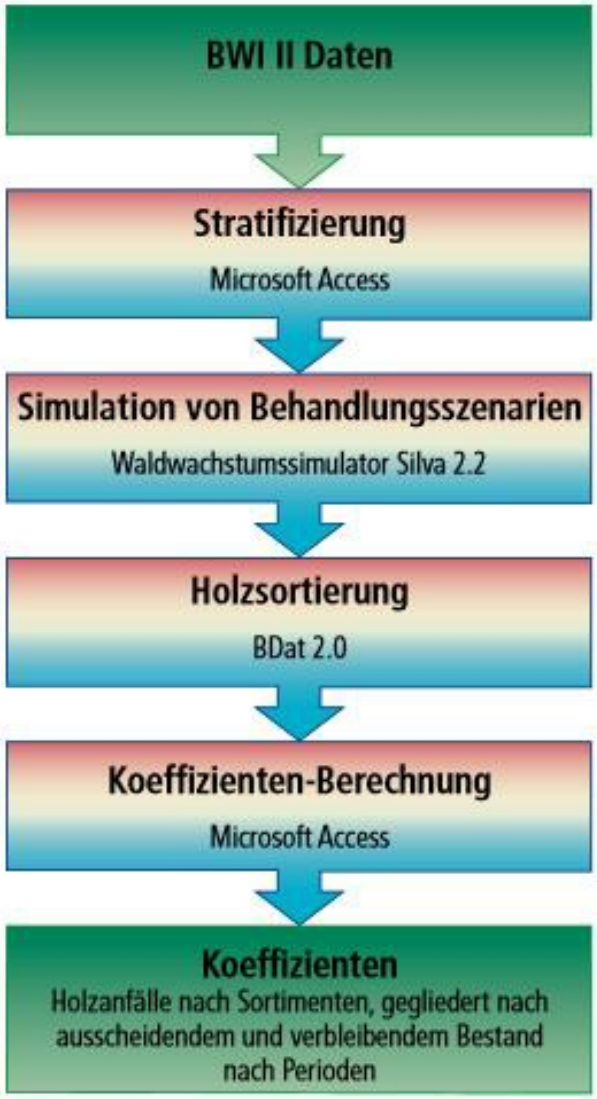
Natural and financial indicators for the consultation of private and communal forest owners



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.

DETTAGLI

ORIGINE DEL LEGNO

foresta

TIPO DI LEGNO

Fusto

TIPO DI LEGNO IN QUESTIONE

Stemwood

IMPATTO SULL'AMBIENTE E LA BIODIVERSITà

Positive on biodiversity and forest resilience enhancement

EFFETTO SUL REDDITO

Positive / more efficient working processes / cost reduction possibility identification

POTENZIALE DI SFRUTTAMENTO

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HUB

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IMPATTO ECONOMICO

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

POTENZIALE DI MOBILITAZIONE

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

POTENZIALE SOSTENIBILITà - VALORE

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FACILITà DI IMPLEMENTAZIONE

Difficult as an expert tool

FACILITà DI IMPLEMENTAZIONE - VALUTAZIONE

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PREREQUISITI CHIAVE

Just In cooperation with TUM possible

TIPO DI EVENTO IN CUI QUESTO BPI è STATO PRESENTATO

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EFFETTO SUL LAVORO

Better qualified staff through verification and discussion possibilities

I COSTI DI ATTUAZIONE (EURO - €)

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CONOSCENZE SPECIFICHE NECESSARIE

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

Più DETTAGLI

SFIDA RISOLTA

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DOMINIO

La gestione forestale, selvicoltura, i servizi ecosistemici, resilienza

TIPO DI SOLUZIONE

Modellazione, DSS, la simulazione, l'ottimizzazione

PAROLE CHIAVE

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SOLUZIONE DIGITALE

Sì

INNOVAZIONE

No

PAESE D'ORIGINE

Germania

SCALA DI APPLICAZIONE

Regionale / sub-nazionale

INIZIO E FINE ANNO

2009 - 2009

CONTATTI

PROPRIETARIO O AUTORE

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REPORTER

REFERENCES AND RESOURCES

SITO PRINCIPALE

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

RISORSE

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SITO WEB DEL PROGETTO

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PROGETTO DI RIFERIMENTO

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PROGETTO NELL'AMBITO DEL QUALE QUESTA SCHEDA è STATA CREATA

Rosewood

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15 Nov 2019

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