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Earth Observation Data and the ABS

FENNER SYNTHESIS WORKSHOP:
ENVIRONMENTAL-ECONOMIC ACCOUNTS WITH EARTH OBSERVATION DATA
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Earth Observation- ABS involvement

Australia has experience with Earth Observation over many years with partnership between a number of organisations.

- Use of satellite data in ABS land accounts program
- Pilots for utilising EO for agricultural purposes
- Involvement in Digital Earth Australia IDC
- Supporting National Approach to environmental accounting

Earth Observation Challenges- some examples

- Access to ground-truth data
- Breadth of different standards and classifications
- Identification of a variety of agricultural commodities
- Geospatial challenges (e.g. scale and grid sizes)
- Urban measurement

Earth Observation- International context

- SEEA EEA revision process
- UNSD *Earth Observations for Official Statistics*
- Global strategy to improve Agricultural and Rural Statistics

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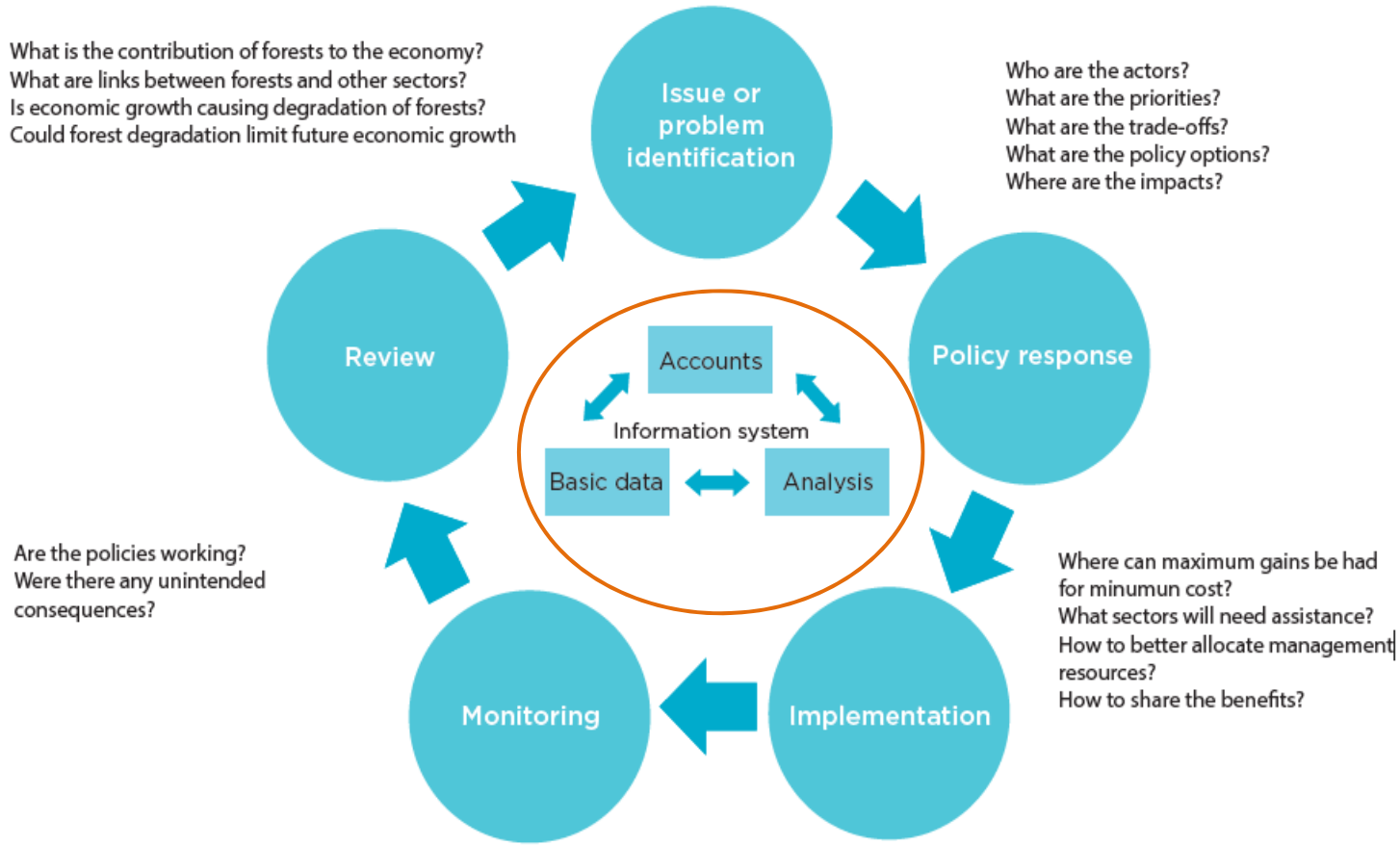
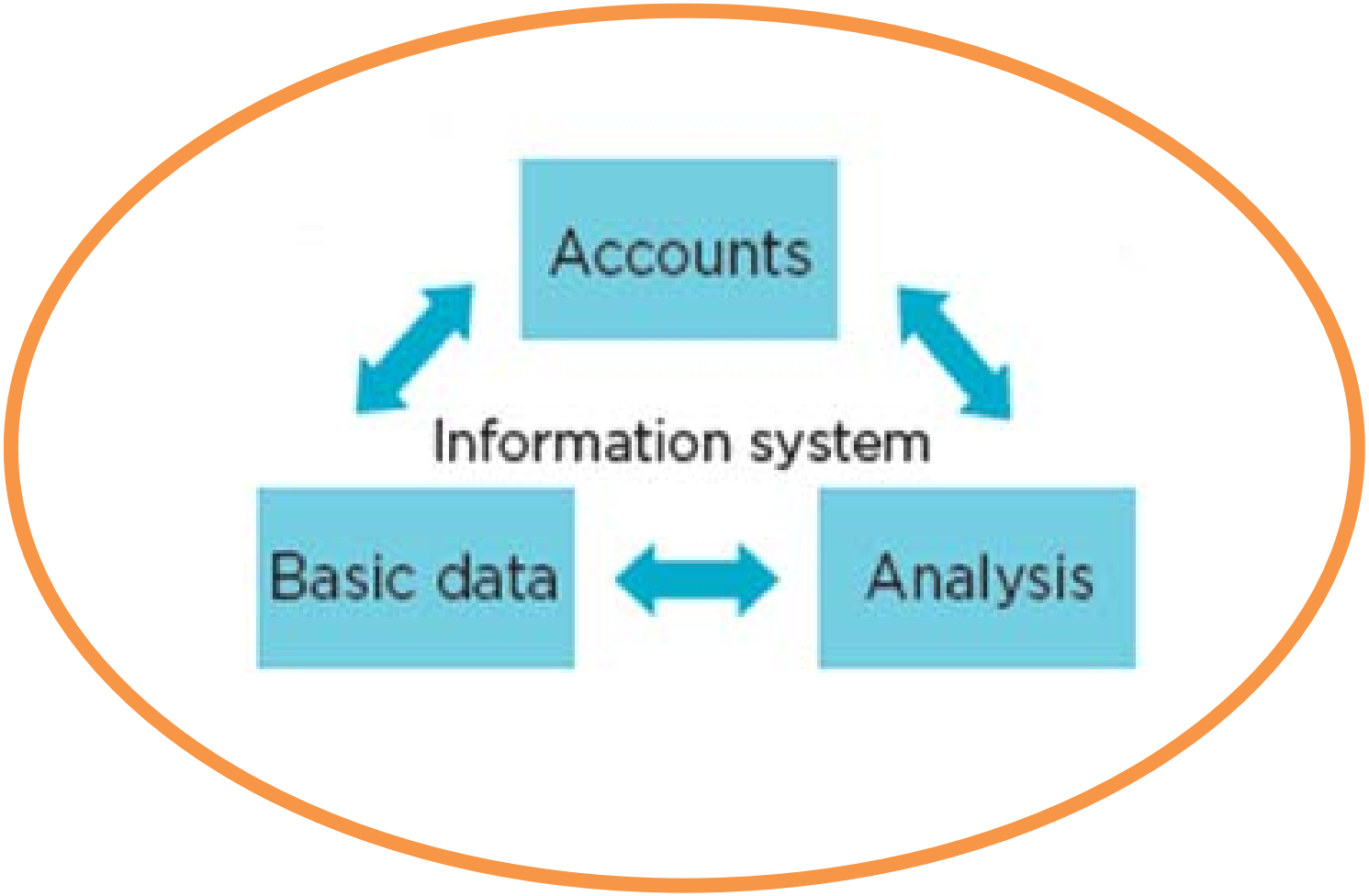
Figure 2.1: The policy cycle and associated NCA uses



Source: Adapted from Vardon et al. (2016).


Accounts
Information system
Basic data
Analysis

Official Statistics vs National Accounting

Official statistics

- Data sets used for tracking change in a variable of interest or as input for accounts
- Analysed for policy purposes directly or jointly with accounts

National accounting

- Starts with a concept (not the data)
- Assembles data to make a *single best picture* of the whole
- Used for tracking stocks and flows
- Uses account structures to *integrate* with many other data and *analysed* for policy purposes

“Account Ready” Data

- Support a key *concept* of policy interest
- Exhaustive and complete - no gaps or overlaps
- Discrete (‘countable’) spatially, temporally and thematically
- Provides quantity and quality information
- Reliability in line with policy requirements

Challenges for the workshop

- *Identify* guidelines and principles for using EO for national statistics and accounting
- *Explore* the challenges around defining and communicating uncertainty in the data and accounts
- *Explore* the challenges around (dis)aggregation of data for integration purposes
- *Identify* how to improve links between environmental data and land tenure and ownership
- *Contribute* to setting the research agenda in this space

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Questions?

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