iWald | Forest growth simulation app

Comparison of silvicultural treatment concepts by simulating forest growth processes on the smartphone.

In the iWald project, a system is being developed enabling forest owners to obtain realistic and technically sound options for the sustainable management of their forests. The individual objectives of the forest owner (private, communal, state) are taken into account as well as the forestry risk minimization and the sustainable conversion of forests while safeguarding the economic, ecological and social forest functions. One of the main results of iWald will be the "iWald App", which can be used to simulate forest growth processes on a smartphone. This will be provided with different entry barriers, so that both the forest layman and the trained forester will find their access to iWald. The goals include activating forest owners, who can thus approach their forest on a playful level, or improving public acceptance of forestry interventions through the possibility of simple visualization of future consequences.

DETAILS

ORIGIN OF WOOD

--

TYPE OF WOOD

--

KIND OF WOOD CONCERNED

--

IMPACT ON ENVIRONMENT & BIODIVERSITY

Economic, ecological and social forest functions are integrated into the apps decision support system.

INCOME EFFECT

--

EXPLOITATION POTENTIAL

--

HUB

Central-West Hub

ECONOMIC IMPACT

--

SPECIFIC KNOWLEDGE NEEDED

MOBILIZATION POTENTIAL

High, activation of forest owners to initiate forestry interventions is encouraged by the game character of the app.

SUSTAINABILITY POTENTIAL - VALUE

Very Positive

EASE OF IMPLEMENTATION

The solution is not yet available on the market.

EASE OF IMPLEMENTATION - EVALUATION

Difficult

KEY PREREQUISITES

--

TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED

--

JOB EFFECT

--

COSTS OF IMPLEMENTATION (EURO - €)

--

--

MORE DETAILS

CHALLENGE ADDRESSED	DOMAIN	TYPE OF SOLUTION
1.- Improve forest resilience and adaption to climate change	Forest management, ecosystem, resilience	Modelling, simulation, optimization
KEYWORDS	DIGITAL SOLUTION	INNOVATION
tree growth simulation	Yes	Yes
apps		
private forest owners		
service providers		
COUNTRY OF ORIGIN	SCALE OF APPLICATION	START AND END YEAR
Germany	National	--

CONTACT DATA

OWNER OR AUTHOR

RWTH Aachen, Institute for Man-Machine Interaction

Dr.Ing. Martin Hoppen

hoppen@mmi.rwth-aachen.de

https://www.mmi.rwth-aachen.de/en/research/applications/environment/

REPORTER

FBZ

Dr. Marie-Charlotte Hoffmann

marie-charlotte.hoffmann@wald-und-holz.nrw.de

REFERENCES AND RESOURCES

MAIN WEBSITE

https://www.mmi.rwth-aachen.de/projekt/iwald/

PROJECT WEBSITE

https://kwf2020.kwf-online.de/portfolio/iwald/

PROJECT REFERENCE

iWald, funded by FNR under no. 22012818

RESOURCES

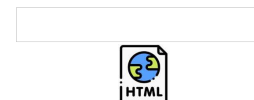**PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED**

Rosewood 4.0

POST DATE

12 Aug 2021

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