SEEA Agriculture: Accounting for Agriculture

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Content of Presentation

- **What is SEEA Agriculture?**

- **Progress**

- **Key elements**

- **Analytical and policy themes**

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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**
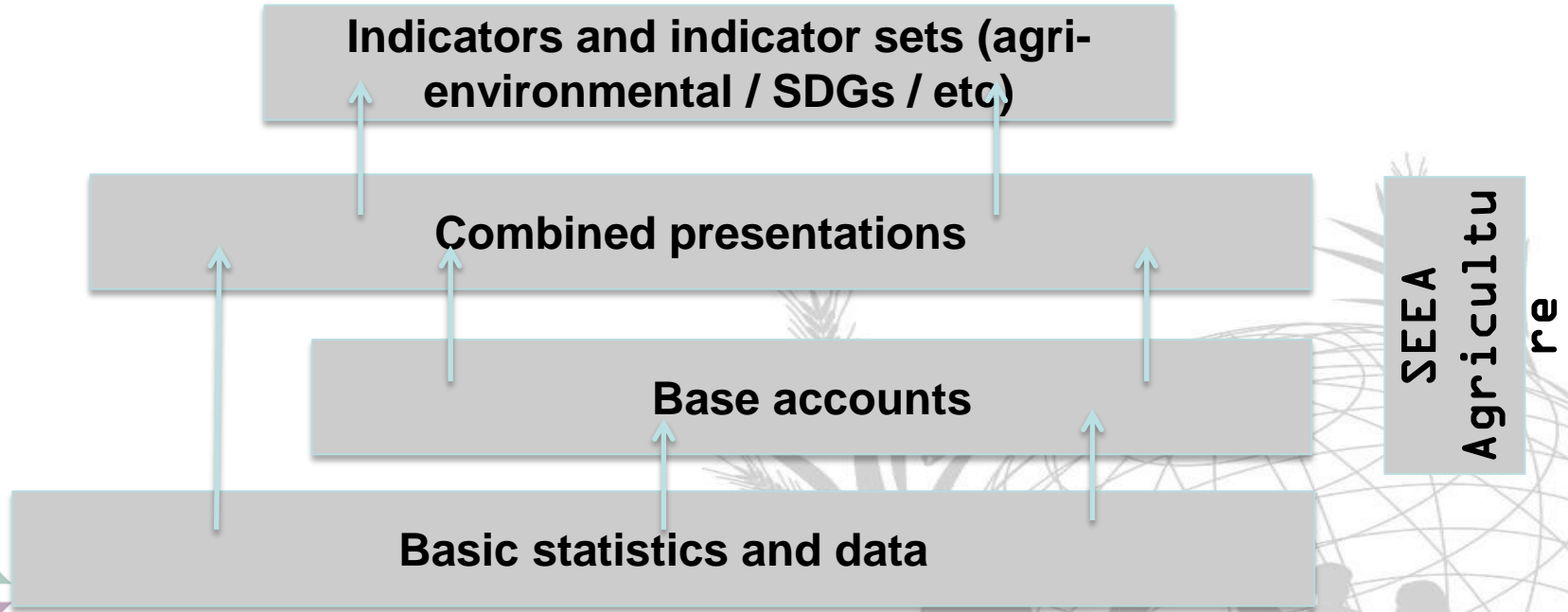- **Foreign ownership of Australian farms**
- **Food waste**

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

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

Combined presentations

Base accounts

Basic statistics and data

SEEA Agriculture

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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