



## Workshop on Water Accounts and Statistics for Mediterranean Countries (Egypt, Jordan, Lebanon, Palestinian Authority)

Beirut, Lebanon, 20-22 March 2012

Venue: UN-ESCWA, Beirut, Lebanon; Meeting Room Mezzanine

### DRAFT SUMMARY MINUTES

Agenda, list of participants, presentations and other relevant documents are available at the following link: [http://enpi-seis.ew.eea.europa.eu/project-activities/data-and-indicators/eea-unsd-un-escwa\\_workshop-water-statistics-and-accounts](http://enpi-seis.ew.eea.europa.eu/project-activities/data-and-indicators/eea-unsd-un-escwa_workshop-water-statistics-and-accounts)

#### Tuesday, 20 March 2012

##### *Opening remarks and presentation of the objectives of the workshop*

Opening remarks and welcome addresses were given on behalf of UN-ESCWA, UNSD and EEA by Juraj Riecan (Director of Statistics Division at UN-ESCWA), Ricardo Martinez-Lagunes (Inter-regional Adviser on Environmental-Economic Accounts, UNSD) and Cécile Roddier-Quefelec (Mediterranean area cooperation, Governance and Networks, EEA).

The objectives of the workshop were defined as follows:

- Explain how water accounts and statistics can be used for fact based policy making.
- Provide guidance to the participants, through hands-on examples, on how to implement water accounts and statistics in their countries according to SEEA-Water and IRWS, as well as using the SEIS principles, using available data.
- To establish and/or strengthen the coordination mechanisms for the implementation of water accounts and statistics in the countries.
- Identify the key steps in the preparation of a statistical program to complete water accounts and statistics.

##### *Workshop expectations of the participants*

The welcome addresses were followed by a short tour de table where the expectations of the workshop participants were collected and written on post-its. The initial expectations of the workshop participants can be summarized as follows:

- To become familiar with water accounting concepts
- To see the link between water policies, water accounting and water statistics. To learn how to use water statistics and water accounts for water policy making.
- Share practical experiences with others.
- Solve practical problems with the help of others.
- To see the link between SEIS and water accounting
- To find practical ways to collect and manage data
- To learn about important metadata to be maintained in relation to water accounts
- To aggregate and integrate data towards information for water policies.

See also following picture with the post-its which were kept in the meeting room for later reference.



Fig 1: Workshop expectations of the participants

### Monitoring framework for water policies

In this module the participants were introduced into the four water policy quadrants (see also briefing note: [http://unstats.un.org/unsd/envaccounting/WWAP\\_UNSD\\_WaterMF.pdf](http://unstats.un.org/unsd/envaccounting/WWAP_UNSD_WaterMF.pdf)) and how the System of Environmental-Economic Accounts for Water (SEEA-Water) and the International Recommendations for Water Statistics (IRWS) provide a comprehensive, consistent and comparable framework for monitoring the different objectives set in each quadrant. The goal of this module was to define the policy-oriented starting point for a later identification of data items which are needed to support monitoring and management of the water sector. The presentation was given by Ricardo Martinez-Lagunes.

It was suggested to focus work in this workshop on “Water Policy Quadrants” I (improving drinking water and sanitation services) and II (managing water supply and demand).

This module also included the presentation of Jordan about the status concerning the implementation and use of water accounts by DOS (Department of Statistics) and MWI (Ministry of Water and Irrigation).

The module included a presentation of major water policy objectives (and targets) from the 4 beneficiary countries:

#### Jordan:

- Strategy until 2020 exists
- Improving drinking water and sanitation services: all major cities and towns should be equipped with drinking water supply, wastewater collection and wastewater treatment
- Managing water supply and demand: water for agriculture shall be kept

- Goal of water use of 120 l/capita/day in municipalities
- Public awareness raising
- Enhancing private public partnership

#### **Palestinian Authority:**

- 3 years strategy exists
- About 40% losses of water supply – should be reduced
- Supply rate is 60-70l/capita/day only – should be increased
- Strengthening and promoting national water policies.
- Building institutional capacity and human resource development.
- Improving information services and water resources assessment.
- Organizing and coordinating investments integrated in the water and sanitation sector.
- Applying water protection standards.
- Raising awareness and supporting public participation in water resources management.
- Strengthening regional and international cooperation

#### **Lebanon:**

- 10 years master plan exists (1999-2009)
- National Water Sector Strategy (2011-2035)
- Maximize the potential of water resources
- Improvement of transmission and distribution of water
- Improvement of wastewater collection and treatment
- Water shortage is not a problem, but its mismanagement

#### **Egypt:**

- Minimize water losses.
- Irrigation improvement project.
- Cost recovery.
- Groundwater development strategies.
- Reuse of agricultural drainage water.
- Reuse of sewage water.
- Cropping pattern shifts.
- Increase Egypt's share of the Nile water.
- Desalination of Brackish water.
- Harvesting of rainfall and flash floods water

The presentation of the policy objectives and targets resulted in an extensive discussion about terminology (always reference to IRWS terminology required) and metadata (mainly description of data sources and data quality).

#### *IRWS data items*

Ricardo Martinez-Lagunes presented the IRWS and an example of data items (Egypt example). Beneficiaries were asked to select their relevant data items (depending on their water policy goals and targets) and to populate it with data (time series). In addition they should take note about difficulties and data sources (metadata), which was intended to be the basis for a the implementation plan to be developed on the last day of the workshop.

## **Wednesday, 21 March 2012**

### *Countries presentations: Palestinian Authority, Egypt and Lebanon*

The representatives of Palestinian Authority, Egypt and Lebanon presented their prepared presentations on water policy objectives, state of play concerning water accounting and institutions involved.

The discussion about harmonized indicators, terminology and methods of data gathering and gap filling was continued based on these presentations.

### *Using the language of stocks and flows to understand the behavior of inland water and economic systems*

An introduction into the key-concepts of stocks and flows as well as central terminology (water use, water supply and water consumption) was given by Michael Nagy. This was followed by a practical exercise (see Annex). The exercise included physical flows of water from the environment to the economy, flows within the economy and returns to the environment. It furthermore included economic information (such as monetary flows related to water supply and sewerage services).

The goal of this exercise was to familiarize the participants with the structure of SEEA-Water PSUT (and Hybrids Supply and Use Table) and its relation to IRWS data items.

The session also included a presentation about the structure of the SEEA-Water Hybrid Tables and their links to National Accounts. The respective presentation was given by Ricardo Martinez-Lagunes.

The results of the practical exercises were presented by volunteers.

## **Thursday, 22 March 2012**

### *Celebration of World Water Day*

The official Lebanese World Water Day celebration was hosted by UN-ESCWA under the patronage of the Lebanese Minister of Agriculture and the Minister of Energy and Water. An intervention was also given by Ricardo Martinez Lagunes to emphasize the integration of water related information to respond to policy needs.

After the official events some of the facts and figures (indicators) mentioned in the speeches of the Ministers were used to translate them into the language of official statistics and to identify the required data items (such as percentage of water used in the agricultural sector etc.).

This initiated a discussion about indicators and its relation to SEEA-Water. It was clarified, that the idea of SEEA-Water is not to discuss indicators, but to provide the foundation (data) for indicators.

### *Data and information dissemination*

Ricardo Martinez-Lagunes presented the classical information pyramid (basic data – integration – indicators) and its link with IRWS and SEEA-Water. This involved a clarification of the role of official statistics: to provide the data and the indicator, but not the decisions. The presentation mentioned important indicators which are based on data integration, such as water abstraction / Water consumption / Emissions compared to Value Added. The issue of opportunity costs (what is the second best option to use the water?) as well as other standard definitions (e.g. normal precipitation) were discussed.

Cécile Roddier Quefelec presented the SEIS principles, links to water accounting as well as modern ways to disseminate information and to involve its users (example Eye on Earth).

The importance of the country reports (steps needed to improve the situation in the countries) was stressed.

A practical example for data dissemination was presented by Michael Nagy: Gapminder (Google Motion Charts). Participants were informed that more information about the implementation of Gapminder in websites can be obtained here: <http://www.gapminder.org/>. An example for a Google Motion Chart implemented in a website was presented: [http://www.umweltgesamtrechnung.at/ms/ugr\\_home/ugr\\_auswertungen2/](http://www.umweltgesamtrechnung.at/ms/ugr_home/ugr_auswertungen2/)

Participants were invited to share similar tools with others.

### *Implementation plans*

Country experts worked in groups to draft national implementation plans. These preliminary drafts will need to be refined after the workshop involving other partners when required.

## **Jordan**

1. Meeting between MWI / DOS with Decision makers to officially agree on follow up committee for the water accounts (end of March)
2. Prepare the baseline tables of WA / Workshop Exercise by committee (5 April)
3. Identify list of Gaps and Data Needs for Water Account (end of May)
4. Identify roles and responsibilities (end of May)
5. Identify support needed- (financial/resources....etc) (end of May)
6. Prepare detailed action plan (end of June)

## **Egypt**

- Dedicate a new chapter in the environmental statistic bulletin to measure the quality of drinking water in terms of the number of measuring stations and measurements that are measured by the holding company as well as the number of samples that have been measured to produce time series.
- Complete work on time series for the section in the bulletin that are not completed
- Update data on water accounts and publish them in the environmental statistical bulletin
- Agree and work on times series to implement the indicators “within the SEIS project” taking into account the work done so far by:
  - 1- Indicators of the Millenium Development Goals done by Central agency for public mobilization and statistics
  - 2-Indicators on drinking water done by the holding company
  - 3-Indicators work of the environmental affairs agency.

## **Palestinian Authority**

1. Meetings and interactive planning depending on the international recommendations of IRWS
2. Interpretation of terminologies through filling the time-series tables and sending them within 2 weeks
3. Set needs and priorities depending on the depending on the mutual cooperation between the related organization and the available MoU.
4. This will include:
  - Evaluating the available/missing data and comparing them to the SEEAW data list
5. Technical mission to Palestinian Authority instead of a joint workshop
  - Identification and evaluation of indicators
  - Estimation methods for missing data
  - Learn from other countries experience- success stories

- Enhance cooperation between institutions and setting clear identification for roles and responsibilities
  - Organizing field visits to related organizations
6. Setting a monitoring and evaluation system
  7. Preparing tables based on the available data according to the international guidelines for water statistics
  8. Preparing methodological report

## **Lebanon**

### Short term (6-12 months): Strategy formulation:

- Define the leadership for water accounts work: MOE
- Check the available data incoming of all official sources at CAS, MOE, CDR, etc.
- Contact MEW in order to get more water data even if it is not updated
- Data gaps can be done through:
  - Reading international UN manuals (IRWS, etc.) in order to have the methodology and background to constitute Lebanon metadata
  - Try to make estimates in order to encounter missing data based on available data of all official sources
- Start filling some SEEA-Water tables through the available information
- See what information is missing.

### Mid term (12-18 months): Strategy implementation / Institutional work:

- Form an inter-ministerial and administrative (CNRS, LARI, LEDO, TEDO, etc.) and syndicates committee in order to strengthen the cooperation and to get the missing data or to be able to compute some agreed estimates
- Set a time table and the job description of the committee members
- Write a memorandum of understanding among the members of this committee to achieve the commitment of the head of institutional pyramid
- Make a capacity building regarding SEEA-Water tables for the committee members and for the people who will compile and handle data
- Try to increase institutional awareness about the importance of establishing SEEA-Water tables and to move from data to information in the field of water
- Try through this committee to encounter the lack of data through asking of other ministries that conduct statistical surveys or collect data from different monitoring networks to introduce in their questionnaires some data related to water and that answers the needs of SEEA-Water tables

### Long term (18 months +): Strategy evaluation to ensure data sustainability:

- Get all the water data that the committee will provide and try to complete SEEA-Water tables
- See what is missing again in order to evaluate the strategy and rectify the field work
- SEEA-Water tables will increase the knowledge of water management and will allow to orient the water decision makers in order to mitigate and alleviate problems regarding for example unaccounted for water
- Publish and disseminate a 2 years publication on water accounts on all committee institutions members' websites. This publication may include:

- Metadata and methodology
- Sources of information
- Move from data to information: a compendium (summary) part, synthetic tables, and exhaustive tables
- Calculating some water indicators
- Forecasting water trends for the future water strategy (ies)

#### *Agreed next steps*

Finish what has been started during the workshop – complete the exercise: All along the workshop, countries used their own data to perform the various exercises. Countries have been encouraged to complete those exercises, which will provide the basis in the next steps of their implementation plan.

1. Selection of data items (IRWS) which are relevant according to the national policy objectives and in order to populate PSUT and Hybrid Supply and Use table.
2. Identification of the corresponding variable within the national system
3. Populating with time series (list of data items, PSUT and Hybrid Supply/Use Table)
4. Provide meta-information such as data source, deviation in terminology or definition etc.

Deadline: in 2 weeks time (April 5th 2012).

After the workshop, relevant follow-up will be provided to ensure proper feed-back and support in the implementation of the water accounts by the countries.

#### *Summary of work accomplished*

Previous to the workshop the participants prepared a presentation of the key water policy issues in their countries and how water accounts and statistics could provide information for the design and evaluation of those policies. These presentations were shared with the participants during the workshop and discussed.

For the four countries water is an issue of high priority. It was clear that information is fragmented in different agencies and that by working in partnership they will be able to produce integrated information that is policy relevant. It was shown that the SEEA-Water, the IRWS, and the SEIS principles constitute the basis for achieving the latter.

The following elements were relevant in the workshop with the four countries:

- **Egypt:** Two representatives from CAPMAS, one from the Water and Sanitation Holding Company, and one from the Ministry of Environment attended the workshop. In Egypt water is a scarce resource and water accounts and statistics can provide the basis for sound fact based water policy making. The Water and Sanitation Holding Company integrates data from almost all the water and sanitation utilities in the country. The information collected by this agency is key for the policies related with drinking water and sanitation (policy quadrant I). It is important to translate the data available into the standardized terminology provided by the IRWS.
- **Jordan:** Two representatives from the Jordanian Department of Statistics and two from the Ministry of Water and Irrigation (MWI) attended the workshop. A representative from the MWI presented the policy needs and indicators required. During the workshop the participants were able to see how some of the indicators required by the water policies can be consistently be calculated using the standardized methodologies provided by the SEEA-Water.

- **Lebanon:** The workshop was attended by a representative from the Central Agency for Statistics (CAS), two representatives from the Ministry of Environment, and a representative from the Ministry of Energy and Water (MEW), who could not stay in the workshop. The representative from CAS presented some of the key issues identified in the country's water policies, as well as the problems due to fragmented information.
- **Palestinian Authority:** The workshop was attended by two staff members from the Palestinian Water Authority (PWA) and two from the Palestinian Central Bureau of Statistics (PCBS). They provided several time series of data and indicators. This is key information that should be translated into the standard terminology. Palestinian Authority has several specific concerns regarding the way in which the imports and exports of water from and to Israel should be recorded. The flows of water are complicated due to the fact that there are substantial flows from one territory to the other. Special time was devoted to analyze the Palestinian case.