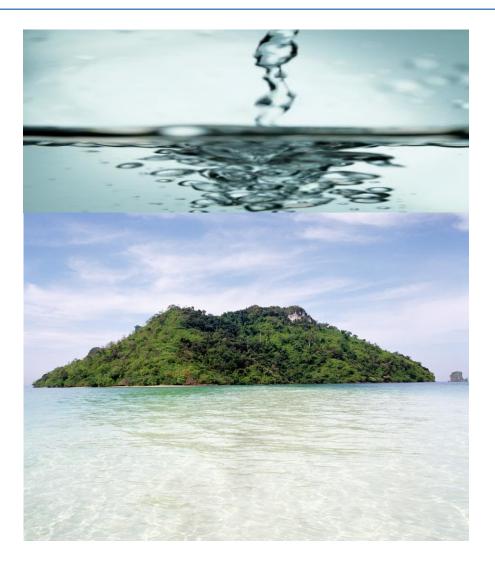


## **Republic of Mauritius**

# Water Account, Mauritius 2013



**Statistics Mauritius, Ministry of Finance and Economic Development** 

June 15

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#### Foreword

This report presents Water Accounts for years 2011 and 2013 based on the UN System of Environment – Economic Accounts (SEEA). Other indicators on water covering the period 2000 to 2013 are also presented. All data, unless otherwise stated, refer to the Island of Mauritius.

The report has been prepared with the collaboration of the Water Resources Unit of the Ministry of Public Utilities, the Central Water Authority and several other organisations. The cooperation and assistance of all these organisations are gratefully acknowledged.

Our special thanks go to Mr Ricardo Martinez-Lagunes, Inter-Regional Advisor on System of Environmental and Economic Accounts (SEEA) at the UN Statistical Division for the guidance and training provided.

The report, together with other publications released by Statistics Mauritius, is available on the website *http://statsmauritius.govmu.org*.

L. F. Cheung Kai Suet (Ms) Director of Statistics

Statistics Mauritius Ministry of Finance and Economic Development Port Louis **REPUBLIC OF MAURITIUS** 

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## List of Symbols and Abbreviations

-	Nil or negligible
	Not available or not applicable
CPC	Central Product Classification
CWA	Central Water Authority
m <sup>3</sup>	Cubic metres
hm <sup>3</sup>	Hectometre cube (million cubic metres)
inhab	Inhabitants
IRWS	International Recommendation for Water Statistics
ISIC	International Standard Industrial Classification
km	Kilometre
KWh	Kilowatt hour
L	Litre
mm	Millimetres
Mm <sup>3</sup>	Million cubic metres
%	Percent
km <sup>2</sup>	Square kilometres
SEEA	System of Environmental-Economic Accounting
TRWR	Total Renewable Water Resources
UFW	Unaccounted For Water
UN	United Nations
WRU	Water Resources Unit

#### 1. Introduction

This report on Water Accounts shows the stock and flow of water in physical terms for the Island of Mauritius. The accounts include rainfall, water abstractions (i.e. withdrawals from reservoirs, rivers and boreholes), water uses, and wastewater, among others.

The Water Accounts are based on the UN System of Environmental-Economic Accounting of Water (SEEA-Water), the System of Environmental-Economic Accounting - Central Framework of 2012 (SEEA-CF) and the International Recommendation for Water Statistics (IRWS).

#### 2. Water resources

In 2013, a total amount of 3,821 Mm<sup>3</sup> of water was received from 2,049 mm of rainfall or precipitation compared to 3,627 Mm<sup>3</sup> of water received in 2011 from 1,945 mm of rainfall.

Rainfall in 2013 was 5% higher than in 2011, and 2% in excess of the long term mean of 2,011 mm for the period 1971 - 2000.

Out of the water received from precipitation in 2013, 10% (382 Mm<sup>3</sup>) recharged the groundwater resources (nappe souterraine), 60% (2,293 Mm<sup>3</sup>) was surface run off, and the remaining 30% (1,146 Mm<sup>3</sup>) were evapotranspiration from plants, water bodies and land surfaces.

Total renewable water resources (TRWR) or water availability was 2,675 Mm<sup>3</sup>, an increase of 5% compared to 2,539 Mm<sup>3</sup> in 2011. TRWR per capita worked out to 2,198 m<sup>3</sup>, above the threshold of 1,700 m<sup>3</sup> for water stress countries.

On average, some 25% of the total water available is abstracted every year from the environment for use within the economy and for households. Table 1.1 below shows water availability for the years 2011 and 2013.

Water flows	2011	2013
Precipitation (rainfall in height), mm	1,945	2,049
Precipitation (rainfall in volume), Mm <sup>3</sup>	3,627	3,821
Surface run off, Mm <sup>3</sup>	2,176	2,293
Evapotranspiration, Mm <sup>3</sup>	1,088	1,146
Net Recharge to Groundwater, Mm <sup>3</sup>	363	382
Total Renewable Water Resources (TRWR), Mm <sup>3</sup>	2,539	2,675
Total Water abstractions, Mm <sup>3</sup>	752	888
Total Water abstracted as proportion of TRWR (%)	22.5	22.7

#### Table 1: Water Availability

#### 3. Physical Water Supply and Use (Figure 1 & Figure 2, Table 3 & Table 4)

The physical supply and use tables for water describe the flows of water from the environment to the economy, within the economy, and from the economy to the environment. The balance between the water flows for the whole economy can be written as follows:

#### Total abstraction + use of water received from other economic units = Supply of water to other economic units + total returns + water consumption

#### Or

#### *Total abstraction = total returns + water consumption*

Water consumption gives an indication of the amount of water that is lost by the economy during use, in the sense that the water has entered the economy but has not returned to either water resources or the sea. This happens during use because part of the water is incorporated into products, evaporated, transpired by plants or simply consumed by households or livestocks.

In 2013, 888  $\text{Mm}^3$  of water were extracted from the environment compared to 752  $\text{Mm}^3$  in 2011. Of these, 24.8% (220  $\text{Mm}^3$ ) was extracted by the water provider (Central Water Authority – CWA), 31.5% (280  $\text{Mm}^3$ ) by the electricity industry, 42.2% (375  $\text{Mm}^3$ ) by the agricultural industries, and the remaining 1.5% (13  $\text{Mm}^3$ ) by the manufacturing and services industries.

Table 2 below shows breakdown of water abstracted for the years 2011 and 2013.

	20	011	2013		
Sources of abstraction	Mm <sup>3</sup>	%	Mm <sup>3</sup>	%	
Water Supply Industry (CWA)	205	27.3	220	24.8	
Agriculture and Livestock	356	47.3	375	42.2	
Manufacturing and Services	10	1.3	13	1.5	
Hydropower	181	24.1	280	31.5	
Total	752	100.0	888	100.0	

 Table 2: Fresh water abstraction

Of the 220.0 Mm<sup>3</sup> of water extracted in 2013 by the CWA, around 51% was from surface water and the remaining 49% of groundwater sources. After treatment, 73.4 Mm<sup>3</sup> were distributed to households, 21.2 Mm<sup>3</sup> to the manufacturing and services industries, and 1.3 Mm<sup>3</sup>to the agriculture industries. Some 124.1 Mm<sup>3</sup> was lost in distribution because of leakages (Unaccounted for Water - UFW).

Water return to the environment amounted to 608.1 Mm<sup>3</sup> of which 280.0 Mm<sup>3</sup> by hydropower generation while water incorporated in products/ evaporation/ transpiration amounted to 279.9 Mm<sup>3</sup>.

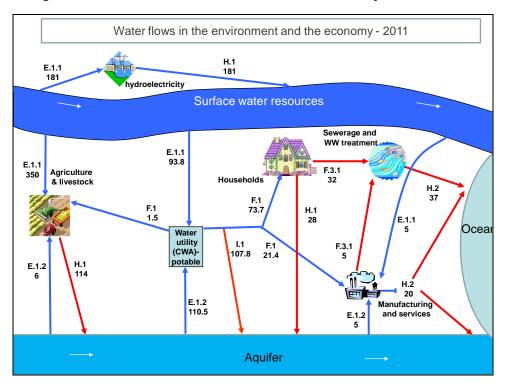
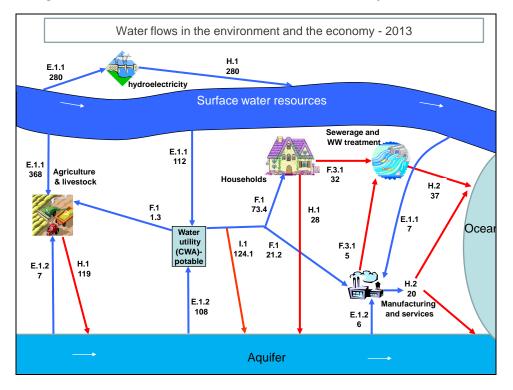


Figure 1 : Water flows in the environment and economy in Mm<sup>3</sup> - 2011

Figure 2 : Water flows in the environment and economy in Mm<sup>3</sup> - 2013



#### 3.1 Utilisation of water

Total water utilised in 2013 was 1,020.9 Mm<sup>3</sup>, 15% more than the 885.6 Mm<sup>3</sup> utilised in 2011.

The agriculture industry is the largest user of water, with 376.3 Mm<sup>3</sup> of water utilized in 2013 mostly for irrigation purposes, representing an increase of 5% compared to 357.5 Mm<sup>3</sup> in 2011. Utilisation of water by the agriculture industry represented around 37% of the total water utilisation in the country in 2013.

It was followed by the electricity industry (280.0  $\text{Mm}^3$  or 27% of total water utilisation), CWA (220.0  $\text{Mm}^3$  or 22%), households (73.4  $\text{Mm}^3$  or 7%) and manufacturing and services industries (34.2  $\text{Mm}^3$  or 3%).

The corresponding figures for 2011 were:

Electricity industry: 181.0 Mm<sup>3</sup> or 20%, CWA: 205.0 Mm<sup>3</sup> or 23%, Households: 73.7 Mm<sup>3</sup> or 8%, and Manufacturing and services industries:31.4 Mm<sup>3</sup> or 4%.

#### **3.2** Water consumption

Water consumption refers to the water incorporated into products, evaporated, transpired by plants or simply consumed by households or livestocks.

In 2013, total volume of water consumed was estimated at 279.9 Mm<sup>3</sup> compared to 263.6 Mm<sup>3</sup> in 2011.

It was highest for the Agriculture industries with 257.3 Mm<sup>3</sup> of water consumed representing 92% of total water consumed, followed by Households (13.4 Mm<sup>3</sup> or 5%), and Manufacturing and services industries (9.2 Mm<sup>3</sup> or 3%)

The corresponding figures for 2011 were Agriculture industries: 243.5 Mm<sup>3</sup> or 92% Households: 13.7 Mm<sup>3</sup> or 5%, and Manufacturing and services industries: 6.4 Mm<sup>3</sup> or 2%.

#### **3.3** Water return to the economy

Total water return to the environment amounted to 608.1 Mm<sup>3</sup> in 2013 compared to 488.4 Mm<sup>3</sup> in 2011. The electricity industry returned some 280.0 Mm<sup>3</sup> of water to the economy (all the water that it has extracted) while the agriculture industry returned some 119.0 Mm<sup>3</sup>, and CWA some 124.1 Mm<sup>3</sup> of water as a result of water loss due to leaks in its 3,500 km-long water distribution network.

Water returns by the other sectors were as follows:- households: 60.0 Mm<sup>3</sup> of which 32.0 Mm<sup>3</sup> through the sewerage and water treatment system and 28.0 Mm<sup>3</sup> directly to the environment, and the manufacturing and services industries: 25.0 Mm<sup>3</sup>.

## Table 3: Detailed Physical Supply and Use, Mauritius - 2011

		ISIC 01-03	ISIC 05-33, 41- 43,38,39,45-99	ISIC 3510	ISIC 3600	ISIC 3700			
A. Physical	<b>Use table</b> (millions of cubic metres)	Agriculture	Manufacture and services	Hydroelectricity	Water utility (drinking water)	Sewerage (sewage collection and treatment)	Total	Households	Total
From the	1. Total Abstraction	356	10	181	205		752		752
environment	( = 1.a + 1.b = 1.i + 1.ii)								
	1.a. Abstraction for own use	356	10	181			547		547
	Hydroelectric power generation			181			181		181
	Irrigation water	356					356		356
	Mine water								
	Urban run-off								
	cooling water								
	Other								
	1.b. Abstraction for distribution				205		205		205
	1.i. From inland water resources:	356	10	181	205		752		752
	1.i.1. Surface water	350	5	181	94		630		630
	1.i.2. Ground water	6	5		111		122		122
	1.i.3. Soil water								
	1.ii. Collection of precipitation								
	1.iii. Abstraction from the sea								
Within the	2. Use of water received from other	1.5	21.4			37	59.9	73.7	133.6
economy	economic units								100.0
	of which:								
	2.a. Reused water								
	2.b. Wastewater to sewerage					37	37		37
	2.c. Desalinated water								
	3. Total use of water ( =1 + 2)	357.5	31.4	181	205	37	811.9	73.7	885.6

## Table 3: Detailed Physical Supply and Use, Mauritius - 2011

		ISIC 01-03	ISIC 05-33, 41- 43,38,39,45-99	ISIC 3510	ISIC 3600	ISIC 3700			
B. Physical S	Supply table (millions of cubic metres)	Agriculture	Manufacture and services	Hydroelectricity	Water utility (drinking water)	Sewerage (sewage collection and treatment)	Total	Households	Total
Within the economy	4. Supply of water to other		5		96.6		101.6	32	133.6
economy	of which: 4.a. Reused water								
	4.b. Wastewater to sewerage		5				5	32	37
	4.c. Desalinated water								
Into the	5. Total returns (= 5.a + 5.b)	114	20	181	108.4	37	460.4	28	488.4
environment	Hydroelectric power generation			181			181		181
	Irrigation water	114					114		114
	Mine water								
	Urban run-off								
	cooling water				108.4		108.4		108.4
	Losses in distribution because of leakages Treated wastewater				108.4	37	37		37
	Other					57	0		0
	5.a. To inland water resources	114		181	108.4		403.4	28	431.4
	( = 5.a.1 + 5.a.2 + 5.a.3)								
	5.a.1. Surface water			181			181		181
	5.a.2. Groundwater	114			108.4		222.4	28	250.4
	5.a.3. Soil water								
	5.b. To other sources (e.g. Sea water)		20			37	57		57
	6. Total supply of water ( = 4 + 5)	114	25	181	205	37	562	60	622
	7. Consumption ( = 3 - 6)	243.5	6.4	0	0	0	249.9	13.7	263.6
	of which: 7.a. Losses of distribution not because of of leakages								

## Table 4: Detailed Physical Supply and Use, Mauritius - 2013

		ISIC 01-03	ISIC 05-33, 41- 43,38,39,45-99	ISIC 3510	ISIC 3600	ISIC 3700				
A. Physical	A. Physical Use table (millions of cubic metres)		Manufacture and services	Hydroelectricity	Water utility (drinking water)	Sewerage (sewage collection and treatment)	Total	Households		Total
From the	1. Total Abstraction	375	13	280	220		888			888
environment	( = 1.a + 1.b = 1.i + 1.ii)									
	1.a. Abstraction for own use	375	13	280			668			668
	Hydroelectric power generation			280			280			280
	Irrigation water	375					375			375
	Mine water									
	Urban run-off									
	cooling water									
	Other									
	1.b. Abstraction for distribution				220		220			220
	1.i. From inland water resources:	375	13	280	220		888			888
	1.i.1. Surface water	368	7	280	112		767			767
	1.i.2. Ground water	7	6		108		121			121
	1.i.3. Soil water									
	1.ii. Collection of precipitation									
	1.iii. Abstraction from the sea									
Within the	2. Use of water received from other	1.3	21.2			37	59.5	73.4		132.9
economy	economic units									
	of which:									
	2.a. Reused water									
	2.b. Wastewater to sewerage					37	37			37
	2.c. Desalinated water									
	3. Total use of water (=1 + 2)	376.3	34.2	280	220	37	947.5	73.4	1	1020.9

## Table 4: Detailed Physical Supply and Use, Mauritius - 2013

		ISIC 01-03	ISIC 05-33, 41- 43,38,39,45-99	ISIC 3510	ISIC 3600	ISIC 3700			
B. Physical S	Supply table (millions of cubic metres)	Agriculture	Manufacture and services	Hydroelectricity	Water utility (drinking water)	Sewerage (sewage collection and treatment)	Total	Households	Total
Within the economy	<ul> <li>Supply of water to other</li> <li>of which:</li> <li>4.a. Reused water</li> </ul>		5		95.9		100.9	32	132.9
	4.d. Reased water 4.b. Wastewater to sewerage 4.c. Desalinated water		5				5	32	37
Into the	5. Total returns (= 5.a + 5.b)	119	20	280	124.1	37	580.1	28	608.1
environment	Hydroelectric power generation			280			280		280
	Irrigation water	119					119		119
	Mine water Urban run-off								
	cooling water								
	Losses in distribution because of leakages				124.1		124.1		124.1
	Treated wastewater					37	37		37
	Other						0		0
	<i>5.a.</i> To inland water resources ( = 5.a.1 + 5.a.2 + 5.a.3)	119		280	124.1		523.1	28	551.1
	5.a.1. Surface water			280			280		280
	5.a.2. Groundwater 5.a.3. Soil water	119			124.1		243.1	28	271.1
	5.b. To other sources (e.g. Sea water)		20			37	57		57
	6. Total supply of water ( = 4 + 5)	119	25	280	220	37	681	60	741
	<ul> <li>7. Consumption ( = 3 - 6) of which:</li> <li>7.a. Losses of distribution not because of of leakages</li> </ul>	257.3	9.2	0	0	0	266.5	13.4	279.9

#### 4. Water Asset Accounts

Water Asset Accounts show the stocks of water resources and their changes during a particular period, linking water use by the economy (abstraction and returns) and the natural flows of water to the stocks of water in the country. They can be represented as follows:

- a) Opening and closing stocks, which are the stock levels at the beginning and the end of the period;
- b) Increases in stocks, which include those due to human activity (returns) and natural causes, such as precipitation;
- c) Decreases in stocks, which include those due to human activity (abstraction) and natural causes, such as evapotranspiration and outflows.

In the absence of data on stocks at the beginning and end of the year, simplified accounts have been prepared where it is assumed that the total addition to stock and the reduction in stock of water are the same. Table 5 and Table 6 present the accounts for 2011 and 2013 respectively.

				Type of water resource						
				Surface wate	er			TOTAL		
			Artificial reservoirs	Lakes	Rivers and streams	Groundwater	Soil water			
Opening			Opening A.1.1	Opening A.1.2		Opening A.2		Opening A.1 + Opening A.2		
Additions	to									
Retu	turns			181		249.8		430.8		
Pred	cipitation			2176.2			1450.8	3627		
Inflo	ows from other territories							0		
Inflo	ows from other inland water resource	es				362.7		362.7		
Disc	coveries of water in aquifers							0		
Toto	al additions to stock			2357.2		612.5	1450.8	4420.5		
Reduction	IS									
Abs	stractions		172	4	458	121.5		751.5		
	for hydro power generation			181				181		
	for cooling water							0		
Eva	apotranspiration						1088.1	1088.1		
Out	tflows to other territories							0		
Out	tflows to the sea			1727.2		491		2218.2		
Out	tflows to other inland water resources	S					362.7	362.7		
Toto	al reductions in stock			2357.2		612.5	1450.8	4420.5		
Closing			Closing A.1.1	Closing A.1.2		Closing A.2		Closing A.1 + Closing A.2		

#### Table 5: Water Asset Account, Mauritius – 2011 (millions cubic metres)

			Тур	e of water reso	urce		
			Surface water				TOTAL
		Artificial reservoirs	Lakes	Rivers and streams	Groundwater	Soil water	TOTAL
Opening		Opening A.1.1	Opening A.1.2		Opening A.2		Opening A.1 + Opening A.2
Additions t	D						
Retu	rns		280		228.1		508.1
Prec	ipitation		2293			1528.1	3821.1
Inflo	ws from other territories						0
Inflo	ws from other inland water resources				382.1		382.1
Disc	overies of water in aquifers						0
Tota	l additions to stock		2573		610.2	1528.1	4711.3
Reductions							
Abst	ractions	270	49	97	121		888
	for hydro power generation		280				280
	for cooling water						0
Evap	otranspiration					1146	1146
Outf	lows to other territories						0
Outf	lows to the sea		1806		489.2		2295.2
Outf	lows to other inland water resources					382.1	382.1
Tota	l reductions in stock		2573		610.2	1528.1	4711.3
Closing		Closing A.1.1	Closing A.1.2		Closing A.2		Closing A.1 + Closing A.2

Table 6: Water Asset Account, Mauritius – 2013 (millions cubic metres)

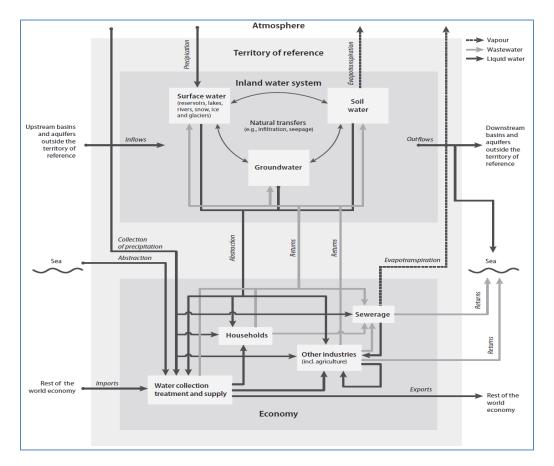
Total addition to stock in 2013 was 4,711.3 Mm<sup>3</sup>, 7% higher than 2011, comprising 2,573.0 Mm<sup>3</sup> from rivers, reservoirs and lakes (surface water) and 610.2 Mm<sup>3</sup> from groundwater, in addition to the 1,528.1 Mm<sup>3</sup> of soil water consisting of water from the uppermost belt of soil.

Total reduction is explained by evapotranspiration  $(1,146.0 \text{ Mm}^3)$ ; abstraction including hydropower (888.0 Mm<sup>3</sup>); outflows to the sea (2,295.2 Mm<sup>3</sup>) and outflows to other inland water resources (382.1 Mm<sup>3</sup>).

#### **Concepts and Methodologies**

**Water accounts:** Water accounts are a set of statistical data representing the water stocks and flow in a country in both physical and monetary terms. The framework commonly adopted for water accounting is the SEEA-Water<sup>1</sup> which provides a conceptual framework for organizing hydrological and economic information in a coherent and consistent manner in order to enable the study of the interactions between the economy and the environment.

**SEEA-Water**: System of Environmental and Economic Accounts for Water is presented in simplified diagrammatic form below, which shows the economy, the system of water resources and their interactions.



Source: SEEA-Water, 2012

The <u>economy and the inland water resource system</u> of a territory, referred to as "territory of reference", are represented in the figure as two separate boxes. The inland water resource system of a territory is composed of all water resources in the territory (surface water, groundwater and soil water) and the natural flows between and among them. The economy of a territory consists of residential water users that abstract water for production and consumption purposes and put in place the infrastructure to store, treat, distribute and discharge water.

<sup>&</sup>lt;sup>1</sup> System of Environmental and Economic Accounts for Water (UN)

#### **Definition from the IRWS**

- 1. **Inland water stocks** The volume of water contained in surface water, groundwater and soil water within the territory of reference at a particular point in time. This includes freshwater, brackish water and saline water and all types of water quality.
- 2. **Groundwater stocks** -The volume of water in porous and permeable underground layers, known as aquifers that can yield significant quantities of water to wells and springs.
- 3. **Precipitation** The volume of water that flows from the atmosphere to inland water resources via rain, snow, sleet, hail, dew, mist, etc., per year.
- 4. **Run-off (i.e., surface run-off)** The volume of water that flows from the atmosphere via rain, snow, sleet, hail, dew, mist, etc., and upon reaching the Earth's surface, either lands in surface water or flows overland into surface water bodies, per year.
- 5. **Evapotranspiration from inland water resources** The volume of water from land and water surfaces that enters the atmosphere by vaporization of water into a gas and through evaporation and transpiration from plants, per year.
- 6. **Abstraction of water (E)** is the volume of water that is removed or collected by economic units directly from the environment. The abstraction of water is disaggregated by the source of water: inland water resources (E.1), collection of precipitation (E.2) and abstraction of water from the sea (E.3).
- 7. Abstraction from inland water resources (E.1) The volume of water that is removed by economic units from surface water, groundwater and soil water within the territory of reference, per year. This includes the abstraction of inland waters that are fresh, brackish, saline or polluted. This excludes abstraction of water from the sea or ocean, since these are not inland water resources
- 8. Abstraction from surface water (E.1.1) The volume of water removed by economic units from artificial reservoirs, lakes, rivers, wetlands and snow, ice and glaciers within the territory of reference, per year. Bank filtration is considered an abstraction of surface water
- 9. Abstraction from groundwater (E.1.2) The volume of water removed by economic units from aquifers and springs within the territory of reference, per year
- 10. Water supplied to other economic units (F) is the volume of water that is provided by one economic unit to another economic unit through mains, artificial open channels, sewers, drains, trucks or other means. Water supplied to other economic units (F) excludes the losses of water in distribution that are included in data item I and the supply of bottled water (CPC, Ver. 2, 2441), which is one of the supplementary data items.
- 11. Water supplied by resident economic units to resident economic units (F.1) The volume of water (CPC 18000) that is provided by resident economic units, typically of the water supply industry (ISIC 36), to other resident economic units through mains, artificial open channels, sewers, drains, trucks or other means, per year.
- 12. Water supplied by resident economic units to resident economic units for treatment or disposal (F.3.1) The volume of water discharged into drains or sewers by resident economic units for treatment or disposal by other resident economic units, per year.

- 13. **Returns of water to the environment by economic units** (**H**) The volume of water that flows from economic units directly to inland water resources, the sea or to land, within the territory of reference, per year. This includes urban storm water, losses due to leakage and burst pipes, irrigation water that infiltrates into groundwater or ends up in surface water, and the discharges of cooling water and water used for hydroelectricity generation. It excludes evaporation because evaporation is consumption.
- 14. **Returns of water to the environment by economic units to inland water resources (H.1)** The volume of water that flows from economic units directly to surface water or groundwater within the territory of reference, per year.
- 15. Returns of water to the environment by economic units to the sea (H.2) The volume of water that flows from economic units directly into the sea or ocean, within the territory of reference, per year. These discharges may occur near the coast or further offshore.
- 16. Losses of water (I) The volume of water that is lost in distribution or lost when sent for treatment and disposal, within the territory of reference, per year. This includes water (CPC 18000) and wastewater.
- 17. Losses of water in distribution (I.1) The volume of water (CPC, Ver. 2, 1800) that is lost during distribution and transportation, between the point of abstraction and the point of use or between the points of use and reuse (e.g., from mains, artificial open channels and trucks). Losses of water sent for treatment or disposal in collection (I.2) consists of water lost from the system used to collect, treat or dispose of discharged water, including artificial open channels and trucks used to collect discharged water.

## Annex A

### Table A1: Selected water indicators, 2000-2013

INDICATORS	UNITS	LTA*	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Main Indicators																
Population density	inhab/km <sup>2</sup>		617	622	626	631	635	638	641	644	646	648	649	650	651	653
Hydroelectricity as proportion of																
energy	%		5	4	4	6	6	5	3%	3%	4%	5%	4%	2%	3%	3%
Electricity generated per capita	KWh/inhab		1,544	1,647	1,669	1,770	1,829	1,909	1,966	2,052	2,122	2,134	2,221	2,253	2,302	2,370
Hydrologic Information																
Precipitation in height	mm/year	2,011	2,010	1,891	2,082	2,148	2,270	2,372	1,914	1,954	2,381	2,397	1,806	1,945	1,609	2,049
Total Renewable Water Resources																
(TRWR)	hm <sup>3</sup> /year	2,625	2,558	2,412	2,734	2,804	2,963	3,096	2,500	2,551	3,108	3,129	2,358	2,539	2,101	2,675
TRWR per capita	m <sup>3</sup> /inhab		2,222	2,079	2,341	2,384	2,504	2,601	2,091	2,124	2,579	2,591	1,948	2,095	1,729	2,198
Artificial reservoir capacity per	2															
capita	m <sup>3</sup> /inhab		79	78	77	76	76	75	75	74	74	73	73	73	73	73
Water in the economy																
Total water abstracted (excluding	2															
hydroelectricity)	hm <sup>3</sup> /year		651	687	736	735	725	691	682	630	616	632	637	571	582	608
Water abstracted per capita	m <sup>3</sup> /inhab		566	592	630	625	613	580	570	525	511	523	526	471	479	499
Water abstraction as proportion of																
TRWR	%		26	28	27	26	25	22	27	25	20	20	27	23	28	23
Water abstracted for drinking																
water per capita	L/inhab/day		379	413	415	429	428	449	428	468	475	499	505	459	485	479
Proportion of abstraction by water	0/		10	1.5	15	17	10	10			50			50		
utilities that is lost	%	•••	48	46	47	47	48	48	45	51	52	55	51	53	56	56
Water received in households per capita	L/inhab/day		155	158	159	164	163	168	168	167	164	170	173	167	164	165
-	· · · ·		100	150	157	104	105	100	100	107	104	170	175	107	104	105
Water-related social-demographic d	ata items	-														
Proportion of population with																
sustainable access to an improved	0/		98.9 <sup>1</sup>	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99.6 <sup>1</sup>	> 99	> 99
water source Proportion of population with	%		90.9	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99.0	> 99	> 99
access to improved sanitation																
sources	%		90.9 <sup>1</sup>											94.9 <sup>1</sup>		
k LTA: Long torm Average (1071 2000)																

\*: LTA: Long term Average (1971 – 2000)

<sup>1</sup> Source: Housing and Population Census

	Units	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Potable Water supply to															
Households	Mm <sup>3</sup>	65.3	67.1	67.6	70.3	70.6	73.1	73.2	73	72.1	75.1	76.5	73.7	72.9	73.4
Non households	Mm <sup>3</sup>	17.1	18.1	18.5	19.6	19.6	20.6	21.1	22.1	21.9	22.7	23.8	22.8	22.3	22.5
Agriculture and livestock	Mm <sup>3</sup>	0.9	1	1	1.1	1.1	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.4	1.3
Manufacturing	Mm <sup>3</sup>	4.6	4.7	4.8	5	4.8	4.8	4.7	4.8	4	4.1	4.3	4.8	3.9	3.8
Accommodation services	Mm <sup>3</sup>	3.3	3.6	3.5	3.6	3.7	4.1	4.3	4.4	4.6	4.7	5.1	5.2	17.1	17.4
Other services	Mm <sup>3</sup>	8.3	8.8	9.2	9.8	9.9	10	10.6	11.4	11.9	12.5	12.9	11.9		
Total Potable Water Supply	Mm <sup>3</sup>	82.4	85.2	86.1	89.9	90.2	93.7	94.3	95.1	94	97.8	100.3	96.5	95.2	95.9
Non Potable Water	supply to														
Agriculture and livestock	Mm <sup>3</sup>	7.8	11	9.4	8.3	8	9	8.9	7.5	8.9	7.3	9.2	10.9	10.4	10
Manufacturing	Mm <sup>3</sup>	5.6	5.7	5.3	5.8	5.2	5.2	5.4	4.5	5.9	5.2	5.5	6	5.7	5.5
Total Non Potable	Mm <sup>3</sup>	13.4	16.7	14.7	14.1	13.2	14.2	14.3	12	14.8	12.5	14.7	16.9	16.1	15.5
Total Sales of water	Mm <sup>3</sup>	95.8	101.9	100.8	103.9	103.4	107.9	108.6	107.1	108.8	110.3	115	113.3	111.3	111.4

## Table A2: Water Supply by sector, Island of Mauritius, 2000-2013

Source: CWA

INDICATORS	Unit	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Abstractions															
Surface water	Mm <sup>3</sup>	536	532	578	577	575	541	528	518	497	511	513	449	460	487
from reservoirs	Mm <sup>3</sup>	147	124	128	169	167	154	146	145	137	150	152	104	121	136
from rivers and streams	Mm <sup>3</sup>	389	408	450	408	408	387	382	373	360	361	361	345	339	351
Groundwater	Mm <sup>3</sup>	145	145	148	148	150	150	154	112	119	121	124	122	122	121
Total abstraction (excluding hydroelectricity)	Mm <sup>3</sup>	677	677	726	725	725	691	682	630	616	632	637	571	582	608
Abstraction per capita	m <sup>3</sup> / person	565.6	592.2	630.1	624.8	612.6	580.5	570.4	524.6	511.2	523.3	526.3	471.1	479	499.5
Hydroelectricity	Mm <sup>3</sup>	-	-	-	-	-	331	236	254	331	368	298	181	218	280
Total abstraction (including hydroelectricity)	Mm <sup>3</sup>	-	-	-	-	-	1022	918	884	947	1000	935	752	800	888
Water abstraction by CWA for	distribution														
Surface water	Mm <sup>3</sup>	77.7	80.1	81.7	88.8	89.2	93.9	96.1	100.5	102.2	109.2	109.1	94.0	97.0	112.0
Groundwater	Mm <sup>3</sup>	94.9	94.6	95.4	95.3	95.9	100.9	90.8	105	107.2	110.4	114.3	111.0	109.0	108.0
Total water abstracted by CWA	Mm <sup>3</sup>	172.6	174.7	177.1	184.1	185.2	194.8	186.9	205.5	209.4	219.6	223.4	205.0	206.0	220.0
% Abstracted by CWA	%	25.5	25.8	24.4	25.4	25.5	28.2	27.4	32.6	34	34.7	35.1	35.5	35.4	36.2
Unaccounted For Water															
"Losses" Unaccounted For	Mm <sup>3</sup>	90.2	89.5	91	94.3	95	101.1	92.6	110.3	115.4	121.8	123.1	107.8	110.8	124.1
Water (UFW)	%	48	46	47	47	48	48	45	51	52	55	51	53	56	56

## Table A3: Water abstraction, Island of Mauritius, 2000 - 2013

Source: CWA and WRU