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Fifth Meeting of the UN Committee of Experts on Environmental-Economic Accounting New York, 23-25 June 2010 North Lawn Building, Conference Room E

STATISTICS DIVISION UNITED NATIONS

#### PROGRESS ON WATER ACCOUNTS IN ESCWA COUNTRIES

Paper prepared by Wafa Aboul Hosn United Nations Economic and Social Commission for Western Asia

*(for information)* 

Background document



# DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS STATISTICS DIVISION UNITED NATIONS

Fifth Meeting of the UN Committee of Experts on Environmental-Economic Accounting New York, 23-25 June 2010 Millennium UN Plaza Hotel - Manhattan Room

### **Progress on Water Accounts in ESCWA Countries**

Paper prepared by Wafa Aboul Hosn<sup>1</sup> United Nations Economic and Social Commission for Western Asia Senior Statistician, Statistics Division

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#### 1. Introduction

The ESCWA region comprises 14 ESCWA members, namely: Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, the Sudan, the Syrian Arab Republic, the United Arab Emirates and Yemen. The region covers 7.3 million km², which represents 5.5 per cent of the world total area. All ESCWA member countries have access to the sea, with the longest coastlines in Saudi Arabia and Egypt at 7,572 km and 5,898 km respectively and highest altitudes found in Yemen, Lebanon and the Sudan at 3,666 m, 3,090 m and 3,075 m respectively³.

The *region* is rich in oil and gas resources, representing in 2008 some 51 per cent of the world proven oil reserves and 27 per cent of the world proven natural gas resources.<sup>4</sup> However, the region suffers from water scarcity and aridity. The inland water surface covers only 1.6 per cent of the total ESCWA surface area. The region contains merely 0.56 per cent of the global renewable water resources, while it accounts for 3.6 per cent of the world's population. Mean yearly precipitation is less than 100 mm per year in six ESCWA member countries, and between 100 and 300 mm per year in four other countries. The water is unevenly distributed and shortages in water supplies in summer are also observed in most regions. Therefore, water accounts are of major importance for the ESCWA region and this was further supported by a recommendation from the ESCWA Statistical Committee<sup>5</sup>.

The System of Environmental-Economic Accounting for Water (SEEAW) is an elaboration of the SEEA-2003 and both use the 1993 SNA as basic framework. The SEEAW provides a conceptual framework for organizing the hydrological and economic information in a coherent and consistent manner complemented with a set of standard tables focusing on the following hydrological and economic information<sup>6</sup>:

- (a) Stocks and flows of water resources within the environment;
- (b) Pressures of the economy on the environment in terms of water abstraction and emissions added to wastewater and released to the environment or removed from wastewater;
- (c) The supply of water and the use of water as input in the production process and by households;
- (d) The reuse of water within the economy;

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<sup>3</sup> UNESCWA. 2009. Compendium of Environment Statistics in the ESCWA Region.E/ESCWA/SD/2009/13 4UNESCWA, Statistical Abstract of the ESCWA Region, Issue 28 (2009).

<sup>&</sup>lt;sup>5</sup>ESCWA. 2004b. Report, the Statistical Committee on its Sixth Session, Beirut, 6-8 October 2004. E/ESCWA/SCU/2004/ig.1/6.

<sup>&</sup>lt;sup>6</sup> UNSD 2007. System of Environmental-Economic Accounting for Water, Background document, Statistical Commission 38<sup>th</sup> Session on Feb 17 – March 2, 2007.

- (e) The costs of collection, purification, distribution and treatment of water, as well as the service charges paid by the users;
- (f) The financing of these costs;
- (g) The payments of permits for access to abstract water or to use it as sink for discharge of wastewater;
- (h) The hydraulic stock in place, as well as investments in hydraulic infrastructure during the accounting period.
- (i) Quality accounts, which describe water resources in terms of their quality

The SEEAW is also a useful tool in support of decision makers on Integrated Water Resource Management (IWRM) by providing the information to on providing a standardized information system, allocating water resources efficiently, improving water efficiency and on understanding the impacts of water management on users<sup>7</sup>. Countries were encouraged to compile water accounts using harmonized concepts, definitions and classifications, and as of 2009, 25 countries have insofar implemented parts of the water accounts<sup>8</sup>. Currently, 60 nations have requested the assistance of the UNSD in implementing their SEEAW, including all ESCWA countries<sup>9</sup>.

ESCWA and ECLAC have been implementing a development account project "Strengthening National Capacities in Environment Statistics, Indicators and Accounts Project (ESIAP) in support of progress toward achieving the internationally agreed development goals since 2007. They have organized several training workshops and EGMs technical assistance missions and study tours publication of studies and reports and development of information systems a docubase and a network of experts, in coordination with regional and international agencies, particularly UNSD, the regional statistical cooperation programme between the European Union and Mediterranean partner countries (MEDSTAT), the United Nations Environment Programme (UNEP) and other partners.

The project focused on the implementation of SEEAW and strengthening supporting statistics. It also identified environmental protection expenditures as another area of work in the region, with some countries embarking with experimenting collecting data on environmental protection expenditure, with focus on water and sanitation expenditures. The focus on the water accounts and supporting statistics has been facilitated by the existence of internationally agreed methodologies, a global implementation strategy including training materials. Energy accounts and Waste Accounts were also identified as a priority area for the region.

## 2. <u>Progress in Water Accounts and Environment Protection Expenditure in ESCWA member Countries at regional, subregional, and county levels.</u>

ESCWA promoted the System of Environmental Economic Accounting (SEEA) at high level policy-makers and enhanced capacity at the technical level in individual countries. In particular, ESCWA presented the SEEAW at the Arab Ministerial Council and enlarged the geographic scope from ESCWA (14 member countries) to Arab region (22 member counties) when cooperating with the League of Arab States at the "Second Meeting of Technical, Scientific, Advisory Committee to Council of Arab Ministers of Water in Egypt that took place from 24-26 January 2010.

<sup>&</sup>lt;sup>7</sup>UNSD 2007. System of Environmental-Economic Accounting for Water, Background document, Statistical Commission 38<sup>th</sup> Session on Feb 17 – March 2, 2007.

<sup>&</sup>lt;sup>8</sup>Alfieri, A. 2006. Integrated Environmental and Economic Accounting for Water Resources – SEEAW, UNSD, presentation 22-24 May 2006, Voorburg, Netherlands.

<sup>&</sup>lt;sup>9</sup> Vardon, M., 2008. Introduction to the System of Environmental-Economic Accounting for Water, Part II., Training Session on the System of Environmental-Economic Accounting for Water (SEEAW) for the Arab Gulf Countries, August 25-28, 2008, Lebanon.

ESCWA enhanced through the project regional and inter-regional knowledge sharing on environmental statistics, indicator and accounts in the Arab region and among interested groups and experts through developed an expertbase and a docubase for ESCWA within an integrated website "ESIAP".

At the subergional level, the Mashriq experience in water accounts was presented by Lebanon and Jordan at the international World Water Forum, 20 - 21 March 2009, in Istanbul, Turkey in cooperation with UNSD and MEDSTAT. At the Gulf subregion, mainly Oman and Bahrain planned on including SEEA in the GCC strategy for the implementation of National accounts in 2010.

In addition, ESCWA received three requests from member countries (Oman, Sudan, Yemen) during the first half of 2010 to provide assistance on environmental economic accounting indicating an increased interest in the region in developing environmental accounts in the near future.

At a country level, experts from all fourteen member countries have participated to trainings on SEEAW, some to study tours and/or missions which enhanced their capacity of technical staff in compiling data for the standard tables for the SEEAW

In the Department of Statistics in Jordan, Supply and Use, Emissions, Assets and Monetary accounts for SEEAW were prepared for three years (2006-2008) and will be published in a report in 2010 and linked to Input–Output tables through another project that DOS in undertaking. Pilot accounts were published in several meetings and in ESCWA's publications in 2009<sup>10</sup>.11.

Egypt prepared pilot accounts on physical supply and use, and assets accounts<sup>12</sup>, emissions and monetary accounts are being prepared for to be released at the end of 2010.

Oman, Bahrain, and Iraq prepared pilot accounts on physical supply and use, assets, and requested further assistance on emissions and monetary accounts. Syria, Lebanon, and Palestine prepared draft physical supply and use and environmental protection expenditure. The other member countries have not started any pilot accounts due to unavailability of water data at the national level or due to lack of resources.

The work plan for the development of water accounts in member countries (Annex1) was discussed and proposed during the regional meeting in ESCWA in April 2010<sup>13</sup>. Countries are now requesting assistance on developing a national work plan on environmental accounts or including a work programme on environmental accounts in the national strategy on environment and that on statistics.

<sup>&</sup>lt;sup>10</sup> UNESCWA. 2009. Compendium of Environment Statistics in the ESCWA Region.E/ESCWA/SD/2009/13

<sup>&</sup>lt;sup>11</sup> UNESCWA. 2009. Framework for environmental economic accounting in the ESCWA region. English. 61 pages. E/ESCWA/SD/2009/3.

<sup>&</sup>lt;sup>12</sup> Egypt country paper presented at the "<u>Regional Meeting on Environment Statistics and Accounts</u>, and Evaluation of the ESIAP Project", <u>April 2010</u>.

<sup>&</sup>lt;sup>13</sup> UNESCWA 2010. Final report of the Regional Meeting on Environment Statistics and Accounts, and Evaluation of the ESIAP Project Beirut, Lebanon 07-09 April 2010. E/ESCWA/SD/2010/?

### 3. <u>Coordination with various organizations working on water and environment data:</u> UNSD, MEDSTAT, UNEP, ECLAC.

ESCWA, as regional commission, coordinates with UNSD on environment and water statistics and environmental accounts by providing joint trainings, co-organizing activities, and sharing questionnaires results of global assessment on environment statistics and accounts regarding the regional component.

Regarding the UNSD questionnaire in environment statistics 2008 and 2010, ESCWA reviewed the Arabic translation and followed up and coordinated with member countries on the inquiries and replies.

ESCWA also coordinated with UNSD on the review of member countries of the IRWS and the incorporation of ESCWA comments in the document. ESCWA had provided in Arabic methodological document developed by UNSD such as the "Manual on the System of Environmental-Economic Accounting for Water (SEEAW) and the standard tables in order to assist member countries to better understand and apply the compilations process of water accounts.

An important outcome of the trainings also relates to the adaptation of the SEEAW standard tables in order to take into consideration the regional peculiarities of member states, i.e., to classify underground water resources into renewable and non-renewable; to divide the water supply and use into cooling water and mining water; to divide the industry's aggregates of the standard tables to show mining, oil extraction manufacturing, oil refining, hotels and cafes, constructions, to divide the water received from other economic units into reuse waste water to sewerage, and distributed water, and to include desalinated water.

#### 4. Activities implements in the development Account Project "ESIAP" 2008-2010

#### **Training workshops completed by ESCWA under the project:**

ESCWA, UNSD, MEDSTAT, ECLAC strengthened further their partnerships to implement the planned activities and prepare for training material jointly, which is now available in Spanish and in Arabic.

- 1. ESCWA MEDSTAT II sub-regional training session on the System of Environmental-Economic Accounting for Water (SEEAW), Amman, Jordan, 10-13 March 2008.
- 2. <u>Training Session on the System of Environmental-Economic Accounting for Water (SEEAW) for the Arab Gulf Countries</u>, August 25-28, 2008, Beirut, Lebanon.
- 3. -The joint work of UNSD-ESCWA-ECLAC-MEDSTAT was conveyed to the international World Water Forum, 20 21 March 2009, Istanbul, Turkey March 2009. UNSD organized Topic 6.4 Data for All.
- 4. -Regional Training for Building Capacity on Environmental Indicators for Latin America- Taller Regional de Construcción de Capacidades en Indicadores Ambientales, 7-11, September 2009
- 5. Expert Group Meeting on Environmental Accounting for the ESCWA Region , 14-16 October 2009, convened by ESCWA in collaboration with UNSD, ECLAC.
- 6. <u>Regional Meeting on Environment Statistics and Accounts</u>, and Evaluation of the ESIAP Project Beirut, Lebanon 07-09 April 2010, in collaboration with UNECLAC and UNSD, UNEP, and MedStat.

#### **Technical assistance missions**

Technical assistance missions were proven to be very important for the ESCWA member countries to develop environment statistics, water accounts and environment protection expenditures, and to fill data

gaps and design a work plan for implementation. ESCWA organized the following missions under the project:

- 1. Mission to Jordan, Department of Statistics (DOS), 9 March 2008, in coordination with MEDSTAT and UNSD.
- 2. Mission to Lebanon, Central Administration of Statistics (CAS), 29 August 2008.
- 3. Mission to Oman, Ministry of National Economy (MONE), 30-31 August 2008, in cooperation with UNSD to present the SEEAW and to assess the status of data available and way forward to the Ministry of National Economy, Ministry of Agriculture and Ministry of Regional Municipalities and Water Resources, and other agencies.
- 4. Mission to Egypt, Central Administration for Public Mobilization and Statistics (CAPMAS), 23 November-2 December 2008 with MEDSTAT.
- 5. Mission to, Central Bureau of Statistics (CBS) in Damascus, Syria, 2-4 December 2008 conducted jointly by one staff from ESCWA and two experts from MEDSTAT to follow-up on the status of preparation environmental accounts in Syria.
- 6. A mission to UAE during 8-12 March 2009 to deliver a training workshop on environment statistics in collaboration with the Ministry of Economy of UAE.
- 7. Mission to Egypt LAS "Second Meeting of Technical, Scientific, Advisory Committee to Council of Arab Ministers of Water". Mission to Egypt LAS "Second Meeting of Technical, Scientific, Advisory Committee to Council of Arab Ministers of Water". 24-26 January 2010 to respond to the recommendation of the "EGM on Environmental Economic Accounting for the ESCWA Region" October 14-16, 2009 on promoting the System of Environmental Economic Accounting (SEEA) at ministerial and high level policy-makers.
- 8. Mission to Jordan DOS by Expert from Statistics Netherlands, 8-11 February 2010 to validate existing data and complete the monetary accounts for water tables i.e. table 5.5, 5.6 and 5.7 of SEEAW<sup>(14)</sup>.
- 9. Mission to Egypt, CAPMAS from Mexico Expert, 10-13 April 2010. Information from several sources related to SEEAW tables was compiled, physical tables completed and some preliminary indicators were derived. In June 2010, Denmark as part of twining project, agreed with the CPAMAS to pursue the accounts and to develop waste accounts and emission as part of Environmental accounts given that Egypt has advanced significantly in water accounts. This indicates that our organization in cooperation with sister organizations and countries are building on each others results to develop more elements of the environmental accounts
- 10. Mission to Bahrain CIO, 2-6 May 2010 to review and evaluate the status of pilot water accounts (water physical supply and use, monetary accounts and emission accounts) with main stakeholders and to develop a plan for Environmental Protection Expenditure.
- 11. Mission to Yemen Central Statistics office 21-24 June 2010, to provide training on Water and Environment Statistics and Water Accounts and application to the ESIS (ESCWA Statistical Information System) on environment and water modules. Participants from NSO, Water Ministry and Environment Authority from Yemen and Sudan participated. ESCWA provided one laptop with the ESIS application to each of the CSO Yemen, Ministry of Water and Ministry of Environment.
- 12. Mission to Oman planned for September 2010 to develop further water accounts and environmental protection expenditures.

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<sup>&</sup>lt;sup>14</sup> Table 5.6 and table 5.7 are also part of the Environmental Protection Expenditure Accounts (EPEA) – cf. EC 2002.

#### **Study Tours**

- 1. Officials from Yemen, Palestine and Iraq, ESCWA member countries affected by conflict, followed a fellowship for one week in the department of Statistics in Jordan from 16-18 march 2008 to build ther capacity on the preparation of surveys on environment and water, and the compilations procedures as well as the data analysis and reporting.
- 2. Given the priority of Climate Change and the relation between energy and environment statistics in this regards, ESCWA offered a mission to Sudan in September 2009 to assist ministry of petroleum and statistical office to compile energy date and relate energy and environment. ESCWA, in collaboration with UNSD also provided fellowships to three countries from Statistical Offices and Ministries of Energy (Lebanon, Sudan, Yemen) to receive training in Turkey on compiling monthly data on oil statistics where information on oil production and consumption is required to estimate CO2 emissions.
- 3. In June 2009, Egypt (CAPMAS) was offered a fellowship to participate at the training in ECLAC and to visit the Statistics Institute of Chile to meet with eh environment statistics department staff.
- 4. Omani and Bahraini delegates conducted a study visit to Tunisia Institute of Statistics from 7-9 June 2010 as a great opportunity for ESCWA member countries to share experience with Tunisia on water accounts since it is a subject of high priority in the region countries that will help in integrated water management resource. The MedStat expert had put us in touch with the water accounts experts in the Institute and proposed that the Institute share experience with ESCWA member countries.
- 5. A study visit to Iraqi delegates will be conducted in September in TurkStat on water accounts.

#### **Publications**

ESCWA published several publications and reports including:

- 1. Framework for Environmental- Economic Accounting for the ESCWA Region 15
- 2. Environmental Expenditures in Jordan in Arabic <sup>16</sup>
- 3. The UNSD manual "SEEAW Part I" and the standard tables; in Arabic 17
- 4. General and Specific Surveys on Water Accounts in the Arab Countries in Arabic
- 5. The IRWS manual by UNSD to be translated into Arabic is under preparation
- 6. The Environmental and Sustainable Development Indicators of Priority in the Arab Region which is a joint work with UNEP and the League of Arab Stat is under preparation

#### **Database, Docubase and networks**

ESCWA promoted the project by developing the network and the docubase on the Environment Statistics, Indicators and Accounts Project (ESIAP) website which can be accessed through: <a href="http://www.escwa.un.org/esiap">http://www.escwa.un.org/esiap</a>. The website was launched during the opening of the sub-regional workshop on water accounts in the presence of high officials from the statistical offices and the ministries of water in Lebanon and the Gulf states. The Network members are already consulting the docubase and exchange ideas and share experience on issues in the field of environment statistics and accounts.

The inter-regional networking was enhanced, through active participation ESCWA in the preparation of training material of the water accounts workshop in Santiago in June 2009 and the participation of delegate from ESCWA country to ECLAC's training on to share experience with Latin American representatives in the meeting, and with officials at the National Statistics office in Chile to discuss the

<sup>&</sup>lt;sup>15</sup> UNESCWA. 2009. Framework for environmental economic accounting in the ESCWA region. English. 61 pages. E/ESCWA/SD/2009/3.

<sup>&</sup>lt;sup>16</sup> UNESCWA. Environmental Expenditures in Jordan. . 56 pages. Arabic E/ESCWA/SDD/2009/WG.4/3

<sup>&</sup>lt;sup>17</sup> The UNSD Manual on the System of Environmental-Economic Accounting for Water (SEEAW). Part. I. Arabic. 2008. 112 pages. http://css.escwa.org.lb/sd/1097/SEEAW Part1 Ar.pdf

programme of environment statistics and find ways of collaboration. Chilean representative participate at the EGM

The ESIS<sup>©</sup> database had been improved and updated<sup>18</sup>. http://esis.escwa.org.lb/. Modules on Environment and Water have been updated. Web-based application and Windows application have been tested inhouse. The application installed on laptops with modules on environment and water distributed to three countries and training provided upon request..

ESCWA kept the maintenance of the Docubase which is a content management system based on a documentary approach. The objective of the archive is to make publications on environmental statistics, indicator and accounts and related themes available to the Arab region and interested groups.

#### 5. Conclusion

The funds provided by the development account project allowed for the capacity building of member states in the development of Environmental-Economic Accounting and mainly SEAAW. The regular budget of the Statistics Division at ESCWA allocated for the Energy and environment Statistics is very limited and should be complemented by extra budgetary funds.

The results of the project are being shared with the European Environment Agency and Eurostat to coordinate further activities on SEEA. ESCWA and ECLAC are seeking more funds for a phase 2 project to develop environmental accounts on waste, emissions, energy and fisheries, depending on counties priorities.

In addition, the cooperation and coordination with UNSD, UNEP, ECLAC and MEDSTAT was very useful in using the resources more efficiently and avoiding duplication. Additional activities were implemented with the money saved from joining efforts between organizations.

The cooperation enhanced the intraregional and inter-regional cooperation. The connections expanded beyond the ESCWA region to include Tunisia, Turkey, Mexico, Austria, Netherlands, Australia, and Chile.

Environmental accounting is becoming high on the agenda of ESCWA member countries. Some member countries will be producing reports on water accounts that can be used by policy maker in better management of water resources in the region.

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<sup>&</sup>lt;sup>18</sup> The ESCWA Statistical Information System ESIS<sup>©</sup>. http://esis.escwa.org.lb

#### Annex I

## WORK PLAN FOR ENVIRONMENT STATISTICS, INDICATORS AND ACCOUNTS FOR THE ESCWA REGION 2010-2013 (3 YEARS AVERAGE) TIME FRAMES FOR EACH PHASE VARY WITH EACH COUNTRY

Phase I: Institutionalize and Coordinate National Statistical Information on Environment and Water for Integrated Resource Management and Evidence-Based Environmental Policy	Time Frame	Geographic Frame
Establish or activate a national working team that includes representatives from the National Statistical Office, Environment and Water ministries and all relevant sectors. The task of this team is to coordinate and follow-up on environmental indicators and accounts according to national priorities and following a consensual institutional order and a documented mode of operation (the sample format is up to the state as an internal affair) with a focus on national statistical offices and their role. The main tasks of the national working team include the following:	1 yr	National Supported by Regional and International
1. Preparing and adopting an action plan for the national working team.	1 month	National
2. Assessing the current status on environment and water statistics and indicators that are available from all sectors (national data list).	2 months	National Subnational
3. Agreeing on organizational and technical aspects of data management and discussing the methodological issues between statisticians and ecologists and water experts.	1 month	National
4. Undertaking a diagnosis of the current national statistical information system (NSIS) for monitoring and evaluating in support of the integrated resource management and environmental policy in the country. Developing accordingly a 3-year plan for NSIS for environment and water within the framework of a national environmental information network and gradual implementation corresponding to plan.	6 months to 3 yrs	National Supported by Regional and International
5. Comparing the available data with that required for environmental indicators agreed upon with the League of Arab States and the United Nations Environmental Program (UNEP) following the methodology concomitant with the collection of indicators (use the English version prepared by UNEP until the complete Arabic translation finishes, or use the simplified Arabic version prepared by the Kingdom of Saudi Arabia) and identifying gaps and taking into consideration MDG7 indicators and its constituting variables	2 months	National Supported by Regional and International

Phase II: Develop a Strategy for Environment and Water Statistics, Indicators and Accounts Supported by Legislation in Close Consultation with National Statistical Offices and Relevant Stakeholders	Time Frame	Geographic Frame
Establishing high-level committee to set national priorities in environment and water and provide guidance on strategy	6-12 months	National
2. Preparing and adopting a national strategy for the development of a system of production, description and dissemination of environmental statistics, indicators and environmental accounts within the national statistical systems and related statistical plans.	6-12 months	National
3. Preparing and adopting a national program for environment statistics, indicators and accounts with appropriate coordination mechanisms for implementation	6-12 months	National
4. Analyzing the mandates and legal situation, and work towards updating and reinforcing legislations on statistics and environmental indicators, and integrated economic accounts especially those concerning water and environmental protection expenditures.	6-12 months	National
5. Implementing the most recent international classifications, particularly the ISIC and SNA in the framework of Integrated Accounts tables	6 months to 3 yrs	National
6. Emphasizing environmental accounts and in particular water accounts as important topics to be adopted by the Technical Secretariat of the League of Arab States and ESCWA Statistical Committee and in the curricula of colleges and universities.	1 yr	Regional

Phase III: Develop Water Accounts as per the SEEAW in Parallel	Time Frame	Geographic Frame
with the Strategy for Environment and Water Statistics and the National Information System for Environment and Water Statistics	1 yr	National
1. <b>Determining data needs</b> through consultation with users and producers mainly NSO and national water administrations and identifying key water policy questions (compare the available data to the required SEEAW data list).		
2. <b>Assessing available data</b> and identifying data gaps and possibility of acquiring them: ranging from the availability from non-specific partners to unavailable, and the ways to acquire them		
3. <b>Prioritizing data</b> by: data items, geographic region, reference period, industries or households, and water resources.		
For the standard tables filling, consider the data availability, simplicity of calculation, and the importance of detailed data:		

	Tables of water accounts						
		Availability	Simplicity	Technical sup required	port	Importar	nce of detailed data
	Asset Accounts tables						
	Supply and Use tables						
	Emissions tables						
	Hybrid tables (Physical and Monetary)						
4.	Involving specialists like interpretation and understand			s in the			
5.	Completing the available International Recommendation						

Phase IV: Support and Training (2010-2013 years)	Time Frame	Geographic Frame
1. Requesting support through consultation and direct contact with experts (ESCWA, United Nations Statistics Division and the European Union and experts who have visited countries in advisory missions).	3 yrs	National Regional International
2. Requesting support from the United Nations through advisory missions to experts in the field of statistics and environmental accounts.	1 yr	National Regional International
3. Checking and validating the data and correcting the tables.	1 yr	National
4. Creating a technical team with ESCWA to follow the work of countries on environmental accounts and to make recommendations.	1 yr	National-ESCWA
5. Providing training for professionals on statistics and environmental accounts in cooperation with the Arab Institute for Planning	1 yr	Regional

Phase V: Disseminate and Exchange Experiences (2010-2013)	Time Frame	Component
1. Publishing pilot tables and analysis reports on the use of water accounts in the integrated management of water resources and reviewing the problems and providing solutions.	3 yrs	National
2. Exchanging the experiences/case studies between regional countries (Jordan and Egypt with countries such as Austria, The Netherlands and Mexico).	1-3 yrs	Inter-Regional
3. Sending study missions to the countries that are most advanced in this area (Turkey, Tunisia and Jordan).	1 yr	Intra-Regional