Project “Insense” (soil diagnosis)

Easily assess the sensitivity of forest soil to increased biomass harvesting. The owner or manager must enter soil characteristics into the digital or paper application, which indicates the sensitivity level for several mineral elements.

This tool allows more intensive forest management to be applied in areas where the risk of soil depletion is low. It is necessary to train forest owners to describe soil horizons.

This tool is complementary to the ADEME's guide "sustainable forest slash harvesting" of 2006 which indicates how to describe the soil (type of humus, soil texture, pH,...) and gives management recommendations according to the different types of sensitivity.
This application takes into account the pedoclimatic zone, humus type, pH, soil texture and prospective depth. The soil is described 25 cm deep. The result of the analysis gives 3 sensitivity levels: low, medium or high applied generally to the soil or for each mineral element (calcium, magnesium, potassium, phosphorus, nitrogen).

DETAILS

ORIGIN OF WOOD

Forest

TYPE OF WOOD

Stemwood

KIND OF WOOD CONCERNED

Woody biomass

IMPACT ON ENVIRONMENT & BIODIVERSITY

Limits the impact of slash harvesting on soil fertility in sensitive ares

INCOME EFFECT

NA

EXPLOITATION POTENTIAL

--

HUB

--

ECONOMIC IMPACT

NA

SPECIFIC KNOWLEDGE NEEDED

NA

MOBILIZATION POTENTIAL

NA

SUSTAINABILITY POTENTIAL - VALUE

--

EASE OF IMPLEMENTATION

Difficult: a lot of climate and soil data to integrate

EASE OF IMPLEMENTATION - EVALUATION

--

KEY PREREQUISITES

Association, organization of meeting days, responding to the NA

TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED

--

JOB EFFECT

NA

COSTS OF IMPLEMENTATION (EURO - €)

--

MORE DETAILS

CHALLENGE ADDRESSED

--

DOMAIN

Forest management, ecosystem, resilience

Forest disturbances, risks

TYPE OF SOLUTION

--

KEYWORDS

--

DIGITAL SOLUTION

No

INNOVATION

Yes

COUNTRY OF ORIGIN

France

SCALE OF APPLICATION

National

START AND END YEAR

2018 -

CONTACT DATA

OWNER OR AUTHOR

Laurent.augusto@inra.fr

REPORTER

REFERENCES AND RESOURCES

MAIN WEBSITE

https://www.ademe.fr/insense-indicateurs-sensibilite-ecosystemes-forestiers-soumis-a-recolte-accrue-biomasse

RESOURCES

--

PROJECT WEBSITE

--

PROJECT REFERENCE

--

PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood

POST DATE

27 Sep 2019

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