



Statistics on Water (Introduction)

UNSD

Workshop on environment statistics
(Addis Ababa, 16-20 July 2007)



Environmental Issues

- 2.5% of world's water is fresh water
- 1.1 billion people lack access to improved water supply
- 2.4 billion to improved sanitation
- Competition for water resources in many countries



Policy and Management Issues

- Covenant on Economic and Cultural Rights
- 2003 International year of fresh water
- International Decade on Water for life
2005-2015
- Access to basic sanitation and fresh water
<http://millenniumindicators.un.org/unsd/mi/>
- Integrated Water Resources Management



Commission of Sustainable Development Water Indicators

Theme: FRESH WATER

Sub-theme: WATER QUANTITY

Indicators: PROPORTION OF TOTAL
WATER RESOURCES USED
WATER USE INTENSITY BY
ECONOMIC ACTIVITY

Sub-theme: WATER QUALITY

Indicators: Biochemical Oxygen Demand in water
bodies
PRESENCE OF FAECAL COLIFORMS IN
FRESHWATER
Wastewater treatment

Theme: POVERTY

Sub-theme: SANITATION

Indicator: PROPORTION OF POPULATION USING IMPROVED SANITATION
FACILITIES

Sub-theme: DRINKING WATER

Indicator: PROPORTION OF POPULATION USING AN IMPROVED WATER
SOURCE



MDGs

- No freshwater indicator. Adding a freshwater indicator is under consideration.
- Proportion of population with access to an improved water source, urban and rural
- Proportion of population with access to improved sanitation, urban and rural



NEPAD/AEO-2 Indicators

To be found in chapters on

- Socio-economic issues
- Land
- Atmosphere
- Fresh water
- Wetlands
- Biodiversity
- Human settlement
- Human health



NEPAD

- Internal renewable water resources available per capita or per year
- Fresh water availability for use (household, agriculture, industry, etc.)
- Urban water supply from dams
- Abstraction from boreholes for domestic use in rural/urban settings (percapita yield)
- Annual water use/consumption per capita per day
- % of population with access to safe drinking water
- Improved drinking water coverage - total population
- Number (density) of boreholes per capita unit area (rural)
- % of population connected to public water supply



NEPAD

- Annual withdrawal of ground and surface water as percentage of total available water
- Change in surface water discharge
- Improved drinking water coverage - total population
- Change in recharge rates
- Biochemical oxygen demand (BOD5) for rivers
- Emissions of organic water pollutants (BOD) total/per worker
- Average annual concentrations of total phosphorus in lakes and rivers
- Annual total dissolved solids/sediment flux in lakes and rivers
- Average annual concentrations of total nitrogen in lakes and rivers
- Average change in oxygen levels in lakes and rivers
- No. of people affected by water borne diseases
- Water use per capita
- Improved drinking water coverage - total population
- % of (change in amount/volume) freshwater used for domestic use, irrigation, industry
- Water use a percentage of renewable resources



NEPAD

- No. of people affected (Incidence of) water borne diseases
- Change in No. of water treatment plants
- Change in sewerage/waste disposal & water supply infrastructure
- Annual internal renewable water resources per capita
- Total renewable water resources;
- Annual internal groundwater recharge per capita
- Annual freshwater consumption per cap
- Change in No. of boreholes per unit (pop dependent)



International organizations involved

- UNSD
- UNEP
- GEMS-WATER
- FAO
- HABITAT
- WHO/UNICEF
- UNESCO
- ...



Coordination

Work session on water statistics

Vienna 20th to 22th June 2005

Organized by the Intersecretariat working group
on environment statistics

- IWG-ENV Subgroup on Water Statistics



Methodological Support

- System of Environmental and Economic Accounting for Water (SEEA W) interim statistical standard
- Manual of Water Statistics
- UNSD/UNEP Questionnaire Guidelines
- CSD and MDG Methodology Sheets



Components of water statistics

- Water resources (stocks and flows in the environment)
- Water abstraction / supply / use (flows from the environment to the economy and within the economy)
- Waste water treatment and discharge (flows in the economy and from the economy to the environment)
- Quality of ambient water bodies