

Innovative spatial FORest PLANning for supporting resilient multifunctional forest management (IFORPLAN)

Andrej Bončina, Henn Korjus, Adriano Mazziotta, Anna Wierzbicka



UNIVERZA V LJUBLJANI
University of Ljubljana



Eesti Maaülikool
Estonian University of Life Sciences



Uniwersytet Przyrodniczy w Poznaniu



Funded by
the European Union

Grant agreement ID: 101094340

<https://forestvalue.org/>

IFORPLAN background

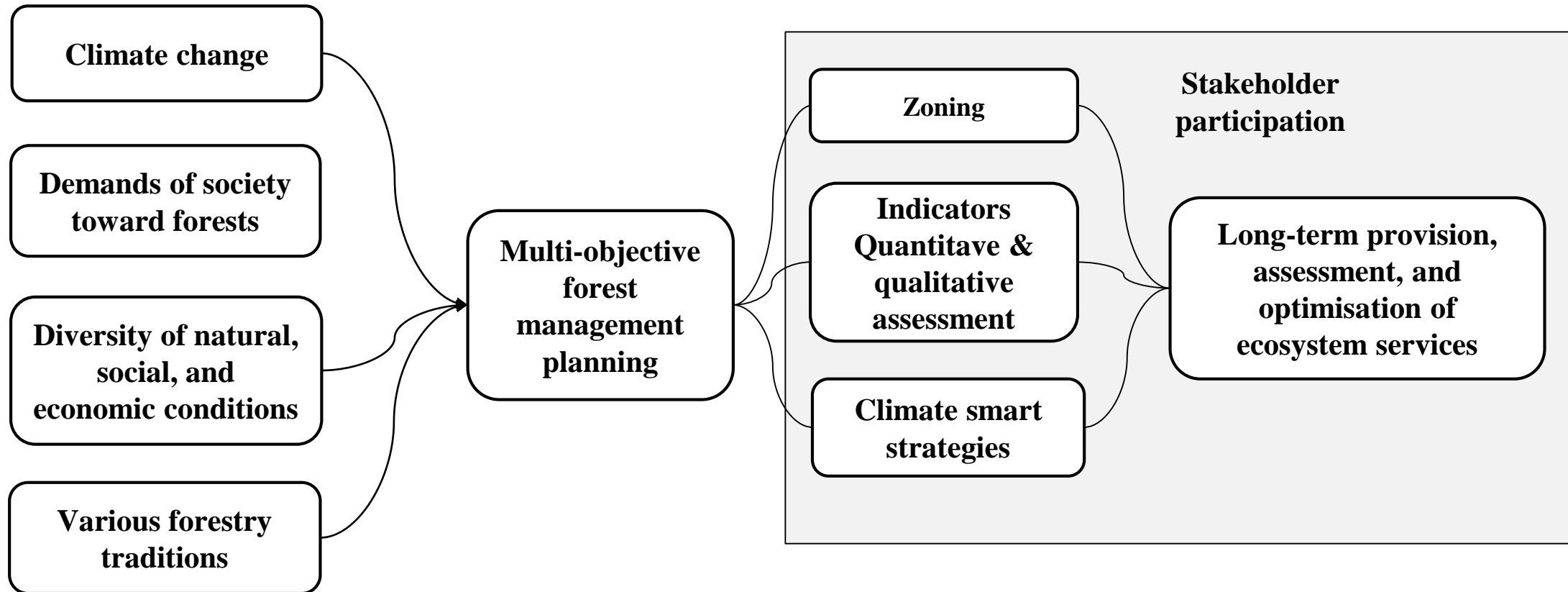
Multifunctional forestry

- different understanding
- different concepts
- changes of forests, societies and environment
- How to go about it?
 - a permanent task
 - a challenge for forest planning
- associated terms:
 - ecosystem services (ES), benefits, goods, forest owners, society, municipality, stakeholders etc

IFORPLAN background: multifunctional forestry iForplan



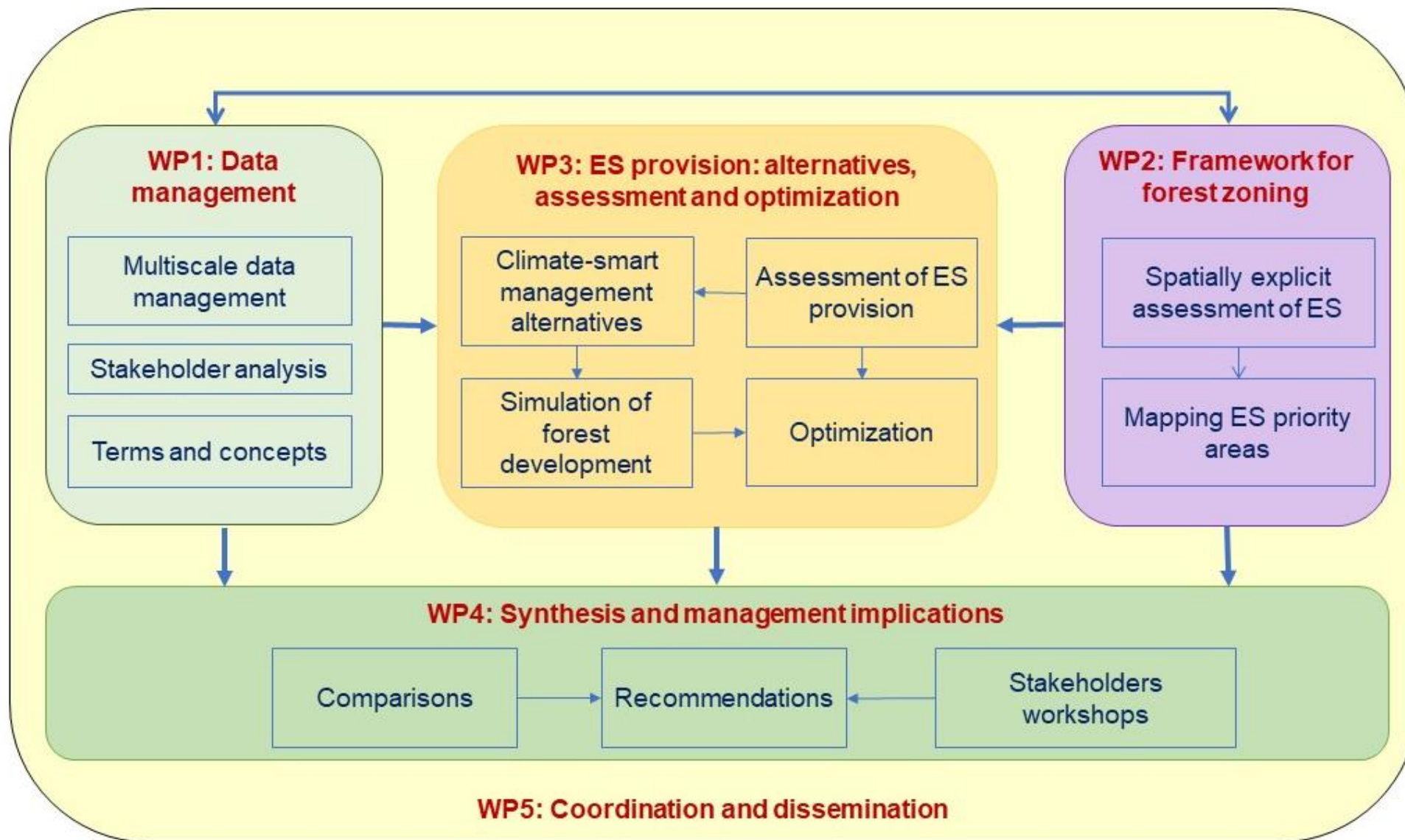
IFORPLAN main ideas



IFORPLAN main objectives

- to develop a procedure for the zonation of forest landscape into ES priority areas
- to develop a system of ES indicators and integrate them into FMP by using quantitative and qualitative MCDA methods
- to develop a procedure for defining sound climate-smart forest management strategies with respect to their capacity to supply ES
- to determine how spatial prioritization affect the long-term provision of ES
- to integrate stakeholder participation in the forest planning

IFORPLAN work plan



IFORPLAN research questions

Q1. Is forest zonation through MCDA an effective method for improving multifunctional forest management?

Q2. Do qualitative MCDA methods improve the definition and evaluation of ES indicators compared to classical purely quantitative approaches?

Q3. How can ES provision be linked with effective climate-smart management options?

Q4. Will spatial prioritization and climate-smart forest management be able to supply a sustainable flow of ES?

Q5. Will the integration of stakeholders in the process of forest planning improve the effectiveness of forest management?

IFORPLAN partners and study areas

Partner	Abbreviation
University of Ljubljana	UL
Natural Resources Institute Finland	LUKE
Poznań University of Life Sciences	PULS
Estonian University of Life Sciences	UT

Study areas (Size; Ownership)	Main forest type
Kranjska Gora, Slovenia; 9000 ha; private and state forests	Norway spruce-European beech-silver fir forests
Urjala and Äänekoski, Finland; 40,000 ha; private forests	Norway spruce and Scots pine dominated boreal forests
Zielonka and Siemianice, Poland; 9500 ha; university forests	Lowland hemiboreal mixed coniferous and broadleaved forests
Koorküla, Valga county, Estonia; 6000 ha; private and state forests	Scots pine, Norway spruce, silver birch hemiboreal forests

IFORPLAN kick-off meeting in Slovenia (Ljubljana, Kranjska Gora)



IFORPLAN kick-off meeting in Slovenia (Kranjska Gora)



WP2 Zoning of priority areas

Purpose

- importance for defining objectives and measures
- collaboration with stakeholders
- participation of forestry sector in land use planning
- impact on decisions about land use changes
- consideration of ecological and social functions in all forests

Ecosystem services considered (ES)

- timber
- protection (falling rock, avalanches, torrents...)
- recreation
- nature conservation
- C-sequestration

WP2 Indicators for priority areas

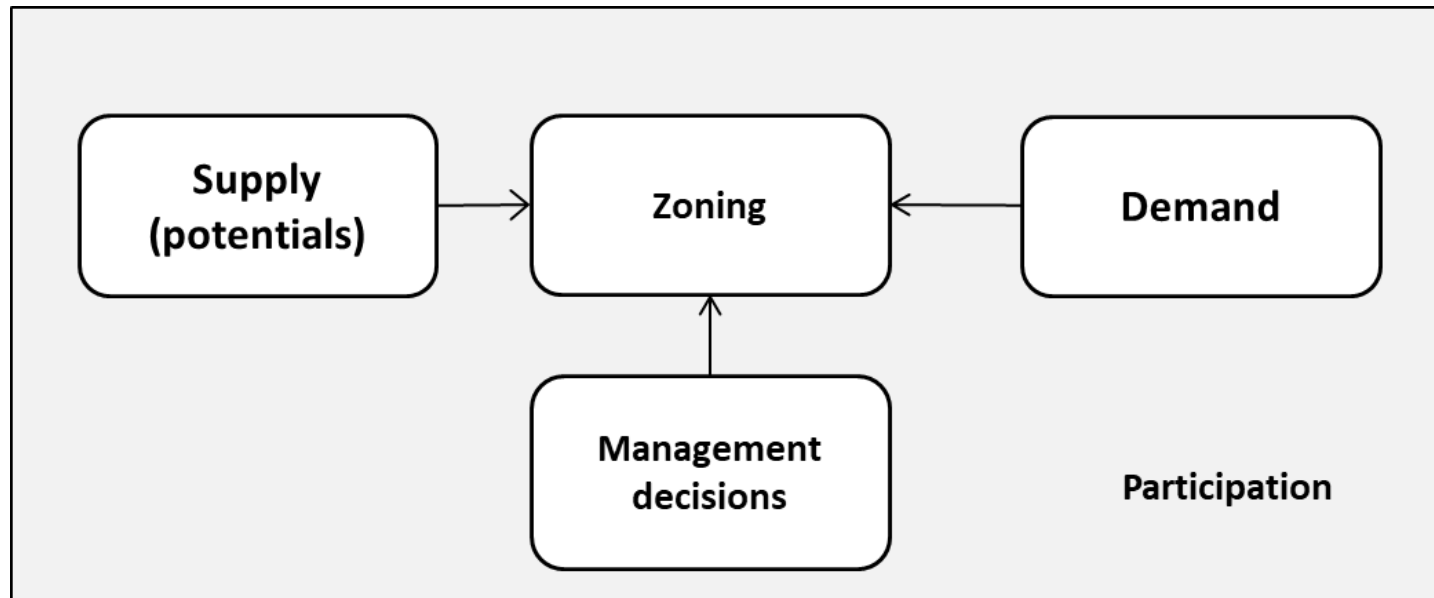
Example: Timber production

Supply

- Long-term stand productivity
- Accessibility
- Topography
- etc.

Demand

- Recent timber use
- Forest experts' assessment
- Forest owners' assessment
- etc.



IFORPLAN main challenges

- coordinating successfully the project (personal view)
- working with people from very different environments
- contributing to novelties in forest planning:
 - integrating different data from available sources
 - zoning approach
 - combining qualitative and quantitative methods in decision making
 - effective communication with stakeholders

Thank you!

