

CONCLUSIONS

4.05.00 IUFRO symposium
**„Advances and Challenges in
Managerial Economics and Accounting“**
*Organised under the
coordination of Walter SEKOT*

Vienna, 8-11 May, 2016

IUFRO - International Union of Forest Research Organizations

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International Union of Forest Research Organizations

Union Internationale des
Instituts de Recherches
Forestières

Unión Internacional
de Organizaciones de
Investigación Forestal

Internationaler
Verband Forstlicher
Forschungsanstalten



Economic and accounting within IUFRO

- ***4.05.00: Managerial economics and accounting***
 - ***4.05.01: Managerial, social and environmental accounting***
 - ***4.05.02: Managerial economics***
 - ***4.05.03: Managerial economics and accounting in Latin America***
- ***9.04.00: forest resource economics***
 - ***9.04.01: economic evaluation of multifunctional forestry***
 - ***9.04.02: valuation of ecosystem services and carbon markets***
 - ***9.04.03: ecological economics***
- ***3.08.00: small scale forestry (strong links with institutional arrangements)***

Did we cooperate enough regarding the content of this symposium?



The goals of 4.05.00 unit

- *In priority the forest enterprise level*
 - *Economics in forest planning...*
 - *Firm accounting*
- *Forest policy impacting forest enterprises*
- *National accounting as a reference for forest enterprises and forest policy*

Were these goals reached with this symposium?



SYMPOSIUM in 2016 in Vienna

I. FM + ESF + Questionnaires + Modeling

1. **Socioeconomic importance of non-wood products (recreation, health) in Czech Rep. , questionnaires, holistic approach (Sisak et al.)**
2. **Modeling (utility model) of urban forests including residents preferences and recreation – case of Slovenia (Japelj et al.)**
3. **Public Forest Service, public perceptions about FM, questionnaires, Qualitative analysis, Slovenia (Leban et al.)**
4. **Measurement of forest enterprise's efficiency, indicators, analysis of profitability, quantitative methods, case of Slovakia (Hajduckova et al)**
5. **DSS – participatory multi-criteria model - for FMP including ES using quantitative methods case of Slovenia (Zadnik et al.)**
6. **Private forest landowners management intentions for wood energy based on questionnaires and econometric methods, case of US (Larson, Hodges et al.)**



SYMPOSIUM in 2016 in Vienna

I. FM + ESF + Questionnaires + Modeling cont.

7. ***Comparing the added value of domestic timber - produced and processed in different supply chains in South Tyrol (Hoffman et al.)***
8. ***Value Chain Analysis and Socio Economic Aspects of Non-Wood Forest Products in Central Serbia (Keca)***
9. ***Sustainability, ES, stakeholders engagement, questionnaires, statistical methods, Scotland and Ukraine (Melnykovich, Nijnik)***
10. ***Usage of the Local Multiplier for Decision-making of Management in a Forest Enterprise – recreation as ES (Menhazova et al.)***
11. ***Evaluation of benefits from the conversion of even-aged spruce stands in the Ukrainian Carpathians into mixed, uneven-aged woodlands (Melnykovich et al.)***

II. ACCOUNTING

- 12. Forest Accounting at the national level: a comparative assessment of issues and approaches at the example of Austria and Bosnia and Herzegovina (Sekot, Kovačič)**
- 13. Intert. Financing Standards, accounting, forest companies, market risk, discounting and much more, questionnaires, Scandinavia (Penttinen, Sekot)**
- 14. Costs of different FM scenarios, input-output analysis, case of Germany (Boesch et al.)**
- 15. Short rotation plantations in Croatia, financial indicators, cost effectiveness, net present value, internal rate of return,... (Posavec et al.)**
- 16. Accounting for non-wood forest products and services, national and forest level, scenario analysis, Austria (Huber, Toscani et al.)**
- 17. Willingness to increase urban forests in order to mitigate climate change (contingent valuation method), case of US (Siry et al.)**

II. Accounting cont.

18. **Financial analysis of red deer management in Hungary 1983-2013**
(Schiberna, Mertl)
19. **Payments for ES, compensation, cash flow, net present value discounting, Slovakia** (Roessinger et al.)
20. **Prediction of export and import wood volume and prices in Germany, time series are used** (Tzanova, Moog)
21. **Accounting guidelines, regulations, standards, rules within int. environment and legislation in Slovakia, document analysis** (Giertlova et al.)
22. **Forest pests in Uruguay - assessment of economic impact, cost-benefit analysis** (Morales Olmos et al.)
23. **Poster presentation: forest resource accounting in S. Korea on basis of inventory data** (Kim)

III. Policy

24. **Non-timber innovations**, system analysis, policy, support mechanisms, questionnaires, case studies Styria (Austria), (Weiss et al.)
25. **Policy acts influencing climate change**, forest **carbon market** – public and private owners without applying guidelines and quality **standards**. Intergovernmental panel on climate change suggested widely used carbon standards which are included in IT. Forest carbon code – only guidelines which ask for forest ecol. activities to fight against climate change (Maluccio, et al.)
26. **Policy - EU rural development plans till 2020**, monitoring and evaluation process, rural development plans, (case of Italy), Marongiu et al.)
27. **Governing Payments for ES**, experiences of restoring degraded cropland (Chinese and US experiences), (Yin)



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IV. Acceptance of decisions and communication

28. *Image of the state forest enterprise LESY SR. Perception of public and forest managers of forest management, strategy, marketing, prices of forest products,... , questionnaires, statistics, case of Slovakia (Halaj, Brodrechtova)*
29. *Objectives, attitudes, behavior of private forest owners towards FM, differences, questionnaires, regression analysis, correlation,..., case of US (Hodges, Proudyl)*
30. *Forest owners: household composition, ageing, forest activities, plantation, case Japan, using world forestry census data (Matsushita et.al.)*
31. *Poster presentation education + communication about nature in general, forests, ES,... tackling all groups: NGOs, children, professionals, media, policy, owners, residents,...,(Baloh, Rantaša)*

V. Deforestation, accounting in S. Amerika – Brazil +

+ Miscellaneous (not presented)

- 32. Attitudes, habits, norms and policies regarding co-authorship among forest scientists in Brazil (Senna da Costa)**
- 33. Economic and accounting costs in wood production , accounting techniques, opportunity costs, case of Brazil (Berger, Sater Melnik)**
- 34. Investments, prices, shares in forestry companies in Brazil (Heidemann Rocha et al.)**
- 35. Economical and political power on deforestation, using land for soybean industry in Brazil (Pastre and Miranda)**
- 36 . Poster presentation: Forest monocultures in Brazil - modeling with GIS (Sales et al.)**
- 37. Simulation system to estimate forest profitability including labor requirements, wood supply and growth parameters throughout Japan (Nakajima et al)**
- 38. Risk-costs in Forestry - Calculation and Impact on Management Decisions (Moehring, Moelmann)**



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29 presentations + 2 posters with some conclusions :

As regards physical and monetary appraisals :

- Evaluation of production strategies are useful not only for wood production but as a reference for other forest ecosystem services; the identification of positive or negative correlations between forest services is an example of what can be done.*
- In forefront of group 4.05.00 activities in research as well as in practice in all represented countries are: non-wood products, socio-economic aspects, urban forests, wood for energy, public services, management of private forests, changes in management . These resarch is more intensive supported by qualitative, quantitative methods, DSS,...*



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- *Valuation of non-wood goods and services is still very important issue; global valuations are useful in order to show the importance of forests in comparison with other land uses.*
- **International financial standards for forest accounting, market risk, discounting, internal rate of return, financial indicators, different prediction methods, as for example time series, are significant for accounting issues in forestry**
- **System analysis, innovations, support mechanisms, policy acts (EU and local) regarding rural development and tackling climate changes are also in research focus.**



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Topics covered IUFRO theme 2015-2019

- Forests for people
 - Multipurpose inventory
 - Incorporation of social values in inventory and management
 - Widen the scope from timber production to ecosystem services
 - Develop information systems for research and management, across scales
 - Improve indicators for sustainable forest management
 - Integrate new technologies and methods
 - Account for changes, risks, uncertainties

Starting points for future:

- *Multifunctionality is hard to achieve but is a good topic for research on Managerial economics and accounting.*
- *The challenge is to resolve:*
 - » *Public and private benefits*
 - » *Different forest-related public policies*
 - » *Multiple interdependent functions and ecosystem services*

Adaptation in forest management under changing framework

- *Adaptation to long-term changes*
- *New approaches in forest management*
- *Evaluation of forest-related policies*
- *Financial modelling of forest management under change*
- *Long-term forest-related economic data systems*
- *Opportunities with payments for ecosystem services*
- *Supply and demand for non-market forest services*
- *Decision-support systems*
- *Managing long-term risks*
- *Awareness and perception of long-term changes*
- *Understanding of sustainability under change*

- **FIELD TRIP tomorrow**
- **2017 4.05.00 symposium in Freiburg**
2018 (Zagreb)
2019 WC (Brazil)
- **Publications of 4.05.00**
- **Many thanks to the organizers,**
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