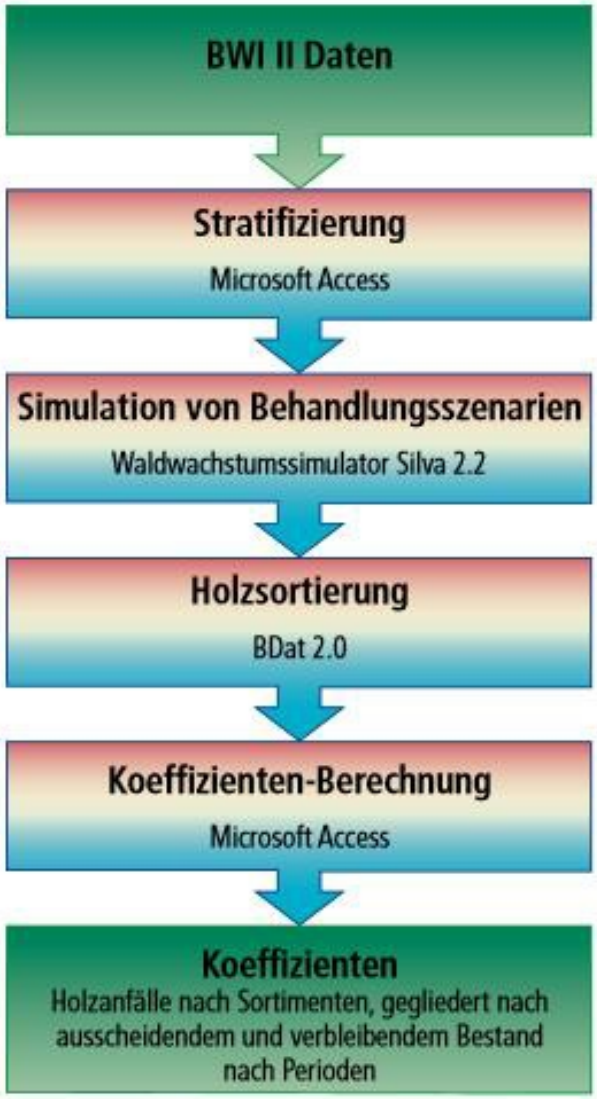
Natural and financial indicators for the consultation of private and communal forest owners



The basic idea is the processing of natural and financial data for typical forest stands and selected forest treatment alternatives after previous simulation calculations. Thereby, the question initially was limited to the depiction of the alternatives “thinning” or “without thinning”.

This prototype can be complemented with additional indicators; other areas and forest treatment strategies and therefore more data should be added and furthermore more risk integration has to be done

The sorted single tree data then were condensed to coefficients via MS Access queries. The coefficients contain information about the arising amounts of wood of the simulated treatments or rather the timber stock of the remaining stands – sorted into sorts of wood and simulation period. After feeding the data to the consultation support system, a connection to current prices for timber and timber harvesting costs was established. Based on the data from the second National Forest Inventory, the stratification of the area of the Bavarian “Tertiäres Hügelland” and the compilation of simulation stocks was carried out. Using the forest growth simulator Silva 2.2, the simulation stocks were updated once without treatment and once updated according to a thinning scheme. In the next step, the results of the simulation runs (single tree data for the remaining and the outgoing stock) were sorted according to regional sorting criteria using the sorting program BDat 2.0.

DETALLES

ORIGEN DE LA MADERA
Bosque

TIPO DE MADERA
Madera en rollo

TIPO DE MADERA AFECTADA
Stemwood

IMPACTO EN EL MEDIO AMBIENTE Y LA BIODIVERSIDAD
Positive on biodiversity and forest resilience enhancement

EFECTO SOBRE LOS INGRESOS
Positive / more efficient working processes / cost reduction possibility identification

POTENCIAL DE EXPLOTACIóN
--

HUB
--

IMPACTO ECONóMICO
An active learning of different silvicultural approaches for forest owners can be achieved. But cost effects are hardly to describe.

POTENCIAL DE MOVILIZACIóN
Area affected is small but information about advantages of thinnings regarding risks can contribute on a wider level (estimated more than 1 m3/ha)

POTENCIAL DE SOSTENIBILIDAD - VALOR
--

FACILIDAD DE APLICACIóN
Difficult as an expert tool

FACILIDAD DE IMPLEMENTACIóN - EVALUACIóN
--

PREREQUISITOS CLAVE
Just In cooperation with TUM possible

TIPO DE EVENTO EN EL QUE SE HA PRESENTADO ESTA IFS
--

EFECTO SOBRE EL EMPLEO
Better qualified staff through verification and discussion possibilities

COSTES DE IMPLEMENTACIóN (EURO - €)
--

CONOCIMIENTOS ESPECíFICOS NECESARIOS

The system is depending on complex program Silva 2.2 – forest experts of TUM have to be included

MáS DETALLES

RETO ABORDADO

--

DOMINIO

Gestión forestal, silvicultura, servicios ecosistémicos, resiliencia

TIPO DE SOLUCIóN

Modelización, DSS, simulación, optimización

PALABRAS CLAVE

--

SOLUCIóN DIGITAL

Sí

INNOVACIóN

No

PAíS DE ORIGEN

Alemania

ESCALA DE APLICACIóN

Regional/sub-nacional

AñO DE INICIO Y FIN

2009 - 2009

DATOS DE CONTACTO

PROPIETARIO O AUTOR

Thomas.knoke@mytum.de

REPORTADOR

REFERENCES AND RESOURCES

SITIO WEB PRINCIPAL

https://mediatum.ub.tum.de/doc/829183/document.pdf

RECURSOS

--

SITIO WEB DEL PROYECTO

--

REFERENCIA DEL PROYECTO

--

PROYECTO BAJO EL QUE SE HA CREADO ESTA FICHA

Rosewood

FECHA DE MENSAJE

15 Nov 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