

System of
Environmental
Economic
Accounting

SESSION 9: OPPORTUNITIES FOR ADVANCING SEEA ACCOUNTS

CONVENTION ON BIOLOGICAL DIVERSITY

2019 Forum of Experts on SEEA Experimental Ecosystem Accounting

Glen Cove, NY, 26-27 June 2019



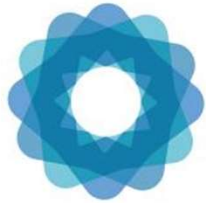
United Nations

Convention on Biological Diversity

- One of the three “Rio Conventions”: an intergovernmental treaty to maintain nature on the planet;
- CBD process provides a globally agreed framework for action to stop and reverse biodiversity decline;
- The current Strategic Plan for Biodiversity 2011-2020 expresses global “policy demand” for accounting work, including ecosystem accounting:
 - > Aichi Biodiversity Target 2: *By 2020, at the latest, biodiversity values (...) are being incorporated into (...) national accounting, as appropriate, (...)*
 - > Under Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

Opportunities to advance SEEA

- COP-14: comprehensive and participative approach for the preparation of the post-2020 biodiversity framework (decision 14/34);
- Timeline well aligned with SEEA-EEA revision;
- Opportunity for a renewed/strengthened policy demand in the post-2020 framework;
- Opportunity to support stronger SEEA implementation, in the context of developing a long-term strategic approach to mainstreaming, as decided by COP-14.



System of
Environmental
Economic
Accounting

SESSION 9: OPPORTUNITIES FOR ADVANCING SEEA ACCOUNTS Conservation International (CI)

2019 Forum of Experts on SEEA Experimental Ecosystem Accounting
Glen Cove, NY, 26-27 June 2019



United Nations

Description

Conservation International: Moving forward the Ecosystem Accounting research agenda and implementation through:

- **Applied R&D and pilot testing**
 - Ecosystem accounts: San Martin, Peru (terrestrial) and Liberia (coastal)
 - Standardized approaches for
 - EA readiness: Eastern Tropical Pacific Seascape (ETPS)
 - Ecosystem mapping in support of the development of ecosystem extent accounts: Gaborone Declaration for Sustainability in Africa (GDSA)
- **Ecosystem accounting readiness and implementation**
 - **Africa (GDSA):** Angola, Botswana, Gabon, Ghana, Kenya, Lesotho, Namibia, Madagascar, Mozambique, Liberia, Rwanda, South Africa, Tanzania and Uganda (scoping, assessment, accounts)
 - **Americas (ETPS):** Colombia, Costa Rica, Ecuador, Panama + Peru (scoping/mangroves)
 - **Asia:** Indonesia (extent accounts/West Papua) and Cambodia

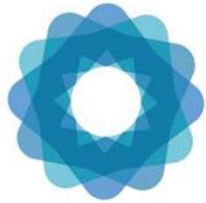


SEEA

Links to SEEA

Conservation International work on Ecosystem Accounting :

- **Research & Development:** Development of methodological approaches for a range of accounts to inform and support development of guidelines/revision process
- **Readiness assessment:** Scoping and road map standardized approach provides the basis for identifying feasibility and implementation of priority accounts
- **Implementation:** Ensuring participatory approach & capacity building for implementation of priority accounts
- **Post-analytical work:** Using EA outputs to inform policy, planning & decision-making



System of
Environmental
Economic
Accounting

SESSION 9: OPPORTUNITIES FOR ADVANCING SEEA ACCOUNTS *EUROPEAN ENVIRONMENTAL AGENCY*

2019 Forum of Experts on SEEA Experimental Ecosystem Accounting
Glen Cove, NY, 26-27 June 2019



United Nations

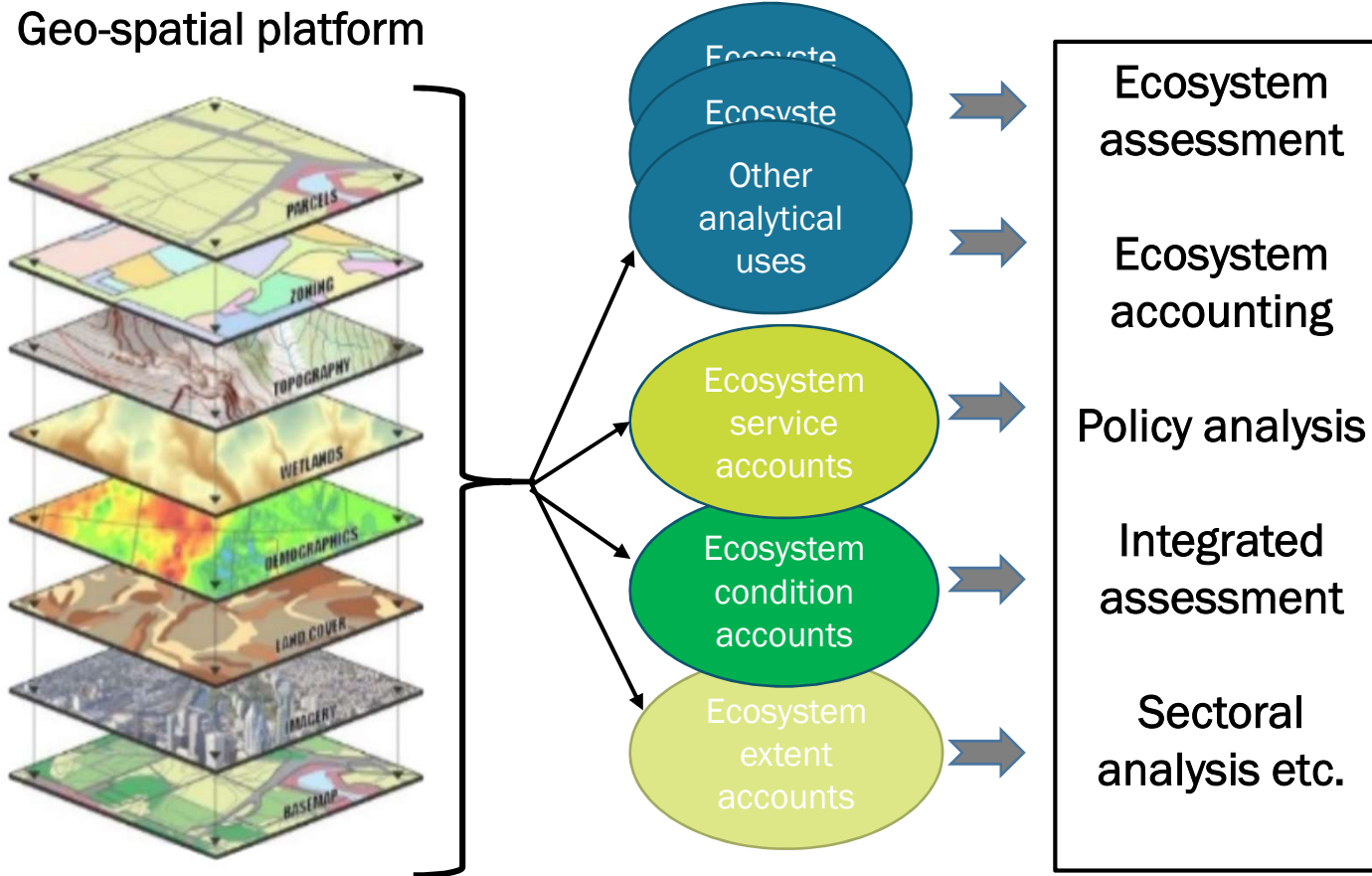
EEA report on Natural capital accounting in support of policy making in Europe

The report covers EEA work in the context of SEEA CF & EEA and reviews:

- **Conceptual framework: logic of SEEA and definition of natural capital**
- **EEA work on land accounts and water accounts at European level**
- **Current progress with developing ecosystem extent and condition accounts under the EU INCA project (2018 snapshot)**
- **Experimental marine ecosystem accounts (fish biomass and seafloor integrity)**
- **Potential analytical support of 7th EU EAP objectives via EEA accounting outputs**
- **Opportunities & needs for linking ecosystem accounts with other analytical tools**
- **The need for investing in ecosystem-related data as the foundation for ecosystem accounting & assessment to be able to manage Europe's natural capital better**

<https://www.eea.europa.eu/publications/natural-capital-accounting-in-support/>

One geo-spatial platform for multiple uses



Earth Observation for Ecosystem Accounting (EO4EA)

Max Wright – Conservation International

SEEA Expert Forum, June 27th, 2019



What is EO4EA and how does it support accounting?

- EO4EA is a GEO Initiative that seeks to facilitate the use of earth observation data to support ecosystem accounting
- Our mission is to develop, pioneer, and test the methods and tools that will allow Earth observation technology to enable the widespread adoption of ecosystem accounting. Through partnership, research, and practical application we will advance the science of Earth observation and practice of ecosystem accounting
- Our membership includes governments, academic institutions, international organizations, and NGOs

Linking GEO and SEEA

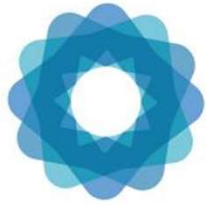
- EO4EA is divided into 4 workstream: Case studies and synthesis, Ecosystem extent and condition, Ecosystem service, and Implementation and capacity building.
- Through our work we hope to create products and methods that can directly utilize EO data to support the development of SEEA-EEA
- To achieve our goals we require input and co-creation with the SEEA community, therefore, we encourage members of this community to join us!

Thank you very much!

To join EO4EA please email us at secretariat@eo4ea.org

Or feel free to reach out to me direction at twright@conservation.org





System of
Environmental
Economic
Accounting

SESSION 9: OPPORTUNITIES FOR ADVANCING SEEA ACCOUNTS *EUROPEAN UNION - JRC*

2019 Forum of Experts on SEEA Experimental Ecosystem Accounting
Glen Cove, NY, 26-27 June 2019



United Nations



The INCA project

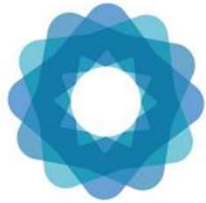
Designing and implementing an integrated accounting system for ecosystems and their services to inform decision making in the EU



- INCA is a joint project of the European Commission and the European Environment Agency.
- The project runs from 2016 to 2020.
- Extent, condition and service accounts
- Data platform
- Supports EU countries and businesses (MAIA and WE VALUE NATURE)

Links to SEEA

- INCA uses the SEEA EEA handbook as working guidance to develop pilot ecosystem extent, ecosystem condition and ecosystem services accounts at EU level.
- INCA supports the development of the SEEA EEA by testing its implementation in the EU.
- INCA partners have been closely involved in the development of the SEEA EEA since its inception.
- For further information on activities of the European Commission and the European Environment Agency on natural capital accounting visit:
http://ec.europa.eu/environment/nature/capital_accounting/index_en.htm



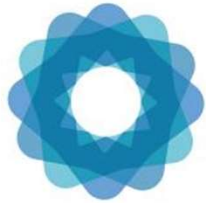
System of
Environmental
Economic
Accounting

SESSION 9: OPPORTUNITIES FOR ADVANCING SEEA ACCOUNTS *EUROSTAT*

2019 Forum of Experts on SEEA Experimental Ecosystem Accounting
Glen Cove, NY, 26-27 June 2019



United Nations



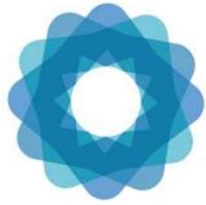
System of
Environmental
Economic
Accounting

The EU MAIA project

- EU research action, 3 million €, 2018-2022, led by Prof. Lars Hein of Wageningen University, NL
- Supports testing and implementation of ecosystem accounting in 9 EU Member States and Norway.
- With 18 partners including statistical offices, environmental departments, research institutes
- Innovations covering most key challenges in SEEA EEA thus helping methodological progress, helps generate practical experience involving government agencies with prospect of sustainable production of accounts, actual policy uses, practical guidance, real data



United Nations



Eurostat grants

- Financing of pilot studies in EU Member States
- Covers different areas of environmental accounting, including since 3 years ecosystem accounts.
- For ecosystem accounts so far 9 countries got 11 grants
- Total budget around 0.5 million € each year, 12-18 months of duration, NSOs or environmental authority
- Contributes to take-up (sustainable production) by NSOs and other government agencies, generates data, provides practical experience in different circumstances, methodological developments and policy buy-in

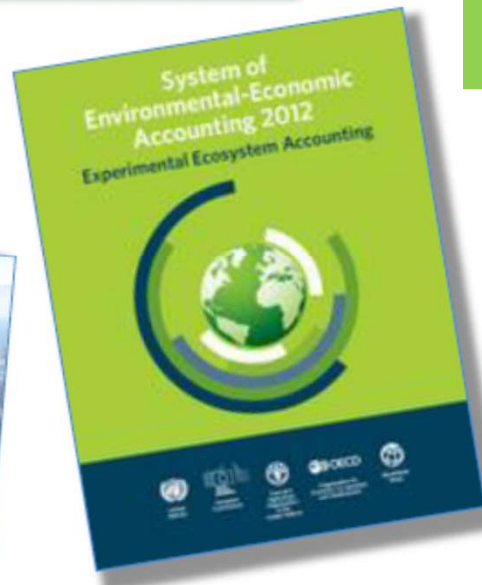




SWEDISH ENVIRONMENTAL PROTECTION AGENCY



Environment for Development



ESAfD

27 June 2019
SEEA EEA Forum of
Experts, Glen Cove, NY



Ecosystem Service Accounting for Development (ESAfD)

- **5 year multi-country** research partnership (2015-2019)
- Valuation of ecosystem services in developing countries to support
 - Policy decisions
 - Ecosystem accounting
- Spatially explicit valuation using primary data on ecosystems and economic outcomes
- Funded by **Swedish International Development Cooperation Agency (SIDA)**

Three Ecosystem Services



**Crop
pollination**



Urban green amenities

Seven Countries



Water purification

Partner Institutions



More information

<https://efdinitiative.org/our-work/research-programs/ecosystem-services-accounting-development>

Received: 20 August 2018
Accepted: 28 January 2019
Published online: 05 March 2019

ESAfD 2.0 under development ...

www.nature.com/scientificreports

SCIENTIFIC REPORTS

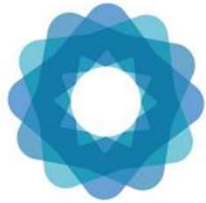
OPEN

Naturally available wild pollination services have economic value for nature dependent smallholder crop farms in Tanzania

Byela Tibesigwa^{1,2}, Juha Siikamäki³, Razack Lokina¹ & Jessica Alvsilver⁴

Despite the importance of naturally available wild pollination ecosystem services in enhancing sub-Saharan African smallholder farms' productivity, their values to actual farming systems remain unknown. We develop a nationally representative empirical assessment by integrating nationally representative plot level panel data with spatially and temporally matched land cover maps to identify the contribution of wild pollinators to crop revenue. Our estimation results reveal distinct and robust contributions by natural habitats of wild pollinators - forests - to plot-level crop revenue, where habitats in near proximity to plots contribute much more value than those farther away. When contrasting between *pollinator-dependent* and *pollinator-independent* crops, we find that the positive effects emerge only for *pollinator-dependent* crops, while *pollinator-independent* crops show no benefits.





System of
Environmental
Economic
Accounting

SESSION 9: OPPORTUNITIES FOR ADVANCING SEEA ACCOUNTS

UN ENVIRONMENT

2019 Forum of Experts on SEEA Experimental Ecosystem Accounting
Glen Cove, NY, 26-27 June 2019



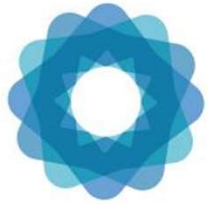
United Nations

TEEB for Agriculture and Food

- The Economics of Ecosystems and Biodiversity (TEEB) is a global initiative focused on drawing attention to the economic benefits of biodiversity including the growing cost of biodiversity loss and ecosystem degradation.
- TEEBAgriFood aims to capture the complex reality of today's diverse and intertwined "eco-agrifood" systems in order to evaluate their performance in a holistic manner to support decision-making
- TEEBAgriFood aims to catalyse policy reforms that improve livelihoods and biodiversity outcomes in agriculture and food systems. At the country level, we conduct a TEEB Country Study, and implementing its recommendations of this study.
- **Assessment of policy interventions from a range of perspectives on four different types of capital: Natural, Social, Human and Produced.**

Achievements and Links to SEEA

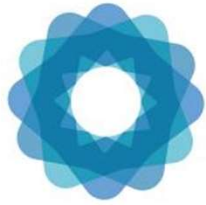
- On-going /completed studies in Brazil, Ghana, India, Ethiopia, Senegal, Colombia, Kenya, Thailand and Tanzania *inter alia*
- Newly launched EU-funded project (Jan 2019) projects in China, India, Thailand, Malaysia, Mexico, Indonesia and Brazil
- Demonstration effects and policy mainstreaming of the accounts
- **Generating “success stories” of policy change**
- Broad stakeholder engagement through Inception workshops and Steering Committee
- Partner with Natural Capital Coalition on integration of environmental and biodiversity indicators into business decision-making



System of
Environmental
Economic
Accounting



United Nations



System of
Environmental
Economic
Accounting

SESSION 9: OPPORTUNITIES FOR ADVANCING SEEA ACCOUNTS *ESCAP*

2019 Forum of Experts on SEEA Experimental Ecosystem Accounting
Glen Cove, NY, 26-27 June 2019



United Nations

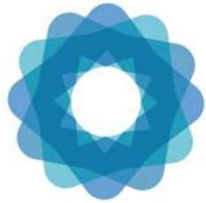
Description



<https://oceanaccounts.unescap.org>

Links to SEEA

- **Environment/ecosystems**
 - > Spatial units & ecosystem classification → Delineate units
 - > Ecosystem services → Expand existing classifications
- **Social**
 - > Beneficiaries/services use as well as “disservices” → Identify communities, artisanal fishers, target groups, impacts
- **Economic**
 - > Valuation of non-SNA



System of
Environmental
Economic
Accounting

SESSION 9: OPPORTUNITIES FOR ADVANCING SEEA ACCOUNTS *WORLD BANK*

2019 Forum of Experts on SEEA Experimental Ecosystem Accounting
Glen Cove, NY, 26-27 June 2019



United Nations

The World Bank

Linking Ecosystem Accounting and Policy

The World Bank is increasingly working to mainstream natural capital in policy dialogue

WAVES is transitioning to a broader umbrella program of work, Global Program on Sustainability

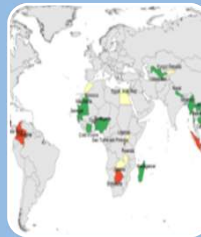
Global Program on Sustainability seeks to integrate more closely 3 related areas of work:

- Macro/global data
- Country NCA
- Corporate ESG



Pillar 1: Global Information

Develop information base and tools to inform policy & investment decisions, including methodology development



Pillar 2: Country Implementation

Build countries' capacity to produce and use natural capital accounting for policy, planning and M&E using SEEA



Pillar 3: Incentives

Integrate sustainability in the functioning of financial markets

The World Bank and the SEEA-EEA Revision

- Scale up efforts with stronger client ownership beyond the current 20+ countries.
- Practical country applications with impacts on the ground, contributes to build a body of evidence for SEEA EEA
- Methodology development, especially on valuation

GPS does not generate primary data. Instead, it uses it to:

- Estimate natural capital and ecosystem services in accordance with SEEA standards
- Carry out economic valuation other analyses to inform decision making

Data collection/
consolidation

Modeling/ Analysis

- Support analytical work to Integrate findings of analyses into the World Bank programs and to build country capacity.

Dialogue with
Governments

Establish dialogue with government officials especially Ministries of Finance

Investments, policy reform

Support policy reform, finance investment

