Inventory and characterization of forest roads



Public administrations directly manage a road network on forest land that in many cases is longer than the general road network itself.
Wood transport is a key factor in the value chain of wood mobilization.
There is therefore a need for reliable knowledge of this network, so that resources can be optimised and rationalised in terms of maintenance and improvement, that is to say, the rationalisation of the processes of inventory, planning, programming and control of the work on these tracks must be emphasised.

The lack of digital cartography with sufficient quality in rural areas is a constant in most territories. Together with a certain delay in the application of technologies in the sectors that operate in this area, they make these areas a priority objective on which to concentrate this type of effort.
This cartography allows to plan more effectively the operations related to the harvesting and transport of wood, from the forest to the industry.

Since 2009, Cesefor has directed and developed the project co-financed by the Regional Government of Castilla y León and the Ministry of Industry and Trade.
Within the framework of this project, more than 50,000 km of rural roads have been inventoried and more than 33,000 equipments have been collected, forming a continuous network connected to the road network with extensive qualitative information on forest areas.
The information has been collected by GPS, attaching the necessary qualitative information in each case.
Specific cartography has been distributed to environmental agents, fire extinguishing media dependent on the Junta de Castilla y León and the digital information is available at the Junta de Castilla y León.
A specific navigator has also been developed for rural roads, since due to the special characteristics of this network it is necessary to know the existing restrictions, either by type of vehicle or state of the tracks.

DETAILS

ORIGIN OF WOOD

Forest

TYPE OF WOOD

Stemwood

KIND OF WOOD CONCERNED

Any wood from forests

IMPACT ON ENVIRONMENT & BIODIVERSITY

Positive: reduction on fuel consumption

INCOME EFFECT

Reduction on transportation costs

EXPLOITATION POTENTIAL

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HUB

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ECONOMIC IMPACT

Reduction on transportation costs

SPECIFIC KNOWLEDGE NEEDED

GIS and database management

MOBILIZATION POTENTIAL

-

SUSTAINABILITY POTENTIAL - VALUE

--

EASE OF IMPLEMENTATION

Medium

EASE OF IMPLEMENTATION - EVALUATION

--

KEY PREREQUISITES

Good work planning and suitable personal needed

TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED

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JOB EFFECT

None

COSTS OF IMPLEMENTATION (EURO - €)

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MORE DETAILS

CHALLENGE ADDRESSED

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KEYWORDS

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COUNTRY OF ORIGIN

Spain

DOMAIN

Harvesting, infrastructure, logistics

DIGITAL SOLUTION

Yes

SCALE OF APPLICATION

Regional/sub-national

TYPE OF SOLUTION

Modelling, simulation, optimization

INNOVATION

No

START AND END YEAR

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CONTACT DATA

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REPORTER

REFERENCES AND RESOURCES

MAIN WEBSITE

http://www.cesefor.com

PROJECT WEBSITE

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PROJECT REFERENCE

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RESOURCES

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PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood

POST DATE

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY