



## Water Accounts in Israel

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### Major Goals of the Water Account

- Establish an economic and environmental database of water, while gathering and presenting information regarding:
  - Sources and uses of different types of water
  - Water expenditure by industry
  - Abstraction, distribution and other water costs
  - Product of the water industries
  - Pollution by industry

### Major Milestones in Developing the water account in Israel

- Study visit in the Spanish Statistical Office
- Adapting the NAMEA tables to the Israeli system and needs
- Mapping data sources and water infrastructure
- Establishing a steering committee with the Water Authority
- Construction of a technological system and database
- Collection of data and data processing
- Quality Assessment
- Final Account
- [Period 2006-2010](#)

# Database Construction

## Principles

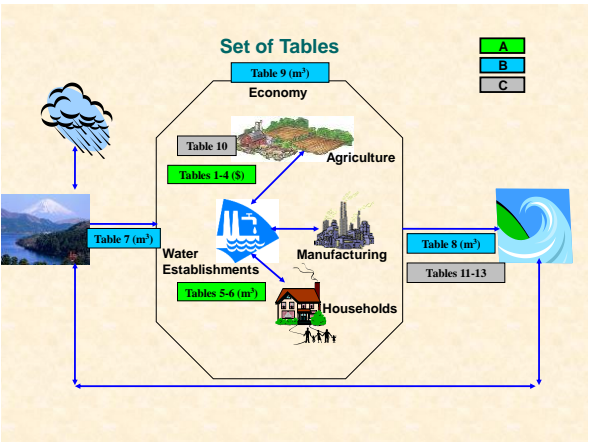
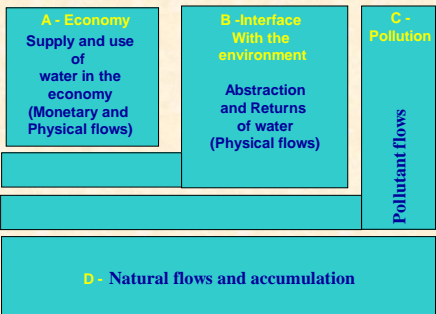
- High resolution for variables, used for background calculation
- Definition of algorithms for variables' calculation by industries, suppliers and user sectors

## Learning from:

- Previous research and other countries' experiences
- Pilot of data collection
- Cooperation with colleagues from IT Department (ICBS)

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# NAMEA Methodology



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Additional requests of the steering committee

- SEEA Major tables- abstraction and supply
- Abstraction and supply by supplier and user
- Water prices vs. costs
- water consumption in municipalities

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Data sources

- Water Authority
  - abstraction and use of water by source, types and user sector
  - taxes paid by water abstractors
- CBS
  - Municipalities' data regarding economic variables
  - Production data by industry
  - Various Coefficients for calculated variables
  - Survey in the water and water related industries (questionnaire and administrative)
  - Waste and wastewater survey in the manufacturing industries
- Other government agencies, such as the MoEP

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Survey in the water and water related industries

- Sampling stratum:
  - water abstractors
  - reclamation plants
  - agricultural cooperatives
  - wastewater treatment plants
  - water and sewage corporations
- The CBS Business Register was used as a framework for sampling (classification changed)

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## Handling Missing data

- Surveys (water and manufacturing industry)
- Completing data from administrative sources (financial data)
- Using distribution of similar “populations”
- Using local or international coefficients (pollution)
- Interpolations (close neighbor, previous years)

## Technological system

- Software tool developed for updating the data
  - input from questionnaires
  - input from administrative files
- Monitoring system for the incoming data
  - data quality tests
  - cross-checking of data from different sources

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## Technological system (continued)

- Survey control tool
  - monitor establishments’ reporting status
  - Coordination between data from different screens and with other systems in CBS

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### Challenges along the road

- Adjusting the questionnaire to establishments with various activities
- Enhancing cooperation with private establishments and government agencies
- Methodology for calculation of missing coefficients
- Difficulties in obtaining pollution data
- Turnover of experts and staff

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### The Way forward

- Publish water accounts on an annual basis and closing the existing gap
- Including data of pollution by industry
- Data by water basin
- Natural cycle data
- SEEA?

### Tips

- You need to start somewhere
- Document your data and systems
- Prefer a computer system over excel files
- Expect a long drive (turnover, technological and methodological developments)
- Cooperation and coordination with stakeholders are highly important

*Thank you!*