Best Practices for Water Accounts

Summary of Discussions at the 21st London Group meeting 2-4 November 2015, Den Haag, The Netherlands

Introduction

This document summarises the discussion of best practices in the compilation of accounts in accordance with the System of Environmental-Economic Accounting: Central Framework (SEEA-CF). The discussions follow on a request from the United Nations Committee of Experts on Environmental-Economic Accounting (UNCEEA), the goal of which was to provide practical compilation guidance that can be incorporated into the Technical Notes. These are being drafted for the various subject-matter areas of the SEEA-CF. Presentations related to this discussion can be found on the London Group website http://unstats.un.org/unsd/envaccounting/londongroup/meeting21.asp hosted by United Nations Statistics Division (UNSD).

Countries contributing presentations for this discussion were The Netherlands and Canada

Summary of best practices

In the technical guidance it is important to note that **water accounting takes time**. Countries should expect development in this area to be a medium to long term effort.

Institutional arrangements and cooperation are particularly important given that water statistics and expertise often exist outside the national statistical office.

Work in The Netherlands to develop a **groundwater abstraction register** and to link it with the business register was identified as a sound basis for beginning work on compiling water accounts.

The importance of **water use coefficients** (e.g. per employee, per unit of GDP, per unit of output, etc.) in the physical flow accounts was identified as an important consideration.

Variability of water availability in both space and time highlight the potential need for data at subnational scales and sub-annual frequencies. This should be highlighted in the technical guidance and mentioned for planning and development purposes.

Micro-data validation is an important consideration in water use surveys given the heterogeneity of water use within even detailed industry classifications. The challenge of this and its relationship to generalized business survey processing models warrants consideration.

As with the energy accounts, **distribution keys** are important for allocating water use to non-surveyed industries and for industries where coefficients are not available or are not reliable. This is particularly

important for allocating treated water from municipal supply if billing data or direct consumption are not available.

Surveys are advisable for large water users such as electric power generation, paper manufacturing, agriculture, water treatment plants, and primary metal manufacturing.

Difficulties interpreting the data were noted, particularly when looking at renewable water yield and multiple instream uses such as hydro-electric power generation.

It was noted that the **OECD/Eurostat Joint questionnaire on inland waters** requires several data points for water that are relevant to this work.

The importance of estimating **leakages** was highlighted. This can be a high proportion of the municipal supply produced (up to 50% was noted for Ireland). This is also important from the perspective of the Sustainable Development Goals (SDGs) where efficiency of the water supply system has been mentioned.

The **complexity of the water supply and use tables** was identified as an impediment to implementation.

The **measurement of stocks** was identified as questionable, especially given such difficult measures like soil water, for example. Changes in water yield and flows might be better ways to analyse the resource. However, artificial water reservoirs were identified as important stock measures in many developing countries.

The **link to ecosystem accounts** was identified as important to mention. The analysis of water flows can be a gateway to work in the domain of ecosystem provisioning services.