestock operators closed on 09/07/2024 (*milestone* "Interviews with operators").

Overall, this resulted in 259 interviews with consumers/sellers and 42 questionnaires from farmers, providing a clear picture of structural trends and the link between farming systems and the territory. Data collection combined official institutional databases (BDN for livestock numbers, Veterinary Epidemiology Information System - SIEV for veterinary and productive aspects, and ISTAT/ISMEA for market trends) with extensive field surveys. To ensure a representative sample, a target of 30 farms per province was set, covering between 20% and 42% of the total farms depending on the SPAs.

The findings from these activities converged into the *deliverable* "Mid-term socio-economic assessment report", completed on 22/08/2025. This report compared baseline data from 2021 with the results from the first survey cycle (July 2023 – July 2024), establishing a structured framework of quantitative and qualitative indicators, addressing structural, managerial, and market aspects across the SPAs.

The mid-term monitoring functioned as a "diagnostic phase", revealing emerging crises, such as the market tensions caused by the conflict in Ukraine, the chronic lack of generational renewal, the closure of local slaughterhouses, and a significant gap between producers and the HORECA sector. This led to project corrective actions, such as: the training of students from professional hotel and agrifood institutes (action B1), to facilitate the creation of a new generation of "ambassadors" (chefs and butchers) capable of valorising N2000 meat; the creation of networks between farmers and processors to position grass-fed products at a fairer price point and safeguard profit margins.

The monitoring process then continued to cover the final monitoring period (August 2024 – October 2025), by using the previous tools and methodologies. New questionnaires were made

available on FIRAB's website starting from 21/10/2025. Compared to the mid-term, this final assessment introduced in the questionnaire specific sections on the evaluation of the GRACE Network and After-LIFE perspectives. Interviews to consumers and sellers in markets were also conducted in October 2025. This final phase expanded the dataset to include an additional 150 interviews with consumers/sellers and 60 questionnaires from farmers. The process culminated in the *deliverable* "Final socio-economic assessment report", completed on 23/12/2025.
The analysis confirmed a general decline in the number of farms, offset by increased farm size and stable livestock numbers in bovine and equine systems. While the ovine-caprine sector faced contraction, the report highlighted the valorisation of autochthonous breeds and a significant 51% increase in pasture movements in the Ausoni–Aurunci SPA. Economically, the report demonstrated that while the overall +10% N2000 meat sales target was only partially met (+1,2% in total volume), specific compartments saw exceptional growth, particularly bovines (+20,6%) and equines (+37,7% in value). Crucially, farms within the GRACE network achieved a +27% average increase in sales, confirming the efficacy of the project's diversification strategies. Furthermore, consumer awareness of the N2000 network rose by 17 percentage points, reaching 43% in 2025.

C1.2 Monitoring of biodiversity impact

The grassland habitats' biodiversity monitoring activities under Action C1.2 were closely dependent on the completion of the preliminary environmental analysis carried out under Action A2 and on the implementation of restoration and conservation initiatives defined through the cooperation model developed under Action B2. Due to the delays affecting these two actions, the systematic monitoring activities originally foreseen could not be fully activated within the initial project timeframe. Nevertheless, DEB carried out preparatory work for biodiversity monitoring in parallel with the completion of vegetation surveys under Action A2 during the spring-summer 2022 campaign, focusing on the definition of a monitoring approach and the identification of potential target sites representative of the ecological and floristic heterogeneity of semi-natural grasslands in the three SPAs.
Building on these preparatory activities, DEB progressively refined the methodological framework for biodiversity monitoring, defining criteria for data collection aimed at addressing the main ecological issues highlighted by the environmental analysis. Particular attention was given to the selection of monitoring sites in relation to habitat type, conservation status and management history, with a view to supporting post-intervention assessments where restoration actions could be effectively implemented. In this context, towards the end of 2024 DEB prepared detailed cartographic outputs for the three project SPAs, specifically aimed at identifying potential sites for post-intervention monitoring.
The restoration intervention carried out in October 2024 in the Municipality of Rivodutri (see Action B2), consisting of shrub clearance over approximately 7,5 hectares within an area previously identified during earlier project phases, provided the opportunity to conduct a first biodiversity monitoring activity linked to an on-the-ground intervention. In June 2025, DEB carried out a floristic and vegetation monitoring survey on the Rivodutri intervention site, focusing on the assessment of the restoration of habitat 6210* (*milestone* "Starting the biodiversity monitoring activities" on 19/06/2025). The monitoring activity allowed the evaluation of pasture ecological conditions a few months after the intervention, after leaving enough time for the recovery of the grassland habitat to begin: DEB documented a rapid recolonisation of the cleared areas by characteristic species of the target habitat and confirming its recovery potential under appropriate management conditions. The presence of orchid populations (*Anacamptis pyramidalis*, *Orchis purpurea*) was also recorded, supporting the attribution of a priority conservation status to the restored habitat. At the same time, early signs of shrub and tree recolonisation were observed, confirming the need to combine restoration interventions with adequate grazing management to ensure habitat persistence at least in the medium term.
Although the limited number of restoration interventions implemented within the project constrained the activation of a broader biodiversity monitoring programme, the activities carried

out demonstrated the applicability and relevance of the monitoring approach developed by the project. The experience gained through the Rivodutri case study provided valuable indications on the response of semi-natural grasslands to restoration actions and on the key factors influencing their conservation over time, thus contributing to the overall assessment framework of LIFE GRACE.
Regarding the project's impact on local livestock breeds, a regional-scale analysis was first carried out to assess population trends, both in terms of farms and individual animals, of the autochthonous breeds present in Lazio, including those at risk of genetic erosion protected under Regional Law No. 15/2000. Monitoring was conducted between 2019 and 2024 using data from the Veterinary Information System portal (vetinfo.it – BDN), managed by the National Animal Protection Authority (AIFA). These breeds, traditionally raised under extensive or semi-extensive grazing systems, play a key role in the ecological management of semi-natural grassland habitats 6210*, 6220* and 6230* within the three project SPAs, and the analysis confirmed that Lazio's autochthonous livestock heritage, particularly the breeds at risk of genetic erosion, remains intrinsically linked to extensive grazing models which, by allowing the use of shallow, non-arable and otherwise unproductive soils, sustain and maintain high-value semi-natural grassland habitats whose conservation is achievable only through active grazing. A more specific assessment was then performed on the seven target breeds (Maremmano Cattle, Bianca Monticellana Goat, Capestrina Goat, Rapid Heavy Draught Horse, Tolfetano Horse, Esperia Pony, Romano della Maremma Laziale Horse), focusing on the number of reproductive females. The analysis drew on the report produced by the National Focal Point at CREA-ZA on the risk of genetic erosion of breeds registered in the Regional Voluntary Register (RVR), which evaluates demographic and genetic parameters. Data from 2018 (project baseline) were compared with those of the most recent report updated to 31/12/2022. Results show a 6,027% increase in breeding females, reaching 13.809 animals, an outcome of notable significance and above expectations (5% increase). Regarding the genetic-erosion risk status, the risk assessments show improvement for the Maremmano Cattle, shifting from "endangered" to "vulnerable".
Although data for 2023-2025 are not yet consolidated, information from the 2024 National Zootechnical Database and from the Breeders' Associations responsible for the Genealogical Registers indicates a likely further increase in breeding females of the target breeds, particularly Maremmano cattle and the equine breeds (Rapid Heavy Draught Horse, Tolfetano Horse, Esperia Pony, Romano della Maremma Laziale Horse). Data on male and female breeders and young stock were provided by the National Breeders' Associations responsible for maintaining the relevant Genealogical Registers. Moreover, the analysis shows that over the years Breeders' Associations have progressively collected more complete population data, supported by the growing number of farmers registering to obtain breed recognition and access to CSR measures and calls for the purchase of breeding animals.
The deliverable "2nd Annual biodiversity monitoring report", illustrating the project's overall impact on both grassland habitats' biodiversity and local breeds at risk of genetic erosion, was completed on 16/12/2025.

Continuation after the end of the project

The methodologies, criteria and monitoring approaches developed under Action C1.2 remain available as reference tools to support future assessments carried out within ordinary institutional frameworks. In line with the After-LIFE Plan, these tools will also be internally used and further valorised by DEB for scientific, technical and institutional activities related to grassland habitat monitoring and adaptive management. Any further monitoring activities will be implemented, where appropriate, through existing management instruments and procedures, in coherence with the After-LIFE Plan, and independently from the project-specific evaluation activities.
With regard to livestock resources, ARSIAL will continue monitoring activities through the analysis of herd and farm numbers, with specific attention to the autochthonous breeds present across the regional territory. Trends in livestock populations will be assessed by consulting: the

BDN, with a particular focus on the evolution of the livestock sector within N2000 sites; and data on breeds at risk of genetic erosion, provided by the Breeding Associations (as authorities authorised to manage the breed Herd Book), by the Regional Network for Animal Conservation and Safety (L.R. 15/2000), and by the periodic assessment of genetic-erosion risk carried out according to FAO categories.
FIRAB will contribute to the socio-economic legacy of the project by sharing the results of its specific field surveys with institutional partners (ARSIAL) to support their broader monitoring activities. Rather than managing large-scale datasets, FIRAB will focus on a qualitative follow-up of the policy integration process. FIRAB will use the project's qualitative findings as a reference to track how grazing systems and short supply chains are discussed and adopted within the Rome Food Council working tables. This ensures that the evidence collected during LIFE GRACE continues to inform local food governance without requiring new large-scale data collection or complex statistical analysis.

Complementary action outside LIFE
With ARSIAL Determination No. 838 of 20/11/2024, the operational agreement between ARSIAL and the Department of Architecture and Design (DiAP) of Sapienza University was approved and financed with ARSIAL resources. The agreement aimed to update the assessment of vegetation transitions across the entire regional territory, with specific focus on the three SPAs of the project. The work extended the analysis of pasture-degradation dynamics to the period 2016-2024, ensuring continuity with the complementary activities to Action A2, which had already reconstructed transitions from 1954 to 2016. Vegetation transitions represent a key tool for planning, managing and restoring pasture areas, in line with the "Testo Unico Forestale" (national forestry framework law), which allows targeted interventions to counteract degradation processes and to recover agro-pastoral surfaces traditionally managed through extensive grazing. The DiAP analysis was completed in September 2025 and formally delivered to ARSIAL.
The full 1954-2024 dataset confirms, across the three project SPAs, a long-term trend of progressive closure of open grasslands and transition towards shrublands and woodland formations. The update for the period 2016-2024, shows that these processes are still active at large scale and have further accelerated in recent years.
For the animal genetic resources showing the highest levels of criticality, ARSIAL has activated the Genealogical Registers within the respective Breed Associations, in line with its institutional responsibilities under national legislation on animal reproduction. The data generated through these Registers have been directly used for the analysis of population sizes carried out within the project, providing a reliable and standardised basis for assessing breed trends and conservation status. This represents a strategically important intervention, as it enables a clearer and more reliable representation of the number of animals that actually meet breed standards, supports structured reproductive-management dynamics, ensures documented traceability within the BDN, and notably promotes the emergence and formal recognition of farms, together with their related activities. By formalising breed identity and improving data quality, the Registers strengthen both conservation efforts and the economic visibility of farms, creating the conditions for more effective management and long-term safeguarding of endangered autochthonous breeds. By improving data quality, reproductive management and farm traceability, the action directly supports and enhances the project's efforts to counter grassland degradation and to reinforce the pastoral system underpinning the conservation of semi-natural habitats.

C2 Monitoring of KPIs

Lead beneficiary: ARSIAL

Other beneficiaries involved: GF, FIRAB, CA, DEB

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/09/2020	21/10/2020	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved

During the reporting period, the partnership worked to identify and value the Key Project Indicators, in order to translate, where applicable and possible according to the different categories foreseen in the KPI webtool, the indicators specified in the excel table of LIFE Key project level indicators, and to integrate them with further indicators able to interpret the ambitious project objectives. Through specific meetings, exchange of emails and skype calls, the partnership has been engaged on the basis of the specific competences and coordinated by CA. The implementation of the KPI webtool has been supervised by the external monitor. On 17/06/2021, the indicators were submitted for validation and subsequently validated. Since May 2022 all results and targets achieved from the ongoing actions which feed the selected KPIs were collected and integrated from the involved partners in order to provide progress in the KPIs within the relevant chapter of the mid-term report.

During the drafting of the intermediate socio-economic report (see action C1.1), FIRAB analyzed the impact of the project also through an assessment of the updated KPIs, particularly those related to developments across the following dimensions: governance, training, information, networks, short supply chains, territorial branding, meetings, and exchanges with the other project partners.

During the last months of the project CA coordinated the partners' activities in the preparation of the final reports for all actions, ensuring the inclusion and updating of the indicators required by the KPI platform. It also developed specific databases for mapping the stakeholders involved in actions B through the various types of commitments undertaken (agreements, business networks, CAM supporting, codes of conduct), as well as for mapping those reached through the various events carried out as part of dissemination actions (D). The databases were shared and were continuously updated with contributions from all partners, enabling not only easier updating of the platform but also overall consistency of the data reported across the various project deliverables.

On 22/01/2026, CA held a call with the external monitor to review the changes made to the KPI platform (now LPI) and since then, the indicators have been updated.

Continuation after the end of the project

The project specific indicators will be reviewed 5 years after the project end with internal ARSIAL resources.

D. Communication and dissemination of the project and its results

D1 Communication plan and dissemination pack

Lead beneficiary: ARSIAL

Other beneficiaries involved: CA, FIRAB

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/09/2020	14/09/2020	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved

Activities started in September 2020, with the drafting of the project's communication plan, finalized on 13/01/2022 (*deliverable*). CA, making use of the expected external assistance, developed the graphic identity of the project (project logos, visual identity and concept image) and the guidance for its use.

The company Digitalia Lab was assigned by ARSIAL to create the project website on 28/10/2020. At the end of 2020, the company designed the tree structure of the website and, in the following months, the partners wrote the contents of the website's static sections. On 25/03/2021 the website was published online in Italian and English (*milestone*): lifegrace.eu. Since then, the LIFE Grace website has been constantly updated by CA, with the collaboration of all partners, populating the various sections with documents, photos, videos, events and news, both in Italian and English. In total, on 31/12/2025, 129 news had been published, and 8.924 unique visitors had accessed the website, exceeding the expected result (5.000 unique visitors). The 20 video-interviews with GRACE testimonials produced for action B4 were published on the website in the "News" page. Relevant calls for application being published by the Lazio Region or the Italian Ministry of Agriculture ("Trashumance Fund", financial contribution for purchase of native breeds, etc.) were also promoted on the website. Moreover, a new section titled "Le aziende della rete Grace" ("The businesses of the Grace network") was created to promote the farms, food distribution points and other organisations that joined the B1 Grace Business Network. The page hosts description sheets for each business, including their contact information, photos, and a description of their activities and products (extensive farming of local breeds, production/ distribution of grass-fed meat and cheese, etc.). In total, 54 description sheets have been published, aiming to improve the business' sales and online presence. Most visitors reach the site thorough organic research, but also directly, and the most visited pages are "Le Aziende Grace" and "News and Events", which are respectively dedicated to consumers and farmers. This demonstrates the strong interest and engagement of the project's two main target groups, confirming that the website has effectively fulfilled its communication purpose.

All partners shared news and updates about the project on their websites and social media accounts. On 14/05/2021 the social pages of the project LIFE Grace were activated (*milestone*): Facebook (www.facebook.com/lifegrace2020), Instagram (www.instagram.com/lifegrace2020) and X (formerly Twitter: twitter.com/lifegrace2020). By the end of the project, 126 posts had been published on Instagram, 196 on Facebook (and 1 Facebook Live), and 187 on X. The accounts, ran by CA, reached 352 followers on Instagram; 309 followers and 249 likes on Facebook; 72 followers on X, and thus exceeding the expected result (200 followers).

On 03/06/2021, ARSIAL started the procurement procedure for the acquisition of the notice boards to be installed at the partners' premises and in the 3 protected areas. In addition, ARSIAL acquired, within the planned budget, further dissemination materials (flags and roll ups) to better characterize the animation and dissemination activities of LIFE Grace. On 05/07/2021, ARSIAL started a second procurement procedure for the graphic design and printing of the dissemination materials. This second procedure was also needed in order to self-produce promotional posters/ playbills before various events (World Cafés, territorial meetings, conferences, workshops, etc.), which was not initially planned.
In total, the following materials were produced: 12 notice boards, 3 roll-ups, 2 outdoor banners, 3 LIFE flags, 2 LIFE GRACE flags (including support base and flagpole), and 1 goccia table-top. By 26/07/2022, all 12 notice boards had been positioned (*milestone*): 2 in the ARSIAL offices, 1 in the FIRAB headquarters, 3 in the Monti Aurunci and Ausoni SPA, 3 in the Monti Reatini SPA and 3 in the Comprensorio Tolfetano-Cerite-Manziate SPA.

A presentation of the LIFE GRACE project was drafted by the project partners for the "LIFE project of the month" initiative by the Italian Ministry for the Environment (MASE). The presentation was published on the Ministry's website on 29/05/2023.
During the 5 years of the project, 24 press releases (*deliverable*) were elaborated by GF and sent to news agencies to promote D2, D3 and D4 dissemination events and the publication of relevant regional or national calls for application. The project's final D4 workshop (09/09/2025) was promoted through a "Save the Date" notice, as well as a regular press release, which was picked up by "Info Parlamento" and "Agra Press" agencies and another 8 media outlets. After the workshop, as a part of the contract made by ARSIAL with F.P.A S.R.L, the specialized magazine "Ruminantia" published an article about the event on their website and social media accounts. Articles, news, radio and TV passes dedicated to the project were collected by CA for the creation of a press review, which collects 171 items.
In April 2025, CA started planning the *deliverable* Layman's Report, with all partners sending their contributions in the following months. The Report was finalised and shared on the project's website and social media pages on 05/12/2025, both in Italian and English. Partners then compiled a mailing list and, by 31/12/2025, the Report had been submitted to 649 contacts (*milestone*), which include regions, municipalities, farmers, breeding associations, professional orders of agronomists and foresters, regional, national and international experts, LIFE projects, as well as HORECA/retail operators that, in different ways, joined or contributed to the project. The Layman's Report was also further disseminated by the contacts reached: the MASE published a news item including the link to the Report; LIFE NATCONNECT 2030 shared both a news article and a newsletter (with 854 subscribers); and the Italian Society of Natural Sciences promoted it through a dedicated

Facebook post. The Report was also promoted through a press release (picked up by at least six media outlets) and an article (read by 335 users) published on the Ruminantia.it website, ensuring significant visibility among the project's key target groups.
Copies of the Layman's Report were not printed, since no in-person events were scheduled after the document's expected delivery date where printed copies could have been distributed. Moreover, distribution through electronic channels proved more effective and also helped reduce paper consumption. The total number of people directly and indirectly reached (649 and over 1.189 respectively) largely exceeded the planned printed copies and digital submissions (500 and 250 respectively).

Continuation after the end of the project

The site will be maintained for 5 years after the end of the project. The Layman's Report will continue to be disseminated after the end of the project through the dissemination activities foreseen in the After-LIFE, ensuring that the results, methodologies, and lessons learned remain accessible to stakeholders, policymakers, and the wider public.

D2 Campaign for public as consumers

Lead beneficiary: GF

Other beneficiaries involved: ARSIAL

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/06/2021	30/11/2021	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved

The campaign for consumers, which started on 30/11/2021, had different targets, each with its dedicated events and activities. 3 information and 4 training meetings were organized to provide **entities that activate canteens** with the skills necessary to implement CAMs in tendering procedures for canteen services, particularly encouraging the inclusion of N2000 meat in school menus. After the first meeting (*milestone* "Start of meetings with public entities that activate canteens") with the Italian Ministry of Infrastructure, where ARSIAL provided technical support related to the tender for office canteens, project partners organized a webinar for municipalities in the Lazio region in collaboration with ANCI Lazio (28/06/2022) and a national conference in Rome on 10/03/2022 ("Canteens… for pastures! The challenge of organic and km0 products in Lazio's collective school catering"). This webinar and collaboration with ANCI Lazio were strategical in spreading the Guidelines and the technical support to define the tender specifications provided by the project to the municipalities (see Action A4.c). 4 training meetings for local administrations were subsequently organized both inside and outside project SPAs, between January and July 2025, in collaboration with LAGs (i.e. entities that bring together small Municipalities with sustainable development as a core value), namely Castelli Romani, Terre di Argil, and Anius Pregius, as well as strategic municipalities like Pastena (FR). LIFE GRACE disseminated its Guidelines for public canteens and the technical tender model (see action B1), with the goal of making grass-fed meat a central element of regional GPP and to educate children and families on its nutritional and naturalistic value. The project also trained public officials on how to reduce costs by accessing MASAF funding for organic school canteens. In the case of the Anius Pregius LAG, the meeting was an important step in the collaboration between ARSIAL and the LAG to build a short supply chain for local meat in the "Monti Simbruini" area (see action B4). In total, 40 public officials and/or technicians working in 35 Municipalities received training, whereas about 44 Municipalities were reached in total, demonstrating that public administrations can act as a primary driver of environmental conservation through their purchasing choices. Following a strategic meeting, ARSIAL also signed a Memorandum of Understanding with Slow Food Lazio on 13/05/2022, aimed at sharing concrete initiatives to promote Traditional Agri-Food Products (PAT), agricultural biodiversity and the implementation of CAMs in public canteens. Other opportunities to promote the project's commitment to including grass-fed meat in school menus were the Compraverde-Buygreen Forum in Rome in May 2025 – an international conference where LIFE GRACE's activities were presented as best practices to replicate in other European contexts – and the 12th edition of "Excellence Food Innovation" in Rome, in November 2025.

ARSIAL and FIRAB also organized/participated in events involving **HORECA players**, such as the "The Maremmana cow: territory and livestock farming" seminar, organized by HQF (High Quality Food) srl – leading company in the meat sector, which joined the GRACE Business network and also collaborated with LIFE GRACE on another event with the Costaggini Institute (see action B1) – and the "Slow Food Chefs' Alliance of Lazio" Regional meeting in Tivoli (RM). On these occasions, project partners worked to promote grass-fed N2000 meat as a "premium" product, capable of enhancing the menus of restaurants, with a focus on storytelling about the local area. About 100 HORECA players were reached by the campaign, including chefs, restaurant owners, butchers and students.

On 30/06/2023, GF completed the *deliverable* "Press Campaign Project", illustrating the project's message and major themes to communicate through a web campaign and the printed dissemination materials. On 26/10/2023, 10.000 leaflets for consumers (*deliverable*) and 1.000 foldables for the HORECA sector (*deliverable*) were printed. While the leaflet was directed to the general public,

following the project's payoff "From our pastures to your table" and highlighting the role of the farmer as a "nature steward" and the importance of customer awareness and conscious purchasing, the brochures were designed to provide restaurateurs with information to give their customers about the high environmental value of meat from N2000 sites. In addition, 30.000 pocket-sized z-cards (*deliverable*) were produced on 19/06/2024, containing general information about the project, simplified maps and a QR code allowing the consumer to download an additional product, the "From our pastures to your table" Guide, a 90-page digital volume that intertwines 15 nature trails within the project's target areas with as many traditional recipes.
The printed materials were disseminated during project events (with about 5.000 copies left at the end of the project), particularly at the 6 **farmers' markets** where GF and FIRAB set up LIFE GRACE information points/ booths to have direct dialogue with both consumers and sellers. The communication activities at markets started in 2022 ("Natura in Campo" market in Rome) and then continued in 2024 and 2025 at other markets located in Rome, such as "Divino Amore" and "La Storta", or inside project SPAs, like the "Piazza del Contadino" market in Frasso Sabino, in the "Monti Reatini" SPA. The event organized at the "Campagna Amica" market in Latina saw the involvement of students from the San Benedetto Institute of Higher Education (see action B1 for related training activities), who prepared grass-fed meat and then guided a tasting activity.
The dissemination with printed materials was accompanied by a large web and viral marketing campaign managed by GF, which was launched on 20/06/2024 (*milestone* "Start of web and viral marketing activities"). The primary tools for the campaign were a "Press campaign editorial" (*milestone*) and 8 "Graphics for the web" (*deliverable* - 5 jpg images and 3 mp4 images), which were sent to sustainability-focused websites or blogs (*Tuttenotizie*, *e-cology*, *Abitare a Roma*, *Notiziegreen*, etc.) for the production of articles and promotional content on LIFE GRACE. In addition, the newsletter *Sapereambiente* was strategically used to reach a consolidated base of 17.000 contacts. The social media campaign, whose targets were chosen through geographic and demographic profiling, was conducted through the publication of sponsored informational posts on Facebook and Instagram, including a series of "Call to action" designed to encourage users to take concrete action (e.g. downloading the Guide, or searching for food distribution points in the LIFE GRACE network). As of December 2025, the web and social media strategy exceeded expectations, generating a total of 1.064.339 views.
Finally, on 12/12/2025, all project partners took part in an online training seminar organized by GF and accredited by the Order of Journalists, with the participation of 27 **journalists**, who were given tools to convey the complexity of the ecological transition and the link between grazing and biodiversity.
In addition to the above-mentioned activities, LIFE GRACE was a guest on the TeleAmbiente programme "Quo VAdis", dedicated to regional food policies in Lazio, and took part in other 4 events involving relevant stakeholders (consumers, HORECA players, journalists, students), raising awareness on the role of grass-fed meat as an ecosystem service and highlighting the connection between the maintenance of grazing activities, local sustainable development and the access to fair, safe, sustainable food. Furthermore 4 press releases were produced and diffused on the occasion of the events organised (doubling the 2 planned).
The complete list of the 25 events/initiatives is available in Chapter 6.3 (Dissemination). All activities carried out in D2 were included in the *deliverable* "Report of the activities carried out and results obtained".

Continuation after the end of the project

The sustainability of Action D2 will be guaranteed by a multi-stakeholder strategy aimed at expanding the awareness gained during the project regarding the value of pasture-raised meat and extensive grazing in N2000 areas. ARSIAL will ensure the systematic reuse of the dissemination toolkit (guides, leaflets, and technical documents) through its institutional channels and local food policy initiatives. FIRAB, operating within the Food Council of Rome, will promote the use of the "Case del Cibo" as venues for the dissemination of materials, data and experiences. Building on

the success of the digital campaign, GF will implement a new social media marketing plan with the goal of reaching an additional 250.000 consumers over the next five years. This “light extension” of activities will not require new structures but will leverage existing institutional networks to ensure that the link between biodiversity and sustainable meat consumption remains a central theme on regional and national agendas.

D3 Campaign for farmers

Lead beneficiary: ARSIAL
Other beneficiaries involved: FIRAB

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/09/2021	01/11/2020	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved

The start of the action was brought forward to November 2020 instead of September 2021, because dissemination to specific targets was essential for a successful involvement during the engagement activities of action A4. The campaign was structured to disseminate project objectives and results, while also offering dedicated training and capacity-building opportunities and encouraging the active engagement of the following main targets:

- **municipalities and agricultural universities** (common land managers, responsible for pasture/forestry planning), to highlight the abandonment and degradation of pastures, show the data on the vegetation transitions between 1954 and 2024 (developed by ARSIAL with the University of Molise and DiAP La Sapienza, see action A2 and C1.2), and suggest improvements to "fide pascolo" (i.e. pasture-rights contracts).
- **forest and pasture planning technicians** to implement pasture conservation measures in the plans currently being defined. The opportunities for pasture management introduced by the "Testo Unico Forestale" (national forestry framework law) were also presented to common land managers and forest-and-pasture planning technicians.
- **farmers**, to promote the fight against pastures abandonment and the participation in the first Lazio CSR Call for farmers operating in N2000 sites. The Call ("Financial compensation for N2000 farming") was published in 2025, thanks to ARSIAL's support (see action B2) and resulted in 1.162 applications on 36.809 ha (6.768.075,64 € requested). Other relevant calls published in 2025 and promoted during events were the Lazio Region's Call providing financial support for the purchase of animals belonging to native breeds, and the MASAF Call for the preservation of traditional transhumant herding.

Other important issues discussed during the dissemination events were:

- the new regulations that have been recently introduced for extensive farming, namely the CAP eco-schemes for pastures, the "Classyfarm" national platform for animal welfare and biosecurity, and the current process of digitalisation with the BDN as an opportunity to improve the relationship between planning and actual use, but also for the valorisation of grass-fed meat produced in N2000 sites
- other relevant regulations, such as the Nature Restoration Law (particularly the implications for degraded grassland habitats), and the new Italian Mountain Law (n. 131, 12 September 2025), which introduces the national register of 'silent' (inactive) lands for all municipalities in Italy
- project proposals on contractual measures for N2000 sites and on AA procedural simplifications
- the results of ARSIAL's activity on breeds at risk of genetic erosion
- the new national guidelines issued in July 2025 by the Ministry of Health on the issue of *Escherichia coli* toxins in raw milk cheese from sheep and goat extensive farming, and their regional implementation, in order to avoid the definitive abandonment of traditional cheese-making without pasteurization
- the participation in the "Slow Food Presidium for permanent grasslands and pastures" (as part of the collaboration between LIFE GRACE and Slow Food). Similarly to LIFE GRACE, the Presidium aims to involve shepherds who contribute to pasture conservation with their work, recognizing their importance as nature custodians.

Events were mostly organised or co-promoted by LIFE GRACE, except for the Fairs and a few other events organised by external organisations, in which the project nevertheless ensured an

active participation through dedicated presentations or stand. Some of the events were also attended by researchers from DEB and the University of Tuscia, who supported ARSIAL in the presentation of the project's scientific results. The following list summarizes the main activities (a complete list is available in chapter 6.3 under 'Dissemination'):

- Organisation of **2 workshops with N2000 Environmental Authorities**, one in Rome on 21/03/2024 (*milestone* "Workshop starts with environmental authority) and one in Pastena (FR) on 15/03/2025; the Authorities involved were Lazio's Environment and Agriculture Directorate, and a Park Director. The exchange of ideas between farmers and Lazio Region representatives eventually resulted in the reactivation of the financial contribution for the purchase of animals belonging to Lazio's native breeds in 2025
- Organisation of **4 training courses** for agronomists and foresters involved in pasture management planning, on 13/10/2023 (*milestone* "Start of meetings with trade associations"), 20/10/2023, 16/11/2023 and 01/12/2023. A total of **64 agronomists and foresters** from the Orders of Agronomists and Foresters (ODAFs) of Rieti, Frosinone, Rome, and Viterbo were trained.
- Participation and/or organisation of **9 seminars with common land managers** (*milestone* "Seminars start with common lands managers": 10/02/2024). In total, the events involved **69** bodies that manage or coordinate common lands, including **28 Municipalities**, 1 Mountain Community and **28 UAs** in the Lazio Region (both inside and outside project areas), but also 3 Municipalities and other common land managers from the Umbria Region.
- Organisation of **6 territorial meetings** with farmers outside of the GRACE areas (*milestone* "First territorial meeting": 18/04/2024); the territorial meeting held during the "In the Shepherd's Footsteps" day trip in Picinisco (FR) was co-organised with PNALM, with which LIFE GRACE later signed an agreement to replicate activities (see action B4). A video of the excursion was produced by DEB ("Sui Passi del Pastore") and showed in subsequent events.
- Participation in **3 Fairs/ Exhibitions** (*milestone* "Participation in national and international fairs") on 05-07/04/2024 ("Agriumbria" National Fair), 28/04/2024 ("Campoverde" Agricultural Fair), and 27-28/09/2024 ("Terra Madre" International Fair), with LIFE GRACE booths and/or presentations of project activities
- **Other 8 events and initiatives** not foreseen by the project, including the video-interview for the Ruminantia's online magazine (https://www.youtube.com/watch?v=pgTvGDqeM4k) and the active participation in workshops and seminars organized by CREA, National Rural Network (NRN), farmers' associations Confagricoltura and Coldiretti. On 16/04/2024, FIRAB was also a guest on the Lazio TV programme "Lavoro e non solo", in an episode dedicated to the livestock farming profession (https://www.facebook.com/reel/1454153841884818).

In total, **155 farmers, 46 trade associations** (including 9 Agronomists and Foresters Associations and 25 breeders' associations), **32 players** of the food supply chain, and **28 Environmental/ Agriculture Authorities** were involved in the D3 activities and events.

In order to communicate the project's goals and results to the different targets, a leaflet on the project was printed in 1.500 copies (*deliverable*) on 10/12/2022. Moreover, 2.000 copies of a second leaflet, not foreseen by the project, were produced and printed. This additional leaflet provided more technical and detailed content to support the communication towards farmers and technicians involved in pasture planning and management. All copies of both leaflets were distributed. Another type of informative material, a *4foldcard*, was printed in 4.000 copies by FIRAB in November 2025, geared towards HORECA players, encouraging short food supply chains and the introduction of N2000 grass-fed meat in school menus. All copies of the card were given to the Costaggini Institute and to the "Borghi più belli d'Italia" Association during the event on 01/12/2025 (see action B1).

On 06/02/2025, an article on the LIFE GRACE project (*deliverable*), specifically on the ethical consumption of grass-fed meat from N2000 sites, was published on the specialized magazine "L'Informatore Agrario", with an average circulation of 20.000 copies.

Web activities
During 2020-21, all partners activated pages on LIFE GRACE on their websites. Throughout the entire project, FIRAB ran a blog directed at farmers on its website, discussing the relationship among the conservation of grasslands, animal grazing on pastures, and the promotion of grass-fed meat from N2000 sites. Similarly, a specific section aimed at farmers was also organized on the project website ("The meat supply chain"), where regulatory references, documents, information on open tenders, constant updates on project activities, and other events useful for farmers were constantly updated. On 10/12/2021, the photo gallery (*milestone*) was created on LIFE GRACE website, where photos of the target areas, and of the different meetings and events were uploaded.

Continuation after the end of the project
The communication targeted to breeders will continue after the end of the project, as ARSIAL will continue to manage the Regional Conservation Network for the breeds of agricultural biodiversity. The dialogue with the environmental and the CSR authorities will continue for the purposes of a better link of conservation and monitoring measures with the rural development measures. Further meetings will be held with institutions on the Nature Restoration Law and the new CAP.
The LIFE GRACE dissemination materials (leaflets, *4foldcard*) will be further distributed during future events, training courses, etc. directed at farmers or other players of the food supply chain, such as HORECA.
The blogs on FIRAB's website will be maintained as an archive of project results and information point for stakeholders.

D4 Networking and final workshop

Lead beneficiary: ARSIAL
Other beneficiaries involved: GF, FIRAB, CA, DEB

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/10/2020	13/10/2020	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved

The networking activity with LIFE and non-LIFE projects or other initiatives started on 13/10/2020 (*milestone*) and was carried out throughout the duration of the project including exchanges of experiences and technical/ scientific documents, through specific contacts or meetings, as well as the organization or participation to different types of events (webinars, conferences, workshops, etc.). During the project 37 networking meetings were organized or attended by project partners, including the final workshop, reaching a total of about 1.400 individuals. The minutes of the networking events are collected in the related *deliverable*.

Different networking activities involved projects and initiatives of international relevance, allowing the networking dimension to develop at an international level. LIFE GRACE built its most significant collaborations with projects LIFE SHEP4BIO and LIFE Pastoralp (networking meetings on 23/09/2022 and 29/11/2022) and took part in events organized by the two projects, namely SHEP4BIO's initial conference (03-04/11/2022), SHEP4BIO's workshop "Mountain livestock farming as a tool for biodiversity conservation. Best practices, challenges, and prospects" (01/03/2024), and LIFE PASTORALP's final conference (15-17/03/2023). During this last event, LIFE GRACE partners collaborated with other LIFE projects representatives to define a "Pastoralp position paper" on grassland habitats and extensive farming.

Other meetings were organized with: RDP operational groups from different Italian Regions (Vistock project, Innovabiozoo project, etc.), EU Initiative "Birds@Farmland", EU project Landcare Europe, Austrian RDP project "Biodiversitätsmonitoring mit LandwirtInnen" ("Biodiversity monitoring with farmers"), project "PASCOL-ANDO: sustainable management of pastures", LIFE GESTIRE2020, LIFE IP IMAGINE, and RDP projects "Bio-Lazio" and "ReMonLHab". In December 2025, ARSIAL and DEB attended an international LIFE Platform Meeting about the future of Europe's Agri-Food sector, with 36 other LIFE projects.

Moreover, project partners participated in several events or meetings (mostly set up by organisations external to the project), where LIFE GRACE and its activities were presented and discussed:

- 5 meetings on the **new CAP** with representatives of the NRN, regional Agriculture representatives (for different regions), farmers' organizations, agronomists and researchers.
- 6 workshops/ meetings about **pastures management and conservation**, extensive farming as a tool for biodiversity and the risks of pasture abandonment (e.g. fires). These events were geared towards regional Agriculture and Environment representatives for Lazio, Park authorities, common land managers (mostly Municipalities and Mountain Communities), researchers, farmers, agronomists and foresters.
- 7 events (national and international workshops, conferences and a fair) about **sustainable food supply chains** and **marketing strategies** for local food products, specifically grass-fed meat and cheese. Participants to these events included regional Agriculture and Environment representatives for Lazio, local administrators, bio-districts, HORECA players and associations, farmers' associations, teachers and students from vocational schools in the agriculture and hospitality sector.

Other than networking meetings and events, a significant activity carried out by ARSIAL was the contribution to the text presented by Picinisco's Municipality to the Senate hearing of 29/04/2025 on the "DDL Valorizzazione della Transumanza" (draft law on the valorisation of transhumance) and the contribution provided to the Regional Councillor for Agriculture of Lazio for the regional

adoption of the National Guidelines on raw milk products, on the occasion of the international exhibition Cheese 2025 held in Bra (CN) on 19-22/09/2025.
The project's final workshop (*milestone*) was organised by ARSIAL, which assigned the catering, the printing of dissemination materials, and the production of additional tools and gadgets not originally foreseen in the project (Rollup – 2 copies, USB stick – 150 copies, shopper 150 copies, and notebook with the project's logos – 300 copies) to external companies. The workshop took place on 09/09/2025 at the "Spazio Europa" location in Rome, with the title "The engagement of institutions, farmers and consumers for the conservation of pasture habitats in N2000 areas". Among the speakers were representatives of CINEA (LIFE GRACE project adviser), the MASE, the Lazio Region (with both Environment and Agriculture Directions), a consumer association (Unione Nazionale Consumatori), and academia. Some farmers also shared their testimonies. LIFE SHEP4BIO and LIFE IP IMAGINE attended the conference with their representatives and through a stand dedicated to LIFE projects with which strong collaborative relationships have been established.
The workshop was attended by 137 participants (68 in person and 69 online) and thus exceeding the expected 100 people. The video of the final conference (an additional product) is published on ARSIAL's YouTube channel and available on the LIFE GRACE website: https://youtu.be/kieHZbf9jvg. A transcription of the speeches and presentations was compiled by GF (*deliverable* "Final workshop proceedings").
The networking relationships developed during the project proved particularly valuable, as shown by the joint PASTORALP position paper, the signatures collected for the GRACE business network and codes of conduct, the contribution to the Senate hearing on the legislative proposal on transhumance, and to the Regional Councillor for Agriculture for the regional adoption of the National Guidelines on raw milk products. Furthermore, following the relationships established with the PNALM authority, the replication activities were subsequently developed within its territory (see action B4).
For details about each networking event and further data on target audience and participants/people, see chapter 6.3 (under 'Dissemination').

Continuation after the end of the project
The exchange activities with projects, related initiatives, and with experts in the sector will continue as a good general practice. Project partners will continue to transfer project results by participating in seminars, conferences workshops and institutional working groups, especially about grasslands management, sustainable food supply chains and grass-fed products.

E. Project management

E1 Project management and coordination

Lead beneficiary: ARSIAL

Other beneficiaries involved: GF, FIRAB, CA, DEB

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/09/2020	01/09/2020	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved

The coordination of the project activities, as well as the administrative coordination, has been regularly carried out. Throughout the entire duration of the project, each partner carried out the administrative procedures related to the implementation of the project activities (e.g. agreements, procurements, requests for quotations, expenditure authorisations, etc.).

It is appropriate here to outline the administrative activities and procedures developed by ARSIAL in relation to its organizational structure and official competences to lay the foundations for the future continuation of the project actions after the end of the project as institutional and ordinary activities, and thus to serve as a basis for drafting the After-LIFE Plan (see action E3):

- on 10/01/2024 ARSIAL proposed to the Administration the establishment of an office dedicated to the Agriculture-Environment relationship within the ARSIAL's new organizational structure. This proposal was subsequently approved in the **commissioner's resolution of 12/03/2024**, which formalized the Quality and Territorial Planning Area, with the aim of strengthening agroforestry planning activities that enable the exercise of agropastoral practices.
- by **decision of the Director General no. 111 of 28/08/2024**, the Service for Agriculture-Environment Relations, Collective Lands and Forests was established within the ARSIAL structure, with specific responsibility for supporting local authorities in the management of collective lands and N2000 areas. This activation also has implications for more structured relations with the Regional Environment and Agriculture Directorates, respectively regarding authorization procedures and the implementation of active policies supported by the Prioritized Action Framework for N2000 (PAF) and the Lazio CSR.
- with the **Regional Government Resolution of 10/10/2024, no. 788**, the Regional Agriculture Directorate and the Agriculture Department appointed ARSIAL as the implementing body of the Forestry Strategy. The resolution is the outcome of the discussions initiated with the Regional Agriculture Directorate to assign ARSIAL the regional activities related to the implementation of the National Forestry Strategy, which has significant implications for improving the planning framework of grazing areas hosting N2000 habitats, with the ultimate goal of submitting the plans as a whole to the AA procedure, rather than submitting individual interventions (including watering points, roads, fences, shrubland mowing in transition, etc.) at plot scale.
- With **Regional Law no. 22 of 30/12/2024, Art. 8**, the Regional Directorate delegated to ARSIAL the activities related to civic uses, particularly concerning the creation of the regional cartographic layer of collective properties (most of the grazing lands in the N2000 areas of Lazio), as well as the approval of land-tenure verifications. This regional legal mandate was issued following the LIFE Grace animation activities carried out in the territories and with the Regional Directorate, during which the importance of restoring legal certainty and strengthening the management of Lazio's collective land assets – the true foundation of the pasture habitats in the N2000 areas – was highlighted.

The new regional mandates assigned to ARSIAL for the implementation of the Forestry Strategy and for activities related to civic uses began in 2025. These are structural functions which, supported by dedicated financial and human resources, will ensure long-term impacts in the After-LIFE phase; the Forestry Strategy, in fact, is funded until 2030.

Continuation after the end of the project

The action is ended with the end of the project.

E2 Project monitoring

Lead beneficiary: CA

Other beneficiaries involved: ARSIAL, GF, FIRAB, DEB

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/09/2020	01/09/2020	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved

Five comprehensive annual reports were produced once a year (*deliverables*). The annual reports represented an opportunity to provide a general overview of the progresses made, including the financial aspect.

Continuation after the end of the project

The action ended with the end of the project.

E3 Redaction of the "after LIFE" plan

Lead beneficiary: ARSIAL

Other beneficiaries involved: GF, FIRAB, CA, DEB

Foreseen start date	Actual start date	Foreseen end date	Actual (or anticipated) end date
01/07/2025	23/10/2025	31/12/2025	31/12/2025

Description of the activities undertaken and outputs achieved

On the administrative side, since 2024 ARSIAL has carried out preliminary activities aimed at structural adjustment and at strengthening/expanding its institutional role in the management of semi-natural grassland habitats (reported under action E1), prior to the official start of action E3, in order to lay the foundations for the After-LIFE Plan. Indeed, thanks to the formalisation of the new roles and competences in the fields of civic uses and forestry strategy, the activities carried out for the management of semi-natural grassland habitats are now shifting from project-based actions to ordinary institutional functions.

The Plan has been developed during the last months of the project by all partners under the coordination of CA. The After-LIFE Plan has a duration of 5 years and aims to promote the long-term conservation of grassland habitats in Lazio by reinforcing the role of extensive livestock farming as a structural element for rural development and for the protection and management of N2000 sites. It also plans the continuation of information and communication activities targeting the main stakeholder groups, namely local authorities, livestock farmers and consumers.

The Plan (*deliverable*) was reviewed and refined after the end of the project, during the preparation of this FR, to ensure full coherence with the FR itself and with the KPI values proposed for the 5 years following the project's conclusion.

Continuation after the end of the project

The action is ended with the end of the project. The actions included in the after-LIFE plan will be implemented after the end of the project.

6.2. Main deviations, problems and corrective actions implemented

The following problems were faced and relevant corrective implemented:

The impact of the COVID-19 pandemic (A3, A4). The pandemic crisis and the ensuing health restrictions represented a critical obstacle during the first two years of the project, effectively paralyzing all activities that required field presence or direct stakeholder interaction. Specifically, the lockdown and the subsequent recovery phases impeded the direct involvement of retailers and HORECA operators for the market surveys planned under Action A3. To overcome this impasse, the project team had to reshape its approach, transitioning from a plan of physical meetings to a "door-to-door" contact strategy to collect data directly and to structured interviews conducted via telephone or digital platforms. In addition, the final focus group was converted into extensive press and web research, leading to the classification and analysis of over 500 articles dedicated to market trends and consumption strategies. Although managing these difficulties caused delays, the overall impact on the project was paradoxically positive. The survey exceeded its original quantitative target – 159 stakeholders involved compared to the 120 planned – but also produced a far more robust and insightful analysis than expected. The integration of press reviews with direct interviews allowed to identify specific 'market niches' and effective communication strategies for subsequent actions.
Similarly, the organization of the "World Café" gatherings (Action A4), the heartbeat of the participatory process, suffered significant delays. To prevent a stalemate in results, a "Plan B" was outlined, which involved rescheduling meetings to the late spring and summer of 2022. This allowed the project to take advantage of periods with lower infection rates while redesigning interactions to ensure physical distancing without losing the effectiveness of the dialogue.
The Covid-19 pandemic had a significant impact also on the identification of administrations willing to implement CAM in school catering (Action A4). Due to emergency regulations, many municipalities renewed existing catering contracts for an additional three years, extending them until the 2024/25 school year. This extraordinary extension effectively froze the possibility of launching new tenders aligned with the CAM approved in 2020, limiting the project's ability to promote their adoption. At the same time, widespread smart working in public offices and distance learning in schools created uncertainty about the actual provision of canteen services, further discouraging administrations from initiating new procurement procedures. As a result, the identification of institutions willing and able to implement CAM-compliant GPP was slowed down, reducing the immediate uptake potential of the project's guidance and tools. These delays were overcome thanks to the support of ANCI Lazio.

Lack of reliable habitat baseline (A2). The lack of updated habitat cartography significantly affected the implementation of Action A2, requiring the development of a dedicated mapping workflow. Rapid vegetation dynamics and the absence of reliable site-specific maps made existing land-cover datasets insufficient, forcing the integration of very high-resolution satellite imagery with a comparative analysis of available cartographic sources. However, the high spatial fragmentation of semi-natural grasslands and the presence of transitional vegetation mosaics made remote interpretation alone inadequate, resulting in a much higher field survey effort than initially foreseen. Extensive floristic-vegetation sampling, detailed ground-truthing and multi-temporal land-cover reconstruction became necessary before a robust habitat baseline could be established.
These additional requirements caused a delay of almost one year in the delivery of the habitat maps but ultimately allowed the precise identification and delineation of habitats 6210*, 6220* and 6230* within the three SPAs. The updated mapping revealed that the actual extent of the target habitats is approximately 30% lower than estimated at proposal stage, highlighting a substantial pre-existing knowledge gap and confirming that the baseline information available at project start was incomplete and, in some cases, unreliable. The field-validated habitat maps produced under Action A2 therefore represent not only a technical output, but a major improvement in the ecological knowledge base of the three SPAs, providing for the first time an accurate and

operational reference framework for conservation planning, intervention design (B2) and subsequent monitoring activities (B3 and C1).

Lack of proper site-specific conservation objectives and measures for the three habitats **and/or of other specific management instruments** (e.g. grazing plans) **(B2)**:
Impact on the identification of practices / measures to be included in the models: Although the Lazio Region formally adopted conservation objectives and measures for the three SPAs and the included SACs (through specific DGRs and their inclusion in the Regional PAF 2021-2027, which also associates estimated costs and potential funding sources), these measures largely referred to management and planning instruments to be drafted or updated. In practice, site-specific operational tools (e.g. updated grazing plans or PGAFs integrating N2000 conservation measures) were not implemented within the project areas. This structural delay was further exacerbated by broader institutional shortcomings. At the time of project implementation, several HD-related instruments were still undergoing revision at regional level, respectively, the N2000 conservation measures and the adoption of updated VIncA guidelines. The subsequent postponement of the publication and operationalization of these instruments resulted in additional administrative uncertainty. This context significantly delayed the identification and operational definition of activities to be included in the conservation model developed under Action B2.
Impact on authorization processes charges (AA) for the implementation of the practices / measures to be included in the models: The technical-administrative delay in embedding conservation measures within formal land management tools resulted in the absence of approved grazing plans or PGAFs integrating N2000 prescriptions for pastures. This situation was further compounded by the lack of pre-assessed interventions, which could have supported a smoother AA process. Consequently, interventions requiring authorization procedures (e.g. scrub-clearance or selective restoration measures) had to undergo individual AA screening processes, generating an additional procedural burden for farmers and local authorities. In response to this situation, ARSIAL, in cooperation with DEB and upon request of the Regional Environmental Authority, initially supported the Lazio Region in developing contractual conservation measures and pre-assessment documentation. However, the proposed agreement model and the pre-assessment procedure for interventions in the agricultural sector could not be operationalised during the project period. Therefore, corrective measures were adopted at project level. The partners promoted the signature of voluntary operational agreements and conventions with municipalities and collective land managers (e.g. Monte Romano, Itri, Campodimele, Rivodutri), aimed at providing technical-scientific support, habitat mapping outputs, intervention fiches, and draft contractual conservation measures (ex DGR 569/2012). These collective arrangements were designed to facilitate the preparation of authorization requests and to streamline administrative procedures through coordinated submissions to the competent authorities.
Despite these efforts, structural constraints – including the absence of dedicated regional funding lines for habitat restoration, lengthy authorization timelines, and structural constraints in administrative capacity – prevented the timely implementation of most planned interventions. As a consequence, the full operationalization of the cooperation model (Action B2) has been slower than initially foreseen, directly affecting the start of large-scale monitoring activities under Actions B3 and C1.2, which are contingent upon the realization of habitat management interventions.

Structural constraints on stakeholder availability (B3, C1.2 and D3). The lack of feasible stakeholder-mobilisation windows in all target areas prevented the project from completing the planned training cycle. While suitable availability slots emerged in Campodimele (SPA IT6040043 Monti Ausoni e Aurunci) and Monte Romano (SPA IT6030005 Comprensorio Tolfetano-Cerite-Manziate), allowing the organisation of two training sessions, no workable opportunity for convening pasture users could be secured in Rivodutri or elsewhere in the SPA IT6040043 Monti Aurunci, notwithstanding sustained efforts to coordinate suitable dates with local administrations and land users. This constraint disrupted the planned sequencing of activities, as

the training sessions were a prerequisite for initiating participatory monitoring, especially in Rivodutri, where the completion of the interventions would have allowed the monitoring phase to begin. The project responded by intensifying bilateral contacts, providing targeted technical assistance, simplifying data-collection procedures, and revised the training materials to emphasise the practical utility of monitoring data for pasture management and for future access to potential funding schemes. However, these measures, while improving communication, did not resolve the underlying availability limitations. Consequently, the training cycle could not be completed.
The same engagement constraints also influenced the organisation of the 3 field days (action D3), which were designed to demonstrate best management practices to farmers not yet involved in LIFE GRACE. The events did not take place due to a limited interest from farmers, who are often reluctant to leave their workplace for an entire day, and to the impossibility of carrying out most B2 restoration activities, as the field days were conceived as post-intervention demonstrations showcasing the benefits of habitat restoration.

Delayed CAP implementation and lack of N2000 support measures (actions B and D).
Due to the Covid-19 pandemic, Regulation (EU) 2020/2220 extended the 2014-2020 CAP to the entire 2021-2022 biennium. At the same time, the new 2021-2027 CAP NSP was adopted with significant delay: the programme effectively started only in 2023, and the first operational phase began in 2024, with CSR measures becoming active between 2024 and 2025.
Since the Lazio Region had never activated N2000 payments in the previous programming period, the Region extended only the old measures not just until 2022, but until 2024. Furthermore, the PAF 2021-2027 (approved with DGR 234/2019) was not financed during the reference period, leaving grassland conservation measures without support. As a result, no N2000 compensatory payment and no other enabling measures were available for almost the entire duration of LIFE GRACE, preventing the project from valorising cooperation models and incentives. This situation particularly affected Action B2 and Action D3, delaying outreach activities and reducing the immediate applicability of the cooperation models developed by the project.
In the absence of CAP measures usable for grassland conservation, partners worked on the basis of the only RDP measure still available and functional to GRACE objectives – Measure 8.5 (forest planning) – and leveraged additional funding sources not initially foreseen, such as MASAF calls, to maintain support to local authorities and stakeholders. These resources allowed the project to continue promoting sustainable management models despite the lack of CAP instruments.
Throughout the project, ARSIAL maintained continuous dialogue with CREA, the NRN and the Lazio Region, organising meetings already in 2020 and continuing its policy dialogue throughout the project. These efforts could concretely influence policy only from 2024 onwards and contributed to the activation of the N2000 compensatory payment in January 2025, also thanks to the technical support provided for the justification of the premium.
Looking ahead, the forthcoming implementation of the Nature Restoration Law and the new 2028–2034 CAP – based on a single national fund – is expected to facilitate the activation of contractual conservation measures in N2000 sites, overcoming many of the structural limitations encountered during the project.

The war in Ukraine: market tensions and breeder resilience (B1). From 2022 onwards, the conflict in Ukraine introduced new and severe challenges linked to the spike in energy and raw material costs, particularly regarding grains for animal feed. These market tensions placed a heavy burden on breeders in N2000 areas, who were already operating with narrow margins and found it impossible to adjust final meat prices at the same pace as inflation. Many farms responded to this pressure by reducing herd sizes (by up to 30%) to limit management costs, while other more fragile entities were forced to close. This phenomenon inevitably weakened the marketing initiatives of Action B1 and posed a risk to the achievement of the expected result related to the volume of branded meat sold.

To counter this scenario, the project focused heavily on leveraging "environmental storytelling", promoting grass-fed meat as a premium product that justifies a higher price point. Furthermore, to mitigate the scarcity of private investment, LIFE GRACE acted as an information bridge toward public funding instruments, such as the V MASAF call for PNRR supply chain contracts. This promoted the creation of local fattening and finishing facilities, allowing breeders to retain the added value within the territory, value that is currently dispersed to other regions.

Structural constraints and supply chain fragmentation (B1). Beyond external shocks, the project addressed chronic structural weaknesses, such as the closure of numerous local slaughterhouses and the progressive disappearance of essential supply chain infrastructure in the Rieti area and other involved SPAs. The tendency of producers to sell live animals to out-of-region traders represents a significant barrier to the valorisation of N2000 products. Added to this is a widespread cultural resistance to aggregation; many breeders operate as "islands", making the formalization of rigid network agreements complex. The project's response was the adoption of a flexible, trust-based territorial governance model. Rather than imposing bureaucratic contracts, the focus shifted to voluntary and reciprocal "Business Network Accords", which built social capital between environmental authorities and producers. Thanks to the technical support of ARSIAL and FIRAB and constant territorial animation, it was possible to overcome initial fragmentation, involving 142 different actors across three territorial business networks. The success of this strategy is evidenced by a 27% increase in sales recorded by members of the GRACE network, proving that the integration of habitat conservation and economic development is possible even in highly fragile contexts.

Lack of generational renewal: from structural threat to educational opportunity (B1). Monitoring activities (C1.1) and World Cafés highlighted a critical structural threat: the professional aging of the sector (prevalence of over-60 operators) and a significant decline in traditional infrastructures, with approximately 5.000 butcher shops closing in Lazio over the last decade. This "generational void" leads to land abandonment in N2000 sites, fragmentation of the supply chain, and a loss of specialized skills (butchery and extensive farming management), making the local grass-fed market less competitive against industrial models. Without a generational turnover, the long-term sustainability of the GRACE network and the active conservation of habitats are compromised. The lack of young professionals capable of processing and narrating the added value of grass-fed meat hinders the implementation of co-marketing agreements and the Code of Conduct.
In order to address the challenge of generational renewal, a strategic addition to ensure long-term sustainability was the investment in human capital through an entirely new "educational outreach" pathway. The project implemented a training program for 117 students from professional hotel and agrifood institutes, such as the IIS "San Benedetto" and the IPSEOA "Costaggini". This strategic addition aimed at preparing future chefs and butchers to promote grass-fed meat within catering and tourism circuits. Through meat-cutting workshops and theoretical lessons, these young professionals were integrated into an innovative supply chain, becoming true ambassadors for the product. This ensured that young professionals are not just workers, but innovators capable of integrating grass-fed meat into tourism and catering circuits, bridging the gap between sustainable production and high-quality consumption.

Lack of formal N2000 product brand or label (B1). One of the most complex deviations concerned the difficulty of establishing a formal, third-party certified labelling system to communicate the origin of products from N2000 sites. LIFE Grace collaborated with the Regional Directorate for Natural Capital to revise the NIC brand specifications, proposing the explicit inclusion of grass-fed products and N2000 origins, but a formal approval is still pending. Additionally, a formal query by ARSIAL to MASAF and ICQRF on voluntary, non-certified

labelling (linking farming systems to N2000 sites via BDN data) was rejected due to traceability obligations currently unfeasible for a fragmented supply chain.
To address these hurdles, LIFE Grace shifted its strategy toward co-marketing and supply chain aggregation. The project adopted the NIC brand as a primary tool, given its alignment with N2000 biodiversity goals and leveraged its planned promotional framework (commercial showcase on the official website, brochures, and tailored outreach materials for specific target audiences) to ensure the necessary visibility for the Business Network. Additional strategic tools (e.g. LIFE Grace Guide, 4-fold cards, B2B meeting) were introduced to create the mass critical required to access HORECA and retail channels, transforming the brand from a simple logo into a "relational device" that builds trust between producers and consumers. This approach moved beyond traditional marketing to build a shared identity that legitimizes the socio-environmental value of extensive farming.
While monitoring data showed a significant increase in consumer awareness of the N2000 network (rising from 28% to 43%), it also highlighted the need for robust co-marketing to overcome the structural fragmentation of small farms. By exploring complementary pathways (e.g. SQNBA - National Quality System for Animal Welfare) and providing a comprehensive suite of both planned and additional promotional resources, LIFE Grace has laid the groundwork for a sustainable branding model that reinforces the economic viability of grazing systems as a key tool for habitat conservation.

Public misperception of extensive grazing and communication barriers (D2). A key challenge was the communication barrier linked to the widespread confusion between intensive livestock farming model and the extensive one. In a context increasingly attentive to animal welfare and the reduction of animal proteins consumption, this misunderstanding weakened the social legitimacy of grazing as an ecological tool essential for the conservation of priority habitats 6210*, 6220* and 6230*. This created a significant obstacle for the project, which needed public support to promote N2000 meat as a biodiversity-friendly product. GRACE addressed this issue through targeted communication tools, such as the guide "From our pastures to your tables" and Z-Cards, which reframed the consumption of N2000 meat as an act of active support for habitat conservation. A dedicated training seminar for journalists officially recognised by the Ordine dei Giornalisti, further strengthened this effort by improving the quality and reliability of media communication on the link between biodiversity, sustainable grazing and high-quality food. These actions helped correct misconceptions and build a clearer, more credible narrative around extensive grazing, reinforcing the social foundations needed for long-term conservation and market uptake.

Limited institutional capacity to correctly apply CAM and GPP in small municipalities (B1, D2). A significant challenge was ensuring a consistent interpretation and application of CAM requirements across local administrative contexts. Many municipalities referred GPP criteria without fully operationalising them, often perceiving environmental criteria more as a bureaucratic burden than as a lever for local development. Structural constraints further exacerbated this situation: tight budgets in small mountain municipalities, very low participation in the Fund for Organic School Canteens in Lazio (around 3% per year), fluctuating availability of local products to meet tender requirements, and reduced ministerial funding despite increasing demand. These factors hindered the adoption of short supply chains in school catering. To address this barrier, the project established a structured collaboration with ANCI Lazio and the LAGs, and organised targeted training seminars targeting mayors, councillors and procurement officers. This training, carried out alongside dissemination events (D2) and the direct support provided to municipalities (B1), aimed to strengthen the autonomy of local authorities in applying CAM and managing zero-kilometre procurement. During these sessions, LIFE GRACE explained and distributed a technical tender model for school catering, specifically designed to facilitate CAM implementation, particularly regarding the activation of short supply chains/Km-zero as award criteria, and to guide both less structured contracting authorities and producers in aligning with sustainability

requirements. Local administrations were also guided on how to access MASAF funds for organic school canteens, helping reduce costs and promote sustainable food education among students. These coordinated actions contributed to shifting the perception of GPP from a bureaucratic obligation to a practical tool for local development and sustainability.

6.3. Evaluation of Project Implementation

The various aspects of the implementation of the project are described and evaluated below.

Methodology applied

Project management

Regular and frequent meetings of the CC (held on average every 2 months and adjusted when specific needs arose) provided the opportunity to share points of view on how to face new developments. This practice produces a regular and updated workflow that allows the beneficiaries to obtain more complete and contextualized information. All partners have demonstrated strong know-how and expertise in their specific fields, assuring no overlapping of competencies, and a useful integration of perspectives. The CC played an important role in reviewing the progress of the activities, discussing emerging issues and identifying operational solutions. It is also important to underline that the partners were consistently willing to share any challenges they encountered, which led to constructive exchanges of ideas and solutions on critical issues. This practice is considered a significant added value, as it fostered a strong integration of perspectives and enhanced the overall effectiveness of the cooperation.

Working methodology

The project was implemented through a methodology in which partners systematically integrated project objectives into their ordinary workflows and, in the case of ARSIAL, into its institutional mandate. This approach enabled a broad and continuous dissemination of project themes, including through events and initiatives arising from each partner's regular activities but fully aligned with the project's scope. Operational results emerging from ordinary fieldwork were promptly incorporated into project dynamics, contributing to the identification of new synergies and informing the on-the-ground activities, such as the Classyfarm implications for the extensive livestock farming, or the data generated through the Genealogical Registers, or the new regulatory requirements related to the BDN. When project outcomes highlighted additional needs not foreseen in the initial planning, partners mobilised remaining project resources (examples include the guidelines for habitats management, the activation of training paths for students, the participation in food policy processes, the support provided to the Lazio Region, the guide featuring 15 nature and gastronomy itineraries, etc.) or, in some cases, their own institutional resources (e.g. the diachronic analyses, reported in the sections dedicated to extra-LIFE complementary actions under paragraph 6.1) to develop additional activities designed to respond effectively to those emerging needs. These contributions supported the effective implementation of the project and, in several cases, generated added value beyond the original design. With the same collaborative spirit, partners also contributed to actions in which they were not initially foreseen, providing specific expertise to ensure full implementation and, where possible, to enhance or multiply the expected impacts.

Methodology performance and institutional outcomes

The success of the applied methodology lies in its contribution to institutional strengthening, particularly for ARSIAL. The project acted as a catalyst for expanding ARSIAL's operational scope, prompting the agency to invest its own funds in thematic areas that would not have been addressed without the project. This is reflected not only in the additional activities and outputs

produced, but especially in the activities aimed at **structural adjustment and at strengthening and expanding ARSIAL's institutional role in the management of semi-natural grassland habitats**, directly building on project outputs. These developments (see Action E1) show that the project did more than achieve its planned objectives: it generated durable institutional change, embedding new competencies, practices, and responsibilities within the regional framework and enabling ARSIAL to invest its own resources in thematic areas that would not have been addressed without the project.

Results

The following table compares, for each action, the results achieved with the objectives and expected results, considering both quantitative and qualitative dimensions. Short-term results are distinguished from those whose effects are likely to materialise in the long-term. An overall assessment of each action is then provided, highlighting key successes and lessons learned.

Action	Foreseen in the proposal	Achieved	Evaluation
A1	Objectives: overview at European level of best practices on biodiversity conservation and monitoring carried out by farmers that can be adapted and replicated in the Lazio region. Expected results: identification of 5 case studies that could provide important information and useful tips for planning of 3 thematic models of cooperation with farmers.	Short term results: the 5 case studies were identified. They include different practices useful for designing the cooperation models with farmers. Long term results: NA	Success: the 5 examples of best practices in biodiversity conservation and monitoring implemented by farmers across the EU Member States inspired and informed the design the cooperation models developed under B1, B2 and B3. The study also allowed the activation of exchange activities with an Austrian project. Lessons learned: the wide bibliography on projects at EU level, allowed to learn from lessons learned and solutions to common problems
A2	Objectives: obtain an in depth environmental and socio-economic knowledge of the 3 SPAs which served as the basis for identifying suitable target areas and for planning actions A4, B1, B2 and B3 and the baseline for actions C1 and C2. Expected results: a geodatabase of the target areas; a model of the habitat maps; updated habitat maps; habitats CS assessment; indicators easy to collect from the farmers; delivery of a questionnaire to 60 economic operators; identify the key structural and socio-economic configurations.	Short term results: geodatabase created and populated with available vegetation survey data and environmental maps; list of indicators defined; habitat models and maps created; habitats CS assessed; thematic habitat maps with conservation measures developed; questionnaires collected from 60 operators; socio-economic configuration of the three areas identified. Long term results: the maps defined are suitable for both management and planning purposes and therefore for the definition of future initiatives aimed at the conservation and restoration of semi-natural grasslands in the 3 SPAs.	Success: The final maps represent the first harmonised and spatially explicit set of habitat maps for semi-natural grasslands hosting habitats 6210*, 6220* and 6230* across the three target SPAs. Despite the delays caused by missing/outdated information on the distribution of the target habitats, the integrated analyses and field activities carried out generated a robust and operational baseline for the implementation of management actions under Action B2, for the design of biodiversity monitoring protocols under Action B3, and for the assessment of project impacts under Action C1. Lessons learned: the definition and implementation of interventions aimed at the conservation and restoration of N2000 Habitats cannot be separated from reliable and up-to-date information on the distribution and conservation status of such Habitats.
A3	Objectives: verify how the current and potential markets can accept meat produced on the N2000 criteria; identification of market chains to be involved in the World Cafè and in the business networks (A4);	Short term results: questionnaire compiled from 114 stakeholders; 3 focus groups organized and 15 direct interviews realized, reaching additional 45 stakeholders; value of the NIC brand tested. Long term results: NA	Success: the objectives were achieved exceeding the expected number of stakeholders in the meat market; the direct interviews and the extensive press reviews carried out to overcome difficulties in reaching retailers and HORECA operators provided numerous

	obtain indications for the definition of the marketing model (B1), and the baseline for actions C1 and C2. Expected results: administration of a questionnaire to 60 stakeholders of the meat chain; organization of 5 focus groups, reaching further 60 stakeholders; estimation of annual consumption of N2000 meat; test and analysis of the value of the NIC brand.		ideas and reflections, also looking at national experiences. Lessons learned: The observation base should be extended on a wider territorial panorama. The current meat market instruments do not promote N2000 meat, and consequently an integrated supply chain must be reorganized to build a greater identity among N2000 meat stakeholders in order to stimulate new cooperation mechanisms.
A4	Objectives: involve the various stakeholders who will also be actors in the implementation of cooperation models (actions B) Expected results: inform/train 120 breeders; identify 30 grazing areas; create one network of environmental breeder's enterprises; create 3 World Café involving 40 breeders and 70 food distribution points; definition of guidelines for the drafting of specifications for public canteens; identify a list of public bodies to rewarding voluntary requirements for N2000 livestock in CAMs.	Short term results: 120 breeders informed/trained; 30 grazing areas identified; 4 World Café organised involving 43 breeders, 12 food distribution points, 24 further key stakeholders, and 54 students; creation of the first business network in the Monti Ausoni e Aurunci SPA with 9 local actors; guidelines for the drafting of specifications for public canteens drafted; a list of 18 institutions available to integrate the GPP identified. Long term results: wider engagement of stakeholders in cooperation models and in the procedures for implementing the CAM and accessing funds for organic school canteens.	Success: promotion of a relationship between environmental authorities, local administrations and breeders on the basis of contractual measures. Several municipalities were available in integrating voluntary rewarding requirements for N2000 livestock in CAM implementation as formally requested technical support. The animation on supply chain projects has allowed operators to verify the real opportunities offered by public tenders for the reactivation of local supply chains increasingly compromised by the absence of operators downstream of primary production. Lesson learned: CAP and organic support for grazing areas is an essential tool for the conservation of wild livestock, especially autochthonous. Support for complying with the CAM in GPP, together with the valorisation of short supply chains, represents an important tool both for less structured contracting authorities and for the production system, which can appropriately orient its business model, with particular regard to accessing environmental sustainability certifications.
B1	Objectives: design and implement a cooperation model to foster the N2000 animal farm economy as a leverage for improved and dynamic conservation. Expected results: 3 box schemes initiatives engaging 3 CSA groups; 10 Public Administrations adopting additional voluntary requirements in public canteens services; 3 business network accords; a strategy for the community brand use; 10% increase of N2000 meat sold.	Short-term results: the cooperation model was designed and effectively implemented through the creation of a multi-level territorial network involving supply, demand and institutional actors across three SPAs. 5 box schemes / CSA initiatives were actively engaged. 15 Public Administrations received technical support and were engaged in the integration of voluntary CAM for the introduction of grass-fed meat in school canteens. 3 territorial business network accords were activated (one per SPA), based on flexible and adaptive co-marketing arrangements. A community brand strategy was developed, focusing on the NIC regional brand, including a proposal to integrate grass-fed meat from N2000 sites into its specifications. 117 students were trained through 2	Success: most qualitative and quantitative targets were met or exceeded, with the exception of the aggregated meat sales target, which was affected by external market trends (decline in ovine consumption, low producer prices). The action significantly strengthened the resilience of extensive livestock farms and demonstrated the effectiveness of cooperative, place-based co-marketing models. Lessons learned: flexible and trust-based cooperation models are more effective than rigid formal structures in fragmented livestock sectors. Economic impacts are uneven across species and territories; aggregated

		training pathways on the sectioning, cutting and preparation of grass-fed meat, organised in two vocational school facilities specialised in agri-food and hospitality education: IIS "San Benedetto" (Latina) and IPSEOA "Costaggini" (Rieti). The overall +10% increase in meat sales was partially achieved (+1,2% in volume overall), while it was fully achieved and exceeded for bovine meat (+20,6%) and for companies participating in the GRACE Network (+27% average increase). Long-term results: a durable territorial governance system capable of supporting extensive grass-fed livestock farming as a driver for the active conservation of semi-natural grasslands. Strengthened links with public procurement, local food policies and professional education systems are expected to stabilise demand, support generational renewal and increase the share of added value retained within livestock farming areas. The consolidation of short supply chains and collective marketing practices is expected to improve farm resilience to market volatility and to contribute to the long-term maintenance of grazing activities.	indicators may underestimate local and network-level benefits. Public procurement (school canteens) is a powerful but complex lever, requiring strong technical support for municipalities. Branding strategies must be supported by credible governance and communication systems to avoid bureaucratic burden on small farms. Long-term continuity and scaling-up require complementary investments in communication, infrastructure and policy alignment beyond the LIFE timeframe.
B2	Objectives: define and test the best management and conservation practices for the semi-natural grassland habitats; support and train farmers in implementing the conservation activities. Expected results: definition of an environmental agreement/contract model; 40 farmers signing the environmental agreement /contract; 10% of the 3 EU habitats restored / maintained.	Short term results: definition and consolidation of an environmental agreement model and of a cooperation framework for the conservation and management of semi-natural grasslands, supported by detailed technical guidelines and best management practices. 9 cooperation agreements formally signed with collective land management bodies, providing an institutional framework that engage over 775 livestock farmers operating under the jurisdictions of the signatory entities. 7,5 ha of habitat 6210* restored in Rivodutri (SPA Monti Reatini; 0,32% of the site's habitat area). Restoration projects and activation of permitting steps for 9,24 ha of habitat 6220* in Monte Romano (SPA Tolfetano-Cerite-Manziate; 0,39% of the site's habitat area). Technical, scientific and administrative groundwork for intervention packages in Itri (SPA Monti Ausoni-Aurunci) covering 156,65 ha of habitat 6210* (4,75% of the site's habitat area) and 167,24 ha of habitat 6220* (7,96% of the site's habitat area). These figures document the concrete operationalisation of the cooperation model, from governance arrangements to site-level action planning. Note: percentage values are based on the habitats extent as resulted in the A2	Success: despite significant procedural constraints and delays linked to authorisation processes and COVID pandemic, Action B2 successfully established a robust technical and institutional framework for the conservation of semi-natural grasslands. The cooperation model was discussed, refined and formalised through continuous interaction with regional authorities, municipalities, collective land management bodies and farmers, and translated into operational tools applicable at local level. The strong interest and active involvement of local administrations, collective land managers and farmers confirmed the relevance and feasibility of the cooperation model developed, even in complex governance contexts. Policy dialogue and technical support to the Regional Agriculture Directorate have successfully enabled the activation of a package of funding measures for the sustainable management of N2000 grassland habitats. Lessons learned: the link between the Lazio Region Environmental Department and the local context established by the project proved to be effective in clarifying the scopes and objectives of N2000 to the farmers and setting the ground for a mutually

		outputs. Long term results: although the full implementation of restoration interventions were constrained by procedural and financial limitations, the concrete cooperation pathways activated with collective land managers is expected to result in the integration of conservation objectives into ordinary planning and programming instruments (such as improvements to "fide pascolo", i.e. pasture management agreements with the farmers, particularly by incorporating data about the habitat conservation status). The Action generated a measurable pipeline of interventions by moving from concept to implementation conditions: 9,24 ha (habitat 6220) in Monte Romano, and 323,89 ha (habitat 6210 and 6220) in Itri entered the design / authorisation track, and the newly activated CSR and regional measures will make it possible to finance such restoration projects.	beneficial collaboration towards the definition of the environmental agreements. The Action highlighted that effective conservation of N2000 grasslands requires early and continuous coordination with environmental and agricultural authorities, flexible cooperation instruments, and alignment with ordinary policy and funding frameworks. The experience demonstrated that building institutional capacity, shared technical understanding and trust among stakeholders is a prerequisite for the long-term implementation of conservation measures, often more critical than the immediate execution of on-the-ground interventions
B3	Objectives: establish a permanent network of monitoring the 3 targeted habitats including farmers and regional staff. Expected results: 5 simplified monitoring protocols; 1 App for monitoring by farmers; collecting 1.000 biodiversity monitoring records by 100 farmers using the App; training 10 technicians of the Lazio Region on the use of Collect Earth.	Short term results: development and consolidation of a structured monitoring framework for semi-natural grassland habitats, including 3 simplified monitoring protocols for the three target habitats and 2 protocols for the main pressures and threats, as well as a customised mobile application for participatory data collection. 24 participants (regional and associated technical staff) trained on Collect Earth. 11 livestock farmers involved in the field-based training events. Long term results: establishment of shared methodologies, operational tools and technical capacities that can be applied within ordinary monitoring and management frameworks beyond the project duration. The established monitoring framework provides a concrete basis for integrating participatory and satellite-supported monitoring into regional environmental and agricultural monitoring activities, progressively scaling up the approach as much as enabling conditions (resources, authorisations and coordination mechanisms) allow.	Success: Action B3 successfully delivered a complete and technically structured monitoring framework, despite delays in its operational deployment. The combination of simplified protocols, digital tools and training activities ensured the readiness of the monitoring model and demonstrated its feasibility in real field conditions, even in complex governance contexts. Lessons learned: the Action highlighted the importance of aligning monitoring activities with administrative procedures, authorisation timelines and funding instruments from the earliest project stages. It also confirmed that the development of flexible, modular monitoring tools and the strengthening of institutional and stakeholder capacity are essential prerequisites for the long-term sustainability of participatory monitoring approaches, particularly where on-the-ground implementation is dependent on external regulatory processes
B4	Objectives: production and implementation of a replication and transfer plan of the cooperation models (B1, B2 and B3). Expected results: 50 Code of Conducts signed; definition of replication and transfer tools; 5 seminars and 3 meetings; 20 videos with testimonials.	Short-term results: the Replication Plan and the Code of Conduct were finalized. 38 Codes of Conduct were signed (23 in project areas and 15 in extra-target areas). Communication was consolidated through the production of 20 video testimonials and the organization of a 9-stop road show, which involved over 215 participants. 3 agreements were signed with territorial governance bodies (PNALM, Lamone Reserve, and LAGs). 1 restoration	Success: the communication and replication objectives were exceeded (9 seminars/meetings held instead of the 8 planned). While adherence to the Code of Conduct outside the 3 SPAs reached only 30% of the target (15 out of 50), their qualitative impact and territorial coverage more than compensated for the numerical gap: the signature from the Tenuta di Castel Porziano, which covers over 6.000 ha of the homonymous SPA,

		project was integrated in the LDS of Castelli Romani LAG. Ecological traits typical of habitat 6220* were restored on 5.600 m^2 of degraded grassland in the Lamone Reserve. Long term results: the consolidation of the agreements, the structural integration of the GRACE model into territorial policies and LDSs. Extending adherence to the Code of Conduct and the agreements, and consolidating short supply chains. The final legacy is the creation of a network of good practices for extensive livestock farming, capable of influencing the programming of ordinary agricultural funds.	represents a highly meaningful recognition, as does the adhesion of farms operating in distant regions such as Liguria and Umbria, accounting for a further 300 ha. Through agreements with LAGs, PNALM, etc., a territory comprising over 500 breeders in the Lazio Region was involved, far exceeding the 50 expected to sign the Code of Conduct. This dynamism made it possible to extend the influence of the model to a total 103.659 ha located outside the 3 target SPAs. Lessons learned: the modularity of the tools is key to replication: different territories can adopt individual parts of the model (only marketing or only conservation) according to their needs. It has emerged that stakeholder involvement is more effective when based on peer-to-peer communication (farmer-to-farmer) rather than on top-down prescriptions. However, the logistics of the short supply chain remain the main bottleneck: without structural investments (e.g., small local slaughterhouses) and a simplification of regional bureaucracy, large-scale replication risks running into management costs that are too high for individual companies.
C1	Objectives: assessing the socio-economic and biodiversity impact of the project. Expected results: mid-term socio-economic assessment report; final socio-economic assessment report; 2 annual biodiversity monitoring reports.	Short-term results: the multi-channel strategy executed for the socio-economic assessment ensured a representative sample (409 consumers/sellers and 102 total farmers) despite initial stakeholder diffidence. A mid-term socio-economic assessment report was produced, providing a structured analysis of baseline conditions, early project effects and emerging trends in extensive livestock systems. A final socio-economic assessment report was completed, consolidating quantitative and qualitative data on farm structure, market performance, resilience strategies and demand-side dynamics. One post-intervention biodiversity monitoring survey completed on the restoration site in Rivodutri (about 7,5 ha of habitat 6210*); analysis of population trends, distribution and genetic-erosion risk of autochthonous endangered breeds fully completed; 1 annual biodiversity monitoring report completed. Long-term results: the socio-economic assessment has generated lasting evidence that the integration of conservation and economic development can be maintained over time, reinforcing the sustainability of the project's approach.	Success: while general market trends were negative (due to the war in Ukraine and inflation), producers within a coordinated network (GRACE) showed significantly higher economic resilience: a +27% sales increase. The final report documented a 17% rise in consumer awareness of N2000. The socio-economic assessment highlighted how extensive grazing (e.g., +51% pasture movements in Ausoni-Aurunci) supports habitat maintenance while improving farm resilience through the GRACE Network. The monitoring supported adaptive management of project actions and informed dissemination, policy dialogue and replication strategies. The post-intervention monitoring carried out at the Rivodutri restoration site provided clear evidence of rapid floristic and structural recovery of habitat 6210*, demonstrating that appropriately designed and targeted management actions can effectively restore degraded grasslands, even within a relatively short time span. The project achieved a clear conservation success, with reproductive females increasing by 6,027% alongside the improvement of the Maremmano cattle risk status from "threatened" to "vulnerable" and a steady rise in registered breeders, demonstrating strengthened population viability,

		Established a coherent assessment framework to evaluate the project's ecological impacts, including criteria for selecting representative sites, field data-collection procedures and cartographic support. The Rivodutri case study provided a first, well-documented validation of the project's intervention logic, and generated evidence-based indications on the conditions under which restoration measures are effective. The combined increase in population sizes of endangered breeds, the improvement in their genetic-erosion risk status, and the steady growth in the number of registered breeders indicate the establishment of more stable, resilient and better-supported autochthonous livestock populations, strengthening their long-term conservation prospects.	improved breed management and greater engagement of the farming community. Lessons learned: The analysis carried out shows that the breeding of Lazio's autochthonous livestock breeds remains intrinsically linked to extensive grazing systems, which play a crucial role in sustaining and maintaining the region's valuable semi-natural grassland habitats. To be effective, monitoring must feed directly into local governance (e.g., GPP in school canteens) and regional planning (Nature Restoration Law). Effective impact assessment relies heavily on the timely implementation of preparatory analyses and on-the-ground interventions. At the same time, even a limited number of well-documented monitoring cases can provide robust and meaningful evidence on habitat recovery dynamics, supporting the overall intervention logic of the project. In complex governance contexts, evaluation frameworks need to combine flexibility with a strong methodological foundation, in order to capture key ecological responses despite procedural delays.
C2	Objectives: proper monitoring of the LIFE KPIs Expected results: LIFE KPI webtool submission and updating.	Short term results: the LIFE KPI webtool was implemented and submitted for validation on 17/06/2021 (first snapshot). The data were validated. The LIFE KPIs were updated and submitted on 24/03/2026 (final snapshot). Long term results: the KPIs will be reviewed 5 years after the project end.	Success: the action proceeded in line with the time schedule, allowing a proper monitoring of the LIFE KPIs. Lessons learned: KPIs monitoring requires partners to adequate/create specific tools or methodologies for tracking progress when carrying out the actions populating the KPIs.
D1	Objectives: coordinate the communication actions; increase awareness of stakeholders and general public on the importance of biodiversity conservation through usage; direct and indirect recipients and the general public informed about the project Expected results: a communication plan with the visual GRACE identity; website with 5.000 unique visitors and social network; 20 press releases; 12 notice boards; 500 copies of the Layman's report.	Short term results: 8.924 unique visitors, with around 501 average quarterly unique visitors; more than 350 followers on socials (Instagram); 24 press releases; 12 notice boards placed; additional dissemination materials produced (3 roll-ups, 2 outdoor banners, 3 LIFE flags, 2 LIFE GRACE flags and 1 goccia table-top); 649 electronic submissions of the Layman's report and over 1.189 additional audiences reached through strategic stakeholder channels. Long term results: increased awareness of project's core messages among stakeholders and general public.	Success: the communication plan was successfully used to coordinate all communication activities and products. All expected short-term goals were reached and sometimes the results even exceeded expectations (number of unique visitors on website, number of press releases). There was a noticeable increase in the number of followers on social media (FB and Instagram) while the web campaigns (see action D2) were active. The Layman's Report reached a wide audience and received positive feedback. Lessons learned: tagging relevant accounts and using specific hashtag to increase post engagement on social networks. Strategic stakeholders proved essential in amplifying the dissemination reach, acting as effective multipliers of project communication tools.
D2	Objectives: bring consumers closer to consumption of meat N2000, intended to	Short-term results: the web and social media campaign reached 1.064.339 views, whereas in-person activities	Success: nearly all planned activities exceeded expectations, with a 1000% effectiveness in raising consumer

	modify its consumption and eating habits Expected results: raise awareness of 100.000 possible consumers on the quality of N2000 meat; reach 30 public canteens managers; reach 100 representatives of the HORECA sector; press campaign; web and viral marketing; 10.000 leaflets; 1.000 leaflets for HORECA; 30.000 Z-Cards; 2 press releases.	reached almost 2.500 people; 45 public canteen managers (44 Municipalities and 1 Ministry) were reached exceeding expectations and 35 of them took part in training meetings; 27 journalists participated in a training seminar (not planned); 100 representatives of the HORECA sector were reached; 10.000 leaflets, 1.000 foldables for HORECA and 30.000 Z-Cards were printed; a "From our pastures to your table" Guide (not planned) was produced. Long-term results: the awareness gained by consumers and the stakeholder network forms the basis for a shared vision of N2000 meat. The legacy of this campaign will undoubtedly have long-term effects on consumer awareness and opinion, which will require time and further encouragement to establish habitual and permanent purchasing decisions. Continuing a social campaign aimed at consumers, as described in the After-LIFE Plan, will foster this process of entrenchment, which in turn will help the business system organize itself increasingly efficiently and effectively.	awareness (from the expected 100.000 consumers to over a million digital views) and a 150% effectiveness in engaging public bodies (from the expected 30 to the final 45). The initiative successfully elevated meat from N2000 pastures, positioning it as a "premium" product in fine dining and as an ethical and sustainable choice in public procurement (GPP). The production of unplanned materials, such as the Nature/Food trails Guide, demonstrated a proactive ability to adapt, generating unexpected added value in terms of visibility and participation. Lessons learned: Experience has shown that purely ethical or prescriptive communication is less effective than experiential communication: integrating gastronomy, hiking, and local storytelling makes "ecosystem services" tangible concepts for the public. It emerged that public canteen managers lack not only willpower, but also administrative engineering, requiring constant technical support to overcome bureaucratic constraints. Finally, it was understood that training professionals (journalists, chefs, and public administration staff) is strategic, as they act as awareness multipliers capable of dismantling cultural prejudices about the link between meat consumption and biodiversity protection.
D3	Objectives: involving farmers active on pastures inside N2000 areas Expected results: 1 article in sector magazines; 3 field days; 4 territorial meetings; participation in 2 national and international fairs; 4 meetings with category associations; 4 seminars with common land managers; 2 workshops with regional authorities; 2.000 leaflet copies	Short term results: 1 article in sector magazines; 6 territorial meetings; participation in 3 national and international fairs; 4 meetings with category associations; 9 seminars with common land managers; 2 workshops with regional authorities; 8 additional communication events; 1.500 copies of leaflet on the project; additional material: 2.000 copies of leaflet for farmers; 4.000 copies of the *4foldcard.* Long term results: thanks to the meetings and training courses, common land managers and pasture / forestry planning technicians, have acquired a better understanding of how to use "fide pascolo" and "Testo Unico Forestale" (national forestry law document) to include the conservation of the target habitats in future regional forestry planning and agro-environmental CSR measures planning; farmers have become more aware of the relevant regional Calls they can apply to.	Success: LIFE GRACE has entered the NRN circuit dedicated to the issues of the agri-environment and the conservation of habitats in agricultural areas. Following the events, the Lazio Region reactivated the financial contribution for the purchase of animals belonging to Lazio's native breeds; many farmers applied to the Calls activated with LIFE GRACE's support and then promoted during project events (e.g. 1.162 applications for the "N2000 payments" CSR Measure). Lessons learned: Original data, produced by LIFE GRACE by crossing food supply chain data and environmental data, were a fundamental element of project communication. Events attended by both farmers and Environmental and/or Agriculture Authorities were essential in directing the Lazio Region's attention to farmers' requests.
D4	Objectives: exchange of experiences and good practices among other projects or initiatives on the themes of the project and among members across food	Short term results: 1 final European workshop; about 1.400 individuals reached. Long term results: consolidation of a multistakeholder network of public	Success: GRACE effectively positioned its activities vis-à-vis Institutions (local administrators, regional representatives) and players involved in pastures management and the local food supply chain. The networking relationships

	and agriculture and environment sectors. Expected results: 1 final European workshop; 175 individuals reached; knowledge building to inform project actions; creating opportunities for replication	institutions, value chain players and researchers interested in habitat conservation through grass-fed animal production.	developed during the project demonstrated their value by creating a collaborative framework and creating opportunities for replication that led to tangible results. Lesson learned: building collaborative and long-lasting relationships with key stakeholders is essential to maximise the value of networking and to translate it into replication and to expand the project's sphere of influence.
E1	Objectives: proper management of the project Expected results: 4 bilateral conventions; kick off meeting; institution of the CC; coordination meetings; monitoring visits.	Short term results: 4 bilateral conventions were signed. The kick off meeting of the project took place on 03/09/2020 in Rome and the CC was established. 39 coordination meetings and three monitoring visits were realized. Long term results: the strengthening of ARSIAL's institutional role, will ensure continuity and long-term impact in the After-LIFE phase.	Success: the project was properly coordinated. The PPs carried out their actions responsibly, sharing decisions and results with the whole partnership. Lessons learned: a proper project coordination starts with a close coordination of the single actions. A constant information exchange and dialogue among partners help to find simpler and more effective solutions.
E2	Objectives: to provide, if necessary, corrective measures during project implementation respect to unpredictable situations or events or, in any case, to make improvements to the activities of the project. Expected results: contributions to the drafting of technical activity reports.	Short term results: providing a general overview of the project, with its strengths and weaknesses; identifying delays, challenges and areas of improvement. Long term results: NA	Success: the reports were an adequate support throughout the project implementation, by identifying general difficulties and specific actions and activities that needed improvements or changes. The reports were also useful in the preparation of Interim/ Final Reports and monitoring visits. Lessons learned: NA
E3	Objectives: to ensure the continuity of activities and the sustainability of the results achieved by the LIFE GRACE project after its completion Expected results: Redaction of a 5-years After-LIFE Plan	Short term results: Redaction of a 5-years After-LIFE Plan for the maintenance and exploitation of the project results. Long term results: Long-term conservation of grassland habitats in Lazio and reinforced role of extensive livestock farming.	Success: Full institutionalisation of the activities and of ARSIAL's capacity to ensure continuity and governance beyond the end of the project. Creation of the structural, administrative and operational conditions needed to make the After-LIFE Plan realistic, sustainable and implementable. Lessons learned: NA

Overall, the implementation of the LIFE GRACE project successfully met, and in several instances exceeded, the objectives and expected results set out in the proposal. The conceptual, methodological and technical frameworks developed and tested within the project constitute a solid and transferable foundation for their future consolidation and uptake.
The following paragraphs examine each cooperation model and their replication efforts in detail, assessing their results and performance in quantitative and qualitative terms, as well as their main strengths and limitations.

Cooperation model on biodiversity conservation
The results achieved under the cooperation model on biodiversity conservation confirm that the project's objectives were met mainly in terms of governance set-up, operational tools and activation of concrete pathways, while the original quantitative targets linked to the signature of individual contracts and the completion of multiple restoration interventions were only partially achieved due to external and procedural constraints. Compared to the expected results, LIFE GRACE successfully delivered:

- a consolidated cooperation framework for shared, sustainable pasture management and conservation, supported by technical guidelines and best practices;
- a shift from a purely "individual contract" approach to an institutional cooperation mechanism based on formal agreements (conventions) with public/collective land managers;
- a set of tangible field and administrative outputs.

In quantitative terms, by the end of 2024 **9 cooperation agreements** were formally signed with common land management bodies (municipalities and UAs), creating an operational entry point to reach and coordinate the farming community operating on the relevant common lands (775 livestock farmers). In parallel, a **first restoration intervention** was completed in **Rivodutri** (scrub clearance on approximately 7,5 ha of habitat 6210* in the SPA "Monti Reatini", corresponding to 0,32% of the total habitat area in the site), and **additional intervention packages** entered the authorisation/ design pathway: 9,24 ha of habitat 6220* in Monte Romano in the SPA "Tolfetano-Cerite-Manziate", corresponding to 0,39% of the habitat area in the site, and targeted intervention areas in Itri in the SPA "Monti Ausoni-Aurunci", covering 156,65 ha of habitat 6210* (4,75% of the site's habitat area) and 167,24 ha of habitat 6220* (7,96% of the site's habitat area). These areas represent a significant proportion of the verified habitat surface and demonstrate that the project activated concrete restoration trajectories. However, due to external procedural constraints (lengthy authorisation processes and limited availability of dedicated financial instruments), most of these interventions could not be completed within the project duration. As a consequence, the 10% restoration/maintenance objective was only partially achieved in terms of implemented hectares, but was substantially addressed in terms of planned, authorised or administratively prepared surfaces. Importantly, the cooperation framework, technical documentation and authorisation pathways established by LIFE GRACE now provide the enabling conditions for reaching or exceeding the 10% objective in the post-project phase, once implementation conditions are consolidated.

A few months after the first intervention in Rivodutri, DEB carried out **one biodiversity monitoring survey on-site**, which showed clear evidence of rapid floristic and structural recovery of habitat 6210*. In particular, the presence of orchid populations was recorded, supporting the attribution of a priority conservation status to the restored habitat. Even though only one post-intervention survey could be completed, the Rivodutri case study demonstrated the applicability and relevance of the monitoring approach developed by the project, providing important data on the response of semi-natural grasslands to restoration actions. In parallel to the ecological evidence emerging from Rivodutri, the socio-economic assessment revealed a significant **+51% increase in pasture movements** in the Monti Ausoni-Aurunci SPA. This expansion of grazing activity indicates a renewed and more coherent use of pastures, fully aligned with the project's core principle of maintaining and restoring semi-natural grasslands through use. Such strengthened grazing dynamics contribute to the ecological processes underpinning habitats 6210*, 6220* and 6230*, and represent a concrete step toward the project's target of restoring or maintaining 10% of these habitats. Although this quantitative objective could not be fully achieved due to external administrative constraints, the observed reactivation of pasture governance demonstrates that the enabling land-use conditions required to reach it have been effectively re-established.

These results demonstrate a concrete **operationalisation of the cooperation model**, from institutional arrangements to site-level planning and implementation conditions. The main success lies in having transformed the project outputs into a workable pipeline of actions and administrative procedures, and in having contributed to **align regional agricultural support measures with N2000 grassland conservation needs** (including the activation, in early 2025, of a dedicated regional compensation scheme for N2000 grazing and the strengthening of other CSR measures supporting extensive livestock farming).

With regard to the autochthonous livestock heritage and, specifically, the seven target breeds (Maremmano cattle, Bianca Monticellana goat, Capestrina goat, Rapid Heavy Draught horse, Tolfetano horse, Esperia Pony, Romano della Maremma Laziale horse), the project fully achieved its expected results. The number of **breeding females increased by 6,027%**, reaching 13.809

animals, a figure of considerable significance that exceeds the values initially foreseen in the project objectives (+5%). It is important to clarify that the evidence of the increased impact of the target breeds is based on data updated to 2022; data up to 2025 have not yet been consolidated. However, drawing on the 2024 data available in the BDN and on the information provided by the Breed Associations managing the Genealogical Registers, it is reasonable to assume that, over the additional three years of project implementation (2022-2025), the number of breeding females of the target breeds continued to increase, particularly for Maremmano cattle and the equine breeds (TPR, Tolfetano, Esperia Pony, Romano della Maremma Laziale).
Over the years, two important dynamics have also been observed: a more complete and exhaustive collection of population data by the Breed Associations managing the Genealogical Registers, and an increase in the number of breeders registering with these Associations. Together, these elements have significantly improved the quality, reliability and traceability of the data used to assess population trends and risk levels for the autochthonous breeds. The emergence of new breeders registered in the Genealogical Registers, combined with improved traceability of production, has created more favourable conditions for the economic valorisation of products derived from grass-fed extensive systems in N2000 areas, thereby contributing to the conservation of the autochthonous breeds.

Cooperation model on biodiversity monitoring

The results achieved under the cooperation model on biodiversity monitoring show that LIFE GRACE succeeded in building a workable participatory monitoring set-up, even though the expected activation of a regular, multi-year monitoring programme was constrained by delays in linked preparatory and implementation actions.
In practical terms, the technical and methodological objectives were fully achieved, as the project developed a structured monitoring framework for semi-natural grasslands, translated into **simplified monitoring protocols** for the three target habitats (6210*, 6220*, 6230*) and for the main pressures and threats affecting grassland conservation, so that observations can be collected in a standardised and comparable way even by non-specialists. This methodological package was complemented by a **customised mobile application** designed for participatory data collection, which represents a key result because it reduces entry barriers (time, skills and standardisation constraints) and enables the integration of field observations into shared datasets supporting management decisions.
Capacity-building activities were implemented to ensure that the model did not remain a purely "paper-based" product. A dedicated training on satellite-based monitoring using Collect Earth involved **24 participants** (regional and associated technical staff), strengthening the ability to interpret remote-sensing information and link it with field-based habitat condition assessments. In addition, the participatory approach was tested through **two field-based training events** with farmers, involving **11 livestock farmers** overall, which allowed an initial validation of the monitoring workflow under real operating conditions and provided feedback on the feasibility of field measurements, the clarity of the simplified indicators, and the usability of the mobile tool.
Overall, although the most ambitious expected result, namely the activation of a systematic monitoring cycle by livestock farmers as originally planned, was not fully achieved, the Action generated long-term value by establishing shared methodologies and operational tools that can be progressively integrated into ordinary regional environmental and agricultural monitoring frameworks. The combined availability of protocols, digital tools and trained technical staff provides a robust basis for scaling up participatory and satellite-supported monitoring beyond the project duration, as enabling conditions (resources, coordination and administrative integration) allow.

Cooperation model on marketing

Beyond the initially foreseen results, LIFE GRACE successful delivered a coherent set of tools and approaches that strengthened territorial cooperation and improved the economic and institutional conditions and capacity for extensive livestock systems in N2000 areas.
The Cooperation Model, built upon the participatory outcomes of the World Café events and further refined through the findings of the socio-economic reports, was developed as an integrated framework to enhance the livestock economy within N2000 areas, effectively linking biodiversity conservation with economic sustainability.
It translated a strategic vision into a flexible operational tool, the **Business Network Accord**. Conceived as a voluntary and reciprocal collaboration frameworks rather than a rigid or binding contracts, the Accord coordinated producers, processors, restaurants, butchers, distributors, local authorities, and communities in an integrated approach to territorial development, helping reconcile environmental protection with territorial marketing, farmers' need with those of citizens and local authorities, and production/commercialization with the sustainable management of natural and cultural resources. To make this cooperation model operational, the project activated a set of complementary mechanisms, most of them not planned by the project:

- **Business networking & co-marketing:** establishing collaborative links across the supply chain (butchers, restaurants, agritourism, canteens) and developing joint promotion strategies to increase the visibility of grass-fed meat.
- **Support for local administrations:** developing a Guidelines for public canteens and a Technical tender model for school canteens, and providing concrete guidance to Municipalities for drafting tender specifications that introduce pasture-raised meat into school canteens through GPP.
- **Institutional agreements:** partnering with Chambers of Commerce to organize promotional events and awareness initiatives to expand the network's reach.
- **Integration into Local Food Policies:** to foster the integration of grass-fed products into local food governance, FIRAB actively participated in the Food Council of Roma Capitale (2024-2025). This engagement targeted two strategic areas:
  - **Working Table 6 (School Canteens):** LIFE GRACE proposed the introduction of pasture-raised meat into school menus. Although grass-fed meat was not ultimately included in the 2026 tender due to current supply limitations (with Rome's schools providing approximately 145.000 to 150.000 meals daily), the initiative significantly raised institutional awareness and successfully laid the groundwork for future inclusion as supply chains scale up.
  - **Working Table 7 (Catering):** the project contributed to the definition of criteria for a city-wide umbrella brand for Roman restaurants. The proposal requires participating restaurants to source at least 25% of their meat products from extensive farming systems, effectively integrating "GRACE" products into the official valorisation program for the city's catering sector.
- **Youth Engagement & Training:** Collaborating with agricultural and hospitality vocational schools to train students, ensuring a new generation of qualified operators.

A specific strategy has been developed to adapt the regional **NIC brand**, promoting the integration of its technical specifications to allow grass-fed products to explicitly highlight their connection to N2000 sites, creating a recognizable brand that adds market value.
In quantitative terms, the participatory **"World Café" model** proved resilient and despite the pandemic, which initially limited its participation, **12 events** were organized (4 of which in A4) and **11 additional informal initiatives** supporting dialogue among farmers, processors, HORECA operators, public administrations and civil society. **3 Business Network Accords** were finalized (one per SPA/ZPS). These are active co-marketing frameworks that, by the end of the project, included 54 farmers/processors and 78 food distribution points, ensuring the model's impact extends beyond the project's original geographic boundaries. Supply chain was significantly strengthened and the project exceeded the "Box Scheme" target by activating **5 CSA initiatives** instead of the 3 initially planned. This expansion broadened market access for grass-fed products and reinforced the network of committed consumers supporting extensive livestock systems. The

project achieved a measurable outcome in capacity building by engaging **15 Public Administrations** (exceeding the target of 10) and delivering 4 technical seminars (not planned by the project) to support them in integrating CAM and rewarding criteria for N2000 grass-fed meat, while simultaneously reinforcing the future supply capacity of the catering sector through the involvement of **117 students** from agricultural and hospitality institutes in a dedicated training programme aligned with the procurement needs emerging from sustainable school catering. The training of these students ensures that the next generation of chefs and butchers will act as ambassadors for these sustainable products.

The economic impact of the model was evident in its ability to **retain added value within the local territory**. According to the final socio-economic assessment, the overall sales volume saw a modest increase (+1,2%), while the impact on the "GRACE Business Network" members was significant, with a **+27% average increase in sales**. Specifically, bovine (+20,6%) and equine (+29,7%) meat sectors showed excellent performance, proving that the model works where supply chain structures are more stable.
The +27% increase in sales for network members confirms that consumers and professional buyers (restaurateurs and CSA) respond positively to the "environmental storytelling" of grass-fed meat.
A major success of the co-marketing model was the **creation of a genuine "social capital"** between environmental authorities and breeders, previously often in conflict. The project demonstrated that GPP is a powerful lever, but it requires intense, tailored technical support for municipalities. Within this framework, a strategic – although not previously planned in the project – development for bridging the gap between primary production and public consumption was the process activated for the **integration with urban food policies**. Participation in the Rome Food Council (2024-2025) laid the groundwork for future scalability, targeting the capital's massive school catering system.
Two major key lessons emerged from the implementation of the model:
- in fragmented sectors (like ovine-caprine), flexible, trust-based cooperation models are far more effective than rigid formal contracts, enabling collaboration despite structural asymmetries and historical tensions.
- marketing for N2000 products must be "place-based": long-term success depends on the integration of short supply chains, supportive local food policies, and the reduction of bureaucratic burdens for small-scale breeders.

Replication and transfer
Replication (Action B4) represented the strategic bridge between the project's pilot phase and its long-term sustainability, enabling the GRACE model to evolve from a set of local tests into a scalable governance framework. The shift from the initial "single pilot farm" approach to a "territorial system" model introduced by the cooperation model on biodiversity conservation (Action B2) as the project's core governance innovation, proved to be the most effective approach for large-scale extension.
By engaging intermediary bodies and local authorities responsible for wide territorial areas, replication was able to extend the GRACE model beyond the project areas, overcoming fragmentation and the limited effectiveness of isolated micro-agreements. This approach enabled coordinated grassland management at landscape scale, significantly enhancing the ecological effectiveness of conservation actions.
Although replication activities fell short of the initial target of 50 signatures of the **Code of Conduct –** a voluntary tool defined by the project to enable single farmers to formalize their commitment as "custodian companies" – outside the projects areas, the large-scale approach produced results far exceeding the original scope of the pilot areas: **3 large-scale agreements and 1 project integrated in the LDS**, alongside to **15 Codes of Conduct** signed by individual farms.
In quantitative terms, the replication activities involved over **533 livestock farms** across nearly 50

municipalities, covering **103.359 ha** in the Lazio Region outside the project's core areas and further **300 ha** in Liguria and Umbria.

The Code of Conduct, signed by 15 farmers operating outside the project areas – a result also enabled by the leverage effect generated by the 23 signatory farmers within the project areas – involved 10 municipalities located within or in proximity to various N2000 sites, in some cases covering substantial surfaces, such as the over 6.000 ha of the SPA IT6030084 - Castel Porziano (Presidential Estate), or involving distant regions such as Liguria and Umbria (300 ha). The qualitative impact and the territorial coverage of these Codes of Conduct more than compensated for the numerical gap. However, it was the **large-scale agreements and collaborations** signed with intermediary bodies and local authorities, namely **PNALM (on the Lazio side), Selva del Lamone Reserve, LAG Anius Pregius, and LAG Castelli Romani**, that enabled the project to go far beyond the target of 50 fragmented individual agreements, ensuring institutional stability and much more solid long-term governance over **96.296 ha** and coordinating **527 farmers**.
Beyond the potential of these figures, concrete results on the ground were already observed:

- The Strategic collaboration with the **LAG Castelli Romani** materialised in the **"Terra Capitale" project**, which was approved and integrated into the LAG's LDS. This enabled LIFE GRACE to move from a series of experimental interventions to a structural and permanent component of the Lazio Region's rural development policies. The initiative addresses the problem of **land abandonment and fragmentation**, tackling the root of habitat degradation, particularly in semi-natural grasslands. Closely linked to this is the issue of **generational change**, which is promoted through the "Agriacademy" experience, a skills incubator focused on transforming young farmers from executors of traditional practices into true "entrepreneurial custodians". The aim is to bridge the technical and bureaucratic knowledge gap that often discourages younger generations, making extensive farming in N2000 areas an attractive and modern business. The project will start in mid-2026.
- The agreement signed with the Municipality of Farnese, managing authority of **the Selva del Lamone Nature Reserve** (SAC IT6010013 and SPA IT6010056), represents the operational maturation of LIFE GRACE, marking the transition from governance theory to the practice of environmental restoration. Based on this formal commitment, LIFE GRACE developed a detailed design phase that identified **5.600 m²** of degraded secondary grassland, affected by grazing abandonment and subsequent shrub encroachment, where the project could re-establish the ecological conditions typical of habitat 6220*. The project also supported the municipality in the AA procedure. **Mechanical brush clearing** was completed in October 2025, preparing the site for controlled grazing planned for 2026. Although quantitatively limited, the intervention confirmed the effectiveness of the restoration approach already applied in Rivodutri (Action B2), acting as a demonstrator of the replicability of the entire cooperation model.
- The launch of a **short supply chain with Anius Pregius LAG**, initiated through the large-scale agreement covering 27 municipalities and approximately 240 livestock farms, represents another concrete outcome of replication. The collaboration laid the foundations for a territorial supply chain project aimed at valorising extensive grazing products through coordinated actions involving farmers, local institutions and HORECA operators. Preliminary work has already begun, including stakeholder engagement, identification of participating farms and definition of the supply chain framework, demonstrating the capacity of the GRACE model to generate economic opportunities linked to biodiversity-based production systems.

Dissemination

A total of 94 dissemination activities were organised or attended under Actions D2, D3, and D4, to present the LIFE Grace project or specific issues, reaching the following number of people in the corresponding categories of audience:

N°	Date	Partner	Dissemination Initiative	Target audience	N. of people reached
Action D2 - Campaign for public as consumers					
1	Nov-Dec 2021	ARSIAL	Meetings with the Ministry of Infrastructure for technical specifications relating to the tender for the office canteen with CAM implementation	public entities that activate collective canteens	1
2	21/03/2022	ARSIAL	Meeting with Slow Food Lazio on communication actions for agri-biodiversity, CAM implementation in public canteens, and the promotion of PAT products from local breeds in project areas.	Slow Food Lazio	1
3	28/06/2022	ARSIAL	Organization of online webinar on Minimum Environmental Criteria (CAM). with ANCI Lazio	ANCI, public authorities, local administration	369 (online)
4	09/10/2022	FIRAB	Partecipation at the event "Tevere Day" the largest event dedicated to the revitalisation of the river of Rome, with the LIFE Grace stand.	Park representatives, regional and local authorities, breeders, environmental associations, consumers	52
5	12/12/2022	ARSIAL, FIRAB, GF, DEB, CA	Partecipation at 30th anniversary of the European LIFE Programme and the Habitats Directive	nature conservation organizations, EC, research bodies, banking foundations, LIFE projects, MASE, public authority	160 (120 face to face+40 online)
6	10/02/2023	FIRAB	Participation in the TeleAmbiente programme "Quo VAdis", dedicated to regional food policies in Lazio and produced in collaboration with the Lazio Region	General public	107 views
7	10/03/2023	ARSIAL, FIRAB, GF	Organization of the conference "Mense…al pascolo. La sfida del bio e del km zero per la refezione scolastica del Lazio"	ANCI, public authorities, local administration, public entities that activate collective canteens, Slow Food Lazio, meat sellers, restaurant owners	282 (251 online + 31 face to face)
8	23/09/2023	FIRAB	Presentation on LIFE Grace at the conference 'Meglio, Meno, Altro', organised as part of the 'Mangiasano 2023' campaign in support of fair, safe and sustainable food systems	Farmers, technicians, researchers, consumers	30 (incl. 20 consumer and 5 farmers)
9	29/12/2023	ARSIAL	Conference on "Good daily nutrition the new Mediterranean diet" in Allumiere Municipality	General public, representatives of the UA of Allumiere, representative of Slow Food, CREA, and nutritionists	20
10	24/01/2024	ARSIAL, FIRAB, GF	Participation at "Mercato Campagna amica Latina"	Consumers, general public, breeders, farmers, students	51
11	26/05/2024	ARSIAL	Organization of "Festa del Bio" with talkshows, workshops and a farmer's market	Consumers, breeders, farmers	More than 60 (13 registered to the event)
12	01/12/2024	FIRAB, GF	Participation at the farmer's market in Frasso Sabino	Consumers, general public, sellers/ farmers at the market	33 signatures, 800 leaflets and/or z-cards distributed
13	21/01/2025	ARSIAL, FIRAB	Organization of "INFORMATION MEETING on Organic Canteens and Minimum Environmental Criteria" (LAG Castelli Romani)	Mayors, councilors, municipal employees responsible for school canteen services	18 (incl. 10 public entities with canteens)
14	20/02/2025	ARSIAL, FIRAB (guests)	HQF PSR event for the promotion of the Maremmana breed and meat (+ contribution of ARSIAL to a video made by HQF)	HQF company, restaurateurs, chefs, butchers, sales agents, agronomists, farmers, local administrators	49 (incl. 3 breeders and 12 actors in the supply chain)
15	15/03/2025	ARSIAL, FIRAB	INFORMATION MEETING on Organic Canteens and Minimum	Mayor of Pastena, representatives from other 4 municipalities, council members, agronomists, Director of	About 50 people (but only 26 signatures); 5

			Environmental Criteria with Pastena Municipality	Regional Park of Monti Ausoni and Lago di Fondi	public entities with canteens
16	24/03/2025	ARSIAL, FIRAB	"Alleanza dei Cuochi" Meeting organized by Slow Food Lazio in Tivoli (RM)	Chefs, farmers, Slow Food representatives, researchers, local administrators	32 people (incl. 14 chefs, 7 retailers, 4 farmers)
17	10/04/2025	ARSIAL	INFORMATION MEETING on Organic Canteens, Minimum Environmental Criteria and MASAF funds (LAG Terre di Argil)	Mayors, councilors, municipal employees responsible for school canteen services	13 (incl. 8 public entities with canteens)
18	15/05/2025	FIRAB, GF	BuyGreen/ Compraverde Forum in Rome	Municipal employees, representatives of projects/ associations that promote sustainability in the food industry	75
19	15/06/2025	GF	Participation at the Divino Amore Market in Rome	Consumers, general public, sellers/ farmers at the market	150
20	19/06/2025	FIRAB	Integral Ecology Festival in Montefiascone (VT)	Journalists, general public, university researchers	30
21	03/07/2025	GF	Participation at the La Storta Market in Rome	Consumers, general public, sellers/ farmers at the market	30
22	05/07/2025	GF	Participation at the Festival of Transhumance (Festa della Transumanza) in Rome	Consumers, general public, farmers associations, regional authorities	50
23	23/07/2025	ARSIAL	INFORMATION MEETING on Organic Canteens, Minimum Environmental Criteria and MASAF funds (LAG Anius Pregius)	Mayors, councilors, municipal employees responsible for school canteen services	18 (incl. 13 public entities with canteens)
24	04/11/2025	FIRAB	Participation in the conference 'Cibo è: educazione alimentare, scuola, formazione e salute', held as part of the 12th Edition of Excellence	Chefs, general public, nutritionists, students, journalists	About 40
25	12/12/2025	ARSIAL, DEB, FIRAB, GF	Training webinar for journalists entitled 'Conserving grasslands and nature through local economic development: the EU-funded LIFE GRACE project'	Journalists, Stampa Romana association, representatives from MASE and EC Agriculture Directorate	31
Action D3 - Campaign for farmers					
26	23/03/2021	ARSIAL	Video interview on web magazine Ruminantia	breeders	236 views
27	02/03/2022	ARSIAL	Conference on the conservation of native biodiversity of the sheep and goat entitled "Zootecnia ovicaprina e biodiversita': quali politiche per il comparto?"	CREA, MASAF, universities, RDP regional authorities, breeders' associations	20
28	19/07/2022	ARSIAL	Conference organized by NRN in Alvito, with a focus developed for the N2000 Area of the Lazio side of the PNALM	NRN, CREA, Mayors, Parks, farmers, farmers' associations, park authorities, regional authorities	40
29	03/08/2022	ARSIAL	Conference organised in Frosinone as part of the Confagricoltura provincial assembly on the impact of climate change in inland areas, with a focus on farming in the N2000 areas of Val di Comino and Ausoni-Aurunci	Confagricoltura, Agronomists, ENEA, researchers, farmers	130 farmers (incl. 30 breeders)
30	15/06/2023	ARSIAL	LegaCoop Lazio conference at Fondi entitled "Emergenza idrica: un percorso comune per il sistema rurale e le agricolture. Cooperazione e ricerca, player necessari per vincere la sfida".	public authorities, local administration, mayors, mountain communities, farmers associations, farmers	Over 40

31	24/06/2023	ARSIAL	Conference at Grotte di Castro (VT) entitled “La rigenerazione dei borghi e dei centri storici minori”	Professional organizations, biodistricts, local administrations, ANCI	19
32	29/09/2023	ARSIAL	Meeting organised by Municipality of Allumiere entitled “XXXVI Festa d’Autunno e dei giochi popolari”	Mayor of Allumiere, Allumiere UA representatives, 2 Slow Food representatives, CREA, Maremmana farmers, consumers	24 (incl. 5 farmers)
33	13/10/2023	ARSIAL, DEB	Meeting organised by LlFE Grace and ODAF entitled “Gli habitat di prateria: matrici della biodiversità naturalistica e della biodiversità di interesse agrario del Lazio” at Rieti	Agronomists, Foresters, Mayor	74 (51 face to face and 23 online)
34	20/10/2023	ARSIAL, DEB	Meeting organised by LlFE Grace and ODAF entitled “Gli habitat di prateria: matrici della biodiversità naturalistica e della biodiversità di interesse agrario del Lazio” at Anagni	Agronomists, Foresters. Mayor, Researchers	
35	16/11/2023	ARSIAL, DEB	Meeting organised by LlFE Grace and ODAF entitled “Gli habitat di prateria: matrici della biodiversità naturalistica e della biodiversità di interesse agrario del Lazio” at Roma	Agronomists, Foresters, Mayor	
36	01/12/2023	ARSIAL, DEB	Meeting organised by LlFE Grace and ODAF entitled “Gli habitat di prateria: matrici della biodiversità naturalistica e della biodiversità di interesse agrario del Lazio” at Monte Romano	Agronomist, Foresters, Mayor	
37	10/02/2024	ARSIAL	Participation at conference with UAs at Valmontone	UAs, Management bodies, Municipalities, ARUAL	50 (incl. 17 UAs)
38	21/03/2024	ARSIAL	Workshops with operators and representatives of the regional beef supply chain. First regional table with operators in the meat supply chain for the shared definition of a certification path for the valorization of the cow-calf line, based on the environmental role played by extensive breeding for the conservation of pastures and prairie habitats	Italian Breeders' Association, all the professional organizations (Coldiretti, CIA, Copagri and Confagricoltura) Regional Directorate for the Environment, Regional Directorate for Agriculture and Department of Agriculture, Breeders, butchers, agronomists, parks, universities.	64 (41 face to face +23 online), incl. 17 breeders, 5 processors/resellers, 5 breeders' associations, 14 regional officials
39	5-7/04/2024	ARSIAL, FIRAB, GF, DEB	Participation at UMBRIAFIERE “Agriumbria” National Fair of Agriculture, Livestock and Food, with the LIFE Grace stand	Students, farmers, agricultural technicians, journalists, researchers, veterinarians, consumers	20 (incl. 6 farmers)
40	09/04/2024	ARSIAL	Conference with Unisapienza for civic state management bodies	UAs, Management bodies, Municipalities	66 (15 UAs and 4 Municipalities)
41	16/04/2024	FIRAB	Partecipation at the Lazio TV programme “Lavoro e non solo”, in an episode dedicated to the "livestock farming profession", where FIRAB presented the project emphasising the key role of farmers who regularly graze their animals as part of sustainable pasture management	Zootechnical sector organisations, breeders, students of the IIS “San Benedetto” in Latina	N/A
42	18/04/2024	ARSIAL	TERRITORIAL MEETING - on the regional beef supply chain in-depth meeting to develop the various technical and financial options that can be activated to strengthen local fattening capacity and the valorisation of regional production among the final consumer.	Operators in the beef supply chain and representatives of the Regional Agriculture Directorate, trade associations	20 (incl. 9 breeders, 5 representatives of trade associations, 3 processors /resellers, 3 regional officials)

43	23/04/2024	ARSIAL	TERRITORIAL MEETING - "The obligations of the new identification and registration (I&R) system of the BDN (EU Reg. 2017/625 and Legislative Decree 134/2022). Fundamental tool for the traceability of production and access to support policies"	Breeders, farmers, agricultural technicians, slaughterers, veterinarians, regional officials, trade associations	86 (12 face to face + 74 online), incl. 38 farmers
44	28/04/2024	ARSIAL, DEB	CONFERENCE at the CAMPOVERDE NATIONAL FAIR Aprilia (LT). The environmental function of the cow-calf line for the conservation of pastures Habitat: the Life Grace project for a meat supply chain consistent with the "NATURE RESTORATION LAW"	Breeders, farmers, agricultural technicians, slaughterers, veterinarians, regional officials, trade associations, consumers	66 (incl. 20 farmers and breeders)
45	30/06/2024	ARSIAL, DEB	TERRITORIAL MEETING "Sui passi del Pastore" – on the role of farmers in N2000 areas for the conservation of biodiversity (Picinisco)	Hikers, researchers, Park authorities, technicians, tourists, pastoral associations, breeders and shepherds	Over 100 (incl. 6 breeders/ shepherds)
46	13/09/2024	ARSIAL	Seminar "Dire Basta non basta più". Intervention on pastures abandonment in N2000 areas and the targets of the Nature Restoration Law	Park Authority, Regional Councillor for the Environment, Municipalities, farmers, environmental associations and local volunteers	26 (incl. 15 common lands managers)
47	27-28/09/2024	ARSIAL	Terra Madre - Salone del Gusto 2024. International Fair.	Breeders, farmers, university researchers, agricultural technicians, consumers.	100 (incl. 15 farmers)
48	22/10/2024	ARSIAL	Meeting in Esperia (FR), with the "Aurunci and Valle dei Santi" LAG Municipalities (common land managers)	Municipalities, common land managers, breeders	30 (incl. 8 breeders, 8 municipalities)
49	24/10/2024	ARSIAL, DEB	Meeting on the conservation of semi-natural grasslands with common land managers in Campodimele (LT)	Municipal administrators, Mayor, breeders, citizens	20 (12 breeders)
50	25/10/2024	ARSIAL	Territorial meeting on BDN and Classyfarm system, in Farnese (VT)	Breeders, farmers, public veterinary services (ASL), University of Tuscia	46 people, incl. 15 breeders (40 people face to face, 6 online)
51	08/11/2024	ARSIAL	Meeting with the "Terre di Argil" LAG Municipalities (common land managers) in Sonnino (LT)	LAG President, local administrators, researchers	11 (incl. 3 common lands managers)
52	11/12/2024	ARSIAL	National Conference "Verso la nuova pastorizia: le scuole, gli attori e le strategie – declinazioni contemporanee di un antico mestiere", about innovative sheep farming practices and strategies, in Cascine del Riccio (FI)	Breeders, shepherds, Rete Italiana della Pastorizia APPIA, CREA	60 (20 face to face + 40 online), incl. 35 breeders
53	15/03/2025	ARSIAL, FIRAB	Seminar in Pastena on pastures abandonment in N2000 areas, targets of the Nature Restoration Law and Classyfarm	Mayor of Pastena, council members, agronomists, Director of Regional Park of Monti Ausoni and Lago di Fondi	42 people (incl. 5 municipalities and 6 farmers)
54	06/07/2025	ARSIAL	Workshop "Valorizzazione della transumanza: i sentieri, i sapori, gli uomini e donne, le praterie l'essenza della Valle di Comino e del PNALM", about the promotion of traditional migratory herding, in Largario Montano (FR)	Mayor of Picinisco, Members of the Senate committees of the Italian Republic, Professional associations, Director of the PNALM National Park	90
55	06/09/2025	ARSIAL	Partecipation at Conference "Promotion of maremma cow -	Regional Councillors for Agriculture and Food Sovereignty,	50 (incl. 12 breeders and 4

			Environment, livestock farming, and quality supply chains. V.A.T. Project (Tarquinian Agri-food Promotion)" in Tarquinia (VT)	UAs, breeders and their associations, Ministry of Health	common lands managers)
56	18/11/2025	ARSIAL	Participation at the seminar "Regenerative Bioeconomy for the internal areas of Lazio between forestry planning and local development" in Rieti (RI)	Farmers, farmers associations, agronomists and foresters, national authorities, university researchers, CREA	40
57	05/12/2025	ARSIAL	Participation at the seminar "Towards a general assembly of Agrarian Universities" in Canale Monterano (RM)	Farmers, Municipalities and UAs representatives, regional authorities, universities	42
Action D4 - Networking and final workshop					
58	16/10/2020	FIRAB	Presentation of LIFE GRACE Project during the forum organized by 'Terra!' association	Environmental activists, farmers, researchers, local administrators	60
59	15/12/2020	ARSIAL, FIRAB, CA	Presentation of LIFE GRACE Project at Web Talk NRN 'La futura PAC e gli obiettivi del Green Deal: Buone pratiche e soluzioni innovative dei progetti LIFE'	NRN, LIFE projects, agriculture regional referents, farmer associations	7
60	26/02/2021	CA	Web meeting with project 'Biodiversitätsmonitoring mit LandwirtInnen' (Biodiversity monitoring with farmers)	RDP project	1
61 62 63 64	08/04/2021 28/06/2021 17/09/2021 21/04/2022	ARSIAL, FIRAB	Web meetings with Operational Groups (Measure 16 PSR) from Tuscany (prog. Vistock) and Liguria (prog. Innovabiozoo) and Emilia-Romagna (and Parmigiano Reggiano Green Deal) about remote monitoring of wild grazing	Farmers, herders, researchers, advisors	Overall ca. 120
65	26/05/2021	ARSIAL, FIRAB, CA	Participation at 'CAP CAFÉ Brainstorming - Laboratory for research and insights on preservation and sustainable use of pastures in Italy: priorities, needs, actors, proposals on the threshold of the CAP reform'	RRN, regional RDP managing authorities, farmers' organizations, research bodies, agronomists	14
66	27/05/2021	CA	Participation at '1st Farming Biodiversity Summit' organized by FFA (Forum for the Future of Agriculture)	CAP representatives, EU parliament referents, EC representatives (agriculture, environment), UN, etc.	NA
67	24/06/2021	CA	Participation at the Webinar on presentation of PASCOL-ANDO project	CREA, researchers, universities, agronomists	NA
68	06/09/2021	ARSIAL	Webinar 'Basta Incendi' organized by the association 'Incontri e confronti' of Formia	Parks, breeders, associations	6
69	24/09/2021	FIRAB, ARSIAL, CA	Web meeting with LIPU on 'Developing tools to support farmland bird conservation in the EU'	LIPU	1
70	07/10/2021	ARSIAL	Participation in the Buygreen Forum - Buygreen organized by the Ecosystems Foundation with an intervention dedicated to the presentation of LIFE Grace Project and the implementation of CAM in public canteens	regional representatives, catering companies and cooperatives and the promotion of the agri-food system	12
71	04/11/2021	ARSIAL, FIRAB	Web meeting with NRN and experts in agroecological approaches on NSP proposals on CAP green architecture	NRN, agroecologists	10

72	28/02/2022	ARSIAL	Meeting with the Lazio Region Civil Protection Council Commission to present the LIFE Grace actions for managing grassland and fighting grazing abandonment as a function of fighting fires in the Ausoni-Aurunci area	Regional Civil Protection Directorate, Regional councilors (XII Council Commission), Municipal Councillor, mayors	15
73	16/03/2022	ARSIAL, DEB	LIFE Grace's presentation at the Platform Meeting 'A Priority for Europe: Investing in the Protection and Restoration of Nature' organized by MASE	LIFE projects representatives, regional representatives	5
74	08/04/2022	ARSIAL, DEB	Presentation of GRACE's ecosystem approach to the conservation of secondary grasslands, at the inter-municipal table for the prevention of forest fires on the Aurunci Mountains held in Formia	regional park bodies, breeders, municipalities, regional directorates, universities	36
75	27-29/04/2022	CA	LIFE Grace's presentation at the Landcare Europe workshop 'Local suburban food production in & outside N2000 areas and direct marketing from farm to fork'	nature conservation organizations, EC, research bodies, banking foundations, LIFE projects, agriculture associations	27
76	23/09/2022	FIRAB	Online meeting with projects "LIFE PASTORALP" and "SHEP4BIO". Presentation of activities and exchange of best practices.	LIFE projects, University of Florence, ARPA Val d'Aosta, Dream Italia	4
77	11/10/2022	CA	Participation at final conference of Birds@Farmland Initiative	LIFE projects, researcher bodies, EC representatives, ONG, nature conservation representatives, public authority	NA
78	17/10/2022	FIRAB, ARSIAL	Online meeting with LIFE projects (ShepforBIO and Pastoralp) and Operational Groups (Innovabiozoo, BovINE, Vistock, CATRIA)	Farmers, herders, researchers, advisors, LIFE Projects, AMAP	18
79	03-04/11/2022	ARSIAL	Participation at the initial conference of the LIFE ShepForBio project	Farmers, herders, researchers, advisors, LIFE Projects, university	Over 100
80	29/11/2022	FIRAB, ARSIAL	Online meeting with project "SHEP4BIO"	LIFE projects, University of Florence, Dream Italia.	NA
81	20/02/2023	ARSIAL	Participation at the meeting in Montefiascone related the Strategic Plan of the CAP and Complement of Regional Rural Development	Agronomist, researcher bodies, regional representatives	200
82	15-17/03/2023	FIRAB	Participation at the final meeting Pastoralp	LIFE projects, University of Florence, Dream Italia, policy makers, technicians in the fields of agriculture and communication, Regions, MASE.	50
83	06/04/2023	All partners	Participation at online meeting with the project LIFE GESTIRE2020. Focused on the good practices, code of conduct ecc	LIFE GESTIRE 2020 partners	15
84	26/07/2023	All partners	Participation at online meeting with the project LIFE IP IMAGINE. Focused on environmental accords, code of conducts, events and the collaboration in the future between the two projects.	LIFE IP IMAGINE partners	15
85	28/09/2023	ARSIAL	Participation at the meeting entitled "I Prodotti Agricoli Tradizionali del territorio reatino: Promozione, Sperimentazione, Valorizzazione" at ITAS Rieti	Teachers and students of the Hotel and Catering School, local authorities of the Reatina Mountain	120

86	07-09/11/2023	ARSIAL	Participation at the meeting in the Lazio region with the Environment and Agriculture Directorate, ISPRA and La Sapienza, for the presentation of the results of the PSR Lazio activities relating to the Bio-Lazio and ReMonLHab projects	Environment and Agriculture Directorate, ISPRA and University La Sapienza	50
87	01/03/2024	FIRAB	Participation at the Workshop of the LIFE ShepForBio project	Farmers, herders, researchers, advisors, LIFE Projects, university	93
88	28/03/2024	ARSIAL	Participation at the conference "Valorizzare il sistema agricolo tra identità, turismo ed eccellenze enogastronomiche di Roma" at Parco di Aguzzano	Representatives of institutions, trade associations and local associations	Over 60
89	20/12/2024	FIRAB	"ANIMABIO" project in Rome, funded by MASAF	Councillor for Agriculture and Food Sovereignty of the Lazio Region, representatives from 13 "biodistretti", 10 breeders, schools	Over 23
90	11/07/2025	ARSIAL	"Regional Forest Strategy: opportunities and challenges for Valle di Comino" in Atina (FR)	Regional councillor for Agriculture, regional technicians, university professors (including the Dean of the University of Tuscia), mayors, President of VERLA LAG, Director of PNALM, farmers, forestry operators, agronomists	80
91	09/09/2025	All partners	LIFE Grace Project Final workshop "The engagement of institutions, livestock farmers, and consumers in the conservation of pasture habitats within N2000 areas" in Rome	Representatives of CINEA, of Ministry of the Environment, of Lazio Region for both environment and agricultural Directorates, researchers, livestock farmers and their associations, Consumers associations, LIFE projects, Agronomists professional associations, UAs, journalists	137 (68 present and 69 online)
92	18-22/09/2025	ARSIAL	Cheese 2025 in BRA (CN)	Slow Food Italy, Lazio's Chef Alliance, regional and local authorities, universities	About 40
93	31/10/2025	ARSIAL	Participation at the workshop "Institutional support for agroecology in Internal Areas" in Porano (TR)	Farmers, biodistricts, regional authorities, teachers and students, Horizon project AF4EU	30
94	3-4/12/2025	ARSIAL, DEB	Participation at the "LIFE Platform AgriFood" international event in Bologna	Farmers, national and regional authorities, EC representatives, 36 European projects, research groups and universities	About 60

The dissemination activities were carried out both in person and online throughout the entire project, with relevant impacts being observed regarding different project's objectives:

- **Raising awareness about the degradation of pastures and the connection between pasture management and conservation:** project partners presented the project's goals and results during workshops, seminars and territorial meetings, reaching **155 farmers** and **54 common land managers** (Municipalities and UAs) during the campaign directed at farmers (action D3) and further **31 farmers** and **16 Municipalitie**s during the networking events (action D4) – with the collective pasture managers showing a high interest in developing solutions for effective grassland habitats management while supporting farmers.
- **Raising awareness about the nutritional and naturalistic value of N2000 meat**: the campaign for consumers (action D2) reached overall **1.064.339** consumers through the integrated web and social media campaign (articles on sector blogs, ads placed on Facebook and Instagram, mailing list, etc.) and **almost 2.500** through the events (e.g. organisation of 7 promotional events at farmer's markets, participation to festivals and conferences on nutrition, health and sustainability). Moreover, the campaign directed at operators in the HORECA and retailer sector

involved **about 100 people** (chefs, restaurant owners, butchers), with strategic collaborations with leading culinary companies such as HQF (High Quality Food) and organisations like the Slow Food Chefs' Alliance of Lazio.

- **Creating capacity-building opportunities:** following the needs and evidence emerging from the other actions, some dissemination events progressively evolved into training events. In particular, 4 courses were organized to train **64 agronomists and foresters** (planning technicians) to improve and update their knowledge on how to ensure the inclusion of grassland conservation in future forestry planning, such as the PGAFs (action D3); action D2 included training directed at 40 technicians from **35 Municipalities** during 4 training meetings on the implementation of CAMs and the inclusion of N2000 meat in school menus, and **27 journalists** during a dedicated course recognized by the Order of Journalists.
- **Promoting measures that support N2000 grassland conservation needs and strengthening the collaboration between local institutions and farmers:** as a consequence of both ARSIAL's policy dialogue activities and the 2024 Workshop with N2000 Environmental Authorities, where farmers expressed the need to reactivate the financial contribution for the purchase of animals belonging to Lazio's native breeds, the measure was published by the Lazio Region in 2025. In addition, LIFE GRACE promoted other relevant Calls during dissemination events, notably the "N2000 payments" CSR Measure, with 1.162 applications received from farmers.
- **Building collaborative and long-lasting relationships with key stakeholders:** thanks to its 38 networking events (action D4), LIFE GRACE established contacts with public institutions, players of the meat supply chain and researchers, as well as LIFE and non-LIFE projects such as LIFE SHEP4BIO, LIFE PASTORALP (an international project involving both Italian and French partners, with pasture management in the Parc National des Ecrins), and LIFE IP IMAGINE. During LIFE PASTORALP's final conference (01/03/2024), LIFE GRACE partners collaborated with other projects representatives to write a "Pastoralp position paper" on grassland habitats and extensive farming. This was one of the most significant results of LIFE GRACE's networking activities, together with the signatures collected for the GRACE business network and codes of conduct (e.g. the signature from a farmer involved in LIFE IP IMAGINE's pasture management interventions).

Other results of the dissemination activities include a diversified range of indicators confirming the overall effectiveness of the communication campaign:

- A **number of unique website visitors** that exceeded expectations (8.924 visitors).
- The distribution of a higher number of printed materials than foreseen. Other than the leaflet for the project (distributed in 1.500 copies), other **more detailed informational material** not planned in the project was produced to strengthen the dissemination towards farmers and technicians: 2.000 copies of a second leaflet distributed; 4.000 copies of the "Grace card" distributed (action D3). The z-cards and leaflets directed at consumers and the foldables for the HORECA/retailer sector (action D2) were also almost fully distributed, with only about 5.000 copies left from the 41.000 printed (30.000 z-cards, 10.000 leaflets and 1.000 foldables). A specific kit for the final workshop, not originally planned in the project, was also produced and distributed (USB stick – 150 copies, shopper 130 copies, and notebook – 130 copies).
- A **90-page digital guidebook** (Guide "From our pastures to your table") intertwining 15 itineraries in the three SPAs with 15 culinary proposals. The guidebook has been available on the project's website since 2024 and had a key role during the web marketing campaign, reaching nearly 464.000 views on sector blogs and more than 105.000 direct interactions on social media channels.
- 649 electronic **submissions of the Layman's report** and over 1.189 additional audiences reached through strategic stakeholder channels (action D1). The Report was indeed shared on the "Ruminantia" magazine's website (335 views on the article), on MASE's (Italian Ministry of Environment) website and social media accounts, on LIFE NatConnect2030's website and newsletter, on LIFE IMAGINE's website, on the Facebook page of the Italian Society for Natural

Sciences (SISN). The Report received a positive response from several stakeholders, especially farmers and science-policy experts also at EU level. In particular, a biologist from ARPA (Regional Environment Protection Agency) Piemonte showed interest in developing a project with similar goals as LIFE GRACE in the Piemonte Region.

- The **publication of an article** on the ethical consumption of grass-fed meat from N2000 sites, was published on the specialized magazine "L'Informatore Agrario", with an average circulation of 20.000 copies (action D3).
- The broad participation in the **final workshop** (09/09/2025) "The engagement of institutions, farmers and consumers for the conservation of pasture habitats in Natura 2000 areas" in Rome (action D4), which was attended by 137 participants (68 in person and 69 online), including representatives of CINEA, the MASE, the Lazio Region, consumers, farmers, and academia. "Ruminantia" published an article about the workshop on its website, reaching 371 views.
- **4 TV appearances**: the relevance of the topics addressed and the tools developed by the project is also confirmed by the invitations to TV programmes featuring LIFE GRACE and by the dedicated TV reports covering key project events. The project was hosted by: the "Quo VadiS" programme (10/02/2023), produced by VAS - Verdi Ambiente e Società in collaboration with TeleAmbiente, EcoGraffi, in the episode dedicated to regional food policies in Lazio, realised with Regione Lazio (https://www.youtube.com/watch?v=WgE4C-SmX7w&t=1353s); and the local TV programme "Lavoro e non solo" (16/04/2024), in an episode dedicated to the livestock farming profession (https://www.facebook.com/reel/1454153841884818). Specific TV segments dedicated to the project were produced by TeleAmbiente TV on the "Mense al pascolo" workshop on 10/03/2024 (https://web.archive.org/web/20230313061134/https://www.teleambiente.it/natura-life-grace-pascoli-convegno-video/), and by Lazio's regional news (TGR RAI) on the Workshop with farmers and N2000 Environmental Authorities on the cow-calf line (21/03/2024).
- The significant number of views registered by **videos recorded** by the project: the video recording of the webinar on CAMs (28/06/2022) (action D2), with 154 views (https://www.youtube.com/watch?v=byiV6c8-ixE); the video-interview about LIFE GRACE made by ARSIAL for the HQF (High Quality Food) s.r.l documentary "The Maremmana cow" (https://www.youtube.com/watch?v=h9rEPwhDTec), with 198 views (action D2); the video about the "In the Shepherd's Footsteps" day trip (30/06/2024) (action D3), with 167 views (https://www.facebook.com/reel/1201390841099405); the video recording of the meeting on BDN and Classyfarm system (25/10/2024) (action D3), with 124 views (https://www.facebook.com/lifegrace2020/videos/572725911786206/?t=562).
- **23 Codes of Conduct** signed during dissemination activities.
- The 171 press items collected for the **press review** demonstrate the strong visibility and media interest generated by the project.
- The final socio-economic report showed a public awareness of N2000 increased from **28% to 43%** (+17%).

Policy impact

The LIFE Grace project focused on the recovery of the HD habitats concerned by grazing, and therefore intrinsically related to the effectiveness of not only environmental, but also agricultural policies and the protection of the conscious choice of the final consumer, which is considered the decisive factor for connecting the market with sustainable development strategies. The project has had some concrete impacts on regional, national and EU policy implementation and development, notably:

- Although the originally proposed environmental agreement model was not formally adopted by the Region, the alternative mechanism developed has nonetheless produced a concrete regulatory impact. It represents the first operational implementation of **DGR 569/2012** on N2000 contractual measures, demonstrating a more agile and workable approach for both ARSIAL and local land managers. Its effectiveness is confirmed by the fact that it has already been signed by

12 managing authorities, providing an immediately applicable governance tool that facilitates the practical enforcement of N2000 conservation obligations at territorial level.

- The habitat restoration activities already carried out – both within the project area (7,5 ha of habitat 6210* in Rivodutri) and outside the project area as a replication initiative (5.600 m² of degraded secondary grassland in the SAC IT6010013 - Selva del Lamone, where the ecological conditions typical of habitat 6220* were re-established) – directly support the implementation of **DGR n. 234/2019** (Lazio's PAF - E.2.4 chapter), the **EU Habitats Directive** and the **Nature Restoration Law**. Their effectiveness was also confirmed by the post-intervention floristic and vegetation monitoring survey conducted on Rivodutri, which showed the quick recovery of the target grassland habitat.
- GRACE studies recorded an increase in reproductive females across the 7 targeted livestock breeds at risk of genetic erosion, an improved risk status for the Maremmano Cattle (from "endangered" to "vulnerable"), and an increase in registered breeders. These results confirm stronger population viability and more resilient autochthonous livestock populations, improving their long-term conservation prospects. The analysis also confirmed that Lazio's native livestock breeds remain closely linked to extensive grazing systems, which provide the conditions for the maintenance of these genetic resources. This evidence directly supports the implementation of **EU Reg. 1305/2013** on rural development, of **Italian Law 194/2015 and Regional Law 15/2000** on the conservation of genetic resources in agriculture and is fully consistent with the current 2023-2027 CAP established by Reg. 2021/2115.
- The policy dialogue and technical support provided to the Lazio Region's Agriculture Directorate resulted in the activation of the **N2000 Payment CSR Measure** for pastures for the first time in Lazio, thereby supporting the local implementation of the **2023-2027 CAP** as well as of the EU HD.
- The territorial facilitation activities, together with the project's role in conveying breeders' needs to the Lazio Region's Agriculture Directorate, resulted in **Regional Determination G15653 of 21/11/2025**, adopted in implementation of **DGR 987 of 28/10/2025**. This act reactivated the regional financial contribution for the purchase of animals belonging to Lazio's native breeds for the 2025-2027 period, with also an increased financial allocation. Also in this way, the project thus supported the implementation of **Italian Law 194/2015 and Regional Law 15/2000** on the conservation of genetic resources in agriculture.
- Exchanges with the Regional Councillor for Agriculture led to concrete contribution provided by the project to the Lazio Region's adoption process of the **National Guidelines on raw milk products**, thereby facilitating the correct application of the **EU Hygiene Package** (Regulations 852/2004, 853/2004 and 2017/625), and ensuring that sheep and goat farmers can produce cheese in compliance with food safety regulations.
- 15 Municipalities (public entities managing school canteens) were directly supported in drafting the technical specifications for their canteen tenders, integrating voluntary rewarding CAM criteria for GPP procedures, specifically for the inclusion of grass-fed N2000 meat. This activity contributed to the application of **Ministerial Decree 65/2020** on CAMs for collective catering services and of **National Law 61/2022** on short supply chains and zero-kilometre products, while contributing to the objectives of the EU Farm to Fork Strategy and the broader EU policy framework on GPP (primarily based on **Directive 2014/24/EU** on public procurement).
- The voluntary adhesion of farmers, processors, HORECA operators and public administrations to the GRACE Business Network Accords represents a concrete uptake of several EU, national and regional policy frameworks. By formalising flexible, trust-based cooperation models around grass-fed meat from N2000 areas, the Accords operationalise the objectives of the **EU Farm to Fork Strategy** and the **EU Biodiversity Strategy**, linking biodiversity conservation with economically viable, place-based value chains and strengthening short supply chains and local food systems. In this way, the Business Network Accords have turned voluntary commitments by 54 farmers/processors and 78 distribution points into a durable governance mechanism that

anchors EU and national policy objectives in the everyday practices of local administrations, businesses and consumers.

The political and administrative barriers encountered during the project concerned various areas (see also paragraph 6.2):

- Lack of updated cartography for the target habitats, a prerequisite to outline any conservation strategy, including the implementation of the AA procedures. This issue was successfully addressed with the production of georeferenced habitat maps for the 3 SPAs.
- Lack of specific conservation objectives and measures for the three habitats; LIFE GRACE provided the Lazio Region with useful material to update them, such as habitat maps and best practices for participatory grassland habitats management.
- Lack of specific management instruments (i.e. grazing plans or PGAFs envisaged by LR 39/2002) which have already passed the AA procedure, due to lack of financial endowment for their elaboration, or delays in the approval of the PGAFs, or dated PGAFs not aligned with N2000 requirements and not including restoration interventions, fences and other infrastructure. To overcome the planning deficit, GRACE urged municipalities and UAs to participate in the regional call for measure 8.5 of the RDP for funding the PGAFs. To ensure the correct appraisal of grasslands habitats in the plans, common lands managers and pasture/ forestry technicians received scientific and technical material and training courses by the LIFE GRACE project to improve their planning (see action D3). A revision of the regional legislation would also be necessary in light of the implications for N2000 and of the "Testo Unico Forestale" (Legislative Decree 34/2018), which introduced the faculty for administrations to plan large private forest-pastoral areas without active plans, as well as new accessibility standards.
- Lack of pre-assessed interventions for measures consistent with site-specific conservation measures, not yet available; LIFE GRACE provided the Lazio Region with a list of proposed regional pre-assessments for interventions in the agricultural sector in the project area, to be carried out through simplified screening procedures.
- Unavailability of the envisaged mechanism for contractual conservation measures for N2000 sites, as provided for by DGR 569/2012. LIFE GRACE chose to operate using a different type of cooperation agreement (conventions), signed by ARSIAL and by common land managers.
- Unclear operational perspectives on CAP planning in the RDP-CSR transitional period and unavailability of N2000 payments until the end of 2024. The N2000 Measure for pastures was eventually activated with the 2023-2027 CSR starting in 2025 (towards the end of the LIFE GRACE project) only thanks to the intense advocacy and technical support provided by the project to regional authorities.
- The decoupling of CAP premiums has progressively weakened livestock resources in N2000 areas, reducing the capacity to fatten calves locally and limiting the potential for short supply chain marketing. While this structural issue lies beyond the direct control of the project, LIFE GRACE mitigated its effects by strengthening local supply chains, promoting Business Network Accords, enhancing co-marketing strategies, and supporting access to alternative funding instruments (including PNRR supply chain contracts). Through the creation of territorial business networks, the promotion of grass-fed meat as a premium product, and the training of 117 young professionals, the project helped retain added value within the territory and reinforced the economic resilience of extensive livestock systems despite the reduced incentives linked to decoupled payments.
- The lack of funding for small, local slaughtering/ processing facilities remains a key structural barrier for pastoralists, fragmenting the supply chain and risking the exclusion of more isolated farms. The GRACE co-marketing model mitigated this constraint, but without such infrastructure, even the best legislative intentions (like CAM implementation) risk excluding the very producers they aim to protect.

In short, project partners made continuous and proactive efforts to overcome the barriers encountered. Nevertheless, several political and administrative constraints remained partially solvable at project level, causing major delays in key project actions due to the lengthy and multi-level authorisation procedures required to start practical interventions and the limited availability of dedicated financial instruments throughout most of the project duration. These structural bottlenecks occasionally dampened farmers' initial enthusiasm, emphasizing the urgent need for streamlined procedures and more accessible funding pathway that acknowledge and support the essential role of farmers as nature stewards within N2000 areas.

6.4. Analysis of benefits

Environmental benefits

Direct / quantitative environmental benefits:

In terms of governance, direct quantitative benefits are mainly reflected in **institutional commitments and capacity building**, which are key enabling factors for habitat conservation at scale. By the end of 2024, **9 cooperation agreements** ("convenzioni") have been signed with 7 municipalities and 2 UAs (collective land-management bodies). This cooperation model for biodiversity conservation was developed as an alternative to the initial Environmental Agreement Model involving the Lazio Region, in order to ensure continuity of action pending the finalisation of specific and updated conservation measures and management instruments at regional level. ARSIAL directly signed agreements with common land managers, providing a formal governance framework, which ensures the indirect involvement and engagement of the farmers operating on common lands where the target habitats occur (**775 livestock farmers**). Furthermore, the Code of Conduct, a voluntary protocol summarizing best practices for sustainable management, was signed by **23 livestock farmers** operating within the project area. Their commitment also generated a leverage effect, encouraging additional farmers outside the project areas to sign the protocol. Notably, around 61% of the Codes of Conduct (14 out of 23) were signed by livestock farmers operating within the territories managed by the public land-management bodies that had entered into cooperation agreements. This demonstrates the concrete operational relevance of these agreements and their capacity to activate commitments directly within the areas under their management. In parallel, the monitoring cooperation model produced measurable outputs in terms of uptake and testing: a Collect Earth training course involved **24 technical participants** (which exceeded the expected result of 10 technicians), and two pilot field training events involved **11 livestock farmers**, supporting the practical applicability of the participatory monitoring approach. In addition, capacity building was extended beyond the immediate project stakeholders. Under Action D3, four technical seminars on pasture management planning were organised in cooperation with the provincial ODAFs, involving a total of **64 agronomists and foresters**. These seminars strengthened the technical capacity of professionals who are directly involved in drafting grazing plans, habitat management schemes and rural development applications, thereby extending the project's impact beyond the scope of the direct conservation interventions.

While targets for the cooperation model for biodiversity conservation were reached, the biodiversity monitoring model could not be fully implemented, due to the delays in the on-the-ground restoration actions (see Action B2), which did not allow a regular, multi-year monitoring programme to start.

The lack of workable availability among stakeholders and farmers, together with the lack of opportunities to convene training meetings for the use of the App, also contributed to the partial achievement of the expected targets.

Although the project's main added value lies in enabling conditions (governance arrangements, operational tools and administrative pathways), LIFE GRACE has already produced direct, measurable **biodiversity-related outputs**. A pilot restoration intervention was completed in the SPA Monti Reatini (Municipality of Rivodutri) making use of Measure 8.5 of the Lazio RDP 2014-

2020, extended to the 2021-2022 transitional period, where approximately **7,5 ha of habitat 6210* were restored through shrub clearance** (0,32% of the site's habitat area, and 0,13% of the habitat area in the 3 target sites), with associated post-intervention ecological monitoring allowing an initial assessment of short-term responses. Despite not achieving the expected target (10% of the 3 EU habitats restored/ maintained), the project generated a quantifiable pipeline of further restoration/management interventions by moving them into design and/or authorisation procedures, including 9,24 ha in Monte Romano and over 300 ha in Itri. While these areas represent a significant proportion of the verified habitat surface in the three SPAs, they are not yet "restored" in the strict sense. They nonetheless represent **concrete conservation opportunities that have advanced beyond conceptual planning**, as the administrative and technical prerequisites for implementation were initiated within the project. Furthermore, the final socio-economic report highlighted a significant 51% increase in pasture movements in the Ausoni–Aurunci SPA, indicating a marked **increase of extensive grazing practices**, with more livestock units using pastures more frequently and across a wider area. The observed expansion of grazing activity provides strong evidence that the project effectively reactivated the land-use dynamics necessary for long-term grassland conservation, the core mechanism through which LIFE GRACE aimed to maintain and restore semi-natural grasslands ("conservation through use").
In terms of livestock biodiversity, the LIFE GRACE project has shown that Lazio's native livestock breeds, many at risk of genetic erosion, remain closely linked to extensive grazing systems that sustain valuable grassland habitats. With reference to the seven breeds targeted by the project, the **number of breeding females** increased from 13.024 in 2018 to 13.809 in 2022 – year of the last updated report from CREA-ZA – corresponding to **about 6% increase**, surpassing expectations (5% increase). Based on the data recorded in 2024 in the BDN and on the figures provided by the Breed Selection Bodies for the respective breeds, it is reasonable to conclude that, over the additional three years of project implementation (2022-2025), a further overall increase in the number of reproductive females of the target breeds can be considered plausible, particularly for Maremma cattle and for the equine breeds (Rapid Heavy Draught, Tolfetano, Esperia Pony, Romano della Maremma Laziale).

Qualitative environmental benefits:
In terms of governance and capacity building, the cooperation model has been activated, with ARSIAL collaborating with multiple common land managers to **create a pipeline starting from signed institutional arrangements and developing into site-level planning and concrete interventions**. In addition, LIFE GRACE contributed to **align regional agricultural support measures with N2000 grassland conservation needs**, thanks to ARSIAL's policy dialogue activities supporting the Lazio Region in the activation of the CSR N2000 compensation measure and the strengthening of other CSR measures supporting extensive livestock farming.
LIFE GRACE has significantly increased the knowledge base and technical capacity available for semi-natural grassland conservation in the Lazio Region. The project produced improved habitat information for the three SPAs, also not planned in the project and sometime with extra-LIFE resources, previously unavailable and which for the first time enabled the enhancement and integration of a series of informational layers that had previously remained disconnected (habitat maps, a vegetation database and multi-temporal land cover analysis, diachronic analysis, analysis and maps on livestock farming and grazing use of the target habitats), which is expected to support more accurate site diagnostics and to inform the definition of conservation measures and management priorities. Importantly, the project has developed a strategic toolkit for the co-governance of semi-natural grassland habitats, articulated across three hierarchical and complementary levels: the Environmental Agreement Model, which provides the overarching contractual framework; the One Cooperation Model, which translates this framework into operational best-practice guidance; and the site-specific Grassland Management Guidelines, which further refine these indications for each N2000 site involved in the project.

Overall, the project has produced a robust and durable technical, scientific and governance infrastructure, strengthening territorial management capacities within N2000 sites and laying the groundwork for concrete habitat restoration and long-term conservation actions across the Lazio region.
Improved awareness of N2000 objectives and management requirements was observed among farmers and land managers involved in the project, particularly in areas where cooperation agreements and training activities were implemented. The structured dialogue established between livestock farmers, municipalities and regional technical bodies contributed to clarifying procedural requirements, conservation constraints and available support measures. While stakeholder engagement remained uneven across the three SPAs, the project strengthened communication channels and reduced information asymmetries between local operators and institutional authorities responsible for N2000 implementation. These improvements represent a necessary precondition for more stable and effective collaboration in future conservation and grazing management initiatives.

In terms of **biodiversity-related outputs**, the post-intervention survey in Rivodutri confirmed that a floristic and structural recovery of habitat 6210* is possible even in a relatively short time span after restoration of a degraded area. The outlook for the target grassland habitats depends on the **effective coupling of restoration measures** (e.g. shrub clearance where encroachment is advanced) **with stable and site-specific grazing management regimes**. The longer-term management of the sites should therefore be assured through a combination of: (i) implementation of the intervention packages already moved into the authorisation/ design pathway; (ii) integration of simplified monitoring and participatory data collection into ordinary regional environmental and agricultural monitoring; and (iii) mobilisation of ordinary funding instruments (e.g. CAP/CSR measures, N2000 compensation schemes and other regional tools supporting extensive grazing). The signed conventions with municipalities and collective land management bodies provide the institutional platform through which responsibilities can be assigned and measures progressively scaled up, subject to the availability of resources and the streamlining of administrative pathways.
In relation to the **livestock biodiversity**, trend analysis of the target genetic resources indicates a consistent, though moderate, increase in population size for cattle and equine breeds. In contrast, the Bianca Monticellana goat and the Capestrina goat show a clear and progressive reduction in numbers. Based on data from the CREA-ZA report assessing the risk of genetic erosion for breeds registered in the RVR, **risk assessments show improvement for the Maremmano cattle, shifting from "endangered" to "vulnerable"**. Overall, LIFE GRACE contributed to stabilizing and enhancing genetic resources, while encouraging more breeders to register animals officially, thereby strengthening recognition of local breeds and enabling access to rural development support measures. In addition, an increase was observed in the number of livestock farmers registering with the Breed Selection Bodies, in order to benefit from the services provided by these organisations and, above all, to obtain the official recognition of their animals' breed. Such recognition is a prerequisite for accessing support schemes for farms, including agri-environmental payments under the regional CSR, as well as calls for the purchase of breeding animals. These measures and calls were made available.

<u>Economic benefits</u>
LIFE GRACE moved beyond simple habitat conservation to create a functional territorial ecosystem. The project demonstrated that extensive grazing is both a strategic asset for ecosystem conservation and a driver for sustainable local development. It also showed that economic resilience in the extensive livestock sector depends on product differentiation and the transition toward a multifunctional model.

- **Growth through quality and networking:** while the general meat market faces contraction, farms integrated into the GRACE Network recorded a +27% average sales increase. This result

stems from a qualitative shift: the network favoured an "informal" and flexible organizational structure that overcame historical local distrust toward rigid hierarchies, creating stable business opportunities.

- **Sectoral performance:** the overall target for sales increase (+10%) was partially met with a +1,2% increase in total volume. This deviation is justified by the sharp decline in the ovine (sheep) sector, which suffered from national market trends. However, targets were significantly exceeded in the bovine sector (+20,6% in volume) and the equine sector (+29,7% in volume and +37,7% in value), highlighting a successful economic re-evaluation of key species used for habitat maintenance.
- **Market drivers and ethical marketing:** monitoring surveys showed that 43% of consumers now prioritize "certainty of origin" over price (which is relevant for only 8%). This shift proves that extensive grazing has become a strategic leverage for "environmental" supply chains.
- **Strategic frameworks for co-marketing and cooperation:** LIFE GRACE highlighted that the growing interconnection between conservation and economic development requires a participatory approach involving all stakeholders – farms, institutions, local communities, land managers, and regional agri-environmental authorities. The project recognized that achieving conservation goals depends on creating synergies between the production system and local realities, which often lack advanced technical skills. To address this, the project provided a specialized Cooperation Model on Marketing designed to support the creation of flexible agreements (supply chain accords, bio-districts, LDSs, business networks). This tool enables producers, processors, and distributors to enhance local networks and foster sustainable territorial development.
- **The Code of Conduct as a link to conservation:** within this framework, the Code of Conduct acted as a strategic anchor, directly linking co-marketing activities to the conservation of pasture habitats. By defining shared principles for habitat protection and quality farming, the Code ensured that economic growth remained strictly functional to the ecological integrity of the N2000 sites, transforming environmental protection from a constraint into a shared value for the entire supply chain.
- **Strategic institutional partnerships:** the involvement of ANCI Lazio was fundamental in disseminating GPP tools. Collaborative protocols with Slow Food (including the "Permanent Meadows and Pastures" Presidium and the Cooks' Alliance) and the Chambers of Commerce have added institutional weight to the network, ensuring market uptake and continuity.

Social benefits

The social legacy of LIFE GRACE lies in the cultural shift from individualism to a vision of *"collective competitiveness"*.

- **Participatory method and trust:** the World Café methodology was decisive in overcoming historical distrust between breeders and institutions. This created a structured dialogue that led 75% of operators to express interest in short supply chains and 50% to recognize the value of naturalistic itineraries.
- **Closing the skills gap:** training actions addressed structural weaknesses in the sector. The project trained 117 students and activated Learning Units (UDA) in culinary institutes. With 23 professional certificates issued, the initiative ensures that the next generation of chefs acts as ambassadors for the "less but better" model.
- **Communicating biodiversity:** a specialized training path was dedicated to journalists, with 27 professionals trained and accredited by the National Order. This path focused on the correct communication of biodiversity, helping consumers translate scientific knowledge into daily sustainable choices.
- **The role of Solidarity Purchasing Groups (GAS):** the activation of 5 Box Schemes (exceeding the target of 3) successfully involved GAS and CSA groups, bridging the gap between N2000 rural areas and urban consumers through shared ethical values.

- **Territorial awareness:** citizen knowledge of N2000 sites reached 43% in 2025 (a +17% increase). This identifies a community shift from viewing environmental constraints as limits to seeing them as pillars of territorial identity.

Replicability, transferability, cooperation

The LIFE GRACE project has successfully moved from a pilot phase to a structured and scalable governance model, demonstrating a high likelihood of replication, driven by both policy integration and market interest. The **institutional agreements and conventions** activated during the project constitute a central asset for the consolidation and long-term expansion of the GRACE model. These partnerships, engaging different intermediate bodies such as collective land management authorities, LAGs, protected areas and regional nature reserves, have shown that the model can be transferred to territories with different governance structures, production systems and ecological conditions. Their strategic value lies in the creation of stable frameworks that embed extensive grazing, pasture governance and the role of the farmer as a "nature steward" within LDSs and N2000 management practices. Each partnership has tested the GRACE approach in real territorial settings, providing evidence of its operational feasibility and adaptability. This has strengthened the credibility of the model and facilitated its acceptance by local institutions and producer networks.

The main drivers for transfer are the modular nature of the GRACE model (allowing independent adoption of marketing, conservation, or monitoring tools) and the clear link between environmental monitoring and access to premium market channels. The primary obstacles remain bureaucratic delays in regional authorization processes and the logistical challenges of the short supply chain for isolated farms.

In addition, the project leaves in its legacy a set of tools, approaches and methodologies that can also be replicated individually elsewhere at national and EU level:

- The **simplified monitoring protocols and the associated mobile application** represent flexible and highly transferable tools that can be integrated, where appropriate, into regional monitoring and control systems linked to agricultural and environmental measures. Their design, based on essential indicators and user-friendly digital interfaces, allows administrations to collect consistent field data without requiring specialised equipment or advanced technical skills. This makes the tools particularly suitable for supporting routine inspections, verifying compliance with agri-environmental commitments and informing restoration planning in grassland habitats.
- The **Code of Conduct**, signed by 38 farmers, confirmed the model's applicability also in distant regions such as Liguria and Umbria. Its strength lies in its ability to transform biodiversity conservation from a regulatory requirement to a voluntary and identity-based commitment, which helped overcome the initial skepticism encountered in new territories, demonstrating that habitat protection and economic profitability can coexist. By translating scientific principles into clear management commitments, such as extensive grazing and active participation in botanical monitoring, it is possible to adapt GRACE's expertise to very different geographical and regulatory contexts, whenever local actors consider it useful for strengthening grassland governance. The leverage generated by the first farmers acting as "nature stewards" has provided the credibility needed to trigger a process of cultural transformation that, in the After-LIFE period, will allow the model to survive independently.
- The **guidelines for public canteens** and the **model tender specification** can be used by any municipality wishing to implement the CAMs for the GPP of collective catering, with particular reference to short supply chains and zero-kilometre products in accordance with national law 61/2022, as well as to access dedicated funds for organic school canteens.
- The **training model implemented in hospitality schools** is highly replicable and represents one of the project's most effective tools for strengthening skills and supporting generational renewal in the agri-food sector. Conceived to address structural weaknesses in the transmission of knowledge on sustainable livestock farming and biodiversity-based supply chains, the model

combines theoretical sessions with practical laboratories, show-cooking demonstrations and direct interaction with sector professionals. The strong interest generated confirms the model's capacity to be integrated into existing school curricula with minimal adaptation. Its modular structure, reliance on widely available professional skills and alignment with national hospitality-school programmes make it easily transferable to other regions.

- The **analytical model** developed through the 'Livestock Farming and Grazing' study represents one of the project's most strategic and replicable outputs. By integrating digital data from the Graphic Crop Plan with livestock information from the BDN, the model provides a dynamic, parcel-scale picture of how grazing systems interact with grassland habitats. This approach demonstrates that public agricultural and livestock databases can be operationalised to generate real-time indicators on habitat use, grazing pressure and socio-economic trends. Its structure makes the tool inherently transferable: any EU Region with access to similar public datasets can reproduce the model without the need for new data-collection systems. This positions the tool as a practical instrument for planning restoration measures, prioritising interventions and supporting evidence-based decisions on pasture management. By offering a scalable and cost-efficient methodology, the model provides a blueprint for integrating digital agricultural data into N2000 governance, enabling other territories to adopt the GRACE approach and strengthen the link between grazing systems and habitat conservation.

Best Practice lessons

Participatory governance and territorial animation

The project's territorial animation (Actions A4 and B1) utilized the World Café methodology, which proved to be a decisive best practice for building social capital in complex N2000 contexts. Moving beyond traditional top-down information meetings, the World Café created a neutral, informal space that successfully bridged the historical gap between environmental authorities, local administrations, and breeders; this participatory framework transformed stakeholders from passive recipients into active members of a multi-level territorial network, ensuring that the conservation of N2000 habitats is supported by a robust and collaborative local community.

One cooperation model on marketing

LIFE GRACE identified three main best practices for co-marketing to be implemented according to local needs: producer associations – aimed at establishing registered territorial brands supported by specific production protocols; supply chain contracts ("contratti di filiera") and business contracts ("contratti di rete") – utilizing formal legal frameworks to structure professional cooperation among farmers, processors, and retailers; bio-districts – broader cooperation frameworks that integrate grass-fed products within the organic sector and LDSs, benefiting from the inclusion of other local productions (vegetables, wine, etc.) to strengthen territorial marketing. Rather than imposing a single rigid structure, the project developed a territorial networking approach to foster co-marketing processes: by offering flexible Business Network Accords, LIFE GRACE allowed stakeholders to join the network without immediate, heavy operational burdens, focusing instead on shared principles and collaborative initiatives (such as joint promotion, specialized training, and development of a stronger short supply chain). This multi-level approach – involving farmers, local authorities, and conscious consumers (GAS) – ensures that the preservation of N2000 habitats through extensive grazing becomes an economically viable and socially recognized value.

One cooperation model on best management practices for grassland habitats and ***Guidelines on management and conservation of semi-natural grasslands***

The two documents defined the best restoration, improvement and grazing management practices for habitats 6210(*), 6220* and 6230* in the 3 SPAs; said best practices – which include periodic mowing, rotational grazing, selective brush clearing, creation of water points and restoration of fences and pens – were drawn up in accordance with the Conservation Measures approved by the

Lazio Region (DGR n. 612/2011 and integrations) and the Regional Forestry Law, and integrated with updated data coming from LIFE GRACE's research activities on grazing intensity (*carichi di pascolo*), vegetational transitions, and the present distribution and conservation status of target habitats (actions A2, B2 and C1.2). The application of best restoration practices was carried out in October 2024 in Rivodutri, while other design/ authorization procedures are underway in Monte Romano and Itri.

Code of Conduct

A voluntary protocol summarizing sustainable best practices for pasture management and promotion of grass-fed meat products, translating the project's principles and values into direct engagement from farmers, who formalized their operational commitment to sustainability by signing the Code. The Code emphasizes that grassland biodiversity conservation is a necessary condition for farmers to keep producing high-quality, sustainable food, and encourages them to become a part of a network of "biodiversity stewards" that protect grassland habitats through active management and collaboration with researchers.

The Code was signed by 38 farmers, proving to be effective in spreading LIFE GRACE's message and goals, but also the strong receptiveness of the territory towards self-regulation tools that recognise and enhance the role of livestock farmers.

Innovation and demonstration value

Environmental Agreement Model

The model was initially grounded in the legal framework of "contractual agreements" to be stipulated, according to the DGR 569/2012 on N2000 contractual measures (never implemented), between the Lazio Region and farmers or common land managers for the execution of restoration interventions on grassland habitats. As the Region did not activate the "contractual measures" (nor the pre-assessment procedure for interventions in the agricultural sector), LIFE GRACE developed an alternative agreement model, with ARSIAL directly signing dedicated conventions with territorial governance bodies (Municipalities and UAs managing collective pastures, as well as protected areas authorities and LAGs) responsible for wide territorial areas, in order to provide technical assistance in carrying out the planning and authorisation phases. Despite the length and complexity of authorization procedures, this model proved effective in translating governance arrangements into concrete site-level action planning. The project's core governance innovation, by shifting from a "single farm" approach to a "territorial system" model, has demonstrated its effectiveness, having been successfully applied both in the target areas (with one restoration intervention completed in Rivodutri and authorization procedures already activated in the other sites) and outside them as part of replication activities (with one restoration intervention carried out in the Selva del Lamone Reserve, and short-supply-chain initiatives launched within the Anius Pregius LAG).

Livestock farming and grassland habitats usage

The additional analytical product "Livestock Farming and Grazing" explored the **relationship between grazing systems and grassland habitats** in an original way, through data extracted from the farm files of about 1.000 active livestock farms. This analysis of grassland habitats use through grazing was developed for the first time using digital data from the Graphic Crop Plan, integrated with BDN data to identify herd size and species used. This model, developed by using public databases, allows to measure the real-time evolution of the relationship between habitats and socio-economic dynamics. The model is replicable in all EU Regions to plan restoration activities, since a precondition for territorial choices is the availability of dynamic parcel scale data on the use of pastures.

N2000 product brand or label

Another potential, innovative use of the BDN database was explored by ARSIAL when working on the inclusion of grass-fed livestock products from N2000 areas in a regional brand/ label to promote their quality and sustainability. Formal exchanges started with the Regional Environmental Directorate and, later, with MASAF and ICQRF on mandatory and voluntary meat labelling options to highlight the link between products, pasture-based systems and N2000 areas using official data from BDN. Although these attempts did not result in regulatory changes, they clarified institutional constraints on traceability.

Diachronic analysis of vegetation transitions

A diachronic analysis of vegetation transitions was carried out by the University of Molise for the 1954-2016 period (baseline) and then updated by the DiAP – Department of Architecture and Design, Sapienza University (2016–2024 period). This activity, done with complementary funds (ARSIAL funds), was prompted by the needs emerged during project implementation to close knowledge gaps in reliable habitats baseline. The analysis represents an innovative approach contribution: by reconstructing medium- and long-term landscape trajectories through a historical perspective, it enabled the interpretation of current habitat distribution patterns in relation to past land-use changes and processes of management abandonment. This approach provides a stronger contextual framework for assessing habitat conservation status.

Emerging practice: multiannual 'Fide Pascolo' arrangements

The collaboration with Municipalities and the sharing of project's data and results led some Municipalities (e.g. Monte S. Biagio, Itri and Campodimele in the Monti Ausoni Aurunci SPA) to shift from annual "fide pascolo" (agreement between a collective pasture manager, such as a Municipality, and a farmer that allows the farmer to operate on common land) to multiannual "fide pascolo". This emerging practice represents a concrete innovation in pasture governance, as longer-term grazing titles encourage a different approach from farmers, creating the conditions for active management, habitat restoration and more stable commitments from farmers. Moreover, the Municipality of Itri will soon allow non-residents to enter "fide pascolo", another innovation meant to counteract pasture abandonment. Although not foreseen as a project deliverable, this change demonstrates the project's capacity to influence administrative practices and to pilot governance solutions that can be replicated across other N2000 areas.

Policy implications

LIFE GRACE is expected to have a structural impact on regional policy, as the Lazio Region has entrusted ARSIAL with responsibility for implementing the Regional Forestry Strategy to be approved by 2028, and ARSIAL expanded its structure and competencies by establishing a new office dedicated to the Agriculture-Environment interface and civic uses. This reorganisation has significant implications for the improvement of agroforestry planning, the integration of grasslands conservation objectives into common land pasture policy, and for a more incisive contribution to the implementation of N2000 policies and related support instruments, including the PAF and the Lazio CSR. These administrative developments lay the foundations for the continuation and further development of the project actions as institutional and ordinary activities.

LIFE GRACE contributed to the future implementation of regional, national and European legislation through the following activities/ commitments:

– The consolidation of the 12 agreements already signed with common land managers and local authorities (especially for those with restoration interventions already within the design/approval process: 333,13 ha of EU habitats), together with the conclusion of additional agreements, will allow the cooperation model developed by LIFE GRACE to evolve into a stable and scalable instrument of participatory governance for long-term uptake of the HD and its regional implementing frameworks (**DGR n. 234/2019**, Lazio's PAF - E.2.4 chapter). By strengthening coordinated planning and authorisation processes for grassland-restoration interventions, this

model will also contribute directly to the achievement of the restoration targets set by the **Nature Restoration Law**, supporting the identification, design and implementation of measures required to restore and enhance grassland ecosystems at landscape scale. The continuation of this activity beyond the project's timeframe has been guaranteed with the establishment of a new Service for Agriculture-Environment Relations, Collective Lands and Forests within ARSIAL's structure.

- The diachronic analysis of vegetation transitions in Lazio in the 1954-2024 period (conducted with complementary ARSIAL funds) will provide an evidence base for identifying areas affected by woodland transition and for developing recovery proposals pursuant to **Leg. Decree n. 34/2018** (National Forestry Law "Testo Unico Forestale"). The project is expected to improve the implementation of Regional and National Forestry Law also as a direct follow-up of its work in addressing the structural lack of updated or N2000-compliant management tools – through training, technical assistance and the promotion of PGAFs and grazing plans. These advancements will also strengthen the integration of the HD into planning processes and support the forthcoming regional implementation of the Nature Restoration Law.
- The project developed the "Terra Capitale" project for the Castelli Romani LAG, which will start in 2026 and will support its 14 Municipalities in pasture management and restoration activities as part of its official LDS. This initiative will contribute to the implementation of the provisions on community-led local development set out in **EU Regulations 2013/1303, 2013/1305 and 2021/1060**.
- LIFE GRACE provided the Lazio Region with a comprehensive technical and governance framework to strengthen the implementation of the Habitats Directive. The project delivered detailed habitat maps and other cartographic products (including vegetation-transition maps, and analysis of pasture use through grazing); best practices for participatory grassland habitats management (One cooperation model on best management practices); a list of pre-assessed agro-pastoral interventions within the project sites; a model for contractual agreements/measures for grassland habitat conservation to be stipulated with farmers or managing authorities; site-specific guidelines for the management of pasture habitats for each N2000 site involved in the project. These outputs provide a coherent technical and governance framework that the Lazio Region can further capitalise on to improve the implementation of the **Habitats Directive** at regional level.
- Project results highlighting the link between pasture abandonment and fire occurrence were shared with local associations active in fire-prevention efforts in Formia (LT), within the Ausoni-Aurunci SPA. They could also contribute to integrating habitat-conservation policies with territorial fire-prevention frameworks. In particular, these findings are relevant for the implementation of the **Regional Wildfire Prevention and Fighting Plan** (Piano Regionale AIB, adopted pursuant to **Law 353/2000**) and for the municipal and inter-municipal AIB plans covering the Aurunci area. By evidencing how the loss of traditional grazing practices increases fuel loads and fire risk, the project provides knowledge that can support the alignment of N2000 management measures with regional and local wildfire-risk mitigation strategies.
- 35 Municipalities (public entities that activate canteens) were trained in the implementation of CAM requirements for GPP procedures, specifically for the inclusion of grass-fed N2000 meat in tenders. The local authorities also received a comprehensive toolkit (Guidelines and a Standard Tender Model), enabling them to carry out future implementation of the national **Law 61/2022** on short supply chains and zero-kilometre products, as well as the **Ministerial Decree 65/2020** on CAMs for collective catering services. Furthermore, the Anius Pregius LAG (27 Municipalities), which initiated, under the framework of the agreement signed with ARSIAL, the development of short meat supply chains and the introduction of local products into school menus, is expected to further strengthen the implementation of these national provisions and to integrate them into its LDS.
- FIRAB participated in the 2024-2025 meetings within the 'Food Council of Roma Capitale' and developed two innovative proposals to operationalise the EU Farm to Fork Strategy and the national GPP framework: the introduction of pasture-raised meat into school menus and the creation of a city-wide 'umbrella brand' for restaurants requiring at least 25% of meat sourced

from extensive livestock systems. Although grass-fed meat was not included in the 2026 Rome school catering tender – managing 145.000 to 150.000 meals per day – due to current supply-chain limitations, the initiative contributed to increasing institutional awareness of the regulatory obligations stemming from the **Farm to Fork Strategy**, the **Directive 2014/24/EU** on public procurement, the **National GPP Action Plan**, and Ministerial Decree No. 65/2020 on CAMs for collective catering. It also highlighted the need for future logistical aggregation hubs to enable compliance with Law 61/2022 on short supply chains and zero-kilometre products in large public contracts. FIRAB's continued participation after the project's end is expected to further support the integration of these policy frameworks into Rome's food-system governance and to facilitate their progressive implementation at metropolitan scale.

- 4 bio-districts were strategically engaged in the Business Network Accords. In some cases, bio-districts initially had a limited understanding of the high-biodiversity value of grass-fed livestock systems. LIFE GRACE filled this knowledge gap and facilitated direct connection between local extensive farmers and their respective bio-districts, contributing to the inclusion of grass-fed meat within their sustainable food identities. These activities are expected to support the implementation of the **Regional Law n.11/2019** on bio-districts, particularly its provisions on the promotion of agroecological practices, the enhancement of local supply chains, and the integration of biodiversity-friendly production systems into territorial development strategies.
- **EU Regulation 178/2002** requires agri-food production systems to ensure full traceability, thereby safeguarding the fundamental right of consumers to make informed choices. LIFE GRACE demonstrated that publicly available data contained in company files, BDN, breed registers and SIV slaughtering system can be effectively used to meet these traceability obligations and to support the development of blockchain-based models. By evidencing the operational feasibility of using existing institutional datasets for traceability purposes, the project provides a concrete contribution to the implementation of Regulation 178/2002 and to future policy developments on digital traceability and transparency in livestock supply chains.
- By supporting the approval process of the **national draft law on the valorisation of transhumance** (**DDL S.1329**), including targeted technical inputs for the Senate hearing, GRACE contributed to the ongoing policy processes to strengthen political and financial support for extensive grazing systems.