Policy uses and applications of water accounts

Glenn-Marie Lange
Center for Economy, Environment and Society
The Earth Institute at Columbia University
Organization of chapter

A. Key indicators from the water accounts

B. Water management and policy analysis

C. Critical issues for water accounts: spatial and temporal characteristics

D. Links between water and other resource accounts (fisheries, forestry, land/soil)
A. Key sustainability indicators from the water accounts

1. Discuss different indicators, systems of indicators, and approaches to water management
   MDGs—PSR—IWRM—WWAP, etc.

2. Identify indicators that cover environmental, economic, and ‘social’ aspects of sustainability

3. Bring together indicators reported in different chapters of the Handbook

4. Briefly describe the use of each group of indicators, where they are discussed in Handbook
A. Key sustainability indicators from the water accounts: major themes

1. Water resource availability

2. Water use for human activities

3. Access to water and sanitation services: the MDG targets
Key indicators from the water accounts

1. Water resource availability

Overall purpose is to indicate:

- Quantity of water available for human use on a long-term sustainable basis
- Severity of pressure on water resources

Indicators based on quantity and quality of stock compared to use & how this changes over time
Key Indicators:
2. Water management and policy analysis

Overall Purpose: provide detailed, sectoral indicators to help prioritize and design a response to pressure on water resources

Indicator groups:
- Comparing environmental and socio-economic performance of industries
- Potential for increasing effective supply and improving water productivity
- Water pricing and incentives for water conservation
Key Indicators:

3. Access to water and sanitation services

Purpose: to provide the indicators for the MDG Target for water

ACCESS TO WATER:
1. Share of urban population with access to safe drinking water
2. Share of rural population with access to safe drinking water

ACCESS TO SANITATION SERVICES:
3. Share of urban population with access to basic sanitation
4. Share of rural population with access to basic sanitation
B. Water management and policy analysis

1. Meeting future water demand & the MDG targets
2. Social and economic benefits from water policy reform:
   - Benefits of present water allocation and alternative allocations
   - Consequences of water pricing reform
3. Assessing costs and benefits of treating water pollution
4. Trade and the environment:
   - trade in ‘virtual water’
   - impact of trade policy on water allocation
C. Critical issues for water accounts: spatial and temporal characteristics
   – Example of river basin accounts for pollution
     *will add examples from the Netherlands, Sweden*
   – No example of seasonal accounts

D. Links between water and other resource accounts (fisheries, forestry, land/soil)
   – No examples yet…
Issues for Chapter

Chapter doesn’t seem coherent, organized by a single objective:

• Emphasis on link to indicators, especially those that drive int’l development like MDGs, or int’l organizations like WWAP or GWP—this would motivate countries and int’l organizations to support water accounting

• Secondary objective of bringing together all the indicators presented in each chapter in a coherent set of tables

There is no consensus on a single system of indicators or hierarchy of indicators

No country constructs/uses water accounts for these indicators!
Issues for Chapter

Countries use water accounts mainly for:

- Water use (pollution) by industry
- Water productivity (VA/m3 water)
- Cost recovery by industry
- Water use module in economic model for forecasting water demand, etc.
Issues for Chapter

Present organization of chapter:
1. Indicators – easy, immediate results for policymakers
2. More complex uses with economic modeling

If we stay with this approach, guidance is needed on
– what set of indicators to use
– whether to cover all indicators in the Handbook
– how to relate this to country experiences
Issues for Chapter

Alternative approaches to organising the chapter:

- topic or water issue
- country experiences, actual uses of water accounts