

Workshop on Environment Statistics

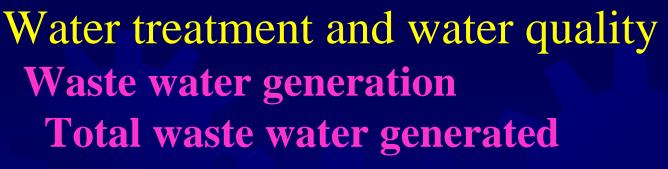
Senegal – Dakar

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- agriculture, forestry and fishing (ISIC 01-05)
- Mining and quarrying (ISIC 10-14)
- Manufacturing Industries (ISIC 15-37)
- Production and distribution of electricity (ISIC 40)
- Construction (ISIC 45)
- Other economic activities
- Households

Waste water treatment

Types of wastewater treatment processes

- 1- Mechanical treatment
- 2- Biological treatment
- 3- Advanced treatment

Table no. W 4b

- 1- Waste water treated in public treatment plants
- 2- Waste water treated in other treatment plants
- 3- Waste water treated in independent treatment facilities
- 4- Non treated waste water
- 5- Total sewage sludge production



- Population connected to waste water collecting system
- Population connected to waste water treatment
- Population connected to independent treatment (septic tanks)
- Waste water treatment plants

 Design capacity of waste water treatment plants



conditions and substances affecting the quality of water

- Physical conditions
- General chemical conditions
- Pathogens
- Oxygen-consuming substances
- Nutrients
- Toxic sub-stances
- Radioactive substances

Water Quality Indicators in some selected Arab Countries

Country	Water quality worldwide ranking	Water quality indicator value
Algeria	104	-0.64
Egypt	63	-0.15
Jordan	119	-1.26
Lebanon	60	-0.11
Libya	85	-0.33
Morocco	121	-1.36
Saudi Arabia	65	-0.18
Sudan	118	-1.06
Syria	7 9	-0.29
Tunisia	99	-0.54

Source: World Water Development Report, World Water Assessment Programmed (WWAP),

Parameters of water quality **Biochemical Oxygen Demand (BOD5) Dissolved Oxygen (DO) Chemical Oxygen Demand (COD) Total Dissolved Solids (TDS) Total Phosphorus Total Nitrogen Faecal Coliform** Chlorophyll-a (Chl-a)

Key water quality parameters for various water uses

Public water supply	Industrial water supply	Agricultural water supply	Aquatic life and wildlife maintenance	Recreation and aesthetics
Coliform bacteria Turbidity Colour Taste-odour Trace metals Dissolved solids Trace organics Chlorides Fluorides Sulphates Nitrates Cyanides Radioactivity	Processing (except foods) pH Turbidity Colour Hardness Alkalinity/acidity Dissolved solid Suspended solids Trade metals Trade organics Cooling pH Temperature Silica Aluminium Iron Manganese Hardness Alkalinity/acidity Sulphates Dissolved solids Suspended solids Suspended solids Suspended solids Sunitary (same as for public supply)	Farmstead: (same as for public supply) Livestock: (similar to that for public supply) Irrigation: Dissolved solids Specific conductance Sodium Calcium Magnesium Potassium Boron Chlorides Trace metals	Temperature DO pH Alkalinity/acidity Dissolved solids Salinity Carbon dioxide Turbidity Colour Settleable materials Floating material Tainting substances Toxic materials Nutrients Substances adversely affecting wildlife	Recreation Coliforms Turbidity Colour pH Odour Floating materials Settleable materials Nutrients Temperature Aesthetics Turbidity Colour Odour Floating materials Settleable materials Nutrients Temperature Substances adversely affecting wildlife

