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.

DETALJER

OPPRINNELSE FOR TRE

Skog

TYPE TRE

Tre fra rundtvirke

TYPE TRE INVOLVERT

Reforestation and creation of forest areas

PåVIRKNING På MILJø OG BIOLOGISK MANGFOLD

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.

INNTEKTSEFFEKT

Very positive. Better forest management can generate more income.

UTNYTTELSESPOTENSIAL

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

MOBILISERINGSPOTENSIAL

--

BæREKRAFTPOTENSIAL - VERDI

Veldig positivt

ENKEL IMPLEMENTERING

--

ENKEL IMPLEMENTERING - EVALUERING

--

VIKTIGE FORUTSETNINGER

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

TYPE BEGIVENHET DER DENNE BPI HAR BLITT OMTALT

--

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
South-West Hub

EFFEKT På ARBEIDSPLASSER
--

ØKONOMISK PåVIRKNING
--

KOSTNADER MED IMPLEMENTERING (EURO - €)
--

SPESIFIKKE KUNNSKAPSBEHOV
Use of digital tools.

MER INFORMASJON

UTFORDRING ADRESSERT

1. Forbedre skogens robusthet og tilpasningsevne til klimaendringer

DOMENE

Inventering, vurdering, overvåking

Skogforvaltning, skogskjøtsel, økosystemtjenester

Skogskader, risiko, katastrofeberedskap

TYPE LøSNING

Modellering, DSS, simulering, optimalisering

NøKKELORD

Reforestation

database

forecasting

DIGITAL LøSNING

Ja

INNOVASJON

Ja

OPPRINELSESLAND

Spania

POTENSIALE

Regional/deler av landet

START OG SLUTT åR

--

KONTAKT INFORMASJON

EIER ELLER FORFATTER

CESEFOR, Junta de Castilla y León

Francisco Gallego

francisco.gallego@cesefor.com

https://www.cesefor.com/

RAPPORTøR

Fundación CESEFOR

Angela García de Arana

angela.garcia@cesefor.com

REFERENCES AND RESOURCES

HJEMMESIDE (HOVEDSIDE)

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

PROSJEKTETS HJEMMESIDE

--

REFERANSE TIL PROSJEKT

--

RESSURSER

Presentación : Proyecto SISREP

PROSJEKT SOM DETTE FAKTAARKET ER OPPRETTET UNDER

Rosewood 4.0

INNLEGGSDATO

15 des 2021

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

cese**for**
Centro de Servicios y Promoción Forestal
y de su Industria de Castilla y León

EFI