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 gualitative 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	MOBILIZATION POTENTIAL
Forest	-
TYPE OF WOOD	
Stemwood	SUSTAINABILITY POTENTIAL - VALUE
KIND OF WOOD CONCERNED	EASE OF IMPLEMENTATION
Any wood from forests	Medium
IMPACT ON ENVIRONMENT & BIODIVERSITY	EASE OF IMPLEMENTATION - EVALUATION
Positive: reduction on fuel consumption	
INCOME EFFECT	KEY PREREQUISITES
Reduction on transportation costs	Good work planning and suitable personal needed
EXPLOITATION POTENTIAL	TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED
HUB	JOB EFFECT
	None
ECONOMIC IMPACT	COSTS OF IMPLEMENTATION (EURO - €)
Reduction on transportation costs	
SPECIFIC KNOWLEDGE NEEDED	

GIS and database management

CHALLENGE ADDRESSED	DOMAIN	TYPE OF SOLUTION
	Harvesting, infrastructure, logistics	Modelling, simulation, optimization
KEYWORDS	DIGITAL SOLUTION	INNOVATION
	Yes	No
COUNTRY OF ORIGIN	SCALE OF APPLICATION	START AND END YEAR
Spain	Regional/sub-national	
CONTACT DATA		
OWNER OR AUTHOR	REPORTER	
Francisco.gallego@cesefor.com		
REFERENCES		
MAIN WEBSITE	RESOURCES	
http://www.cesefor.com		
PROJECT WEBSITE		
PROJECT REFERENCE		

PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood

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