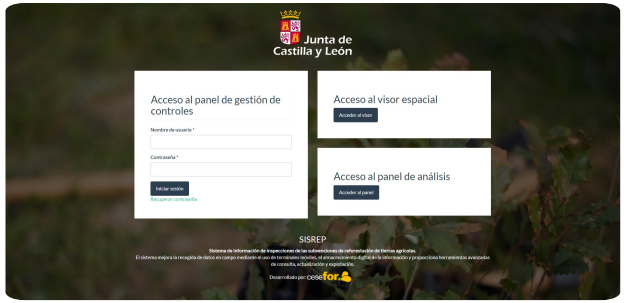
SISREP | Management and analysis of reforestations on agricultural land



SISREP is a project that has developed an advanced statistical model that allows predictive and descriptive analyses to be carried out using a forestation survival prediction tool to ensure the success of new plantations. SISREP is based on the use of knowledge from historical in-situ visits to predict the probability of success of future plantations using machine learning techniques, and on a database with more than 50,000 observations referring to forestations carried out from 1993 to the present day.

The main objective of SISREP is to make use of the information obtained during inspections in the framework of aid for afforestation and the creation of forest areas in Castilla y León in order to:

- Use of the information obtained in the field for the management of the controlled files.
- Creation of a centralised and geo-referenced database with information on the state of plantations.
- To be able to predict, by means of artificial intelligence techniques, the success of future plantations.
- With the knowledge extracted, review and improve the planning of future actions, allowing the implementation of the most appropriate technical conditions for the new environmental circumstances.

To this end, an infrastructure has been designed and implemented that allows the digitalisation of the entire workflow, from data collection in the field to the use of these data in advanced statistical analysis tools.

The data collected in the field are for example species, altitude, density, slope, method, orientation, age, lithography, with or without sowing, or area.

DETTAGLI

ORIGINE DEL LEGNO

foresta

TIPO DI LEGNO

Fusto

TIPO DI LEGNO IN QUESTIONE

Reforestation and creation of forest areas

IMPATTO SULL'AMBIENTE E LA BIODIVERSITà

SISREP enables better forest management and ensures the success of new tree plantations, thus improving the preservation of the environment and the creation of new forest ecosystems.

Therefore, the project has a very positive impact on the environment and biodiversity.

EFFETTO SUL REDDITO

Very positive. Better forest management can generate more income.

POTENZIALE DI SFRUTTAMENTO

Very positive, as SISREP is a support system for forest management in multiple variants, as well as a valuable aid to both private owners and managers in the task of creating new forests and, in the medium term, managing specific aspects of existing ones.

The use of data derived from the daily management of administrations is a

POTENZIALE DI MOBILITAZIONE

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POTENZIALE SOSTENIBILITà - VALORE

Molto positivo

FACILITà DI IMPLEMENTAZIONE

--

FACILITà DI IMPLEMENTAZIONE - VALUTAZIONE

--

PREREQUISITI CHIAVE

In order to carry out this project, it would be necessary to have a solid database, compiled over a number of years.

TIPO DI EVENTO IN CUI QUESTO BPI è STATO PRESENTATO

--

highly valuable source of information that can help to improve the services offered by these administrations. To this end, the digitisation of processes becomes a fundamental and indispensable task.

HUB

Hub sud-ovest

EFFETTO SUL LAVORO

--

IMPATTO ECONOMICO

--

I COSTI DI ATTUAZIONE (EURO - €)

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CONOSCENZE SPECIFICHE NECESSARIE

Use of digital tools.

PIù DETTAGLI

SFIDA RISOLTA

1. Migliorare la resilienza delle foreste e l'adattamento ai cambiamenti climatici

DOMINIO

Inventario, la valutazione, il monitoraggio

La gestione forestale, selvicoltura, i servizi ecosistemici, resilienza

disturbi della foresta, i rischi, risposta ai disastri

TIPO DI SOLUZIONE

Modellazione, DSS, la simulazione, l'ottimizzazione

PAROLE CHIAVE

Reforestation

database

forecasting

SOLUZIONE DIGITALE

Sì

INNOVAZIONE

Sì

PAESE D'ORIGINE

Spagna

SCALA DI APPLICAZIONE

Regionale / sub-nazionale

INIZIO E FINE ANNO

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CONTATTI

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REFERENCES AND RESOURCES

SITO PRINCIPALE

https://www.pfcyl.es/sites/default/files/biblioteca/documentos/ficha_sisrep.pdf

SITO WEB DEL PROGETTO

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PROGETTO DI RIFERIMENTO

RISORSE

Presentación : Proyecto SISREP

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PROGETTO NELL'AMBITO DEL QUALE QUESTA SCHEDA è STATA CREATA

Rosewood 4.0

DATA DI INSERIMENTO

15 Dic 2021

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

Link to Rosewood 4.0

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

Centro de Servicios y Promoción Forestal y de su Industria de Castilla y León