Water Account, Mauritius 2019-2020

Statistics Mauritius

Ministry of Finance, Economic Planning and Development

November 2022

Note: Readers are invited to make the distinction between official data which are published in reports and the analysis presented for the benefit of general readers. Differences of opinion may arise regarding the analytical part but these do not, in any way, undermine the quality of the data. The Editors welcome constructive critical comments.

Foreword

This report is the fourth issue prepared by Statistics Mauritius presenting Water Accounts for years 2019 to 2020 based on the UN System of Environment – Economic Accounts (SEEA).

Other indicators on water covering the period 2011 to 2020 are also reported. Wherever possible, latest data available are presented and these may be subject to revision in later issues. All data, unless otherwise stated, refer to the Island of Mauritius.

Data produced by the Water Resources Unit of the Ministry of Energy and Public Utilities, the Central Water Authority and Waste Management Authority and some other organisations were used to prepare the Water Account.

The cooperation and assistance of all these organisations are gratefully acknowledged.

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

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Ministry of Finance, Economic Planning and Development
Port Louis
November 2022

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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^3	Cubic metres
hm^3	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^3	Million cubic metres
%	Percent
km^2	Square kilometres
SEEA	System of Environment-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 between the environment and the different sectors of the economy 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 Environment-Economic Accounting of Water (SEEA-Water) and the International Recommendation for Water Statistics (IRWS).

2. Water resources

Table 1 below shows some indicators of water availability for the years 2019 and 2020.

Precipitation (or rainfall) in Mauritius for 2019 was 3,972 Mm^3 from 2,130 mm of rainfall. In 2020, a total amount of 3,717 Mm^3 of water was received from 1,993 mm of rainfall. With regards to the long term annual mean of 2,003 mm of rainfall for the period 1981-2010, there was an increase of around 6.3% in rainfall intensity in 2019 whereas a decrease of 0.5% was noted in 2020.

As shown in *Table 1*, out of the water received from precipitation, 60% went as surface runoff, 10% recharged groundwater resources and the remaining 30% formed part of evapotranspiration from plants, water bodies and land surfaces.

Total Renewable Water Resources (TRWR), that is water available from surface and ground water resources, was 2,780 Mm^3 for 2019, out of which total volume of water abstracted for use in the economy (including households) was 595 Mm^3. In 2020, TRWR was 2,602 Mm^3 out of which water abstraction was 607 Mm^3.

Although total freshwater abstracted from the environment for use within the economy as a proportion of available water rose from 21.4 % in 2019 to 23.3 % in 2020, the Island was still in the 'no stress' class in terms of water stress severity[a].

[a] When a territory withdraws 25 per cent or more of its renewable freshwater resources, it is said to be water-stressed - UN Water

Table 1: Water Availability, Island of Mauritius, 2019-2020

Water Availability	2019	2020
Precipitation (rainfall in height), mm	2,130	1,993
Precipitation (rainfall in volume), Mm^3	3,972	3,717
Surface run off (60%), Mm^3	2,383	2,230
Evapotranspiration (30%), Mm^3	1,192	1,115
Net Recharge to Groundwater (10%), Mm^3	397	372
Total (Actual) Renewable Water Resources, Mm^3	2,780	2,602
Total Water abstractions*, Mm^3	595	607

excluding hydroelectricity

3. Physical Water Supply and Use

The physical supply and use tables 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*

That is,

Total abstraction = *Total returns + water consumption*

since total supply of water to other economic units is equal to the total use of water received from other economic units.

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 is because part of the water used is incorporated into products, evaporated, transpired by plants or simply consumed by households or livestock.

Figure 1 and *Figure 2* depict the different flows of water between the environment and the economy as well as within the economy for the two years under study. Rainwater collected in surface bodies and aquifers is abstracted for use by the economy that constitutes the following sectors: Agriculture, Manufacturing and services, Hydropower generation, Water utility, Sewage collector and the Household sector. Total water flows from the environment amounted to 925 Mm^3 in 2019 and 996 Mm^3 in 2020.

Flows within the economy relate to potable water being channelled from CWA to resident economic units, waste water being supplied to WMA for treatment and/or disposal and some discarded water being converted into re-used water for the agricultural sector. Water flows between economic units was around 160 Mm^3 over the two years.

Water is also returned from the economy to the environment, that is, the internal water resources (surface water and ground water) and other resources (the sea). These can be in the form of water turbinated in hydroelectric plants, water lost from the utility supply network and waste water. The return flows ranged between 698 Mm^3 and 767 Mm^3 for the period 2019 to 2020.

Figure 1: Water flows in the environment and the economy in Mm^3, Island of Mauritius, 2019

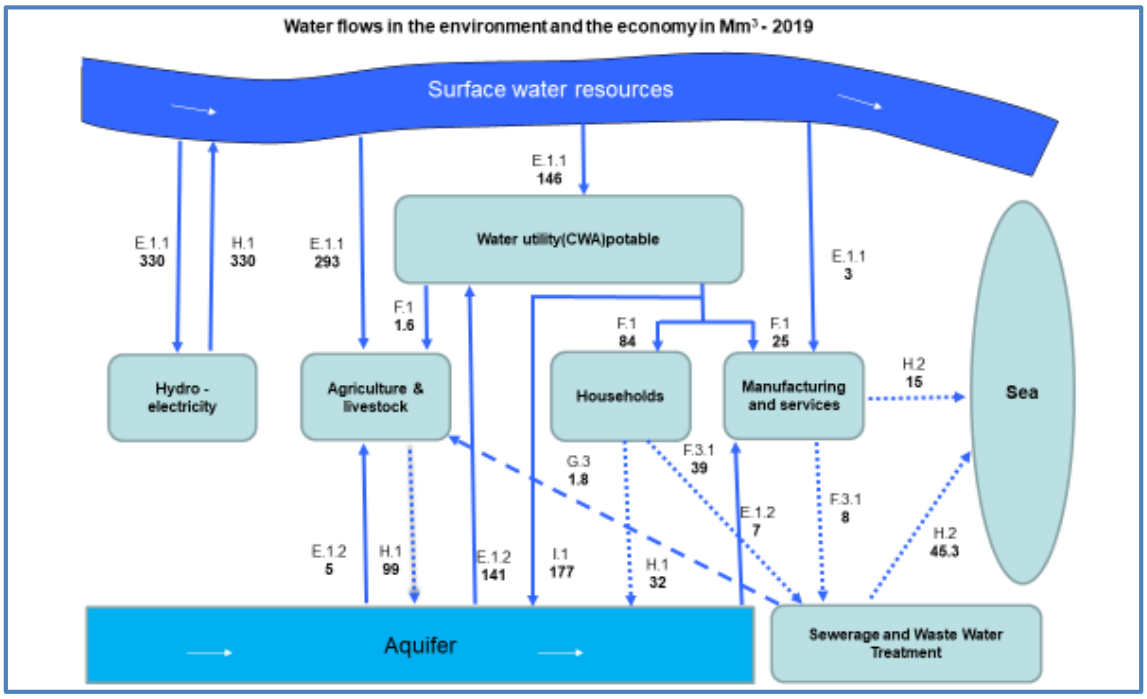
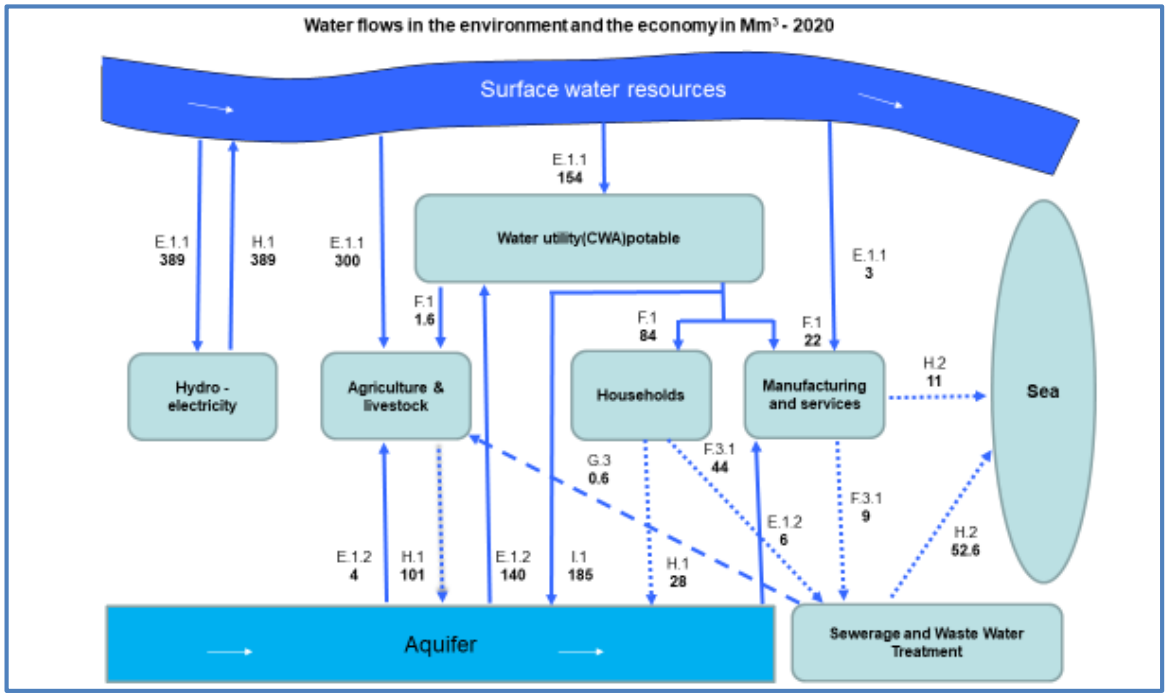


Figure 2: Water flows in the environment and the economy in Mm^3, Island of Mauritius, 2020



Legend to Figure 1 and Figure 2:

Water flows

Waste water flows

Reused water flows

***E.1.1**: Abstraction from surface water*

***E 1.2**: Abstraction from groundwater*

***F.1**: Water supplied by resident economic units to resident economic units*

***F.3.1**: Water supplied by resident economic units to resident economic units for treatment or disposal*

***G.3**: Wastewater received for further use*

***H.1**: Returns of water to the environment by economic units to inland water resources*

***H.2**: Returns of water to the environment by economic units to the sea*

***I.1**: Losses of water in distribution*

More details are given at “Definition from the International Recommendations for Water Statistics (IRWS)”.

Sections 3.1-3.4 explain the different parts of the Physical Supply and Use tables for 2019 and 2020.

Table 2: Detailed Physical Supply and Use, Island of Mauritius, 2019

A. Physical Use table *(millions of cubic metres)*		ISIC 01-03 Agriculture	ISIC 05-33, 41-43,38,39,45-99 Manufacture and services	ISIC 3510 Hydro-electricity	ISIC 3600 Water utility (drinking water)	ISIC 3700 Sewerage (collection and treatment)	Total	Households	Rest of the world	Total
From the environment	**1. Total Abstraction (= 1.a + 1.b = 1.i + 1.ii)**	298	10	330	287		**925**			**925**
	1.a. Abstraction for own use	298	10	330			**638**			**638**
	Hydroelectric power generation			*330*			***330***			***330***
	Irrigation water	*298*					***298***			***298***
	Mine water									
	Urban run-off									
	cooling water									
	Other		*10*				***10***			***10***
	1.b. Abstraction for distribution				287		**287**			**287**
	1.i. From inland water resources:	298	10	330	287		**925**			**925**
	1.i.1. Surface water	293	3	330	146		**772**			**772**
	1.i.2. Ground water	5	7		141		**153**			**153**
	1.i.3. Soil water									
	1.ii. Collection of precipitation									
	1.iii. Abstraction from the sea									
Within the economy	**2. Use of water received from other economic units**	3	25			47.1	**75**	84		**159**
	of which:									
	2.a. Reused water	1.8					**2**			**2**
	2.b. Wastewater to sewerage					47.1	**47**			**47**
	2.c. Desalinated water									
	3. Total use of water (=1 + 2)	**301**	**35**	**330**	**287**	**47**	**1000**	**84**		**1084**

Note: Dark grey cells indicate zero entries by definition

Table 2: Detailed Physical Supply and Use, island of Mauritius, 2019 (*continued*)

B. Physical Supply table *(millions of cubic metres)*		ISIC 01-03 Agriculture	ISIC 05-33, 41-43,38,39,45-99 Manufacture and services	ISIC 3510 Hydro-electricity	ISIC 3600 Water utility (drinking water)	ISIC 3700 Sewerage (collection and treatment)	Total	Households	Rest of the world	Total
Within the economy	**4. Supply of water to other economic units**		8		110	1.8	**120**	39		**159**
	of which:									
	4.a. Reused water					*1.8*	***2***			***2***
	4.b. Wastewater to sewerage		*8*				***8***	*39*		***47***
	4.c. Desalinated water									
Into the environment	**5. Total returns (= 5.a + 5.b)**	99	15	330	177	45.3	**666**	32		**698**
	Hydroelectric power generation			*330*			***330***			***330***
	Irrigation water	*99*					***99***			***99***
	Mine water									
	Urban run-off									
	cooling water									
	Losses in distribution because of leakages				*177*		***177***			***177***
	Treated wastewater					*45.3*	***45***			***45***
	Other		*15*				***15***	*32*		***47***
	5.a. To inland water resources (= 5.a.1 + 5.a.2 + 5.a.3)	99		330	177		**606**	32		**638**
	5.a.1. Surface water			330			**330**			**330**
	5.a.2. Groundwater	99			177		**276**	32		**308**
	5.a.3. Soil water									
	5.b. To other sources (e.g. Sea water)		15			45.3	**60**			**60**
	6. *Total supply of water (= 4 + 5)*	**99**	**23**	**330**	**287**	**47**	**786**	71		**857**
	7. Consumption (= 3 - 6)	**202**	**12**	**0**	**0**	**0**	**214**	13		**227**
	of which:									
	7.a. Other Losses in distribution									

Table 3: Detailed Physical Supply and Use, Island of Mauritius, 2020

A. Physical Use table *(millions of cubic metres)*		ISIC 01-03 Agriculture	ISIC 05-33, 41-43,38,39,45-99 Manufacture and services	ISIC 3510 Hydro-electricity	ISIC 3600 Water utility (drinking water)	ISIC 3700 Sewerage (collection and treatment)	Total	Households	Rest of the world	Total
From the environment	**1. Total Abstraction (= 1.a + 1.b = 1.i + 1.ii)**	304	9	389	294		**996**			**996**
	1.a. Abstraction for own use	304	9	389			**702**			**702**
	Hydroelectric power generation			*389*			***389***			***389***
	Irrigation water	*304*					***304***			***304***
	Mine water									
	Urban run-off									
	cooling water									
	Other		*9*				***9***			***9***
	1.b. Abstraction for distribution				294		**294**			**294**
	1.i. From inland water resources:	304	9	389	294		**996**			**996**
	1.i.1. Surface water	300	3	389	154		**846**			**846**
	1.i.2. Ground water	4	6		140		**150**			**150**
	1.i.3. Soil water									
	1.ii. Collection of precipitation									
	1.iii. Abstraction from the sea									
Within the economy	**2. Use of water received from other economic units**	2	22			53.2	**78**	84		**162**
	of which:									
	2.a. Reused water	0.6					**1**			**1**
	2.b. Wastewater to sewerage					53.2	**53**			**53**
	2.c. Desalinated water									
	3. Total use of water (=1 + 2)	**306**	**31**	**389**	**294**	**53**	**1074**	**84**		**1158**

Note: Dark grey cells indicate zero entries by definition

Table 3: Detailed Physical Supply and Use, Island of Mauritius, 2020 (*continued*)

B. Physical Supply table *(millions of cubic metres)*		ISIC 01-03 Agriculture	ISIC 05-33, 41-43,38,39,45-99 Manufacture and services	ISIC 3510 Hydro-electricity	ISIC 3600 Water utility (drinking water)	ISIC 3700 Sewerage (collection and treatment)	Total	Households	Rest of the world	Total
Within the economy	**4. Supply of water to other economic units**		9		109	0.6	**118**	44		**162**
	of which:									
	4.a. Reused water					*0.6*	***1***			***1***
	4.b. Wastewater to sewerage		*9*				***9***	*44*		***53***
	4.c. Desalinated water									
Into the environment	**5. Total returns (= 5.a + 5.b)**	101	11	389	185	52.6	**740**	28		**767**
	Hydroelectric power generation			*389*			***389***			***389***
	Irrigation water	*101*					***101***			***101***
	Mine water									
	Urban run-off									
	cooling water									
	Losses in distribution because of leakages				*185*		***185***			***185***
	Treated wastewater					*52.6*	***53***			***53***
	Other		*11*				***11***	*28*		***39***
	5.a. To inland water resources (= 5.a.1 + 5.a.2 + 5.a.3)	101		389	185		**676**	28		**703**
	5.a.1. Surface water			389			**389**			**389**
	5.a.2. Groundwater	101			185		**287**	28		**314**
	5.a.3. Soil water									
	5.b. To other sources (e.g. Sea water)		11			52.6	**64**			**64**
	6. *Total supply of water (= 4 + 5)*	**101**	**20**	**389**	**294**	**53**	**858**	72		**930**
	7. Consumption (= 3 - 6)	**205**	**11**	**0**	**0**	**0**	**216**	13		**229**
	of which:									
	7.a. Other losses in distribution									

3.1 Water Abstraction

From 2019 to 2020, fresh water abstraction from the environment increased by approximately 7.7% from 925 Mm^3 to 996 Mm^3. Abstraction from surface water rose by 9.6% during same period.

Table 4 provides a breakdown of water abstracted for the years 2019 to 2020 by sector. Out of total water abstracted for 2019, 32.2% was for agricultural use, 1.1% for industrial use, 35.7% for generating electricity and 31.0% for distribution to other resident units after treatment (through CWA). Almost same relative share of water abstraction was maintained in 2020 for each economic unit except for hydropower generation whereby an increase of 2.0% was noted.

Table 4: Fresh water abstraction by economic unit, Island of Mauritius, 2019-2020

Economic Unit	2019		2020	
	Mm^3	%	Mm^3	%
Agriculture	298	32.2	304	30.5
Manufacturing	10	1.1	9	0.9
Hydropower	330	35.7	389	39.1
Water Supply Industry (CWA)	287	31.0	294	29.5
TOTAL	***925***	***100.0***	***996***	***100.0***

Over the two-year period, CWA abstracted almost equally from surface and ground water for distribution whereas the Manufacturing sector abstracted mostly groundwater (around 68.3%) compared to surface water.

3.2 Water utilisation

In addition to water abstracted by the different resident sectors for use, some 159 Mm^3 and 162 Mm^3 of water were mainly received from CWA in 2019 and 2020, respectively. The latter supplied potable water to the household sector, manufacturing and agricultural sectors. The WMA received waste water from almost all concerned sectors, excluding Agriculture, to conduct its main activity of waste water collection, treatment and disposal. Some of the waste water was treated and directed to agriculture as re-used water (1.8 Mm^3 in 2019 and 0.6 Mm^3 in 2020).

In 2019, 1,084 Mm^3 of water was utilised by all sectors jointly. Water volume of 330 Mm^3 (or 30.4%) was withdrawn to generate electricity, 301 Mm^3 (or 27.8%) was used in agriculture, 287 Mm^3 (or 26.5%) by CWA, 84 Mm^3 (or 7.7%) for domestic use mainly and 35 Mm^3 (or 3.2%) was meant for the manufacturing and services industries.

With a rise of 6.8%, the corresponding figure representing water utilisation reached 1,158 Mm^3 in 2020. The hydropower generation industry (389 Mm^3 or 33.6%) and the agriculture industry (306 Mm^3 or 26.4 %) are the two largest users of water. They were followed by CWA (294 Mm^3 or 25.4 %) and households (84 Mm^3 or 7.3%). The manufacturing and services industries represented the smallest user with 31 Mm^3 of water utilised or 2.7% of the total.

3.3 Water consumption

Water consumed in agriculture, manufacturing and services, and households was 227 -229 Mm^3 for the two consecutive years. For both years, the largest consumer was agriculture with water volumes ranging from 202 Mm^3 to 205 Mm^3 not being returned to the environment.

In 2020, total water consumption was 229 Mm^3, an increase of 1.0% compared to 227 Mm^3 for 2019. Agricultural water consumption was 205 Mm^3 (or 89.6 %) whilst manufacturing sector (11 Mm^3) and households (13 Mm^3) represented 4.8% and 5.5%, respectively, of total consumption. Therefore, 23.0% of water abstracted from the environment was consumed, that is, incorporated in products or living things (humans, plants/crops, livestock).

3.4 Water return to the environment

Out of the total volume of water abstracted in the economy in 2019, some 698 Mm^3, that is, 75.5% was returned to the environment. Some 638 Mm^3 (91.4%) was returned to the internal water resources system and the remaining to other resources, namely, the sea.

The total amount of water which is returned to the economy adds up to 767 Mm^3 in 2020. This represented 77.0% of water abstracted. Around 91.7% of the returns combined with existing internal water resources and the rest with seawater. The electricity industry returned 389 Mm^3 (that is, all the water which is abstracted for hydropower generation), the agricultural sector 101 Mm^3 as irrigation water and CWA 185 Mm^3 of water as a result of losses in distribution due to leakages (that is, Unaccounted for Water). For the remaining sectors, households returned 28 Mm^3 and manufacturing and services 11 Mm^3 directly into the environment. Some 53 Mm^3 of water was returned by household and industrial users through the sewerage and water treatment system (WMA).

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 evaporation/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.

The physical asset accounts for water resources in Mauritius for 2019 and 2020 are shown below.

Table 5: Water Asset Account, Island of Mauritius, 2019

2019	Type of water resource					TOTAL
	Surface water			Groundwater	Soil water	
	Artificial reservoirs	Lakes	Rivers and streams			
Opening stock of water	**Opening A.1**			**Opening A.2**		**Opening A.1 + Opening A.2**
Additions to	**2,713**			**705**	**1,589**	**5,007**
Returns	167		163	308		**638**
Precipitation	2,383				1,589	**3,972**
Inflows from other territories						
Inflows from other inland water resources				397		**397**
Discoveries of water in aquifers						
Reductions	**318**	**0**	**2,395**	**705**	**1,589**	**5,007**
Abstractions	318		454	153		**925**
for hydro power generation	*167*		*163*			***330***
for cooling water						
Evaporation & actual evapotranspiration					1,192	**1,192**
Outflows to other territories						
Outflows to the sea			1,941	552		**2,493**
Outflows to other inland water resources					397	**397**
Closing stock of water	**Closing A.1**			**Closing A.2**		**Closing A.1 + Closing A.2**

Note: Dark grey cells indicate zero entries by definition

The physical asset account for 2019 (*Table 5*), mainly shows that around 2,713 Mm^3 of water was added to the existing stock of surface water by means of precipitation and returns from the economy. Out of this, some 772 Mm^3 (or 28.5%) was abstracted for use and the remaining water flowed to the sea. With regards to groundwater, some 705 Mm^3 was added to the deep aquifers whereas only some 153 Mm^3 (or 21.7%) was withdrawn for use, and sea outflows was 552 Mm^3.

Table 6: Water Asset Account, Island of Mauritius, 2020

2020	Type of water resource					TOTAL
	Surface water			Groundwater	Soil water	
	Artificial reservoirs	Lakes	Rivers and streams			
Opening stock of water	**Opening A.1**			**Opening A.2**		**Opening A.1 + Opening A.2**
Additions to	**2,619**			**686**	**1,487**	**4,792**
Returns	214		175	314		**703**
Precipitation	2,230				1,487	**3,717**
Inflows from other territories						
Inflows from other inland water resources				372		**372**
Discoveries of water in aquifers						
Reductions	**384**	**0**	**2,235**	**686**	**1,487**	**4,792**
Abstractions	384		462	150		**996**
for hydro power generation	*214*		*175*			***389***
for cooling water						
Evaporation & actual evapotranspiration					1,115	**1,115**
Outflows to other territories						
Outflows to the sea			1,773	536		**2,309**
Outflows to other inland water resources					372	**372**
Closing stock of water	**Closing A.1**			**Closing A.2**		**Closing A.1 + Closing A.2**

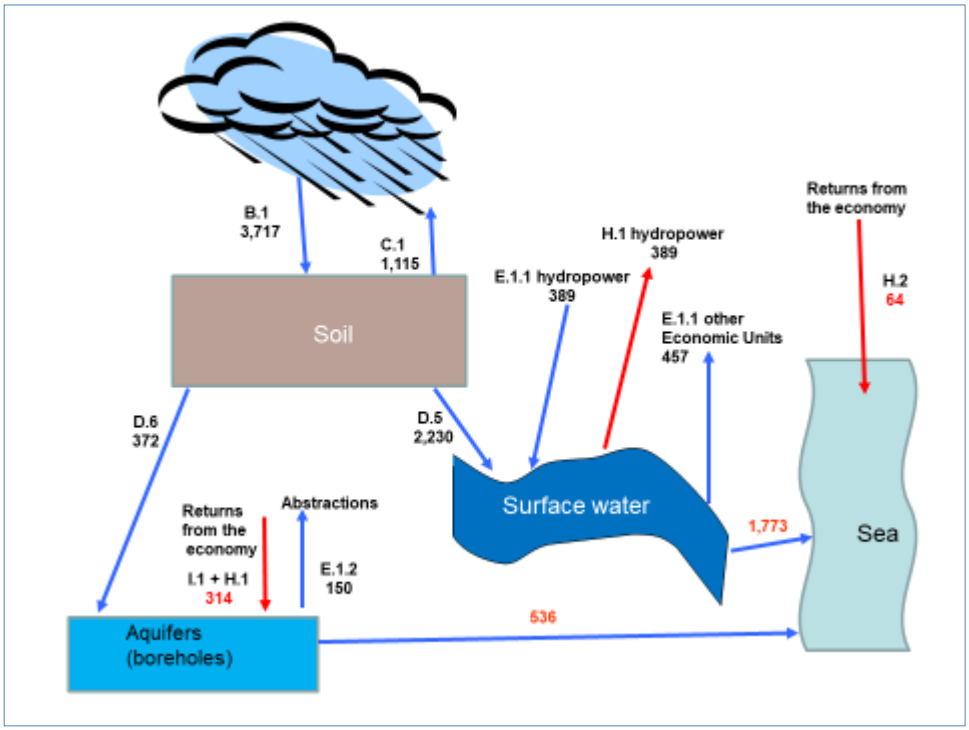
Note: Dark grey cells indicate zero entries by definition

In 2020, the total volume of water added to the existing water resources was 4,792 Mm^3, representing a decrease of 4.3% as compared to 5,007 Mm^3 in 2019. Over the year, surface water added to the environment, mainly, in reservoirs and rivers/streams was 2,619 Mm^3, ground water was about 686 Mm^3 and soil water containing water in the uppermost belt of soil was about 1,487 Mm^3.

Total reduction is mainly explained by outflows to the sea (2,309 Mm^3) from surface and ground water bodies and evaporation/evapotranspiration (1,115 Mm^3). Reduction in water stock from abstraction including hydropower was 996 Mm^3 and outflows to other inland water resources was 372 Mm^3.

Of the total surface water and total ground water available to Island of Mauritius, water abstracted represented 32.3% and 21.9%, respectively.

Figure 3: Water flows (Mm^3) to and from inland water resources, Island of Mauritius, 2020



Note: 1. *Red numbers are rough estimates or balancing numbers.*
2. *Surface water include artificial reservoirs, lakes, and rivers and streams.*

Figure 3 shows water flows within the internal water resources and the sea. The role played by soil as a transportation medium to flow water into boreholes (372 Mm^3) and surface water bodies (2,230 Mm^3) is clearly described. In addition, soil allows evapotranspiration of some 1,115 Mm^3 of water back into the water cycle. From rainfall of 3,717 Mm^3, some 2,373 Mm^3 was returned to the sea from the economy and internal water resources.

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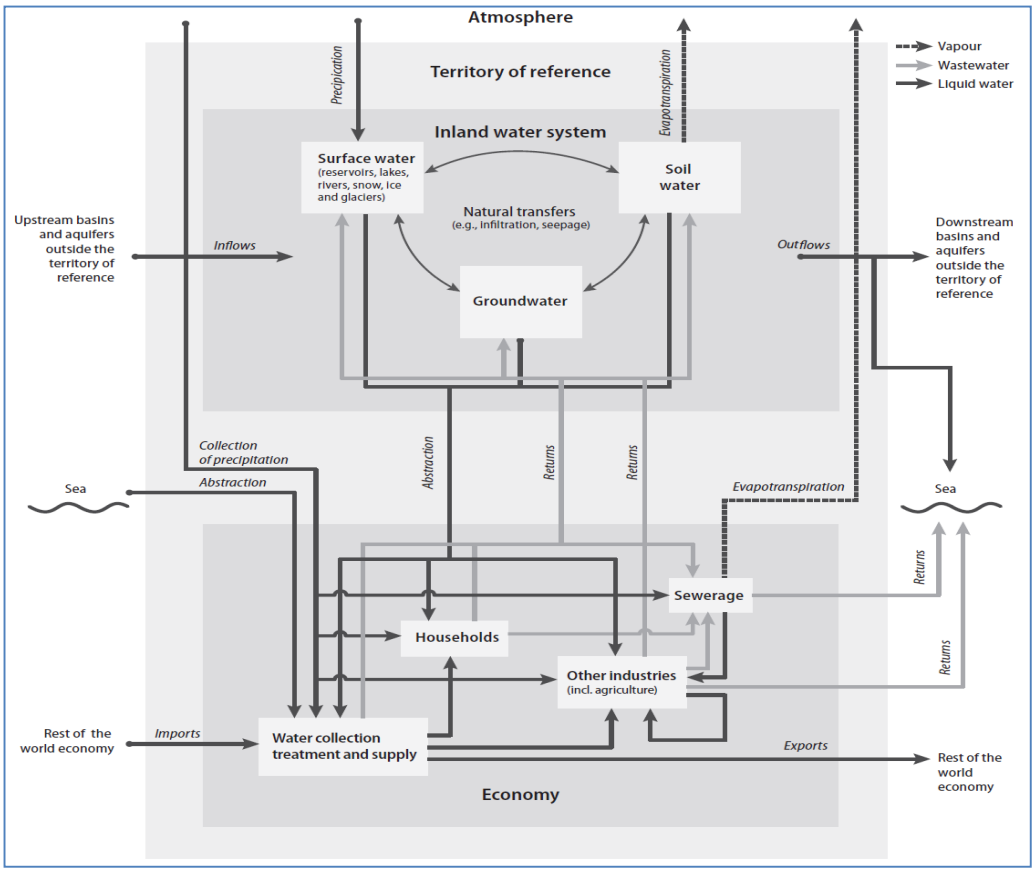
Concepts and Methodologies

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 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 economy and the inland water resource system 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.

Definition from the International Recommendations for Water Statistics (IRWS)

1. **Inland water stocks (A)** - 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. **Surface water stock (A.1*)*** - 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.

3. **Groundwater stocks (A.2)** -The volume of water in porous and permeable underground layers, known as aquifers, that can yield significant quantities of water to wells and springs within the territory of reference at a particular point in time.

4. **Precipitation (B.1)** - The volume of water that flows from the atmosphere to inland water resources via rain, snow, sleet, hail, dew, mist, etc., per year.

5. **Evapotranspiration from inland water resources (C.1)** - 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. **Natural transfers with other resources in the territory (D) -** The volume of water that moves between inland water resources of a territory, per year. The volume of water that moves from soils to artificial reservoirs, lakes and rivers on the land's surface (D.5). The volume of water that infiltrates from soils into aquifers (D.6).

7. **Abstraction of water (E)** is the volume of water that is removed or collected by economic units directly from the environment within the territory of reference, per year. 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).

8. **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

9. **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

10. **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

11. **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, per year. 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, 94100), which is one of the supplementary data items.

12. **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.

13. **Water supplied by resident economic units to resident economic units for treatment or disposal (F.3 and F.4)** - The volume of water discharged into drains or sewers by resident economic units for treatment or disposal by other resident economic units, per year.

14. **Water received from other economic units (G)** - Water received from other economic units (G) consists of G.1 water (CPC 18000) received by resident economic units from other resident economic units; G.2 water (CPC 18000) received by resident economic units from the rest of the world (water imports); G.3 wastewater received by resident economic units from other resident economic units; and G.4 wastewater received by resident economic units from the rest of the world (wastewater imports). Wastewater (G.3 and G.4) is further divided into wastewater received for treatment and disposal (G.3.1 and G.4.1) and wastewater received not for treatment and disposal (for further use, G.3.2 and G.4.2).

15. **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.

16. **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.

17. **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.

18. **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.

19. **Losses of water in distribution (I.1**) - The volume of water (CPC, Ver. 2, 18000) 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 1 : Selected water-related indicators for Island of Mauritius, 2011-2020

Indicators	Units	LTA*	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
General Indicators												
Mid-year population	000	…	1,212	1,215	1,217	1,219	1,221	1,221	1,222	1,222	1,222	1,222
Population density	inhab/km^2	…	669	652	653	654	653	654	654	654	654	654
Hydrologic Information												
Precipitation in height	mm	2,011	1,948	1,621	2,126	2,094	2,377	1,896	2,134	2,816	2,130	1,993
TRWR	hm^3/year	2,625	2,539	2,101	2,675	2,733	3,103	2,475	2,794	3,676	2,780	2,602
TRWR per capita	m^3/inhab	…	2,095	1,729	2,197	2,242	2,542	2,027	2,286	3,008	2,274	2,129
Socio-economic water indicators												
Total water abstracted **	hm^3/year	…	571	582	608	620	612	620	610	591	595	607
Water abstracted per capita **	m^3/inhab	…	471	479	499	509	501	508	499	484	487	497
Water abstraction as proportion of TRWR	%	…	22.5	27.7	22.7	22.7	19.7	25.1	21.8	16.1	21.4	23.3
Water abstracted for drinking water per capita per day **	Litre	…	459	485	488	515	549	553	586	639	662	679
Water abstracted by CWA	hm^3	…	205	206	220	234	255	257	262	281	287	294
Unaccounted for Water by CWA	hm^3	…	108	111	124	137	157	157	157	172	178	185
Proportion of abstraction by water utilities that is lost	%	…	52.9	53.8	56.4	58.6	61.5	61.0	60.1	61.4	62.0	62.9
Water received in households per capita per day	Litre	…	167	164	165	167	168	171	180	186	187	189
Proportion of population using safely managed drinking water services***	%	…	99.6	…	…	…	…	…	…	…	…	…
Proportion of hydropower generation	%	…	2.1	2.7	3.3	3.1	4.1	3.3	2.9	4.0	3.1	4.1

LTA: Long term average of 1971 – 2000* * revised figures* **** Source: 2011 Housing and Population Census*

Annex 2: Water supply by sector, Island of Mauritius, 2011-2020

	Unit	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Potable Water Supply to:											
Households	Mm^3	74	73	73	74	75	76	80	83	84	85
Non-household:	Mm^3	23	22	23	23	23	24	24	26	26	24
Agriculture and livestock	Mm^3	*2*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*2*	*2*
Manufacturing	Mm^3	*5*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*3*	*3*
Accommodation & Other services	Mm^3	*17*	*17*	*17*	*18*	*18*	*19*	*19*	*20*	*21*	*20*
Total Potable Water Supply	**Mm^3**	**96**	**95**	**96**	**97**	**98**	**100**	**105**	**109**	**110**	**109**
Non-potable Water Supply to:											
Agriculture and livestock	Mm^3	11	10	10	9	8	11	8	8	7	6
Manufacturing	Mm^3	6	6	6	6	7	8	7	8	8	8
Total Non-potable Water Supply	**Mm^3**	**17**	**16**	**15**	**15**	**15**	**19**	**15**	**15**	**15**	**14**
Total Sales of water	**Mm^3**	**113**	**111**	**111**	**112**	**113**	**119**	**120**	**124**	**125**	**123**

Annex 3: Water abstraction, Island of Mauritius, 2011-2020

INDICATORS	Unit	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Abstractions											
Surface water	Mm^3	449	460	487	489	467	473	468	441	442	457
from reservoirs	Mm^3	*104*	*121*	*136*	*141*	*157*	*158*	*144*	*154*	*151*	*170*
from rivers and streams	Mm^3	*345*	*339*	*351*	*348*	*310*	*315*	*324*	*287*	*291*	*287*
Groundwater	Mm^3	122	122	121	131	145	147	142	150	153	150
Total abstraction *(excluding hydroelectricity)*	**Mm^3**	**571**	**582**	**608**	**620**	**612**	**620**	**610**	**591**	**595**	**607**
Abstraction per capita	Litre	471	479	499	509	501	508	499	484	487	497
Hydroelectricity	Mm^3	181	218	280	275	361	341	312	398	330	389
Total abstraction	Mm^3	**752**	**800**	**888**	**895**	**973**	**961**	**927**	**989**	**925**	**996**
Water abstraction by CWA for distribution											
Surface water	Mm^3	94	97	112	115	122	124	132	143	146	154
Groundwater	Mm^3	111	109	108	119	133	133	130	138	141	140
Total water abstracted by CWA	**Mm^3**	**205**	**206**	**220**	**234**	**255**	**257**	**262**	**281**	**287**	**294**
% Abstracted by CWA	%	35.5	35.4	36.2	37.6	41.7	41.5	42.6	47.5	48.2	48.4