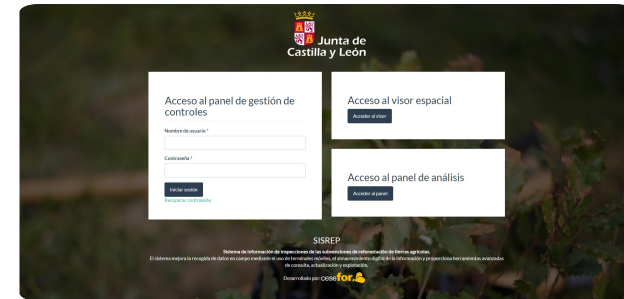# SISREP | Management and analysis of reforestations on agricultural land

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.

DETALJI

PODRIJETLO DRVA
Šuma

VRSTA DRVA
Deblo

ODGOVARAJUĆA VRSTA DRVA
Reforestation and creation of forest areas

UTJECAJ NA OKOLIš I BIORAZNOLIKOST
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.

UčINAK NA PRIHOD
Very positive. Better forest management can generate more income.

POTENCIJAL ISKORISTIVOSTI
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

POTENCIJAL ZA POVEĆANJE UPORABE DRVA
--

POTENCIJAL ODRžIVOSTI - VRIJEDNOST
Vrlo pozitivno

JEDNOSTAVNOST PROVEDBE
--

JEDNOSTAVNOST PROVEDBE - EVALUACIJA
--

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

VRSTA DOGAđAJA NA KOJEM JE PRIKAZAN OVAJ BPI
--

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.

SREDIŠTE

Jugozapadno čvorište

GOSPODARSKI UČINAK

--

POTREBNA POSEBNA ZNANJA

Use of digital tools.

UČINAK NA ZAPOŠLJIVOST

--

TROŠKOVI PROVEDBE (EURO - €)

--

VIŠE DETALJA

IZAZOV

1. Poboljšanje otpornosti šuma i prilagodbe klimatskim promjenama

DOMENA

Popis, procjena, praćenje

Upravljanje šumama, uzgoj šuma, usluge ekosustava, otpornost

Nepovoljni prirodni uvjeti, rizici, odgovor na katastrofe

VRSTA RJEŠENJA

Modeliranje, sustav za podršku odlučivanju, simulacija, optimizacija

KLJUčNE RIJEčI

Reforestation

database

forecasting

DIGITALNO RJEŠENJE

Da

INOVACIJA

Da

ZEMLJA PODRIJETLA

Španjolska

PODRUčJE PRIMJENE

Regionalno / podnacionalno

POčETAK I KRAJ GODINE

--

KONTAKT PODATCI

VLASNIK ILI AUTOR

CESEFOR, Junta de Castilla y León

Francisco Gallego

francisco.gallego@cesefor.com

https://www.cesefor.com/

IZVJESTITELJ

Fundación CESEFOR

Angela García de Arana

angela.garcia@cesefor.com

REFERENCES AND RESOURCES

GLAVNA WEB STRANICA

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

WEB STRANICA PROJEKTA

--

IZVORI

Presentación : Proyecto SISREP

REFERENCA PROJEKTA

--

PROJEKT U OKVIRU KOJEG JE INFORMATIVNI LIST KREIRAN

Rosewood 4.0

DATUM UNOSA

15 pro 2021

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

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

EFI