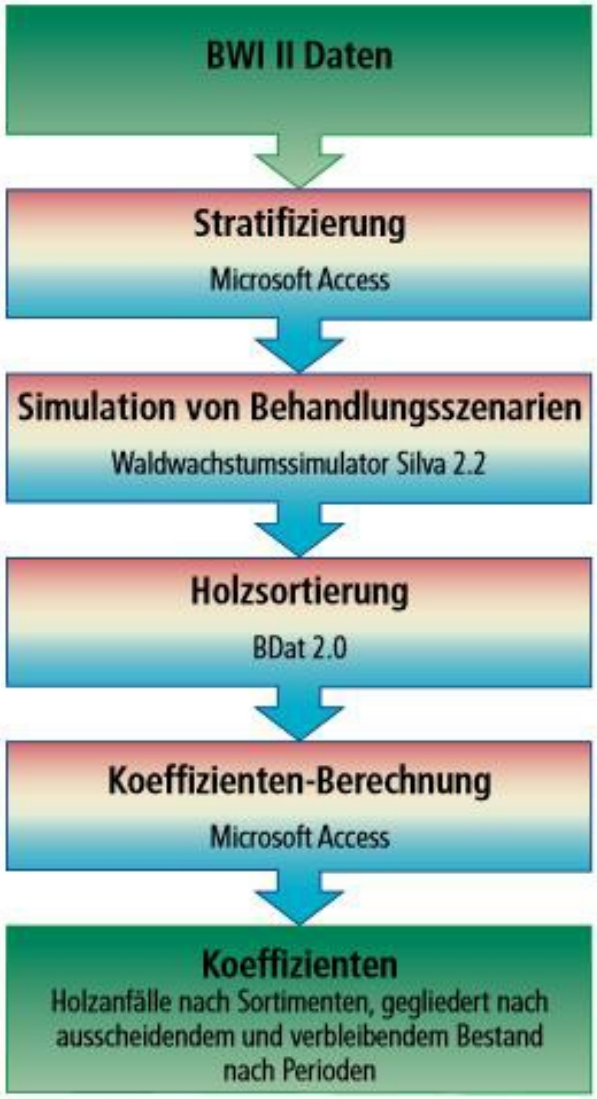
Natural and financial indicators for the consultation of private and communal forest owners



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.

DETALHES

ORIGEM DA MADEIRA
Floresta

TIPO DE MADEIRA
Tronco

TIPO DE MADEIRA EM CAUSA
Stemwood

IMPACTE NO AMBIENTE E BIODIVERSIDADE
Positive on biodiversity and forest resilience enhancement

IMPACTE NAS RECEITAS
Positive / more efficient working processes / cost reduction possibility identification

POTENCIAL DE EXPLORAçãO
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HUB
--

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

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

SUSTENTABILIDADE POTENCIAL - VALOR
--

FACILIDADE DE IMPLEMENTAçãO
Difficult as an expert tool

FACILIDADE DE IMPLEMENTAçãO
--

PRE-REQUISITOS CHAVE
Just In cooperation with TUM possible

TIPO DE EVENTO EM QUE ESTE BPI TEM SIDO APRESENTADO
--

IMPACTE NO EMPREGO
Better qualified staff through verification and discussion possibilities

CUSTOS DE IMPLEMENTAçãO (EURO - EUR)
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CONHECIMENTOS ESPECIFICOS NECESSáRIOS

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

MAIS DETALHES

DESAFIO ABORDADO

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DOMíNIO

Gestão florestal, silvicultura, serviços do ecosistema, resiliencia

TIPO DE SOLUçãO

Modelação, sistemas de apoio à decisão, simulaçã, optimização

PALAVRAS-CHAVE

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SOLUçãO DIGITAL

Sim

INOVAçãO

Não

PAíS DE ORIGEM

Alemanha

ESCALA DE APLICAçãO

Regional/ sub-nacional

ANO DE INíCIO E FIM

2009 - 2009

DADOS DE CONTACTO

PROPRIETáRIO OU AUTOR

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REPóRTER

REFERENCES AND RESOURCES

WEBSITE PRINCIPAL

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

RECURSOS

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WEBSITE DO PROJETO

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REFERêNCIA AO PROJETO

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PROJETO NO âMBITO DO QUAL A FOLHA DE DIVULGAçãO FOI CRIADA

Rosewood

DATA DE ENTRADA

15 Nov 2019

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY