

AGRI-FORESTER Guidelines for sustainable management, enhancement of ecosystem services and carbon sequestration in the Emilia-Romagna forest system

Riferimenti

Tipo di progetto

Gruppo Operativo

Acronimo

AGRI-FORESTER

Tematica

Impronta carbonica

Information

Time frame

2019 - 2022

Durata

36 months

Partners (no.)

6

Regione

Emilia-Romagna

Comparto

Forestale

Localizzazione

ITH51 - Piacenza

ITH55 - Bologna

Costo totale

€187.670,38

Fonte di finanziamento principale

Programma di sviluppo rurale

Programma di sviluppo rurale

2014IT06RDRP003: Italy - Rural Development

Programme (Regional) - Emilia Romagna

Parole chiave

Climate and climate change

Farming/forestry competitiveness and diversification

Landscape /land management

Soil management / functionality

Biodiversity and nature management

Forestry

Sito web



Objectives

Estimate the storage of organic carbon in forest soil; Monitor the basic parameters and the apparent density of the soil; To carry out specific analyzes aimed at improving the quantitative and qualitative knowledge of the organic substance; Emphasize the role of organic matter in the soil; Evaluate the organic soil quality index; Monitor and enhance the ecosystem services of the partner companies forests; Identify the silvicultural practices that lead to the favoring of carbon sequestration in the soils by creating specific "Guidelines for sustainable management, the enhancement of ecosystem services and carbon sequestration in the Emilia-Romagna forest system".

Activities

Monitoring of carbon sequestration in soil in representative sites, study and enhancement of ecosystem services of the main forest types present in partner companies, identifying and sharing "guidelines for sustainable management, enhancement of ecosystem services of carbon sequestration in the Emilia-Romagna forest system"

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<https://www.pedologia.net/it/AGRI-FORESTER/cms/Pagina.action?pageAction=&page=I...>

Project status
completed

Partenariato

Role	Azienda	Address	Telephone	E-mail
Leader	I.TER Soc. Coop.	Via Zacconi 12 40127 Bologna BO Italy	051 523976	scotti@pedologia.net
Partner	Alma Mater Studiorum - Università di Bologna	Via Zamboni, 33 40126 Bologna BO Italy	051 2096210	livia.vittori@unibo.it
Partner	Azienda Agricola Il Regno del Marrone di Rontini Sergio e Monia	Via Pianeta, 16 40022 Castel del Rio BO Italy	0542 96302	
Partner	DINAMICA s.c.a r.l.	Via Bigari 3 40128 Bologna BO Italy	051 360747	info@dinamica-fp.it
Partner	Ferreri Marco	Località Faraneto, 39 29020 Coli PC Italy	348 4490015	
Partner	Partecipanza Agraria di Sant'Agata Bolognese	Via Il Agosto 1980, 45 40019 Sant'Agata Bolognese BO Italy	051 956127	

Pratiche abstract

Description

This action provides for the organization, activation and maintenance of the Operating Group (OG). I.TER will assume the role of coordinator of the activity of operation and management of the OG, planning and implementing all the technical initiatives necessary for the realization and achievement of the results envisaged by the Plan. Having qualified technical, administrative and secretarial staff with many years of experience in the technical-organizational coordination of research, experimentation and dissemination projects, I.TER will handle the secretarial and administrative management of the project as a reference point.

The coordination activity will develop with at least 2 meetings a year.

For the entire duration of the Plan, the Project Manager will carry out functional activities to ensure the correct application of the contents of the Plan itself, and in particular: monitoring the progress of the work; the evaluation of the results in progress; analysis of the deviations, comparing the intermediate results achieved with those expected; the definition of corrective actions.

At the end of the Plan and at the end of each year, the Project Manager, together with all the partners involved, will complete the analysis of the intermediate and final results obtained, as well as the analysis of their compliance with the provisions of the Plan. As part of the coordination of activities I.TER expects to keep in close contact with all partners in order to promptly learn about any critical issues and difficulties and start consultations with the OG in time to implement containment actions and define solutions.

Description

ACTION STUDIES OF FOREST AREAS PRESENT IN THE RELEVANT TERRITORIES OF THE

PARTNERS There are field visits to partner companies to carry out an initial analysis of the development, phytosanitary status and age of the forest systems present in order to identify the characteristics of the soil and of the above-ground to control the placement of the monitoring, in representative areas. ITER and UNIBO-DISTAL foresee a first inspection at all companies aimed at gathering information on forest management. This survey is aimed at identifying representative sites within the member companies in which to place the studies and demonstrative tests provided for in the actions of the Operational Plan.

For each company, 9 monitoring sites will be identified for the assessment of the carbon content in the soil and among these 3 sites for the study of the biofertility index, assessment of organic pools, CO₂ emission and index evaluation of biological quality of the soil, forest humus and monitoring ecosystem services.

In the final part of this study there will be a meeting with the OG participants aimed at sharing and validating the following documents useful for the implementation of the Operational Plan:

- List and location of the sites, representative for the soil environment and for forest management, in which to carry out the activities of the Plan actions
- Definition of the sampling protocol to be used for sampling for soil analysis

Description

ACTION 1: MONITORING OF THE CARBON SEQUESTRATION IN THE SOIL IN

REPRESENTATIVE SITES I.TER and UNIBO-DISTAL foresee the study of carbon sequestration and types of organic substance in typical situations both for forest type (age, management, species present etc.) and for pedological environment.

In the previous study action, for each partner company, 9 monitoring sites were identified in which I.TER will carry out: the study of the soil; the georeferencing of the studied sites; a photo collection of the survey station environment; monitoring of organic carbon in the soil by taking compound samples at two different depths (0-15 cm and 15-30 cm); the taking of samples at 10-20 cm using a special sampler for assessing humidity and apparent density. UNIBO-DISTAL will identify for each partner company 3 sites selected from the previous 9 in which it will perform: characterization of the different organic carbon pools; evaluation of the biological fertility index; definition of microbial populations (bacteria and fungi); CO₂ emission assessment. I.TER and UNIBO-DISTAL will prepare a report of the various results obtained by processing the carbon stock in the soil in connection with the types of soil and with silvicultural management (Batjes-1996 equation). The apparent volumetric mass values determined on the basis of the weight of the samples collected in the field will also be compared with the data of pedofunctions available in the region.

Description

STUDY AND ENHANCEMENT OF ECOSYSTEM SERVICES OF THE MAIN FOREST TYPES

PRESENT IN PARTNER COMPANIES The forest produces ecosystem goods and services which, in addition to the sequestration of carbon treated in Action 1, concern the regulation of water, the reduction of hydrogeological risk, maintenance and protection. of biodiversity. The GO intends to perform monitoring and observations in the field to collect data preparatory to the enhancement of ecosystem services provided by the forest. In the same 3 sites of the partner companies already selected by I.TER and UNIBO (Action 1) the following studies are foreseen: evaluation of soil biodiversity through the soil biological quality index (QBS-ar); evaluation and classification of forest humus; field observations concerning the role of the forest in water regulation and hydrogeological protection

Description

ACTION 3: IDENTIFY AND SHARE "GUIDELINES FOR SUSTAINABLE MANAGEMENT, ENHANCEMENT OF ECOSYSTEM SERVICES AND CARBON SEQUESTRATION IN THE EMILIA-ROMAGNA FOREST SYSTEM"

The Operational Plan sets out several results that all converge on the main objective that "links" the participants to the OG, or define the "Guidelines for sustainable management, the enhancement of ecosystem services and carbon sequestration in the Emilia-Romagna forest system " and to enhance the role of agro-forestry companies in defense, protecting and safeguarding the territory. The goodness of the final result will be determined by the ability to work collegially, testing and verifying the data collected in the field in the territories belonging to the associated forestry companies to share and then define the best forest management techniques.

Special excursions will be organized, with the participation of OG partners, other forest companies, technicians and regional officials to discuss and share the guidelines. The places of visit will be the woods of the associated companies and possibly real cases of optimal management or representative cases.

Description

DISCLOSURE ACTION

1. Definition and promotion of the slogan "AGRI-FORESTER" so that it becomes a symbol of group work; the slogan will also be "launched" on the PEI network to start exchanges with any similar realities;
2. Organizing a press conference at the start of the plan and sending invitations;
3. Definition of press releases that will be addressed to the main newspapers (Resto del Carlino, Libertà, other local newspapers);
4. Organization of a technical seminar;
5. Definition of Pei card;
6. Contacts with PEI network;
7. Organization of 2 demonstration activities;
8. Creation of web pages in the I.TER portal;
9. "Rural communication" radio broadcasts at Radio Budrio;
10. Writing of at least 1 article for regional and national magazines;
11. Organization of a final conference for the presentation of results;
12. ROLL UP which will show the logo and the slogan of the project;
13. VIDEO focused on communicating the sustainability and values of the forest;
14. Organization of two itinerant comparisons by bus ("AGRI-FORESTER-bus").

Description

TRAINING ACTION The cooperation modality also takes place with the Training and Consultancy of

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forest technical experts, pathologists, foresters, forest security experts. The OG plans to activate both training courses by DINAMICA and specific consultancies by I.TER. The training proposals inserted by DINAMICA are aimed at providing participants with preparatory training hours to understand, evaluate and receive information on sustainable forest management that implements and enhances the ecosystem services of company forests with particular reference to carbon sequestration. Training and comparison of forest population types and the main silvicultural treatments are the basis of the courses, starting both frontal lessons and field observations. Moreover, speaking of sustainable management and therefore also of silvicultural practices and interventions, part of the training will be dedicated to work in the forest in safety.

The consultancy proposals entered by I.TER are aimed at providing the advice of an expert Forest Doctor for the assessment of the vegetative production status and the potential of the ecosystem services of the applicant farms. The consulting activities are aimed at agro-forestry companies interested in knowing the main characteristics of the forest stands present in the company, the potential ecosystem services with particular reference to the carbon sequestration that the company forests can provide and the relative cultivation indications necessary for a management sustainable of the woods.

Link utili

Titolo/Descrizione	Url	Tipologia
Sito web del progetto	https://www.pedologia.net/it/AGRI-FORESTER/cms/Pagina.action?pageAction=&page=I...	Sito web
Video Progetto AGRI-FORESTER	https://www.youtube.com/watch?v=ojviK8zzfAU	Materiali utili
Video della Visita presso azienda il Regno del Marrone Castel del Rio (Bo)	https://www.youtube.com/watch?v=qdTZe8jrQjs	Materiali utili