

# 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.

## DETTAGLI

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### ORIGINE DEL LEGNO

foresta

### TIPO DI LEGNO

Fusto

### POTENZIALE DI MOBILITAZIONE

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### POTENZIALE SOSTENIBILITÀ - VALORE

Molto positivo

### TIPO DI LEGNO IN QUESTIONE

Reforestation and creation of forest areas

### FACILITÀ DI IMPLEMENTAZIONE

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### IMPATTO SULL'AMBIENTE E LA BIODIVERSITÀ

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.

### FACILITÀ DI IMPLEMENTAZIONE - VALUTAZIONE

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### EFFETTO SUL REDDITO

Very positive. Better forest management can generate more income.

### PREREQUISITI CHIAVE

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

### POTENZIALE DI SFRUTTAMENTO

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.

### TIPO DI EVENTO IN CUI QUESTO BPI È STATO PRESENTATO

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The use of data derived from the daily management of administrations is a

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**

Hub sud-ovest

**EFFETTO SUL LAVORO**

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**IMPATTO ECONOMICO**

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**I COSTI DI ATTUAZIONE (EURO - €)**

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**CONOSCENZE SPECIFICHE NECESSARIE**

Use of digital tools.

## PIÙ DETTAGLI

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SFIDA RISOLTA	DOMINIO	TIPO DI SOLUZIONE
1. Migliorare la resilienza delle foreste e l'adattamento ai cambiamenti climatici	Inventario, la valutazione, il monitoraggio La gestione forestale, selvicoltura, i servizi ecosistemici, resilienza disturbi della foresta, i rischi, risposta ai disastri	Modellazione, DSS, la simulazione, l'ottimizzazione
PAROLE CHIAVE	SOLUZIONE DIGITALE	INNOVAZIONE
Reforestation database forecasting	Sì	Sì
PAESE D'ORIGINE	SCALA DI APPLICAZIONE	INIZIO E FINE ANNO
Spagna	Regionale / sub-nazionale	--

## CONTATTI

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PROPRIETARIO O AUTORE	REPORTER
CESEFOR, Junta de Castilla y León Francisco Gallego francisco.gallego@cesefor.com <a href="https://www.cesefor.com/">https://www.cesefor.com/</a>	Fundación CESEFOR Angela García de Arana angela.garcia@cesefor.com

## REFERENCES AND RESOURCES

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SITO PRINCIPALE	RISORSE
<a href="https://www.pfcyl.es/sites/default/files/biblioteca/documentos/ficha_sisrep.pdf">https://www.pfcyl.es/sites/default/files/biblioteca/documentos/ficha_sisrep.pdf</a>	
SITO WEB DEL PROGETTO	Presentación : Proyecto SISREP
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PROGETTO DI RIFERIMENTO	



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PROGETTO NELL'AMBITO DEL QUALE QUESTA SCHEDA è STATA CREATA

Rosewood 4.0

DATA DI INSERIMENTO

15 Dic 2021

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY



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