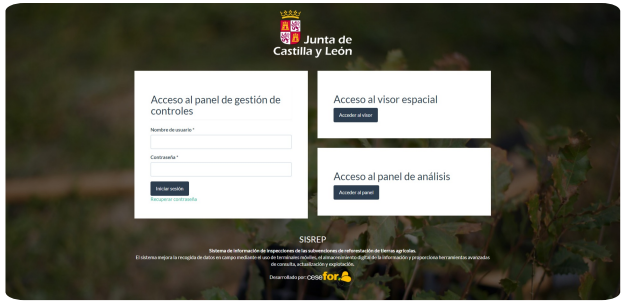
SISREP | Management and analysis of reforestations on agricultural land



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.

DETALHES

ORIGEM DA MADEIRA

Floresta

TIPO DE MADEIRA

Tronco

TIPO DE MADEIRA EM CAUSA

Reforestation and creation of forest areas

IMPACTE NO AMBIENTE E BIODIVERSIDADE

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.

IMPACTE NAS RECEITAS

Very positive. Better forest management can generate more income.

POTENCIAL DE EXPLORAçãO

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 MOBILIZAçãO

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SUSTENTABILIDADE POTENCIAL - VALOR

Muito positivo

FACILIDADE DE IMPLEMENTAçãO

--

FACILIDADE DE IMPLEMENTAçãO

--

PRE-REQUISITOS CHAVE

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 EM QUE ESTE BPI TEM SIDO APRESENTADO

--

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

Pólo Sudoeste

IMPACTE NO EMPREGO

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IMPACTE ECONOMICO

--

CUSTOS DE IMPLEMENTAçãO (EURO - EUR)

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CONHECIMENTOS ESPECIFICOS NECESSáRIOS

Use of digital tools.

MAIS DETALHES

DESAFIO ABORDADO

1. Melhorar a resiliência e adaptação das florestas às alterações climáticas

DOMíNIO

Inventário, avaliação e monitorização

Gestão florestal, silvicultura, serviços do ecosistema, resiliencia

Perturbações florestais, riscos e resposta a catástrofes

TIPO DE SOLUçãO

Modelação, sistemas de apoio à decisão, simulaçã, optimização

PALAVRAS-CHAVE

Reforestation

database

forecasting

SOLUçãO DIGITAL

Sim

INOVAçãO

Sim

PAíS DE ORIGEM

Espanha

ESCALA DE APLICAçãO

Regional/ sub-nacional

ANO DE INíCIO E FIM

--

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REFERENCES AND RESOURCES

WEBSITE PRINCIPAL

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

WEBSITE DO PROJETO

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RECURSOS

Presentación : Proyecto SISREP

REFERêNCIA AO PROJETO

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PROJETO NO âMBITO DO QUAL A FOLHA DE DIVULGAçãO FOI CRIADA

Rosewood 4.0

DATA DE ENTRADA

15 Dez 2021

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY