

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.

PODROBNOSTI

PÔVOD DREVA

Les

DRUH DREVA

Kmeňové drevo

UVAŽOVANÝ DRUH DREVA

Reforestation and creation of forest areas

VPLYV NA ŽIVOTNÉ PROSTREDIE A BIODIVERZITU

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.

DOPAD NA PRÍJMY

Very positive. Better forest management can generate more income.

POTENCIÁL VYUŽITIA

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

MOBILIZAČNÝ POTENCIÁL

--

POTENCIÁL UDRŽATEĽNOSTI - HODNOTA

Veľmi pozitívne

UĽAHČENIE IMPLMENTÁCIE

--

UĽAHČENIE IMPLMENTÁCIE - HODNOTENIE

--

Kľúčové PREPOKLADY

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

TYP PODUJATIA, NA KTOROM BOL TENTO BPI PREZENTOVANÝ

--

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.

ROZBOČOVAČ

Juhozápadné centrum

EKONOMICKÝ VPLYV

--

POTREBA ŠPECIFICKÝCH ZNALOSTÍ

Use of digital tools.

DOPAD NA ZAMESTNANOSŤ

--

NÁKLADY NA IMPLEMENTÁCIU (EURO - €)

--

VIAC INFORMÁCIÍ

RIEŠENÁ VÝZVA

1. Zlepšenie odolnosti lesov a adaptácie na zmenu klímy

DOMAIN

Inventarizácia, posudzovanie, monitoring/monitorovanie
Lesné hospodárstvo/hospodárska úprava lesa, pestovanie lesa, ekosystémové služby, odolnosť
Disturbancie/kalamity, riziká, odpoveď na katastrofu

TYP RIEŠENIA

Modelovanie, simulácia, optimalizácia

Kľúčové SLOVá

Reforestation
database
forecasting

DIGITALNE RIEŠENIE

áno

INOVÁCIE

Áno

KRAJINA PôVODU

Španielsko

ROZSAH APLIKÁCIE

Regionálny/

ZAČIATOK A KONIEC ROKA

--

KONTAKTNÉ ÚDAJE

VLASTNÍK ALEBO AUTOR

CESEFOR, Junta de Castilla y León
Francisco Gallego
francisco.gallego@cesefor.com
<https://www.cesefor.com/>

REPORTÉR

Fundación CESEFOR
Angela García de Arana
angela.garcia@cesefor.com

REFERENCES AND RESOURCES

HLAVNÁ WEBSTRÁNKA

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

ZDROJE

Presentación : Proyecto SISREP

PROJEKTOVÁ WEBSTRÁNKA

--

REFERENCIA PROJEKTU

--

PROJEKT, V RÁMCI KTORÉHO BOL TENTO INFORMAČNÝ PREHĽAD VYTVORENÝ
Rosewood 4.0

DÁTUM ODOSLANIA
15 dec 2021



Link to Rosewood 4.0



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

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY



□