

# **Twinning Project**

## **“Strengthening of the National Statistical System of Armenia – Phase II”**

### *Activity 6.1*

*Assessment of the current status on water statistics and water accounts*

### **A short speech on Water Accounts**

Stefano Tersigni

Simona Ramberti

Giovanna Tagliacozzo

Donatella Vignani

Istat – Italian National Institute of Statistics  
State of Environment Division  
Water resources and climate Unit

Yerevan, 1-4 february 2016

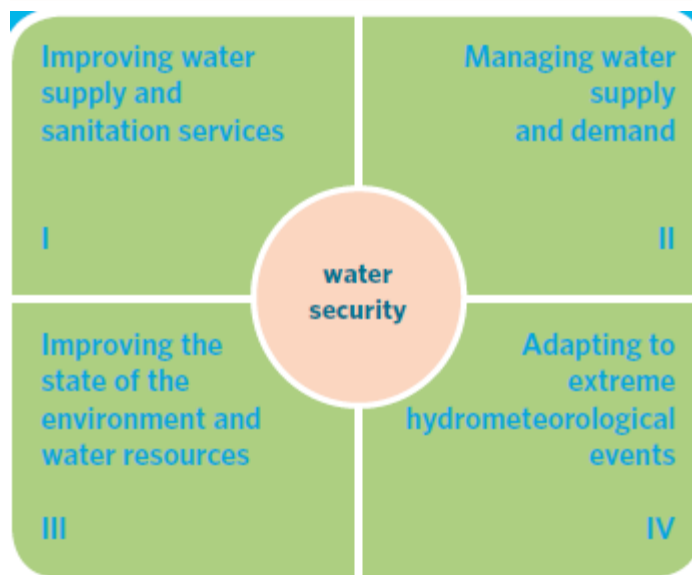


# Background

Policies for the sustainable management of water resources are a **priority** in the European and national agendas. Current goals at European level are oriented to improving knowledge about the reference situation in terms of water availability and demand.

**Water is essential for achieving equitable and sustainable social and economic development!**

## What scopes for water policies?



**Water is a scarce resource and should be used sustainably!**

## What is happening?

Growing pressure on water resources due to:

- Increasing demand of water from all sectors: civil, agriculture, industry, energy, tourism
- Climate Change effects

## What we have to do?

- Reduce water stress
- Increase efficient use of water resources
- Reduce water losses
- Improve quality of water resources

## What Official Statistics should do?

Provide high quality statistical information:

reliable, consistent, timely,  
comparable, accessible, “regional”



# How to describe water resources (WR)

WHO?

Environmental statisticians, water experts, national accountants, hydrologists, policy-makers need to be able to communicate using a common language.... need to work together in order to make this happen.

HOW?

Water Statistics (WS) and Water Accounts (WA) are part of an integrated programme:

- ⚡ WS provide the list of variables and indicators related to water
- ⚡ WA measure the interactions between the hydrological system and the economy



**PROMOTE THE USE OF ENVIRONMENTAL ACCOUNTING AS A KEY ELEMENT OF ENVIRONMENTAL ASSESSMENT AND POLICY SUPPORT**



# What are Water Accounts?

WA were developed with the objective of **integrating economic and hydrological information** permitting a consistent analysis of the contribution of water to the economy and the impact of the economy on water resources.

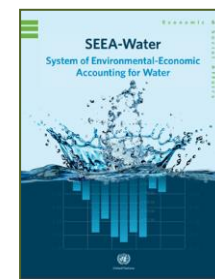
The System of Environmental-Economic Accounting for Water (SEEA-Water) is a satellite system of the System of National Accounts (SNA, United Nations 2008) that is the internationally agreed standard set of recommendations on how to compile measures of economic activity.

SEEA-W consists on a set of standard tables and the main categories of accounts are:

- ✓ Assets accounts
- ✓ Physical supply and use tables and emission accounts
- ✓ Hybrid and economic accounts

**SEEA-Water is an information system that feeds knowledge into decision-making process** assisting policy makers in taking informed decisions on:

- ❖ allocating water resources efficiently
- ❖ improving water efficiency
- ❖ understanding the impacts of water management on all users
- ❖ getting the most value for money from investment in infrastructure
- ❖ linking water availability and use
- ❖ providing a standardized information system which harmonizes information from different sources, is accepted by the stakeholders and is used for the derivation of indicators





## Asset accounts

Give information on the stock of water at the beginning and end of an accounting period

## Physical water supply and use for water flows and for emission

show how the use of water resources can be monitored in physical terms, describe the pressure that the economy puts on the environment in terms of emissions into water.

## Hybrid and economic accounts for activities and products related to water

The *hybrid accounts* study the economy of water, that is to describe in monetary terms the supply and use of water-related products and to identify:

- a. the costs associated with the production of these products
- b. the income generated by their production
- c. the investment in water-related infrastructure and the costs to maintain that infrastructure
- d. the fees paid by the users for water-related services, as well as the subsidies received.



- ✓ Water is becoming a very important issue for many countries !
- ✓ However, the information necessary to make the right policy decisions is fragmented and inconsistent.
- ✓ Water Accounts, based on the United Nations standards, provide countries with the conceptual framework to organize their data in a way that it can be transformed into valuable information for the decision making process at national or regional levels.
- ✓ Water Accounts provide different signals that are essential for policy analysts to understand how the behavior of the society, and its economic activities, are affecting water resources through time. With these elements projections can be made for the future of water resources.
- ✓ Water Accounts allow to identify areas of social, economic or environmental stress and to monitor relevant policies.





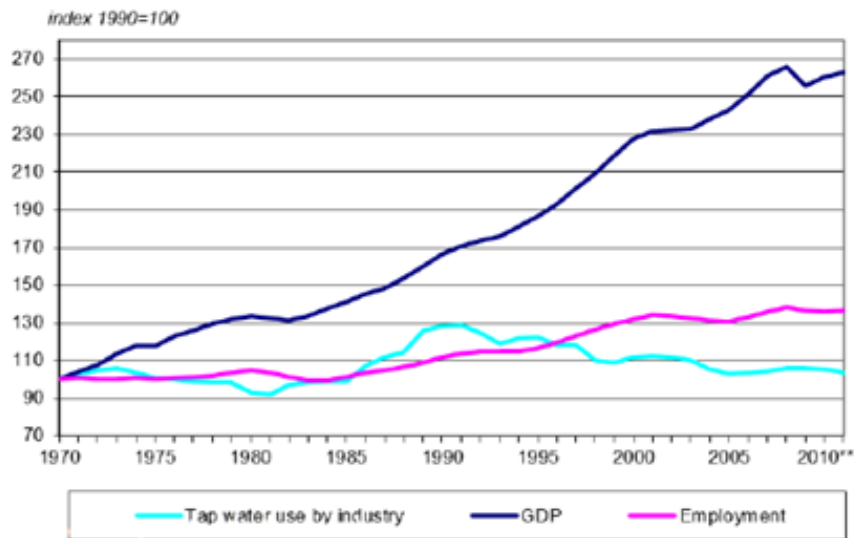
## ❑ Is there decoupling between water use and economic growth?

We can use the comparison among economic and environmental data relating to GDP, employment and volume of water used by industry for production.

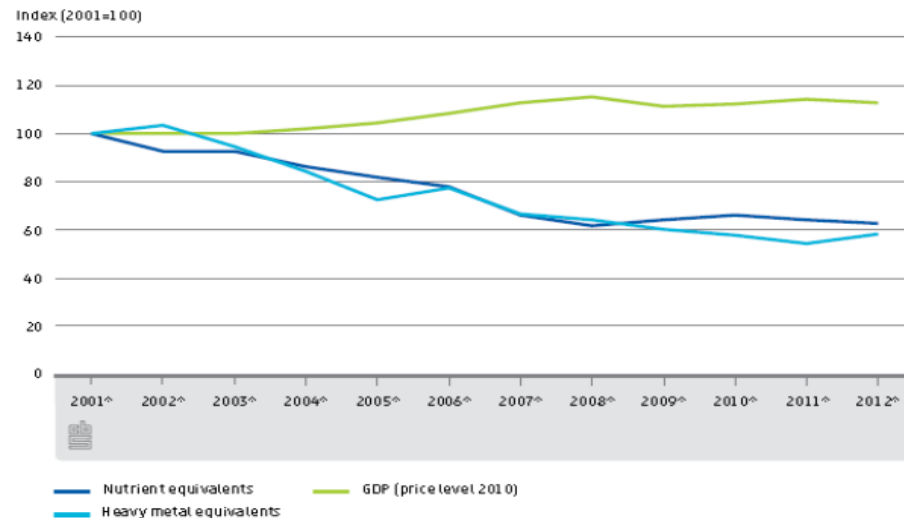
## ❑ Are there regional differences in emission intensity ?

We can use data to analyze, for example, emission intensity of heavy metals or nutrients (quantities of emissions per million euro) and GDP.

### Volume GDP, employment and tap water used for production – Statistics Netherlands



### Emission to water and GDP – Statistics Netherlands

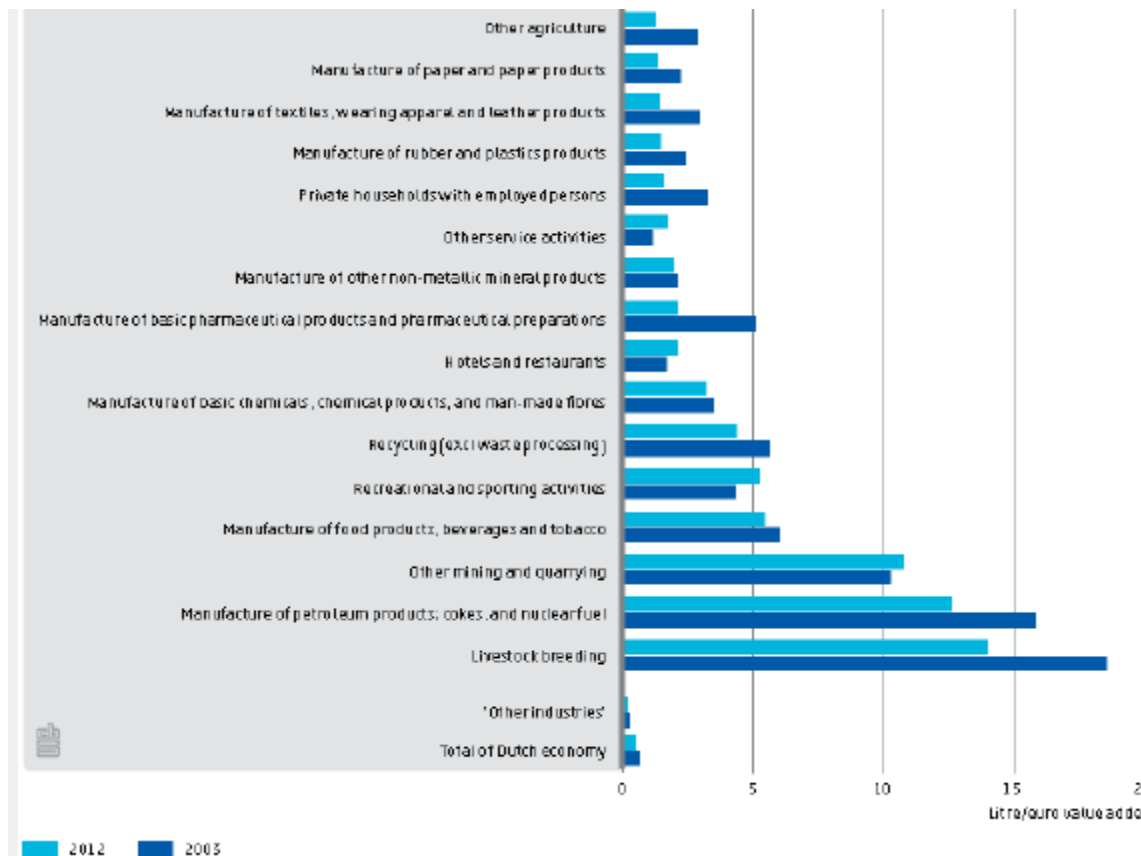






## ❑ What are the most important users of water ? Is their water efficiency improving ?

We can analyze the *water use efficiency* by ranking industries according to the highest use intensities (water/GDP) for groundwater



Industries with the highest tap water (drinking water) use intensities  
Statistics Netherlands



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**IN PROGRESS**



*Thank you for your attention*

*Stefano Tersigni (stefano.tersigni@istat.it)*

*Giovanna Tagliacozzo (tagliaco@istat.it)*

*Simona Ramberti (ramberti@istat.it)*

*Donatella Vignani (vignani@istat.it)*

*Socio-demographic and Environmental Statistics Directorate  
State of Environment Division - Water resources and climate Unit  
Istat - Italian National Institute of Statistics*