## TWINNING CONTRACT

## **AM/14/ENP/ST/15**

# Strengthening of the National Statistical System of Armenia – Phase II



## **MISSION REPORT**

on

## **Water Accounts**

## Activity 6.5: Compilation of water accounts II

Mission carried out by

Mr. Stefano Tersigni, Istat Ms. Simona Ramberti, Istat

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Final version



National Statistical Service Republic of Armenia





## Expert contact information

Stefano Tersigni Istat Address Viale Liegi, 13 00198 Rome - Italy Phone +390646737511 Email stefano.tersigni@istat.it

Simona Ramberti ISTAT Address Viale Oceano Pacifico,171 00144 Rome - Italy Phone +390646734322 Email ramberti@istat.it

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## **List of Abbreviations**

EU	European Union
ISTAT	Italian national institute of statistics
NSSRA	National Statistical Service of the Republic of Armenia
JQ-IW	OECD/Eurostat Joint questionnaire on inland waters
<b>PWFA</b>	Physical Water Flow Accounts
PSUT	Phisical Supply and Use tables
SEEAW	System of Environmental-Economic Accounting for Water
WA	Water Accounts
WR	Water Resources
WS	Water Statistics

## 1. General comments

This mission report was prepared within the Twinning Project "Strengthening of the National Statistical System of Armenia – Phase II". This was the fifth activity in component 6 and the actions planned for this activity were carried out as scheduled.

The purposes of the mission were:

- o Continuation of compilation of water accounts
- o How to integrate water accounts in national accounts
- o To involve relevant stakeholders in the discussions

The MS experts would like to express their sincere thanks to all officials and individuals met for the kind support and valuable information which they received during the stay in Armenia and which highly facilitated their work. The views and observations stated in this report are those of the MS experts and do not necessarily correspond to the views of EU, NSSRA, Istat or Statistics Denmark.

## 2. Assessment and results

### 2.1 Continuation of compilation of water accounts

The first purpose reached in this activity was the presentation by NSSRA staff of the work conducted after the previous mission with Italian experts from Istat.

In particular all tasks requested by Istat have been completed.

In detail, NSSRA and the MS experts had a talk on the updated version of the tables:

- JQ-IW (OECD/Eurostat Joint questionnaire on inland waters) tables;
- physical and supply tables for water and emissions to water;
- hybrid supply and use tables;
- matrix of flows of water within the economy.

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During the analysis of the table "Physical use table", the discussion was particularly pointed to the analysis of the item "urban runoff" and "abstraction from soil water", having always in mind the international literature and glossary, in particular based on the SEEA-Water manual. An interesting and in-depth discussion was developed on some relevant points, necessary to have a better overview of country specific features.

For this reason, it was decided to split some columns of the tables, in order to give a better overview of the Armenian situation, analyzing with more detail the NACE activities. In particular Fishing and aquaculture, Mining and quarrying, and Manufacture and food products.

## 2.2 How to integrate water accounts in national accounts

Hybrid supply and use tables, that are one of the final steps of this twinning project, juxtapose the standard of System of National Accounts supply and use table with the corresponding physical tables. In so doing, the physical and monetary data share the same structure, classifications and concepts.

During the analysis of these tables it has been established that all the required macroeconomic information will be produced by the National Account Division of NSSRA as part of its standard activities.

#### 2.3 Involvment of relevant stakeholders in the discussions

During the working days, a stakeholder from Ministry of Agriculture was invited by the NSSRA staff to participate in the discussions. This made possible, as first important result, an in-depth analysis on abstraction from soil water, which includes water use in rain-fed agriculture, which is computed as the amount of precipitation that falls onto agricultural fields. The excess of water, that is, the part that is not used by the crop, is recorded as a return flow into the environment from rain-fed agriculture. Such information it is important in the assessment of water abstraction from the environment (physical supply and use tables).

#### 2.4 About the dissemination of WA

One of the topics discussed in the meeting days was the form that the dissemination of this information would have to give an effective added value in the reading of the territory.

The integrated analysis of physical and monetary aspects of water represents, in fact, an important innovation for Armenian official statistics.

Besides the production of the standard tables, enriched with additional columns required to highlight local situations, as already said, and the construction of the indicators, that are a key moment of synthesis, a communication channel is therefore required. This will give prominence to this important goal, taking into account of the different layers of information needs to be met (research, policy, statistics, standard users, people, students).

The data dissemination must therefore be structured so that these needs are satisfied.

As a first output an editorial product has been discussed, either in electronic and paper format, which in a draft summary should contain the following chapters: introduction, glossary, methodology, text and tables, maps, graphs, and conclusions. The main tables and maps will be included in the appropriate chapter, but other auxiliary ones in annexes, which will contain anything not specifically commented in the previous parts, but that represent an aid to complete the reading of the phenomena. Where possible, it was suggested to do a recall to international comparisons and analysis in time series.

## 3. Conclusions and recommendations

#### **Conclusions**

- NSSRA did a good work in line with the recommendations and the road map fixed at the end of the previous Istat mission in Yerevan.
- The analysis of Water Statistics (WS) and Water Accounts (WA) tables made in these days clarified some figures already filled in, in reference with international statistical standards (UN, Eurostat).
- Some specific features were underpinned to determine the best way to exploit the information collected in Armenian database for the compilation of WS and WA tables. In particular, we focused on the water use in agriculture in Armenia.
- We had a profitable discussion on the calculation of the indicators starting from WS and WA tables.
- It emerged the convenience to focus on some country specific phenomena.
- We discussed on the dissemination of WS and WA products.
- As usual the teamwork was, once again, very fruitful, in accordance with the twinning project goals, sharing experiences and results.

#### Recommendations

- To persist in analyzing in-depth official statistical manuals in particular the SEEA-Water, basic condition to a successful compilation of the Physical Water Flow Accounts and Hybrid supply and use tables.
- To continue the checking of data filled in the tables and their consistency with the requested information.
- In case of doubts or uncertainties NSSRA staff has to contact Istat experts, in order to have the necessary support and, overall, to share problems and solutions.
- To be aware that methodology and indicators in the future will need to be regularly assessed by NSSRA and key stakeholders, in order to make sure that users' needs are met.
- To set up a system of regular meetings with key stakeholders to ensure future sustainability (and further development) of data sources.

Actions needed for moving forward as well as for preparing the next mission:

Action	Deadline	Responsible person
Final performance of the JQ-IW, Physical and Hybrid Sup-	10 may 2017	NSSRA
ply and use tables and matrix of water exchanges		
Calculation of the indicators derived by the Physical and	15 may 2017	NSSRA
Hybrid Supply and Use tables		
Discussion with Istat on critical aspects arisen during the	10 may 2017	NSSRA
production of indicators		
In addition to the standardized indicators, design additional	15 may 2017	NSSRA
indicators/tables referred to country specific features		
Production of metadata referred to all variables that will be	15 may 2017	NSSRA
disseminated		
Review of the tools and mechanism of data collection, par-	20 may 2017	NSSRA
ticularly for accounting of water expenditures		
Prepare a draft plan for the publication of Water Accounts	20 may 2017	NSSRA
in NSSRA (text, tables, maps, graphs)		

## **Annex 1: Terms of Reference**

## **Terms of Reference**

## EU Twinning Project AM/14/ENP/ST/15

## 27-30 March 2017

**Component 6: Water Accounts** 

**Activity 6.5: Compilation of water accounts II** 

#### 0. Mandatory results and benchmarks for the component

#### Mandatory results:

• Water account compiled (July 2017)

#### Benchmarks:

- Inventory of data sources (availability, information flow) for water accounts defined (April 2016)
- Methodology for water accounts developed (January 2017)
- Meeting with stakeholders held (July 2017)
- Water accounts compiled (July 2017)
- Staff of NSSRA trained on issues related to the water accounts compilation (July 2017)

#### 1. Purpose of the activity

- Continuation of compilation of water accounts
- How to integrate water accounts in national accounts
- To involve relevant stakeholders in the discussions

#### 2. Expected output of the activity

- Work on compiling water accounts done
- o Integration of water accounts with national accounts identified
- o A lining up of work programme for the next and last activity
  - o 6.6 "Follow-up on achievements and recommendations for the future" is scheduled to 22-25 May 2017

### 3. Participants

#### **NSSRA**

Component leaders

- Mr. Yurik Pogosyan
- Ms. Nelli Baghdasaryan

#### Other staff from the division

- Ms. Naira Mandalyan
- Ms. Ani Hambardzumyan
- Ms. Astghik Podmogova

#### Other staff from NSSRA

- Macroeconomic Indicators and National Accounts Division
- Agriculture Statistics Division
- Industry Statistics Division
- Finance Statistics Division
- Trade and Other Services Statistics Division
- Construction statistics division will also be invited.

## Other stakeholders taking part in the activity

#### Staff from

- RA Ministry of Nature Protection
- RA Ministry of Economy
- RA Ministry of Agriculture
- RA Ministry of Finance
- RA Ministry of Healthcare
- RA Ministry of Territorial Administration and Development
- Commercial organizations
- International organizations (UNDP, USAID, WB etc.)

will also be invited

#### MS experts

Mr. Stefano Tersigni, Expert, Istat Ms. Simona Ramberti, Expert, Istat

# **Annex 2: Programme for the mission**

Time	Place	Event	Purpose / detail
Monday (27/3) (start at 11:00)	NSSRA	Meeting with BC Component Leader and BC Experts	To discuss the programme of the week  Assessment of situation and presentation by BC of the work conducted since last mission
Tuesday, morning (28/3)	NSSRA	Meeting with BC Component Leader and BC Experts	Presentation of water monetary accounts and tables, experiences of other countries
Tuesday, afternoon (28/3)	NSSRA	Meeting with BC Component Leader and BC Experts	Define the indicators of water monetary accounts, discussion of methodological approaches of calculation and registration.
			Opinion assessment on the field in regards with comparability and relevance of information owned by NSSRA based on previous discussions and tables provided to MS Experts.
Wednesday, morning (29/3)	NSSRA	Meeting with BC Component Leader and BC Experts and stakeholder(s) from RA Minis- try of Nature Protection	Discussions continued, with participation of stakeholders from line ministries, in particular RA Ministry of Nature Protection
Wednesday, afternoon (29/3)	NSSRA	Meeting with BC Component Leader and BC Experts, stake- holders from	Discussions continued. Choosing final format of monetary tables. Defining tool kits and mechanisms of filling in the tables.  Recommendations on tool kits and mechanisms of collectiong the financial indicators.
Thursday, morning (30/3)	NSSRA	Debriefing with BC Project Lead- er	Conclusions and decisions and their consequences for the next activity and the implied work programme for BC Experts

## **Annex 3: Persons met**

#### NSSRA:

- Mr. Stepan Mnatsakanyan, President of the NSS RA
- Ms. Anahit Safyan, Member of the State Council on Statistics of RA
- Mr. Yurik Pogosyan, Member of the State Council on Statistics of RA
- Ms. Nelli Baghdasaryan, Head of Social Sphere and Natural Protection Division
- Ms. Naira Mandalyan, Leading Specialist, Social Sphere and Natural Protection Division Ms. Ani Hambardzumyan, Junior Specialist, Social Sphere and Natural Protection Division
- Ms. Astghik Podpomogova, Statistician, Social Sphere and Natural Protection Division
- Ms. Nadezhda Astvatsaturova, Chief Specialist, Macroeconomic Indicators and National Accounts Division

#### **External stakeholders:**

Mr. Gagik Manucharyan, Head of Division of Environmental Protection, RA Ministry of Nature Protection

### **RTA Team:**

Mr. Peter Bohnstedt Anan Hansen, Resident Twinning Adviser

Ms. Anush Poghosyan, RTA Language Assistant