Rolling silviculture planning (annually)



Forest management based on the latest available technical solutions and satellite data (Sentinel2 and caliper with georeferencing possibility). Determinization of rough wood according to tree-species for the entire forestry operation surface. Realtime wood stock management and silvicultural measure planning reviewed with silvicultural planning simulations. Rolling management approach on an annually basis for optimization of economic, ecological and social values. Management units of approx. 30 hectares defined to enhance efficiency of the entire process. Reduction of rotation periods according to tree-species

Advanced forest management and silvicultural planning on a good wood stock analysis with proximity in time is one key factor for optimization of forest management, silvicultural measures and wood production incl. better selling possibilities. New learning process possibilities. Enhanced reaction times on requests of all sorts and in the case of extreme events (storms etc.). The approach allows the better exploitation of the growing wood potential, reducing the rotation period and thereby fostering the climate change adaptation potential. Efficiency enhancement in economic, ecological and social dimension with the aid of modern techniques is possible and will become more prominent in the future

Efficiency enhancement in economic, ecological and social dimension. Increased yield and cost reduction resulting in enhanced profitability while providing stability for wood stocks. Reducing discards by adaptation to climate change and active monitoring of sustainability principles. Exploiting of new selling opportunities. Active learning possibilities through Realtime verification of work processes incl. field work (work plan -> validation -> assignment -> verification). Better integration possibilities of all actors in the field and active work support. Better communication possibilities with players of downstream markets

DETAILS

ORIGIN OF WOOD
Forest

TYPE OF WOOD
Stemwood

KIND OF WOOD CONCERNED
Stemwood

IMPACT ON ENVIRONMENT & BIODIVERSITY
Positive on biodiversity and forest resilience enhancement

INCOME EFFECT
Positive / more efficient working processes / cost reduction possibility identification

EXPLOITATION POTENTIAL
--

HUB
--

ECONOMIC IMPACT
Enhancement of regionally added value / more efficient working processes /active learning

SPECIFIC KNOWLEDGE NEEDED

MOBILIZATION POTENTIAL
1 – 2 m³/ha

SUSTAINABILITY POTENTIAL - VALUE
--

EASE OF IMPLEMENTATION
Medium

EASE OF IMPLEMENTATION - EVALUATION
--

KEY PREREQUISITES
Sentinel2 datas (which are freely available)

TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED
--

JOB EFFECT
Better qualified staff through verification and discussion possibilities

COSTS OF IMPLEMENTATION (EURO - €)
--

GIS data processing possibilities needed

MORE DETAILS

CHALLENGE ADDRESSED

--

DOMAIN

Forest management, ecosystem, resilience

TYPE OF SOLUTION

--

KEYWORDS

--

DIGITAL SOLUTION

No

INNOVATION

No

COUNTRY OF ORIGIN

Switzerland

SCALE OF APPLICATION

Regional/sub-national

START AND END YEAR

2017 -

CONTACT DATA

OWNER OR AUTHOR

REPORTER

stefan.flueckiger@bgbern.ch

REFERENCES AND RESOURCES

MAIN WEBSITE

https://forst.bgbern.ch

RESOURCES

--

PROJECT WEBSITE

--

PROJECT REFERENCE

--

PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood

POST DATE

16 Sep 2019

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

Link to Rosewood 4.0

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY