SEEA Agriculture: Accounting for Agriculture

AARES Conference
2-5 February 2016

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Content of Presentation

• What is SEEA Agriculture?
• Progress
• Key elements
• Analytical and policy themes
• Applications for Australia
• Data requirements
• Implementation challenges
• Next steps
What is SEEA Agriculture?
- Framework to integrate all agricultural activities

SEEA Agriculture will link together:
- Activities in all sub-sectors (crop and livestock production, fishery and forestry)
- Production activities, utilisation of natural resources (land, water, energy, soil) and their sustainability
- Economic (System of National Accounts data), Natural resource use (SEEA Central framework), food security, livelihood, gender
Key Elements

  - Improve quality of national accounts estimates (especially 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
Progress to date

- Project endorsed by UN Committee of Experts on Environmental Economic Accounting in 2012: Work commenced in June 2013
- Design of the SEEA Agriculture framework 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 UN Statistical Commission March 2015
- Completion of initial global consultation on draft SEEA Agriculture release of version under the Global Strategy
Analytical and 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
Analytical and Policy Themes

• 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
• Integration with indicators for the Sustainable Development Goals (SDGs)
Policy Applications for Australian Agriculture

- Variability in real net value of farm production
- Climate change
- Market access for Australia’s commodity exports
- Health and obesity
- Ageing of farmers
- Foreign ownership of Australian farms
- Food waste
SEEA Agriculture Combined Table Format

For individual food crops, meat products, forestry and fishing

- Economic variables – output, value, value added, exports, imports, employment
- Consumption variables – consumption of food, calories per capita per day
- Environmental variables – land use, water use, GHG emissions, fertilizer use, livestock and fruit trees
Accounting framework

Indicators and indicator sets (agri-environmental / SDGs / etc)

Combined presentations

Base accounts

Basic statistics and data
Basic Data Requirements

- 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
Basic Data Requirements

- Goal to 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
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
Tiered Implementation Approach

- 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 Feb 2016)
• Incorporate feedback and present to UN Statistical Commission (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. UN Statistical Division, World Bank, Eurostat, OECD)
• Develop connections between SEEA Agriculture and SDG indicators
Key Outcomes

• The integrating of economic variables with environment and consumption variables is an excellent way to present information about agricultural activity.
• The data would be relevant to a number of agricultural policy issues.
• The data would be useful in policy making around areas other than agriculture, including health and nutrient value of food.
• Most of the data is already available, although it will require some modelling to fill the table completely.
• Data gaps are mainly around commodity level information.
• Need to firm up some of the definitions and classifications so that countries report in a standard and comparable format.
Discussion and Questions

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