



Implementation of the System of Environment-Economic Accounting for Water

Expert Group Meeting on Environmental Accounting
for the ESCWA region

United Nations Statistics Division



Outline

- The SEEAW implementation strategy
- Global Assessment of Water Statistics and Water Accounts
- Progress with implementation
 - International Recommendations for Water Statistics
 - Technical cooperation and promotion
 - 5th World Water Forum
- Key issues and lessons from SEEAW implementation
- The way forward



SEEA W implementation strategy

- SEEA W was adopted by UNSC in 2007 as interim standard
- UNSC requested UNSD to develop an implementation strategy for the SEEA W
- Component of the SEEA W implementation strategy:
 1. Development of International Recommendations for Water Statistics (IRWS)
 2. Development of training and promotion material
 3. Development of a technical cooperation programme
 4. Harmonisation of international data collections with the SEEA W



Global Assessment of Water Statistics and Water Accounts

1. To obtain an understanding of country practices in the compilation of water statistics and accounts
2. To assess the use of the SEEAW
3. To support the preparation of the International Recommendations for Water Statistics (IRWS)
4. To assist with the development of targeted technical cooperation activities in these areas.



44 Countries have, or are planning, water accounts

Global Assessment of Water Statistics and Water Accounts (GAWSWA)

<http://unstats.un.org/unsd/statcom/doc09/BG-WaterAccounts.pdf>

- Andorra
 - Australia
 - Austria
 - Bahamas
 - Botswana
 - Canada
 - China
 - Colombia
 - Denmark
 - Dominican Republic
 - Egypt
 - France
 - Germany
 - Guatemala
 - Hungary
 - Iraq
 - Israel
 - Italy
 - Jordan
 - Mexico
 - Namibia
 - Netherlands
 - New Zealand
 - Peru
 - Philippines
 - Portugal
 - Singapore
 - South Africa
 - Spain
 - Sweden
 - Switzerland
 - Trinidad and Tobago
 - Ukraine
 - Armenia
 - Estonia
 - Greece
 - Lebanon
 - Mauritius
 - Norway
 - Occupied Palestinian Territory
 - Romania
 - Tunisia
 - Turkey
 - United Kingdom
- Plus 4 (Data not from GAWSWA)
- Bahrain
 - Brazil
 - Oman
 - Panama



International Recommendations for Water Statistics

- Outline presented at the 3rd UNCEEAA meeting in June 2008
- Expert Group Meeting held November 2008
- Next draft was submitted to the expert group in July-August 2009
- Final Draft for Global Consultation on web in October 2009
- Final Draft and comments from Global Consultation to UNCEEAA by December 2009 for transmission to the UN Statistical Commission



The Purpose of the IRWS

Overall purpose of IRWS:

To assist countries in the establishment and strengthening of an information system for water in support of IWRM

In particular, IRWS:

- Supports collection, compilation and dissemination of comparable water statistics
- Supports the implementation of the SEEAW
- Supports the derivation of coherent and consistent sets of indicators

<http://unstats.un.org/unsd/envaccounting/irws/>



Outline of the IRWS

- Part I International Recommendations
 - **Chapter I – Scope of water statistics**
 - Covers the international context in which these recommendations have been developed and notes specific exclusions in coverage.
 - **Chapter II – Main concepts and frameworks**
 - Briefly describes the main features of the environment and the economy in relation to water, and it provides the main statistical concepts needed to place water statistics into a broader context. It provides an explanation of the SEEAW and its relationship to the SNA and SEEA accounting frameworks. It also covers the issue of spatial and temporal references for water statistics.
 - **Chapter III – Statistical units and classifications**
 - Provides the definition, characteristics and classification of units within the environment and the economy and how these relate to water statistics. This includes the definition and classification of the inland water resources and a description of enterprises, establishments and households as well as the classification of economic units by the *International Standard Industrial Classification of All Economic Activities* (ISIC Revision 4). It identifies and describes the main industries and products of importance for water statistics, and some of the issues associated with their classification.
 - **Chapter IV – Water data items**
 - Contains the list of data items that are recommended as a minimum set for compilation by countries. It includes a description of the data items as well as the identification of issues relevant to each data item.

<http://unstats.un.org/unsd/envaccounting/irws/>



Outline of the IRWS (Cont'ed)

- Part II: Guidance for Implementation
 - **Chapter V – Data collection strategy**
 - Addresses problems presented by multiple data sources and provides guidance on how to assess the scope, availability and quality of existing data and survey frames to support water statistics.
 - **Chapter VI – Data sources and methods**
 - Describes statistical sources (i.e. survey data and administrative data) as well as hydrological/meteorological and research sources of water data that may be used for collecting and compiling water statistics. It examines the different types of data, their availability from various agencies and the likely advantages and disadvantages of using data from different sources. It also discusses the most relevant data sources for the various data items recommended in Chapter IV. It covers general issues of imputation, weighting, grossing up and aggregation of data.
 - **Chapter VII –Metadata and data quality**
 - Describes the dimensions of data quality and outlines a suggested data quality assessment framework for water statistics.
 - **Chapter VIII – Data dissemination**
 - Addresses the issues of confidentiality, equality (of access) and objectivity of water statistics. Some formats, media and best practices for presentation, dissemination and international reporting are discussed.



Outline of the IRWS (Cont'ed)

- Annexe and references
 - Annex I – List of recommended data items
 - Annex II – List of supplementary data items
 - Annex III – Links of data items to the SEEAW
 - Annex IV – Indicators and links of data items to WWAP indicators
 - Annex V – Measurement units and conversion factors
 - The references include all of the documents referred to in the IRWS.



Issues addressed during IRWS

- Terminology and definitions
 - Wastewater
- Inclusion of stocks of soil water as part of the recommended items
- Recording water in artificial reservoirs as part of the environment or the economy
- Identifying aquifers according to whether water is renewable or non-renewable



Key findings of the Global Assessment and lessons from countries implementing SEEAW

1. Build on existing knowledge and recognise that a range of different systems are already in place
2. Cooperation is essential
3. High level support is needed
4. An agency needs to take the lead
5. A phased approach is needed and pilot or experimental accounts are very useful
6. A lot of progress can be made quickly



Technical cooperation and promotion

Since adoption of SEEA Water in 2007 UNSD has:

- Conducted six regional workshops
- Provided 11 country missions
- Conducted the expert group meeting on the international recommendations for water statistics
- Received three delegations in New York for training
- Contributed to two workshop via video link
- Provided training material and other assistance to two Med Stat II Missions and one for the EU Europe Aid Project “Upgrading the Statistical System of Turkey”
- Remote assistance to countries



5th World Water Forum

UNSD with World Meteorological Organisation (WMO) and International Association of Hydrological Sciences (IAHS) organised the topic “Data for All” in four sessions

- 6.4.1 Data needs and data acquisition
- 6.4.2 Data integration and dissemination
- 6.4.3 Barriers to data availability
- 6.4.4 Action to ensure data for all

UNSD created a web page to host material for these four sessions,

<http://unstats.un.org/unsd/envaccounting/workshops/wwf2009/lod.htm>



Outcomes from 5th World Water Forum - Data for All

- “.. the lack of integrated water data was a systematic impediment to informed decision making related to the sustainable use of water resources”
- “.. SEEA-W offers a coherent and valuable framework to support national data collection and is an important part of the way forward”
- “..data collection, integration and dissemination must be elevated on the agenda at the next World Water Forum. There is a need for strong leadership to achieve this, and clear goals and timelines to support data for all need to be established by an ongoing process. This process should bring together hydrologists, economists, social scientists, statisticians, etc, to strengthen coordination and cooperation between countries and international agencies”



Key issues in SEEAW implementation

- Lack of knowledge and understanding of the SEEAW by the users and producers of water statistics
- Institutional arrangements
- Data availability



The way forward

- Promotion
- Training and network of experts
- Data quality assessment
- International data collections
- Data availability



Promotion

- SEEAW needs to be promoted to countries, regional and international agencies.
- In particular, it needs to be brought to the attention of leaders in the field of water policy and decision making.
 - E.g. the UN Secretary-General's Advisory Board on Water and Sanitation and UN Water
- Demonstrate usefulness of SEEAW to policy makers



Proposed publication on SEEAW

- It is proposed to develop a brief publication (20-30 pages) covering the main concepts of the SEEAW, illustrated with country examples and linked to key policy issues such as climate change, water pricing, water efficiency and the MDGs.
- This publication would be developed by UNSD with assistance from two regional commissions (ESCWA and ECLAC) and would include country examples (e.g. Australia, China, The Netherlands and Mexico).
- WWAP and UNSD would produce the publication and it would be launched at the World Water Week (August 2010, Stockholm, Sweden)



Training and network of experts

- At present many countries are requesting assistance with the implementation of the accounts but the number of people able to provide assistance is limited
- Establish a network of water accounting experts from countries, regional and international agencies that can be drawn upon to provide assistance
- As part of this, a programme to train-the-trainers would be developed



Data quality assessment

- Several countries have requested UNSD to review their accounts to check for compliance with standards and provide recommendations on the way forward
- Need to develop a data quality assessment framework



International data collections and data availability

- There is a strong demand for global water data. However, the water data available at the global level are very poor and in many cases the availability of data in countries is declining
- The existing data collection have many gaps and deficiencies
- Existing regional and international data collections need to be examined to see if they can collectively be used to produce a more comprehensive suite of water data or fill gaps in existing datasets.



International and regional coordination

A small working group under the auspices of the UNCEEA and World Water Assessment Program will be established to:

- Strengthen the water data at country levels
- Coordinate and improve the regional and international activity relating to water data collection
- Ensure that the water data are regularly reported to regional and international agencies, through either an expansion of existing activities or through new initiatives, and that these data are available to a range of data users

This group will build on the World Water Assessment Program Expert Group, the UN Water Task Force and the UNSD Expert Group convened for the development of the IRWS as well as members of the expert group involved in the development of the SEEAW (a sub-group of the London Group on Environmental Accounting).