SEEA Agriculture: Accounting for Agriculture

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Lisa Green
Environmental Statistics Section
Australian Bureau of Statistics
Lisa.green@abs.gov.au

Content of Presentation

- What is SEEA Agriculture?
- Progress
- Key elements
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- Applications for Australia
- Data requirements
- Implementation challenges
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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

- Alignment with conceptual framework of SEEA 2012 Central Framework and 2008 System of National Accounts
  - 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

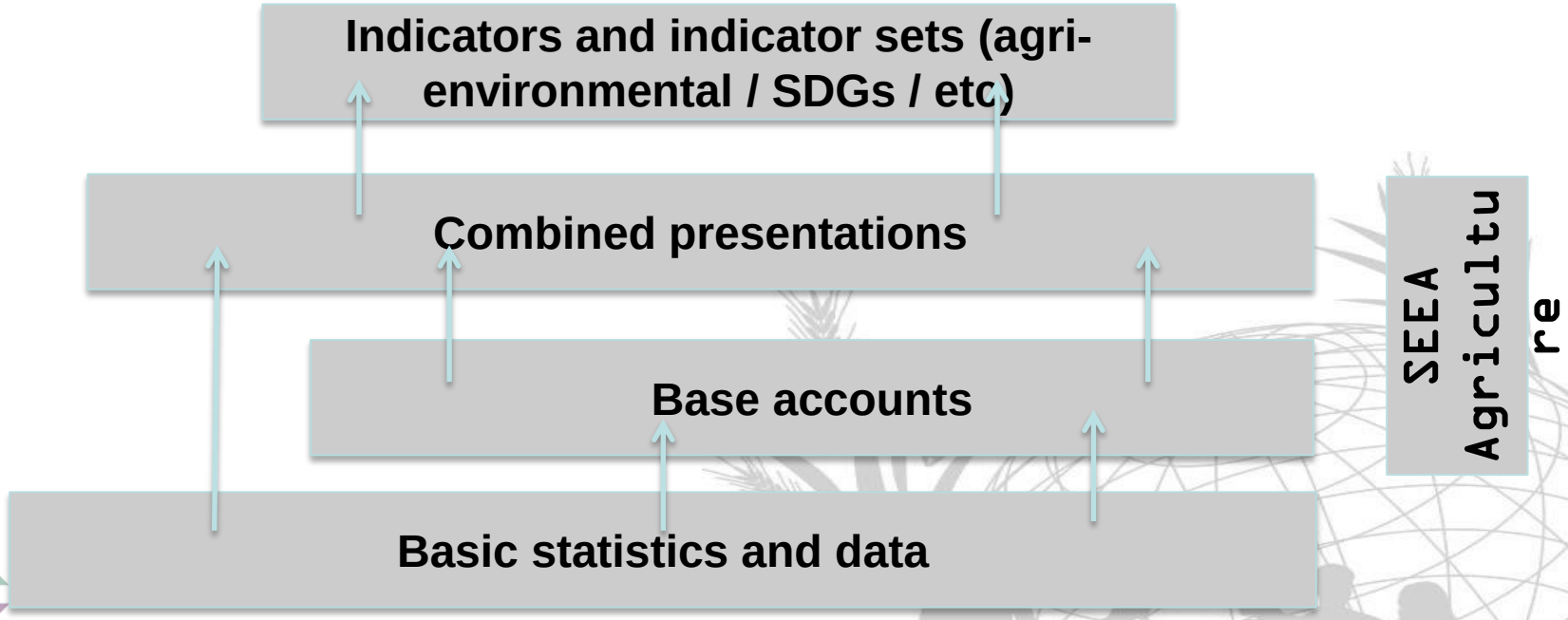
- Variability in real net value of farm production
- Climate change
- Market access for Australia's commodity exports
- Health and obsesity
- Ageing of farmers
- Foreign ownership of Australian farms
- Food waste

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



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

Lisa Green

Environmental Statistics Section

Australian Bureau of Statistics

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