SYSTEM OF ENVIRONMENTAL-ECONOMIC ACCOUNTING FOR AGRICULTURE, FORESTRY AND FISHERIES (SEEA AGRICULTURE)

UNECE/OECD SEEA IMPLEMENTATION WORKSHOP
GENEVA, OCTOBER 2015
Progress to date

• Project endorsed by UNCEEA in 2012: Work commenced in June 2013
• Design of the SEEA Agriculture framework advanced to cover 10 broad data domains
• SEEA Agriculture database under development drawing data from other FAO datasets: Developing Tier 1 accounts
• Feasibility and usefulness of SEEA Agriculture tested in four countries (Australia, Canada, Guatemala, Indonesia)
• Expert Group Meeting October 2014, discussion at UNCEEA and London Group, side event at UNSC March 2015
• Completion of initial global consultation on draft SEEA AFF release of version under the Global Strategy
Key elements of SEEA Agriculture approach

  - Improve quality of national accounts estimates (espec. GDP)
  - Facilitate & support links to input-output tables and associated models

- Integration of economic and environmental information in monetary and physical terms

- Ambition to improve and integrate national level data

- Cross-sector coverage of agriculture, forestry and fisheries

- Incorporate a “key product” focus
Analytical & policy themes

• Themes supported by current design
  • Activity / product specific inputs (e.g. water, energy, emissions intensity)
  • Food consumption and waste / Food security
  • Biomass extraction and sustainability
  • Cross industry / activity comparison
  • Agricultural productivity
  • Industry level value and supply chain analysis

• Themes that could be covered with some extensions
  • Rural incomes (also links to demographics, gender, health)
  • World trade and global supply chains
  • Geo-spatial perspectives
  • Ecosystem services

• Development of indicators for the Sustainable Development Goals (SDGs)
<table>
<thead>
<tr>
<th></th>
<th>Data domains</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agricultural products and related environmental assets (e.g. soil, orchards, breeding stock)</td>
</tr>
<tr>
<td>2</td>
<td>Forestry products and related environmental assets (e.g. timber resources)</td>
</tr>
<tr>
<td>3</td>
<td>Fisheries products and related environmental assets (e.g. fish stocks)</td>
</tr>
<tr>
<td>4</td>
<td>Water resources</td>
</tr>
<tr>
<td>5</td>
<td>Energy</td>
</tr>
<tr>
<td>6</td>
<td>Greenhouse Gas (GHG) emissions</td>
</tr>
<tr>
<td>7</td>
<td>Fertilizers, nutrient flows and pesticides</td>
</tr>
<tr>
<td>8</td>
<td>Land</td>
</tr>
<tr>
<td>9</td>
<td>Soil resources</td>
</tr>
<tr>
<td>10</td>
<td>Other economic data</td>
</tr>
</tbody>
</table>
Basic data needs

• National accounts aggregate activity data for agriculture, forestry, fisheries (production, value added, trade, employment)

• For key products (e.g. wheat, rice, maize, livestock, timber, fish):
  • Supply and use (production, trade, consumption) in monetary and quantity terms
  • Land use data including forest and inland water areas
  • Irrigated water use
  • Fertiliser use
  • GHG emissions

• Ideally also collect
  • Energy use data
  • Environmental asset data: soil, water resources, fish stocks, livestock

• Large overlap with Minimum set of core data outlined for the Global Strategy to Improve Agricultural and Rural Statistics

• Many links to data required for implementation of SEEA CF
Tiered implementation approach

- Three tiered approach to implementation proposed

- Tier 1: Compilation of accounts using global datasets, especially FAO
  - Designed as entry point for accounting
  - Less detail, focus on organising data for derivation of indicators
  - Basis for cross-country comparison

- Tier 2: Use of available national level data
  - Provide a platform for integration of data from multiple agencies
  - Additional detail and broader coverage compared to Tier 1
  - Additional analytical potential and national relevance

- Tier 3: Full implementation
  - Likely to require additional data collection
  - Extend to sub-national, geo-spatial data
  - Build progressively, perhaps develop Tier 3 accounts as benchmarks
Implementation challenges

• Obtaining data on input and residual flows (e.g. water, fertiliser, energy, emissions) for key products

• Alignment in use and application of product classifications across production, income, consumption and environmental information

• Managing gaps/overlaps in cross-sector data

• Treatment of secondary production from residues (e.g. crop residues from harvesting now processed for energy)

• Integrating data on condition/quality of environmental assets, especially soil and water systems
Next steps

- Commence second global consultation (late Oct – early Dec 2015)
- Incorporate feedback and present to UNSC (March 2016)
- Advance implementation strategy on SEEA Agriculture
  - Further testing and implementation at country level
  - Data co-ordination work within FAO
    - Tier 1 accounts
    - Connections with the Global Strategy to Improve Agricultural and Rural Statistics
  - Discussion with other international agencies (incl. UNSD, World Bank, Eurostat, OECD)
- Develop connections between SEEA Agriculture and SDG indicators and agri-environmental indicators
Questions and discussion