Water and agriculture information systems for IWRM

FAO tools to involve stakeholders in data collection and analysis

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Data and information for IWRM

- IWRM requires a participatory, coordinated and integrated process in order to achieve economic efficiency, environmental sustainability and social equity.

- Data and information of evidence-based decision making is key in IWRM.

- FAO has developed a number of tools and methodologies to collect and disseminate data at different levels.
Water information levels

- National
- Water Basin Level
- Local Community Level
FAO tools to involve stakeholders in data collection and analysis

- **AQUASTAT** – FAO’s Global information system for water and agriculture – Monitors SDG 6.4. – **National and water basin level**

- **WAPOR** – Using remote sensing data for water productivity – **National level**

- Participatory water accounting – **MASSCOTE** – Irrigation district level
• FAO water flagships program. Since 1994.

• Article 1 of FAO’s Constitution “Collect, analyze, interpret and disseminate information related to nutrition, food and agriculture”.

• In 2018, a network of national correspondents was established to promote national stakeholder participation and country ownership of data.
AQUASTAT – Areas of work

• **Data release**: water and agriculture statistics
  - AQUASTAT collects, analyses and provides free access to over 180 variables and indicators by country from 1960.
  - AQUASTAT collects data and monitors target **SDG 6.4 water stress and water use efficiency**. FAO is the **custodian agency** for SDG 6.4. Focal point for SDG 6.4

• **Methods and Standards** – Glossary, methodological guidelines

• **Capacity Development** – extensive training at regional level on the monitoring of SDG 6.4

WWW.FAO.ORG/AQUASTAT
AQUASTAT – Main data base

180 variables:
- 15 geography & population
- 45 water resources
- 40 water use
- 70 irrigation and drainage
- 10 health and environment

WWW.FAO.ORG/AQUASTAT
AQUASTAT – Data collection process (since 2018)

Annual data collection

FAO AQUASTAT QUESTIONNAIRE

AQUASTAT National Correspondent

Quality Control

FAO AQUASTAT database

Standardization

Dissemination
Web, publications, Apps

Collaborative data collection
(Int’l Organizations)

Quality Assurance

Coordination between agencies

Country surveys and census

Literature review

Feedback

WWW.FAO.ORG/AQUASTAT
146 National Correspondents Nominated
SDG 6.4.2 – water stress (%) at national level
SDG 6.4.2 – water stress (%) at basin level
WaPOR: Water Productivity from Remote Sensing
Near-real time (every 10 days) data on biomass development and water consumption (actual evapotranspiration), in addition to agro-climatic parameters on a daily time step (reference ET and precipitation).

Spatial resolution ranges between 250 m and 30 m
MASSCOTE - Mapping System and Services for Canal Operation Techniques

The tool consists in a systematic way for collection data and information and diagnosing the performance of irrigation system improve the service to users.

Thank you!

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