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LAC Regional Workshop

16-17 March 2016

Session 6: Use of environmental accounting in policy



Wealth Accounting and the Valuation of Ecosystem Services
www.wavespartnership.org



Session aims and links

To get you thinking about how accounts are or can be used

Links to later sessions

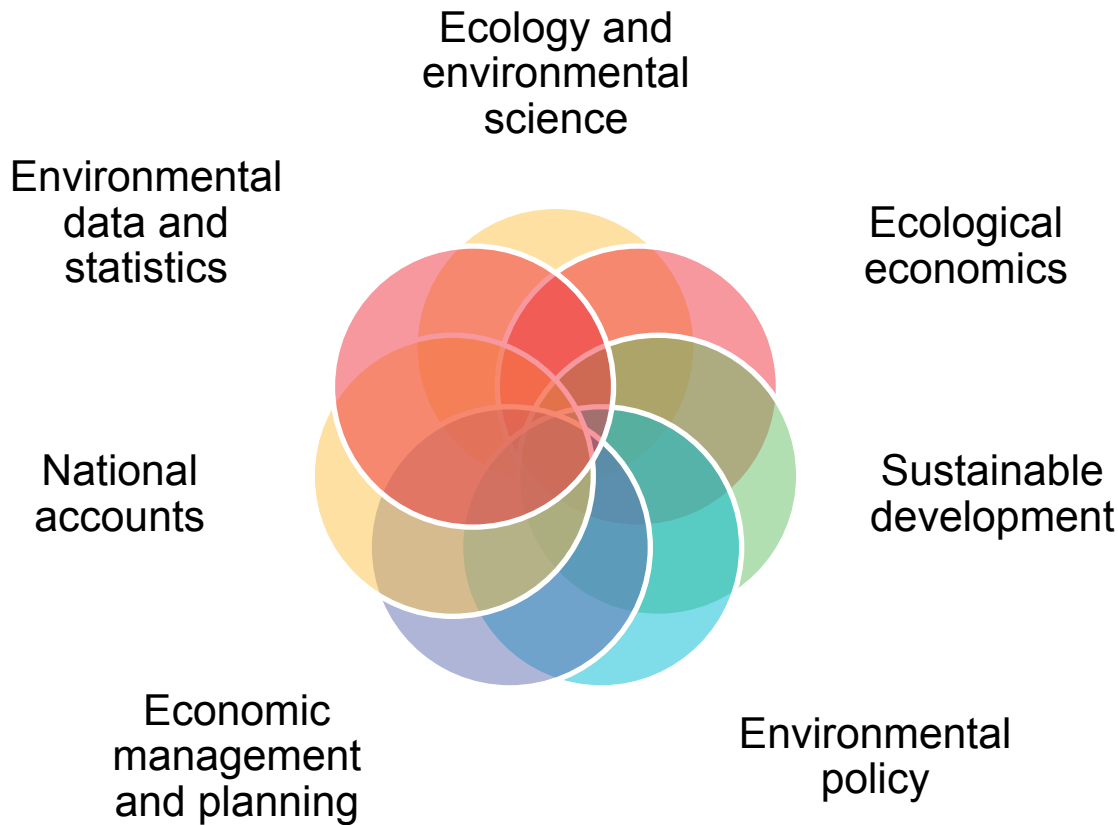
- **Examples from countries (Session 7)**
- **Country assessment (Session 8)**
- **Mini-country roundtables (Session 9)**

Ask questions (and I will ask them of you!)



Foundations of environmental accounting

Built from the concepts and knowledge from many areas



Where does your understanding start?



What do decision-makers think about?



- **What is the problem?**
- **What can I do about it?**
- **Who wins?**
- **Who loses?**
- **How much will it cost?**

Barry Gardiner, Member of Parliament, United Kingdom

Main concepts for environmental accounting and links to policy

- Stocks measured at a point in time (e.g. 1 January)
- Flows measured as a rate (e.g. litres/minute, dollars/year)

What is the problem?



Stocks and flows



Physical and monetary measures

- Physical measures like kilograms, hectares, litres, parts per million
- **Monetary measure like \$, €, ¥, £, etc.**

Benefits beneficiaries



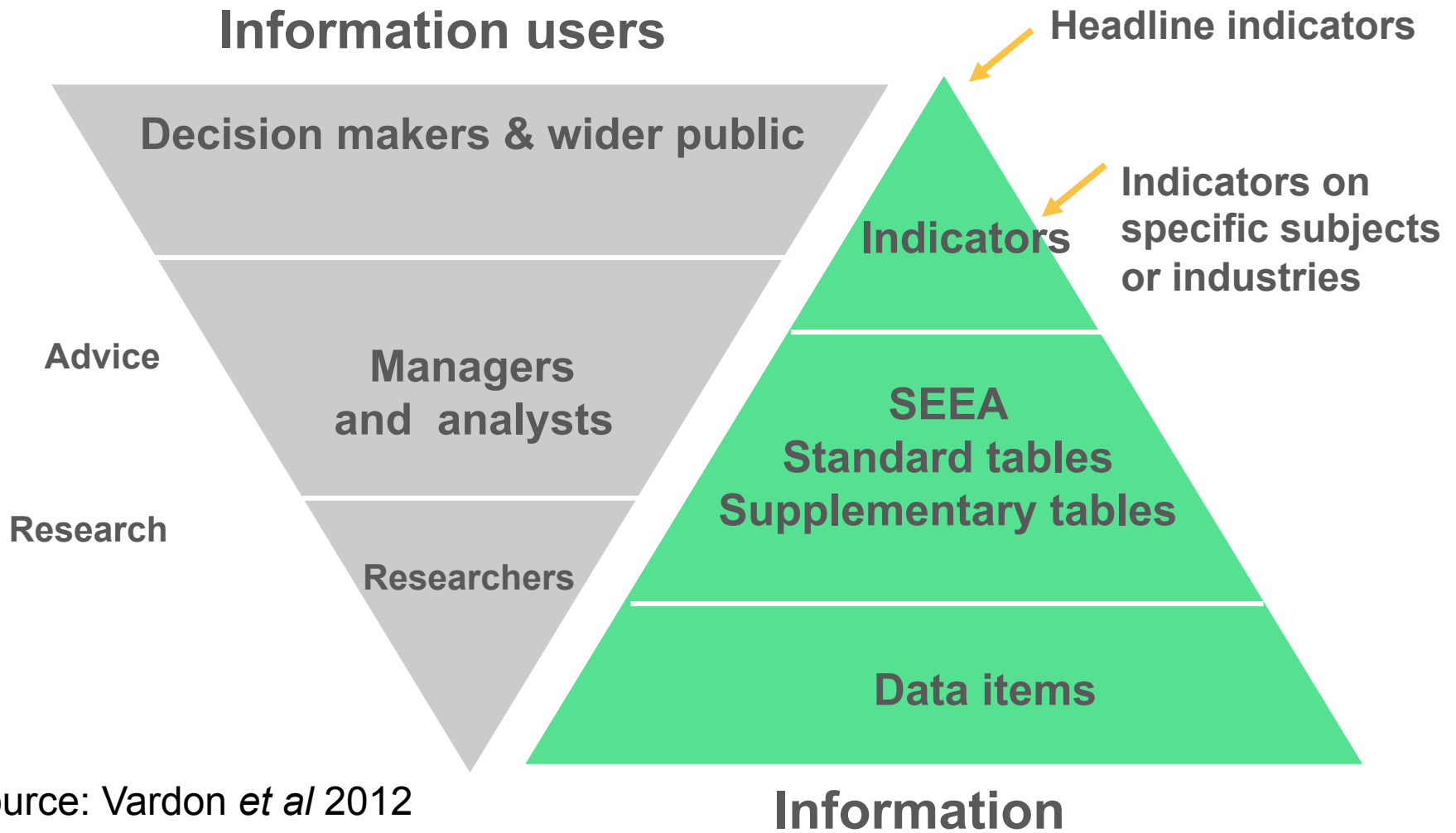
What does it cost?

- Benefits in SNA (in GDP) or non-SNA (not in GDP)
- **Beneficiaries are people or groups (e.g. farmers, government, miners)**

Who are the winners and losers?



Audiences and information



Source: Vardon *et al* 2012



Types of information use

- **Instrumental**
- **Conceptual**
- **Tactical**
- **Symbolic**
- **Political**



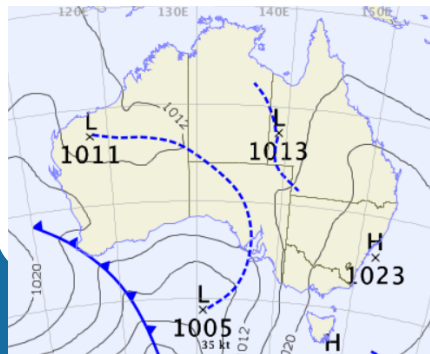
Hezri AA and Dovers SR. 2006. Sustainability indicators, policy and governance: issues for ecological economics. *Ecological Economics* **60**: 86-99.

Instrumental use of accounts

Basic data
(e.g. rainfall,
agricultural survey)

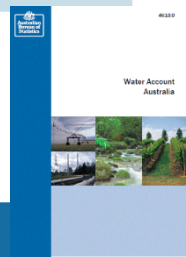
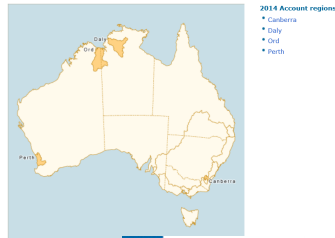


- Design Rainfalls
- Environmental Monitoring Sites
- Geofabric
- Groundwater information
- Hydrologic Reference Stations
- Water Data Online

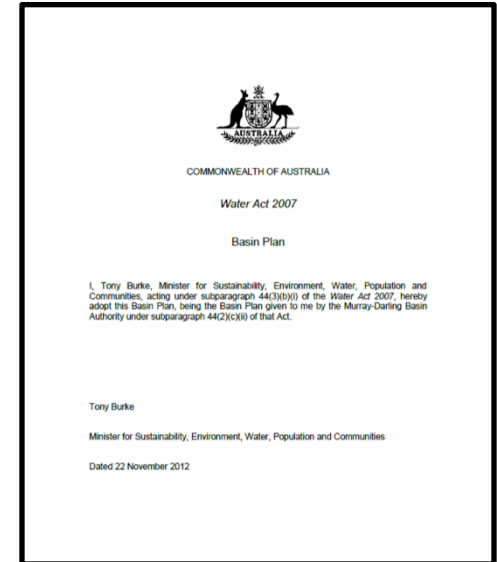
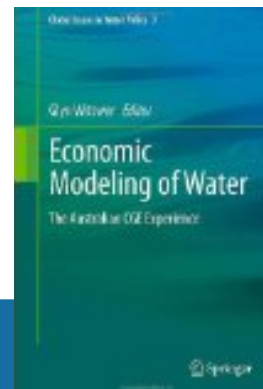


Account
compilation
(e.g. water
account)

National Water Account 2014
The 2014 Account contains a set of water accounting reports for nine nationally significant water management regions.
It covers a one year period, from 1 July 2013 to 30 June 2014.
Reports for Canberra, Daly, Ord and Perth regions are now available. Reports for Adelaide, Melbourne, Murray-Darling Basin, South East Queensland and Sydney region will be available in coming months.



Analysis and
interpretation
(e.g. water use by
industry)



Policy and decision
making
(e.g. Basin Plan)

Conceptual, symbolic and political use



Botswana President Ian Khama

State-of-the-Nation address address highlighted the importance of natural capital accounting to Botswana's economic development and aim of sustainable development (13 November 2014)

Three policy lens

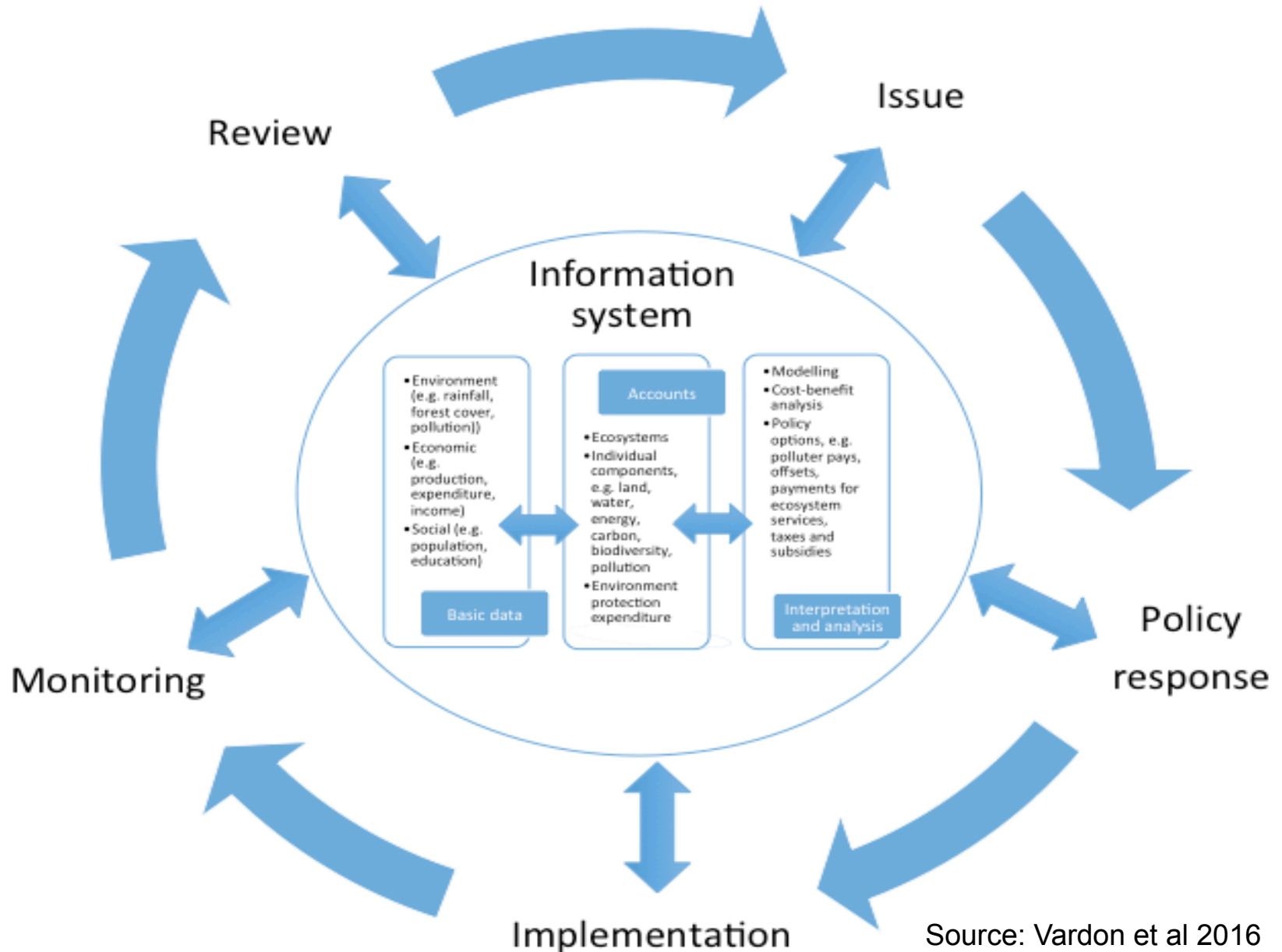
- **Academic/expert:** what is the problem and how it can be fixed?
- **Programmatic:** what can work legally and administratively and how it can be implemented (including costing)?
- **Political:** complex trade-offs (who wins, who loses, cost?)



Head BW. 2008. Three Lenses of Evidence-Based Policy. *The Australian Journal of Public Administration* 67: 1–11



The place of accounts in the information system and policy cycle



Decision-centered design of accounts

- What are the decisions to be made that can use information?
- What are the policy options available?
 - Carrots
 - Sticks
 - Sermons
- What accounts would be useful to assess or implement the options?



Environmental accounting policy roundtables

- Users and producers of accounts work together to identify the issues and policy options and decision-making processes that can use information



Things noted at the roundtables

- **The goal of policy is to influence behavior in society**
- **It is the countries and government agencies within countries that are the managers of the economy and environment**
- **There is already lots of data and new technologies mean more are coming – data, information and understanding are not the same things**
- **The nature of environmental policy and decision-making is changing.**
 - Before highly thematic (land, water, pollution)
 - Now diverse (e.g. considering conservation on public and private land) and needing to identify multiple impacts and benefits (within and outside the environment).
- **Information is needed quickly for advice/decisions**



What international issues could be linked to accounts?

- **Sustainable development**

- E.g. Post 2015 sustainable development goals

- **Climate change**

- E.g. Kyoto Protocol and UNFCCC

- **Biodiversity conservation**

- E.g. Aichi targets and IPBES



What policy tools or management actions could be linked with accounts?

- Payments for ecosystem services
- User pays (pricing natural resources)
- Polluter pays (pricing externalities)
- Budget process (shadow budget)
- Offsets
- Land use planning
- Protected area management
- Threatened species management
- Development approvals
- State of Environment Reporting



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https://www.researchgate.net/profile/Michael_Vardon/contributions

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Thank you



The place of accounts in the information system and policy cycle

