UNSD Data Collection and Dissemination in Environment Statistics

United Nations Statistics Division (UNSD)

UNSD/UNEP Questionnaire on Environment Statistics

- UNSD collects data from non-OECD/Eurostat countries every two years and this year will be the sixth round
- 2004 Questionnaire included sections on:
  - Air; Land; Waste; and Water
- 2006 Questionnaire included sections on:
  - Waste and Water
- 2008 and 2010 Questionnaires include sections on: Waste and Water

- 2004 Questionnaires: http://unstats.un.org/unsd/environment/questionnaire2004.htm
- 2006 Questionnaires: http://unstats.un.org/unsd/environment/questionnaire2006.htm
- 2008 Questionnaires: http://unstats.un.org/unsd/environment/questionnaire2008.htm
- 2010 Questionnaire http://unstats.un.org/unsd/environment/questionnaire2010.htm

Data collection 2010

- Questionnaire sent out to countries by mid April
- Sent to NSOs and environmental ministries (nominated focal points to coordinate)
- Data collection fully coordinated with regional commissions
- Questionnaires available in English, French, Spanish, Russian and Arabic

Consistency between Questionnaires

- UNSD/UNEP Questionnaire is consistent with the OECD/Eurostat Questionnaire
  - The UNSD questionnaire asks for less detailed information than the OECD/Eurostat questionnaire
  - The Water questionnaire is consistent with SEEA–W and IRWS
- Any regional questionnaires should be consistent with UNSD/UNEP and OECD/Eurostat questionnaires

International Coordination of Environment Statistics

UNSD is actively promoting coordination between international and regional organizations through the Inter-secretariat Working Group on Environment Statistics (IWG-ENV).

The main objective of the IWG-ENV is the harmonization of international data and their collection. It focuses on:

- development and harmonization of
  - methods
  - concepts, definitions and classifications
  - data compilation guidelines
- coordination of data collection
- coordination of training.

UNSD data dissemination (1)

- UNSD Environment Statistics are available on the web as:
  - Environmental Indicators
    - Air and climate, Biodiversity, Energy and minerals, Forests, Governance, Inland water resources, Land and agriculture, Marine and coastal areas, Natural disasters, and Waste

http://unstats.un.org/unsd/environment/qindicators.htm

UNSD data dissemination (2)

- Country files
  - Access restricted to countries and international organizations that participate in the data collection

http://unstats.un.org/unsd/environment/Questionnaires/index.asp

- Country Snapshots
  - Include UNSD environmental indicators and other economic/demographic data

http://unstats.un.org/unsd/environment/Questionnaires/country_snapshots.htm

- Environment statistics in UNData

http://data.un.org/

Outline

I. UNSD data collection in environment statistics – Water

II. UNSD data collection in environment statistics – Waste

III. UNSD dissemination in environment statistics

UNSD data collection and dissemination in env. statistics

- UNSD/UNEP Questionnaire 2010 on Environment Statistics – sent out in April and focuses on water and waste statistics (http://unstats.un.org/unsd/environment/questionnaire2010.htm)
- Water statistics – The tables cover renewable freshwater resources, freshwater abstraction, distribution and use, and wastewater treatment.
- Waste statistics – The tables cover the generation of waste, the generation and treatment of hazardous waste, and the generation, collection, treatment, and composition of municipal waste.

I. UNSD data collection and dissemination -water statistics

1. Renewable Freshwater Resources (W1)
2. Freshwater Abstraction (W2)
3. Freshwater Available for Use (W3)
4. Total Water Use (W4)
5. Water Supply Industry (ISIC 36) (W5)
6. Wastewater Treatment Facilities (W6)
7. Population Connected to Wastewater Treatment (W7)

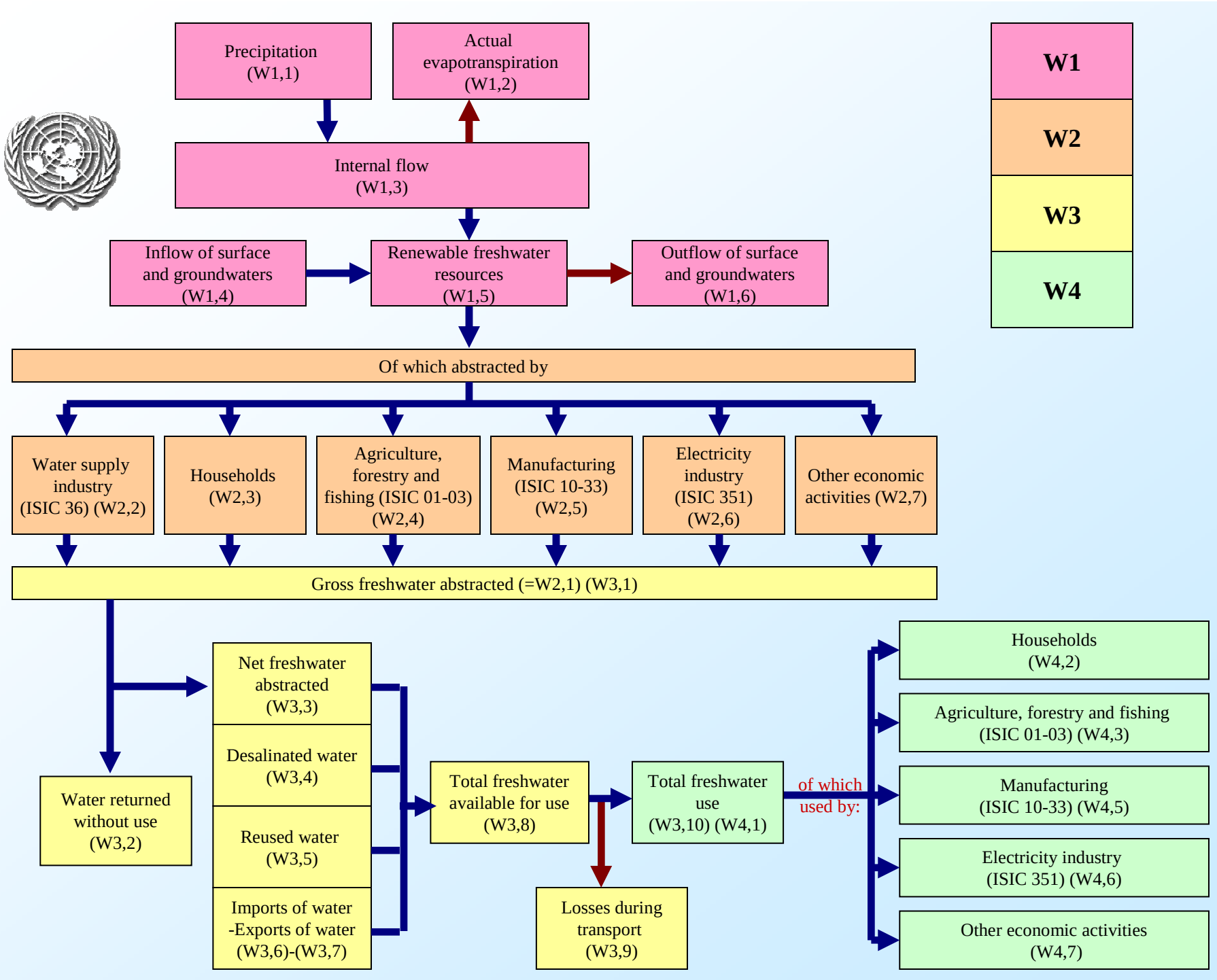
Precipitation (W1,1)
Actual evapotranspiration (W1,2)
Internal flow (W1,3)
Inflow of surface and groundwaters (W1,4)
Renewable freshwater resources (W1,5)
Outflow of surface and groundwaters (W1,6)
W1
W2
W3
W4
Of which abstracted by
Water supply industry (ISIC 36) (W2,2)
Households (W2,3)
Agriculture, forestry and fishing (ISIC 01-03) (W2,4)
Manufacturing (ISIC 10-33) (W2,5)
Electricity industry (ISIC 351) (W2,6)
Other economic activities (W2,7)
Gross freshwater abstracted (=W2,1) (W3,1)
Water returned without use (W3,2)
Net freshwater abstracted (W3,3)
Desalinated water (W3,4)
Reused water (W3,5)
Imports of water -Exports of water (W3,6)-(W3,7)
Total freshwater available for use (W3,8)
Losses during transport (W3,9)
Total freshwater use (W3,10) (W4,1)
of which used by:
Households (W4,2)
Agriculture, forestry and fishing (ISIC 01-03) (W4,3)
Manufacturing (ISIC 10-33) (W4,5)
Electricity industry (ISIC 351) (W4,6)
Other economic activities (W4,7)

Table W1: Renewable Freshwater Resources

Line	Category	Unit	Long-term annual average		1990
1	Precipitation	mio m^3/y			
2	Actual evapotranspiration	mio m^3/y			
3	Internal flow (=1-2)	mio m^3/y			
4	Inflow of surface and groundwaters	mio m^3/y			
5	**Renewable freshwater resources (=3+4)**	mio m^3/y			
6	Outflow of surface and groundwaters	mio m^3/y			

Chart W1: Renewable Freshwater Resources

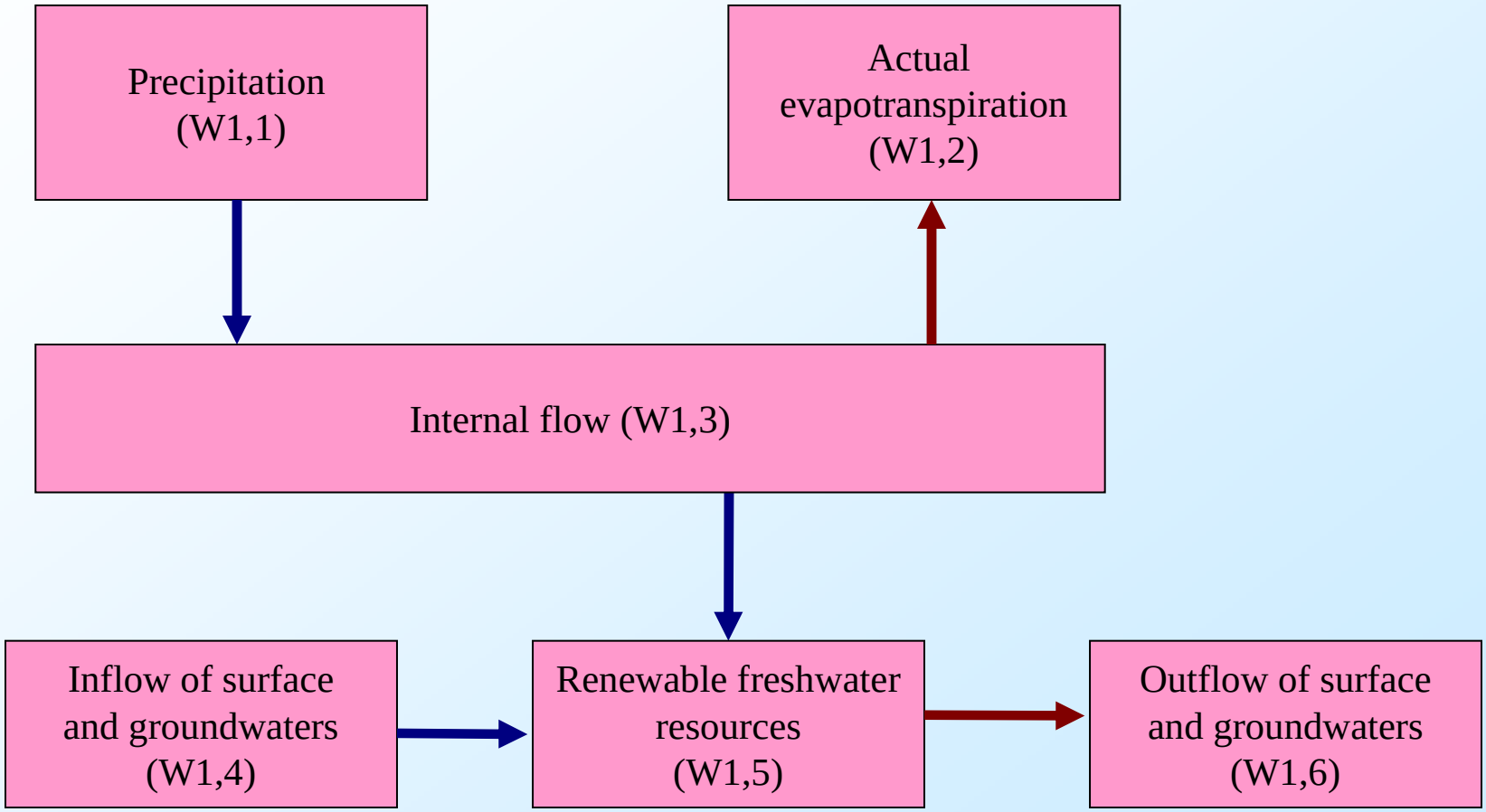

Table W2: Freshwater Abstraction

Line	Category	Unit	1990	1995
	Water abstracted			
1	**Gross freshwater abstracted (=11+21) (=2+3+4+5+6+7) (=W3.1)**	mio m³/y		
	Of which abstracted by:			
2	Water supply industry (ISIC 36) (=12+22)	mio m³/y		
3	Households (=13+23)	mio m³/y		
4	Agriculture, forestry and fishing (ISIC 01-03) (=14+24)	mio m³/y		
5	Manufacturing (ISIC 10-33) (=15+25)	mio m³/y		
6	Electricity industry (ISIC 351) (=16+26)	mio m³/y		
7	Other economic activities (=17+27)	mio m³/y		
	Surface water abstracted			
11	**Gross fresh surface water abstracted (=12+13+14+15+16+17)**	mio m³/y		
	Of which abstracted by:			
12	Water supply industry (ISIC 36)	mio m³/y		
13	Households	mio m³/y		
14	Agriculture, forestry and fishing (ISIC 01-03)	mio m³/y		
15	Manufacturing (ISIC 10-33)	mio m³/y		
16	Electricity industry (ISIC 351)	mio m³/y		
17	Other economic activities	mio m³/y		
	Groundwater abstracted			
21	**Gross fresh groundwater abstracted (=22+23+24+25+26+27)**	mio m³/y		
	Of which abstracted by:			
22	Water supply industry (ISIC 36)	mio m³/y		
23	Households	mio m³/y		
24	Agriculture, forestry and fishing (ISIC 01-03)	mio m³/y		
25	Manufacturing (ISIC 10-33)	mio m³/y		
26	Electricity industry (ISIC 351)	mio m³/y		
27	Other economic activities	mio m³/y		

Table W3: Freshwater Available for Use

Line	Category	Unit	1990
1	Gross freshwater abstracted (=W2,1)	mio m^3/y	
2	Water returned without use	mio m^3/y	
3	**Net freshwater abstracted (=1-2)**	mio m^3/y	
4	Desalinated water	mio m^3/y	
5	Reused water	mio m^3/y	
6	Imports of water	mio m^3/y	
7	Exports of water	mio m^3/y	
8	**Total freshwater available for use (=3+4+5+6-7)**	mio m^3/y	
9	Losses during transport	mio m^3/y	
10	**Total freshwater use (=8-9) (=W4,1)**	mio m^3/y	

Chart W3: Freshwater Available for Use

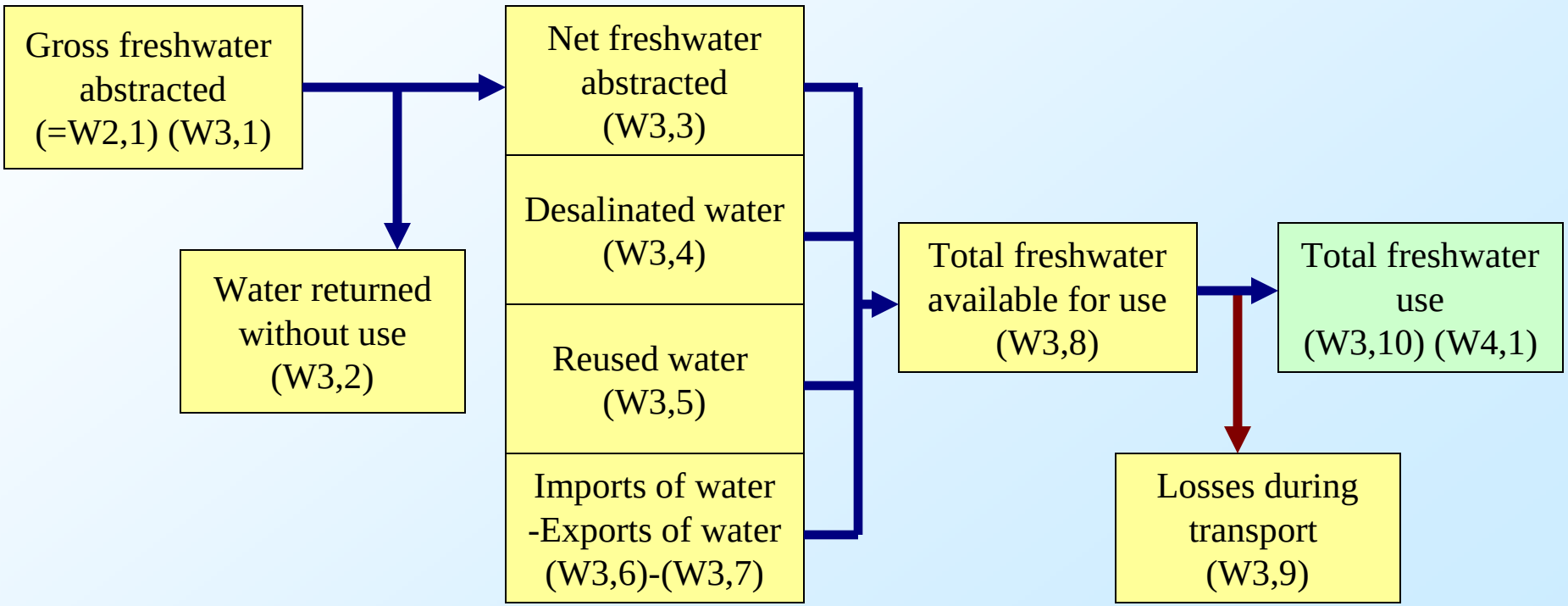

Table W4: Total Water Use

Line	Category	Unit	1990
1	**Total freshwater use** (=2+3+5+6+7) (=W3,10)	mio m^3/y	
	of which used by:		
2	Households	mio m^3/y	
3	Agriculture, forestry and fishing (ISIC 01-03)	mio m^3/y	
4	*of which* for irrigation in agriculture	mio m^3/y	
5	Manufacturing (ISIC 10-33)	mio m^3/y	
6	Electricity industry (ISIC 351)	mio m^3/y	
7	Other economic activities	mio m^3/y	

Chart W4: Total Water Use

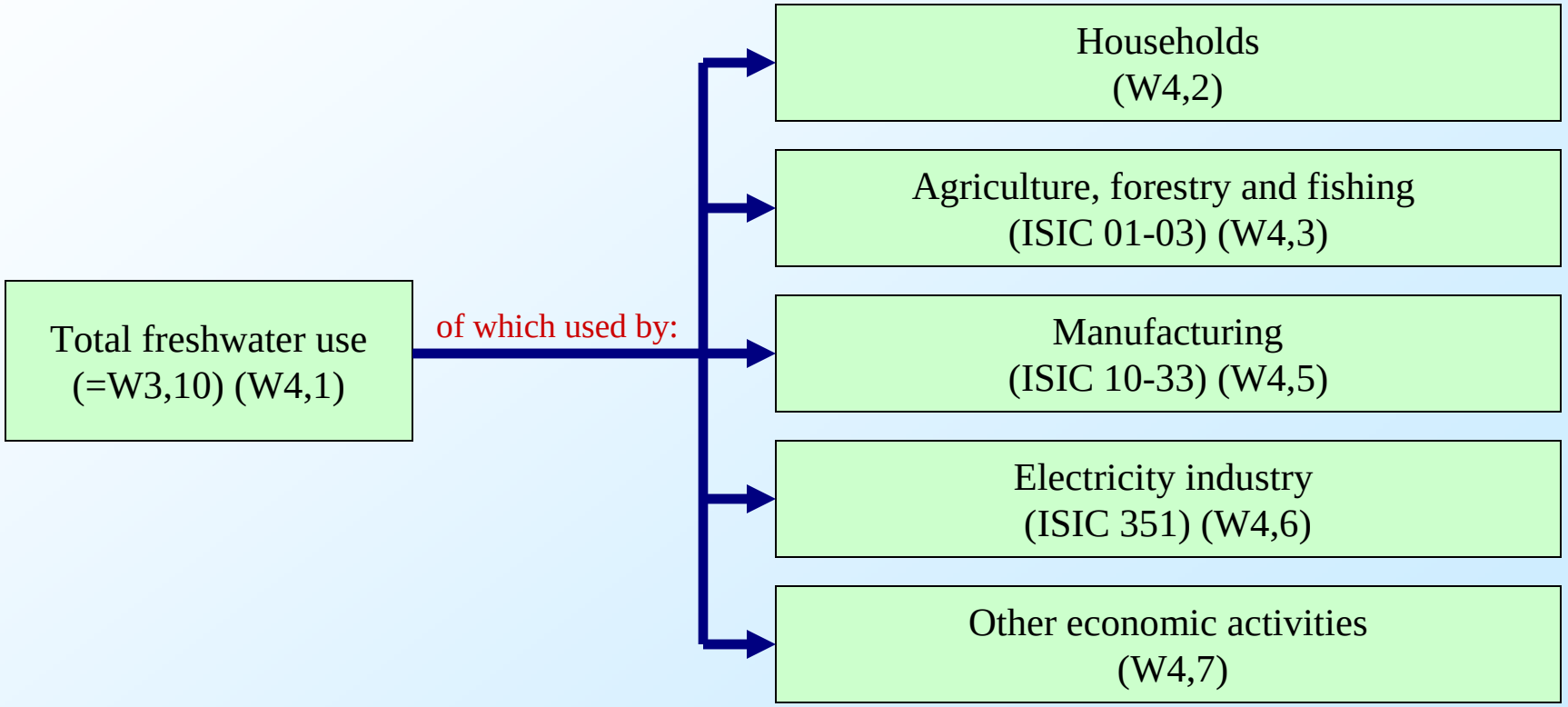

Table W5: Water Supply Industry (ISIC 36)

Line	Category	Unit
1	Gross freshwater supplied by water supply industry (ISIC 36)	mio m^3/y
2	Losses during transport by ISIC 36	mio m^3/y
3	*of which:* Losses by evaporation	mio m^3/y
4	Losses by leakage	mio m^3/y
5	**Net freshwater supplied by water supply industry (ISIC 36) (=1-2) (=6+7+8+9+10)**	mio m^3/y
	of which supplied to:	
6	Households	mio m^3/y
7	Agriculture, forestry and fishing (ISIC 01-03)	mio m^3/y
8	Manufacturing (ISIC 10-33)	mio m^3/y
9	Electricity industry (ISIC 351)	mio m^3/y
10	Other economic activities	mio m^3/y
	Population supplied by water supply industry (ISIC 36)	
11	Total population supplied by water supply industry (ISIC 36)	%
12	Urban population supplied by water supply industry (ISIC 36)	%
13	Rural population supplied by water supply industry (ISIC 36)	%

Chart W5: Water Supply Industry (ISIC 36)

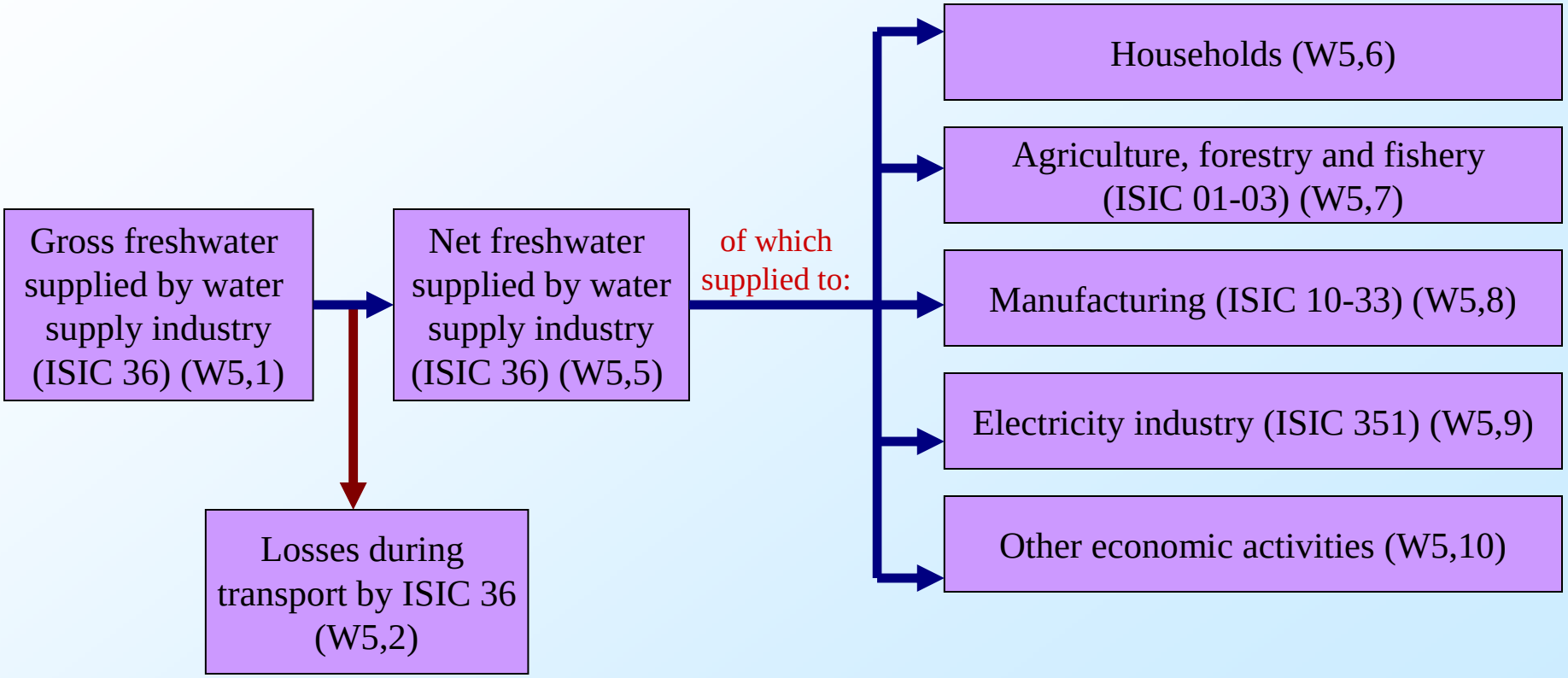

Table W6: Wastewater Treatment Facilities

- Urban wastewater treatment: primary, secondary, tertiary
- Independent wastewater treatment
- Other wastewater treatment: primary, secondary, tertiary
- Each type of treatment:
    - Number of plants
    - Design capacity (Volume)
    - Design capacity (BOD)
    - Actual occupation (Volume)
    - Actual occupation (BOD)
- Sewage sludge production (dry matter)

Table W7: Population Connected to Wastewater Treatment

Line	Category	Unit
1	Population connected to wastewater collecting system	%
2	Population connected to wastewater treatment	%
3	*of which* at least secondary treatment	%
4	Population with independent wastewater treatment (e.g., septic tanks)	%
5	*of which* at least secondary treatment	%
6	Population not connected to wastewater treatment (100% - (2) - (4))	%

II. UNSD data collection and dissemination - waste statistics

1. Generation of Waste (R1)
2. Management of Hazardous Waste (R2)
3. Management of Municipal Waste (R3)
4. Composition of Municipal Waste (R4)
5. Management of Municipal Waste – City data (R5)

Table R1: Generation of Waste by Source

Line	Category	Unit	1990
1	Agriculture, forestry and fishing (ISIC 01-03)	1000 t	
2	Mining and quarrying (ISIC 05-09)	1000 t	
3	Manufacturing (ISIC 10-33)	1000 t	
4	Electricity, gas, steam and air conditioning supply (ISIC 35)	1000 t	
5	Construction (ISIC 41-43)	1000 t	
6	Other economic activities excluding ISIC 38	1000 t	
7	Households	1000 t	
8	**Total waste generation (=1+2+3+4+5+6+7)**	1000 t	

Table R2: Management of Hazardous Waste

Line	Category	Unit
1	Stock of hazardous waste at the beginning of the year	tonnes
2	Hazardous waste generated during the year	tonnes
3	Hazardous waste imported during the year	tonnes
4	Hazardous waste exported during the year	tonnes
5	**Hazardous waste treated or disposed of during the year**	tonnes
6	*Amounts going to:* Recycling	tonnes
7	Incineration	tonnes
8	Landfilling	tonnes
9	Other, please specify in the footnote	tonnes
10	Stock of hazardous waste at the end of the year (=1+2+3-4-5)	tonnes

Table R3: Management of Municipal Waste

Line	Category	Unit	1990
1	Municipal waste collected from households	1000 t	
2	Municipal waste collected from other origins	1000 t	
3	**Total amount of municipal waste collected (=1+2)**	1000 t	
4	Municipal waste imported for treatment/disposal	1000 t	
5	Municipal waste exported for treatment/disposal	1000 t	
6	**Municipal waste managed in the country (=3+4-5)**	1000 t	
7	*Amounts going to:* Recycling	1000 t	
8	Composting	1000 t	
9	Incineration	1000 t	
10	*of which:* with energy recovery	1000 t	
11	Landfilling	1000 t	
12	*of which:* controlled landfilling	1000 t	
13	Other, please specify in the footnote	1000 t	
14	Total population served by municipal waste collection	%	
15	Urban population served by municipal waste collection	%	
16	Rural population served by municipal waste collection	%	

Table R4: Composition of Municipal Waste

Line	Category	Unit	1990
1	Paper, paperboard	%	
2	Textiles	%	
3	Plastics	%	
4	Glass	%	
5	Metals	%	
6	Other inorganic material	%	
7	Organic material	%	
8	*of which*: food and garden waste	%	
9	TOTAL	%	100

Table R5: Management of Municipal Waste – City Data

Line	Category	Unit	1990
1	Total population of the city	1000 inh.	
2	Percentage of city population served by municipal waste collection	%	
3	Municipal waste collected from households	1000 t	
4	Municipal waste collected from other origins	1000 t	
5	**Total amount of municipal waste collected (=3+4)**	1000 t	
6	*Amounts going to:* Recycling	1000 t	
7	Composting	1000 t	
8	Incineration	1000 t	
9	*of which:* with energy recovery	1000 t	
10	Landfilling	1000 t	
11	*of which:* controlled landfilling	1000 t	
12	Other, please specify in the footnote	1000 t	

III. UNSD data collection and dissemination

UNSD disseminates data through:

- UNSD Environmental Indicators (Air and climate, Biodiversity, Energy and minerals, Forests, Governance, Inland water resources, Land and agriculture, Marine and coastal areas, Natural disasters, and Waste) (http://unstats.un.org/unsd/environment/qindicators.htm)
- Country Files (access restricted to countries and international organizations that participate in the data collection (http://unstats.un.org/unsd/environment/Questionnaires/index.asp)
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- Environment statistics in UNData (http://data.un.org/)