

„Economizing Nature“

Special Track - Call for Abstracts/Papers

Scope

The UN System of Environmental-Economic Accounting (SEEA) in conjunction with regional and national regulations enforces the demands for complex and dynamic information availability, coherence and synergies for substantial improvements in documentation, planning, decision making and operational actions.

The loss of biodiversity and ecosystem services, which underpin nearly all of the Sustainable Development Goals indicates on transformative changes that are needed to ensure biodiversity conservation, its sustainable use, and the multi-faceted, careful and all-of-society based definition and implementation of ecosystem services upon which all life depends.

Socio-economic approaches also consider human factors, societal, (psycho-)social, cultural, ethical as well as organizational aspects. The specific difference lies in enabling inclusive participation not only in documentation, planning, implementation and evaluation of goal-reaching success but also in take-up of suggestions for consideration in revised actions and adaptation plans.

Natural capital affects the impacts of natural hazards, e.g. mangroves can protect against floods and cover crops against drought. Quantifying these benefits is key for a more holistic cost/benefit analysis of nature restoration or conservation efforts.

The systemic impacts of hazards affecting nature are beyond those directly captured. The economic impact of a food security shock (through malnutrition, stunting, livelihoods, long term investment etc.) are greater than direct agricultural losses. Quantifying these impacts give a more accurate indicator of the Disaster Risk Reduction value of nature.

The complete set of information management best practice methods especially supports the principles of “critical thinking”, enabling extensive reporting, transparent analysis, compliance to regulations and other boundary conditions. Information control obligations include phases of retrace, audit, reexamination, analysis, avoidance of malpractice, and indications on situation robustness, weaknesses and vulnerabilities.

Topics

- Economics and the Environment
- Competing Land Cover and Land Uses
- Accounting and Costing Nature
- Food security and Sovereignty
- Economics of Landscape Restoration
- Market and Non-Market Valuation Techniques
- Ownership of Nature Goods and Services
- Indigenous and Nomadic Peoples Interests
- SEEA Conflicts
- Valuing Status, Development and (historic, current, future) Ways of use
- Nature Restoration in Post-Industrial Regions
- Restoring Marine Biodiversity
- Scenarios beyond Economic Growth

Ecosystem Goods and Services

- Supply of water
- Carbon sequestration
- Supply of timber
- Non-timber forest products (food and medicine)
- Food
- Recreation

Costs Types

- Operational costs
- Foregone opportunities

Economic Instruments

- biodiversity-relevant taxes, fees and charges,
- tradable permits, biodiversity offsets,
- payments for ecosystem services

Analysis

- thresholds, tipping points
- minimizing biodiversity loss
- Limits of Cost-Benefit Analysis
- Models, Solutions and Alternatives
- maximizing investment into nature improvement effectiveness
- ecology stability measures, equilibrium, robustness
- economic indicators and alternative welfare paradigms

Scenarios

- Facts, Situation, change, goals, actions, monitoring/control
- Dependencies
- Context Models
- Processes
- Observatories

Assessments

- systematically identify public subsidies harmful to biodiversity or the environment
- Finance Impact Analysis

Decisions

- Facts, Situation, change, goals, actions, monitoring/control
- Dependencies, context models
- Elements of (permanent) Governance
- Processes
- Observatories

Actions

- Facts, Situation, change, goals, actions, monitoring/control
- Processes
- Protection by development
- Actions Research
- Dependencies, context models
- Synergistic protective and pro-development effect
- Observatories

Expected outcome of Special Track “Economizing Nature”

Research and Development Questions related to Information Management:

- Existing questions (extensions, refinement)
- Goal Reaching Management and Progress Reporting
- Food security and sovereignty Information Management
- Discontinuities as chances for adaption
- Quantifying biodiversity-related expenditures
- Information distortion and fraud
- Governance needs
- Manageable Information on Social dimensions

The processing and use of information according to the requirements of the UN System of Environmental-Economic Accounting (SEEA) holds enormous potential for new ways of enabling just-in-time foresight, situation management and ex-post evaluation. For a successful decision and action support, we have to make the best possible use of this potential.

This track is organized in cooperation with CODATA-Germany and SusInf Community of Experts. Submissions and participation recommended for stakeholders in Nature Economy R&D, Governance and Practice: Science, Public Administrations / Law Enforcement Agencies, Private Sector, and NGOs.

ENVIROINFO2022 details: <https://informatik2022.gi.de/enviroinfo-2022>

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Selected References, Documents and Links: <http://susinf.net/enviroinfo2022-hamburg-special-track-economizing-nature>