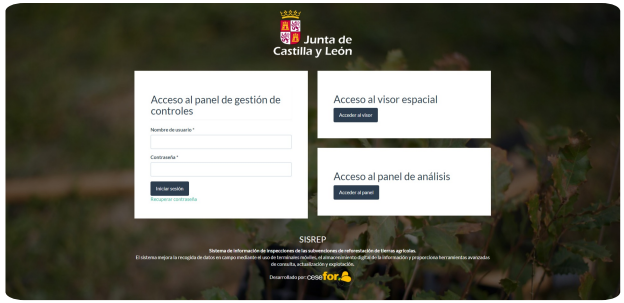
SISREP | Management and analysis of reforestations on agricultural land



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.

DETALLES

ORIGEN DE LA MADERA

Bosque

TIPO DE MADERA

Madera en rollo

TIPO DE MADERA AFECTADA

Reforestation and creation of forest areas

IMPACTO EN EL MEDIO AMBIENTE Y LA BIODIVERSIDAD

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.

EFECTO SOBRE LOS INGRESOS

Very positive. Better forest management can generate more income.

POTENCIAL DE EXPLOTACIóN

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

POTENCIAL DE MOVILIZACIóN

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POTENCIAL DE SOSTENIBILIDAD - VALOR

Muy positivo

FACILIDAD DE APLICACIóN

--

FACILIDAD DE IMPLEMENTACIóN - EVALUACIóN

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PREREQUISITOS CLAVE

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

TIPO DE EVENTO EN EL QUE SE HA PRESENTADO ESTA IFS

--

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

Centro del Suroeste

EFECTO SOBRE EL EMPLEO

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IMPACTO ECONóMICO

--

COSTES DE IMPLEMENTACIóN (EURO - €)

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CONOCIMIENTOS ESPECíFICOS NECESARIOS

Use of digital tools.

MáS DETALLES

RETO ABORDADO

1. Mejorar la resistencia y la adaptación de los bosques al cambio climático

DOMINIO

Inventario, evaluación, seguimiento

Gestión forestal, silvicultura, servicios ecosistémicos, resiliencia

Perturbaciones forestales, riesgos, respuesta a desastres

TIPO DE SOLUCIóN

Modelización, DSS, simulación, optimización

PALABRAS CLAVE

Reforestation

database

forecasting

SOLUCIóN DIGITAL

Sí

INNOVACIóN

Si

PAíS DE ORIGEN

España

ESCALA DE APLICACIóN

Regional/sub-nacional

AñO DE INICIO Y FIN

--

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REFERENCES AND RESOURCES

SITIO WEB PRINCIPAL

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

SITIO WEB DEL PROYECTO

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RECURSOS

Presentación : Proyecto SISREP

REFERENCIA DEL PROYECTO

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PROYECTO BAJO EL QUE SE HA CREADO ESTA FICHA

Rosewood 4.0

FECHA DE MENSAJE

15 Dic 2021

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY