

Valuating and Financing Forest Ecosystem Services – the Example of Germany

Matthias Dieter

Thünen Institute of International Forestry and Forest Economics

Silva2015 - joint session of the ECE Committee on Forests and the
Forest Industry and the FAO European Forestry Commission
Agenda Item 4, Financing Sustainable Forest Management and Forest
Ecosystem Services

November, 3rd 2015, Engelberg, Switzerland



UNECE



Food and Agriculture Organization
of the United Nations

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- changes, not stocks**
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Valuating FES: changes, not stocks

Forest Ecosystem Services (according to MEA)

Provisioning services

e. g. timber

Regulating services

e. g. protection against avalanches,

e. g. flood regulation

Cultural services

e.g. recreation



World without ?

(Valuation only against a reference)

=> Comparison of alternative options

=> Balancing FES

MEA: Millennium Ecosystem Assessment 2005

Valuating FES: an example from Germany

Reference point for comparisons: forest management as today

Utility of cultural services: for 67,23 million people (adults) in Germany

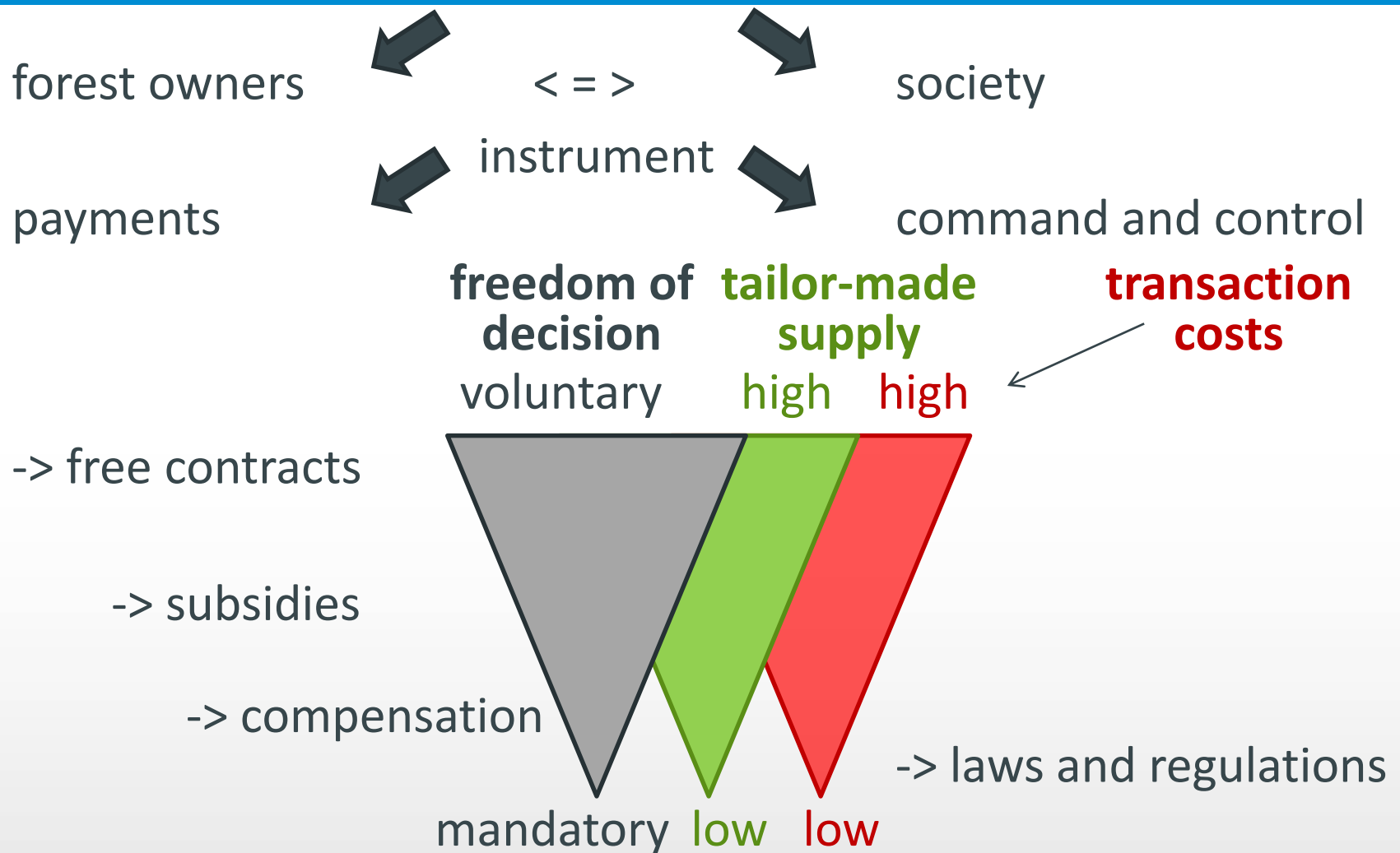
Positive values: willingness to pay/utility

Negative values: compensation request/disutility

Source: Weller, Elsasser, in preparation

		Bio energy strategy	Nature protection strategy
provisioning ecosystem services	Value added through timber use	?	?
regulating ecosystem services	Carbon sequestration and substitution	?	?
cultural ecosystem services	Share of coniferous trees	-5.14	-0.58
	Harvest age	-3.36	5.02
	Biodiversity	0 (no change)	3.82
	(Sub-)total (in billion €)	-8.50	8.26

Financing FES: property rights

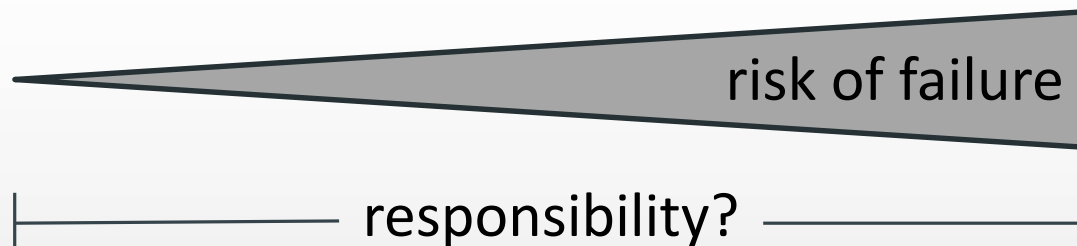


Financing FES: general remarks

requires:

- allocation of **property rights** with the forest owners
- preferably **voluntary** instruments

basic decision: what to finance?



Financing Forest Ecosystem Services in Germany I

Current situation in Germany:

safeguarding of FES under **both allocation approaches**, but laws and regulations prevailing

- free access to forests for **recreation** purposes
- free use of **groundwater** volume under forests through water supply companies (individual companies offer payments for specific measures, e. g. Gemeindewerk Kaufering)
- accounting for **carbon sequestration** under Art 3.4 KP but no full benefit sharing with forest owners
- laws and regulations as well as subsidies and compensation payments in case of **Habitat Directive** Implementation
- laws and regulations: establishment of nature conservation areas

Financing Forest Ecosystem Services in Germany II

Habitat Directive continued

- payments:
3.9 million €/yr. recently on 2.7 million ha, i. e. 1.4 €/ha/yr.
range of individual payment schemes: 6 – 200 €/ha/yr.
objects of funding: area based lump sum or individual measures

Further forest funding (under the Joint Task on Agricultural Structures and Coastal Protection), top three positions

- 23 million €/yr. for forest restructuring (planting/fostering broadleaved trees)
- 8.3 million €/yr. soil protective liming
- 7.9 million €/yr. forest road construction and maintenance

=> funding of measures but no payments for specific FES

Conclusion

Valuation of FES on change level rather appropriate than on stock level

Valuation of FES can help to find optimum forest management solutions (i. e. FES provision)

Financing FES requires (re)allocation of property rights to forest owners

In German forest policy both existing, payments and command and control

Input based payments for generic measures prevailing in Germany

Values proved to be significantly higher than payments

Thank you for your attention!

Contact

Prof. Dr. Matthias Dieter
Thünen Institute of International Forestry and Forest Economics

Leuschnerstrasse 91 Tel. 0049-40-73962-300
D-21031 Hamburg Fax: 0049-40-73962-399
matthias.dieter@ti.bund.de
Internet: <http://www.ti.bund.de/>



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