



**UGANDA BUREAU OF STATISTICS**



## **UGANDA WATER ACCOUNTS REPORT 2022**



**System of Environmental Economic Accounting-  
Water accounts of 2020 to 2021**

**December 2022**

# FOREWORD

The Uganda water accounts are one of the environmental-economic accounts produced by Uganda Bureau of Statistics (UBOS). The accounts compiled in accordance with the System of Environmental Economic Accounting (SEEA) and the SEEA-Water which was elevated to an international statistical standard in 2012. These accounts extend the boundaries of the System of National Accounts (SNA) framework to include environmental resources, which occur outside the economic production and asset boundaries measured by the SNA.

The accounts integrate data from different sources into a consolidated information set making it possible to link physical data on water to economic data. It consists of supply and use tables for both physical and monetary volumes. Water supply and use tables provide a framework to link core components of the National Accounts to physical information.


The physical water supply and use tables present aggregates of all available physical data (cubic metres) in terms of the supply and use of water within the economy for the accounting period. The tables illustrate the economic use of water and include: flows from the environment, own abstraction, water distribution, use of water (intermediate consumption), reuse/return flows and flows to the rest of the world.

The monetary supply and use tables which present aggregates of all available quantitative monetary data in terms of the supply and use of water within the economy are not presented in this report. They illustrate the economic transactions associated with the supply and use of water and the provision of sewerage, drainage and waste services.

The scope of the water accounts is limited to distributed water, reuse water and waste water, sewerage and drainage services. Distributed water is subdivided into; urban distributed water; rural distributed water; and bulk water (both urban and rural) according to National Water and Sewerage Corporation.

Data for the water accounts is sourced from a range of UBOS surveys, water authorities, and industries.

We appeal to the policy makers and general public to put to good use these accounts for informed decision making.



Aliziki K Lubega

For: **EXECUTIVE DIRECTOR**

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## **1.0 INTRODUCTION**

Uganda's economy is to a great extent nature dependent; driven mainly by agricultural production and agricultural related industrial activities. The primary agricultural production is mostly rain-fed dependent and any delay in the rain fall or drought spells doom for the country. Most of the economic activities are dependent on water availability hence prioritizing the water accounts among all accounts. The water accounts are compiled by estimating and populating three important tables: i) the Water-data input, ii) the physical water supply table, and iii) the physical water use table. In order to come up with the information stipulated below;

The Gross Water Input for 2021 was estimated at 220,407,327 million cubic metres which was lower than 261,209,916 million cubic metres estimate of 2020. Similarly, total water consumption declined by 12.3 percent; 28,921,586 million cubic metres in 2021 from 32,963,329 million cubic metres in 2020.

Water use efficiency (WUE) declined to UGX 67,573 in 2021 from UGX 108,455 registered in 2020. The annual water use per capita for 2021 was 5,389,531 cubic metres which was lower than 6,562,289 cubic metres registered in 2020. The average water use per household per day registered an increase of 52.6 litres in 2021 from 48.5 litres in 2020. The average water consumption per household per day rose to 30.9 litres in 2021 from 28.5 litres in 2020.

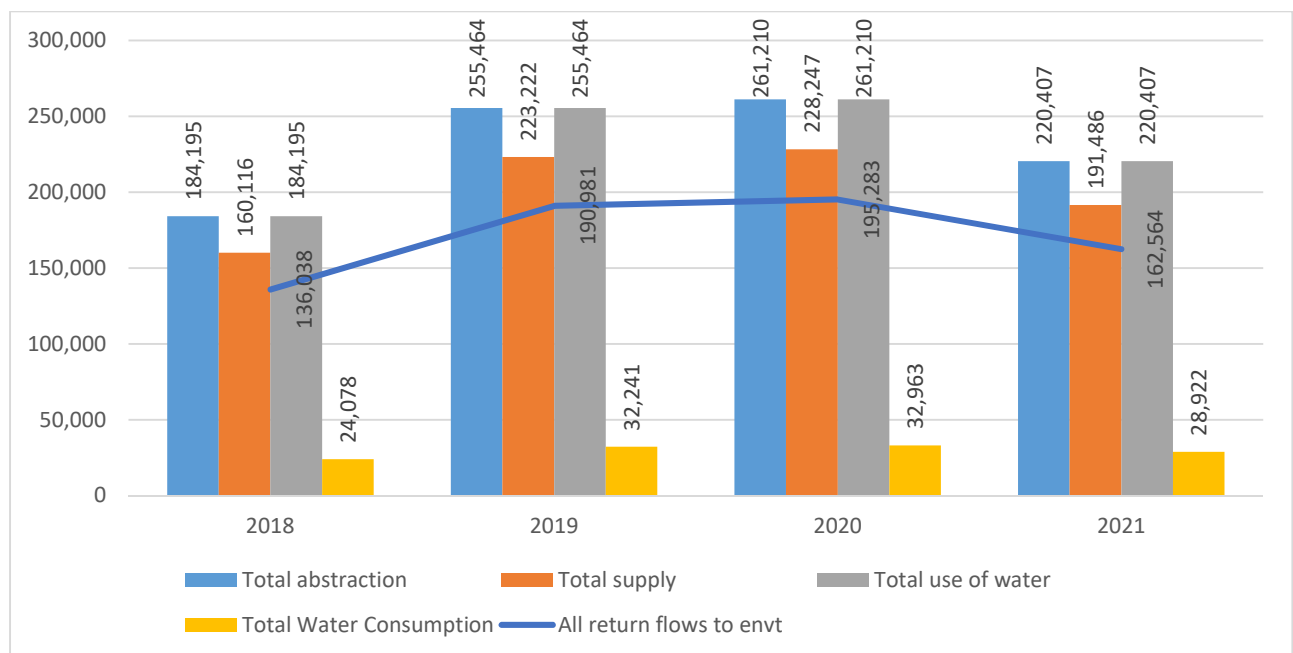
## **2.0 PHYSICAL WATER SUPPLY AND USE**

In 2021, the amount of water abstracted from the environment dropped to an estimate of 220,407,327 million cubic metres from 261,209,916 million cubic metres that was abstracted in 2020. This represented a decline of 15.6 percent in the water abstracted. Likewise, the amount of water supplied decreased by 16.1 percent, to 191,485,739 million cubic metres in 2021 from 228,246,511 million cubic metres in 2020. Furthermore, the total amount of water used in the economy dropped to 220,407,417 million cubic metres in 2021 from the estimated amount of 261,209,925 million cubic metres in 2020.

On the other hand, Total water consumption also dropped to 12.3 percent from 32,963,414 million cubic metres in 2020 to 28,921,678 million cubic metres in 2021. Total water return flows to the environment also dropped to 162,564,060 million cubic metres in 2021 from 195,283,097 million cubic metres in 2020, See Table 1.

The annual average amount of water returned to the environment for 2021 constituted 73.8 percent of the total water abstracted as shown in the figure below;

**Figure 1: Water Supply and Use**

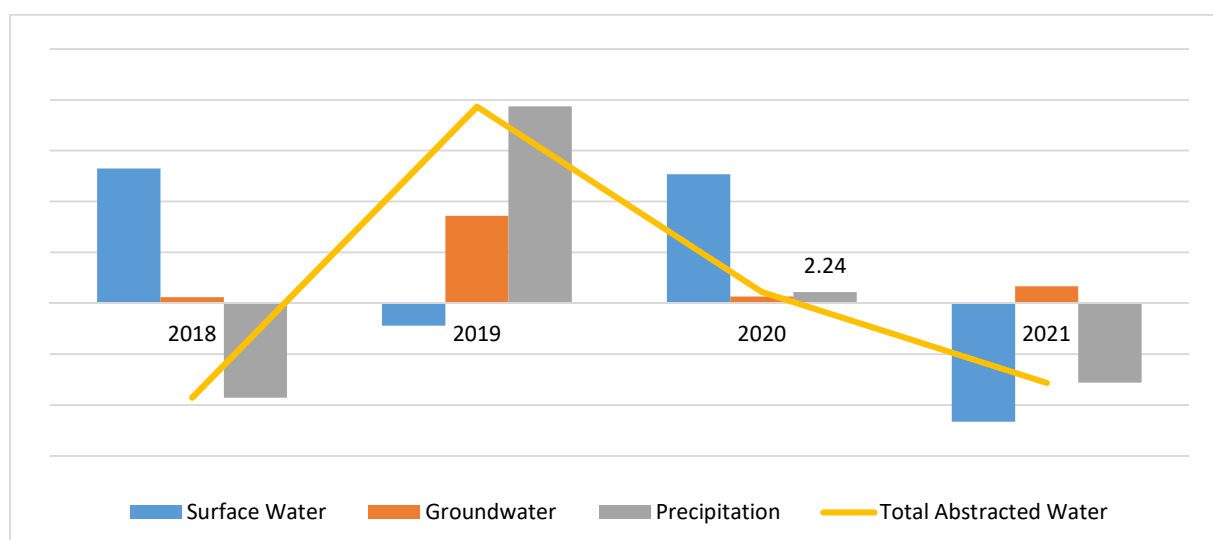


Source: Uganda Bureau of Statistics

**2.1 Water Abstraction by Water Source**

Precipitation as the main source of water abstracted in 2021 with an annual average share of 99.95 percent, dropped to 15.6 percent in 2021 from a 2.24 percent increase registered in 2020. In addition, water abstracted from surface water bodies reduced by 23.3 percent in 2021 to 106,400 million cubic metres from 138,702 million cubic metres in 2020. However, water abstracted from ground water resources increased by 3.4 percent in 2021 from an increase of 1.3 percent in 2020. As shown in the figure below;

**Figure 2: Water Abstraction by Source**



Source: Uganda Bureau of Statistics

## **2.2 Water Abstraction by Purpose**

Estimates indicate that total water abstracted for supply and distribution purposes dropped by 36.5 percent in 2021 as opposed to the growth of 13.9 percent which was registered in 2020. Water abstracted for own use also decreased to 15.6 percent in 2021 as opposed to a 2.2 percent growth in 2020.

## **2.3 Water Abstraction by Economic Activity**

The agriculture sector has continuously recorded the largest volumes of water abstracted averaging 99.42 percent of the total water abstracted in 2021. The amount of water abstracted for agricultural activities in 2021 decreased by 15.56 percent compared to an increase of 2.24 percent registered in 2020. The main drivers for the reduction in the water abstraction were agriculture irrigation that registered a 77.36 percent decline, agriculture rain-fed crop growing and Forestry activities that registered a 24.38 percent decline. However, Livestock registered a growth of 18.16 percent compared to 2.24 percent reducing growth recorded in 2020. In addition, Fishing recorded an increase of 0.02 percent which was a recovery from a decline of 2.76 percent recorded in 2020, See Table 3.

The industry sector average recorded a reduction of 0.58 percent in 2021 compared to 0.62 percent of the total share of annual abstraction in 2020. This exhibited a decrease of 24.28 percent in the amount of water abstracted by the sector in 2021, differing from an increase in the annual abstractions of 3.81 percent in 2020. The Construction activities had the strongest growth followed by manufacturing of Food and Beverage activities in 2021.

The services sector, continued to have a negligible share of the total water abstracted annually for the period under review. However, water abstraction by this sector grew by 28.6 percent; 5.54 million cubic meters in 2021 from 4.24 percent; 4.31 million cubic metres in 2020. Public administration services was the main driver in the services sector with an increase of 70.31 percent in 2021, See Table 3.

## **2.4 Water Supply by Economic Activity**

In 2021 water supply across water abstraction economic activities was dominated by agriculture activities with an annual average of 99.39 percent supply followed by the industrial activities with 0.61 percent. Agriculture rain-fed crop growing activities dominated the water supply category with an average share of 61.70 percent of the total water supplied annually in 2021. However, agricultural activities registered a decrease in the amount of water supplied from 226,575,737 million cubic metres in 2020 to 190,326,167 million cubic metres in 2021 resulting to a 16.00 percent decrease despite an increase of 18.16 percent in Livestock activities, See Table 4.

Water supply within the industrial sector dropped to 30.60 percent in 2021 which was dominated by a reduction of 31.21 percent in Water Supply, Sewerage and Waste Management activities and 21.01 percent in electricity for water supplied to industrial activities.

Consequently, the total amount of water supplied grew by 8.82 percent in 2021, which was a continued increase from 2.91 percent in 2020, See Table 4.

## **2.5 Water Use by Economic Activity**

Total water use was greatly dominated by agriculture sector activities accounting for a 99.42 percent annual average share for 2021. In the agriculture sector, water use declined from 2.24 percent in 2020 to 15.56 percent in 2021. This was mainly driven by a decline in irrigation activities of 77.36 percent, agriculture rain fed crop activities and forestry activities of 24.38 percent in 2021. However, there was an increase in water used for livestock and fishing activities of 18.16 and 0.02 percent respectively.

The total share of water used by the industry sector averaged 0.58 percent in 2021. Water used by this sector decreased by 24.28 percent in 2021 after an increase of 3.81 percent in 2020. Water Supply, Sewerage and Waste Management Activities dominated the use of water in this sector with a share of 0.54 percent share of the total water use though it registered a decrease of 24.38 percent in 2021 following an increase of 2.24 percent which had been registered in 2020.

For the service sector, water use share is negligible, however it increased by 9.05 percent in 2021 following an increase of 2.98 percent in 2020. Notably, within the service activities, Household's activities dominated water use accounting for an average of 75.33 percent share within the sector, followed by public administration activities with 12.54 percent share within the sector in 2021, See Table 5.

## **2.6 Water Consumption**

Water consumption is that part of water which is not distributed to other economic units and does not return to the environment, because it is either incorporated in products, or consumed by households and livestock. Total water consumption excluding households in 2021 was 28,921,586 million cubic metres from 32,963,329 million cubic metres in 2020, representing a decrease of 12.3 percent from an increase of 2.24 percent registered in 2020, See Table 6.

Water consumption by agricultural sector had the largest annual average share of 99.55 percent in 2021. In this sector, agriculture rain fed crop had the biggest share of 45.4 percent, followed by livestock and forestry with 37.3 and 16.8 percent annual average share respectively. Water consumption in agriculture decreased by 12.6 percent in 2021 compared to the increase of 2.2 percent recorded in 2020. This was majorly driven by the decrease in water consumed by irrigation of 77.4 percent, 24.4 percent of rain fed crop and forestry agricultural activities.

Water consumption by industrial activities had an annual average share of 0.45 percent that was dominated by activities of Water supply; Sewerage and Water Management activities accounting for 0.44 percent share of the industry in 2021. Water consumption by industrial activities grew and this was mainly driven by the increase in construction activities of 325.5 percent from the increase registered in 2020 of 30.8 percent and the increase in water supply sewerage management activities. However, there was a reduction of 24.0 percent in the water consumed in for electricity activities.



Water consumption by service activities continues to be negligible compared to water consumption by agriculture and industrial activities. However, it grew by 9.19 percent in 2021 from 3.02 percent recorded in 2020. Household activities dominated (71.08 percentage share). Household water consumption increased by 8.6 percent in 2021 following the growth of 2.70 percent in 2020, See Table 6.

### **3.0 ECONOMIC PROFILES FOR WATER**

It is important to compare the environmental performance of industries among each other overtime. This is achieved through use of environmental-economic profiles which compare direct economic benefits and environmental burden/costs. The economic water profiles may be used for benchmarking industrial performance in order to promote water use efficiency and water conservation. Economic profiles of water productivity and Water Use Efficiency for the water accounts are as presented below.

#### **3.1 Water Productivity**

Water productivity is an indicator that combines two elements, that is economic contribution and environmental burden into a single indicator.

In 2021, water productivity was UGX/m<sup>3</sup> 4.86 from UGX/m<sup>3</sup> 4.21 in 2020 representing an annual average growth of 15.30 percent. The activities with greater burden on water resources are, Livestock rearing with the lowest value (UGX/ m<sup>3</sup> 0.52), forestry (UGX/m<sup>3</sup> 1.24), agriculture Rain fed (UGX/m<sup>3</sup>1.44) and Water Supply, Sewerage and Waste Management Activities (UGX/m<sup>3</sup> 24.23).

Activities with greater economic contribution and less environmental burden were mainly services activities that registered UGX/m 531,214 in 2021. Apart from other service activities (not classified), education activities had the greatest economic benefit and less environmental burden with water productivity of UGX/m<sup>3</sup> 3,298,275 of value added per cubic metre of water consumed, See Table 7.

#### **3.2 Water Use Efficiency (WUE)**

Water Use Efficiency (WUE) is the value added divided by the volume of water used for a given industrial activity. In computation, only run-off water and groundwater (so called blue water) are considered when computing this indicator, (FAO, 2018). However, the amount of water of agricultural production carried out in rain-fed conditions and the amount of water abstracted for hydro-power generation (except evaporation at the dam) are excluded.

The WUE registered in 2021 was estimated at UGX 67,573 of value added per cubic metre of water used, equivalent to US\$18.1 per cubic metre. Similar to the previous years, the service sector activities emerged as the most water use efficient activities estimated at UGX /m<sup>3</sup> 506,294. The drivers were; other services, followed by education services, accommodation and health. See Table 8.

## 4.0 THE DERIVED AGGREGATES AND INDICATORS

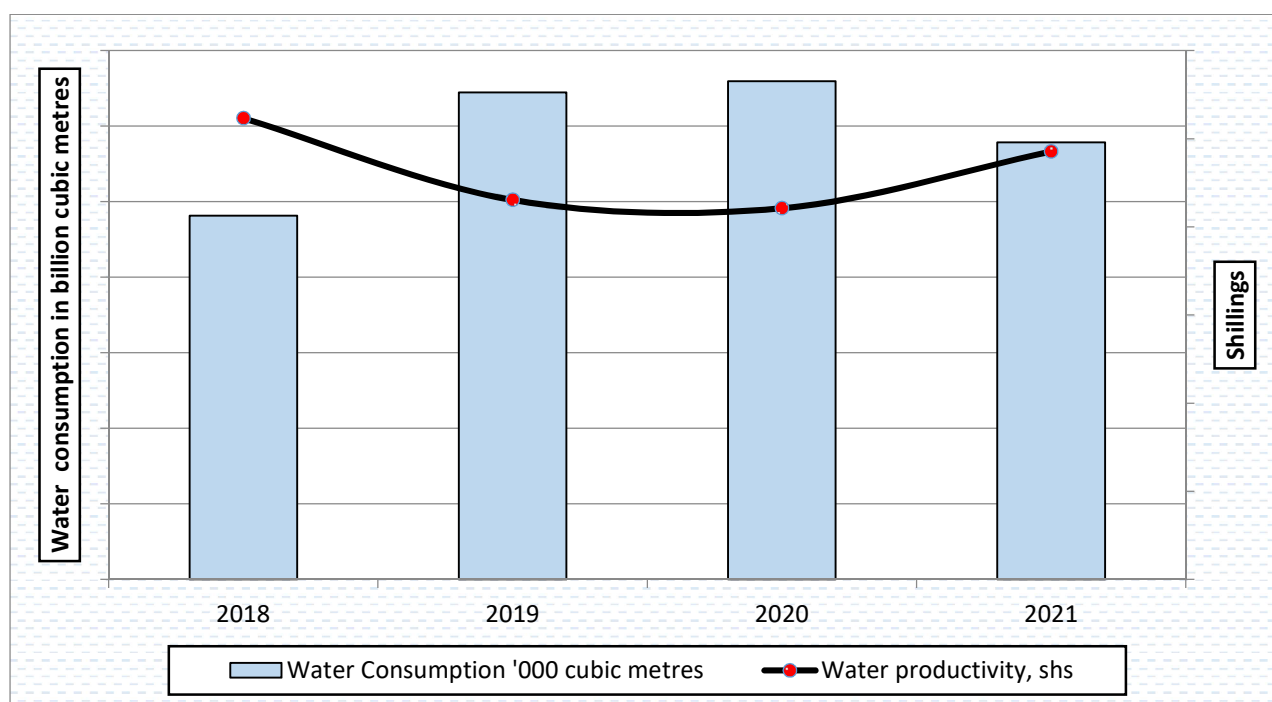
This section presents the social and economic aspects of water with discussions on some implications of the state of the water sector. The purpose is to provide an insight into the outcomes of the current water management and regulation in order to improve water management for sustainability.

Over the reporting period, the highest Gross Water Input of 220,407,327 million cubic meters was estimated in 2021 which was lower than the estimate of 261,209,916 million cubic metres registered in 2020. Similarly, Net Domestic Water use of 220,407,314 million cubic meters estimate for 2021 was lower than 261,209,903 million cubic metres reported in 2020. Due to lack of estimates of imported water, Gross Water Input is equal to Net Domestic Water.

### 4.1 Water Consumption and Water Productivity

Water consumption was estimated at 28,921,586 million cubic metres in 2021, leading to water productivity of UGX/m<sup>3</sup> 4.86. As indicated in Figure below, water productivity has continued to grow compared to water consumption. Industry and service sectors registered the highest amount of water consumption with corresponding lowest water productivity. However, the agricultural sector registered a growth of 21.6 percent in water productivity despite the decrease in its water consumption of 12.6 percent. Therefore, in order to increase on water productivity for these economic units, the opportunities for improving water productivity should be identified and implemented.

**Figure 3: Water Consumption and Water Productivity**

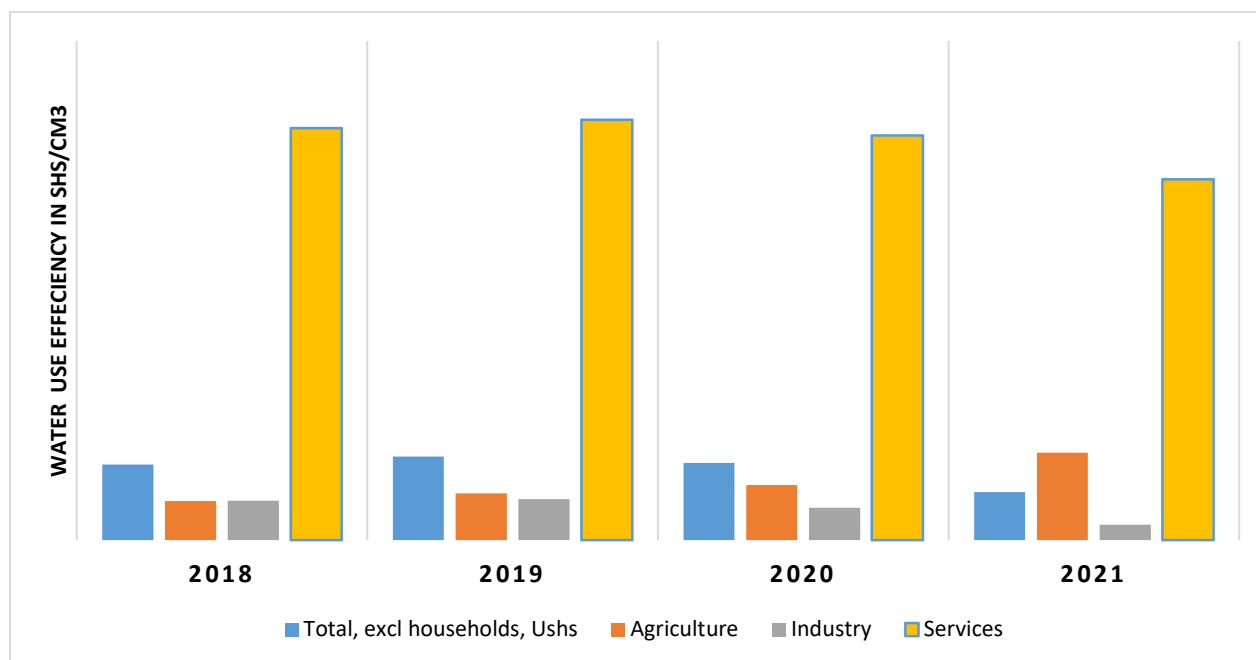


Source: Uganda Bureau of Statistics

## 4.2 Water Use Efficiency (WUE)

The WUE excluding households of UGX 67,573 was registered in 2021. This was lower than, UGX 110,463 registered in 2020 implying that less water was used without a corresponding increase in GDP. Service activities registered the highest WUE while industry activities registered the lowest WUE as shown in the Figure 2 below.

**Figure 4: Water Use Efficiency**

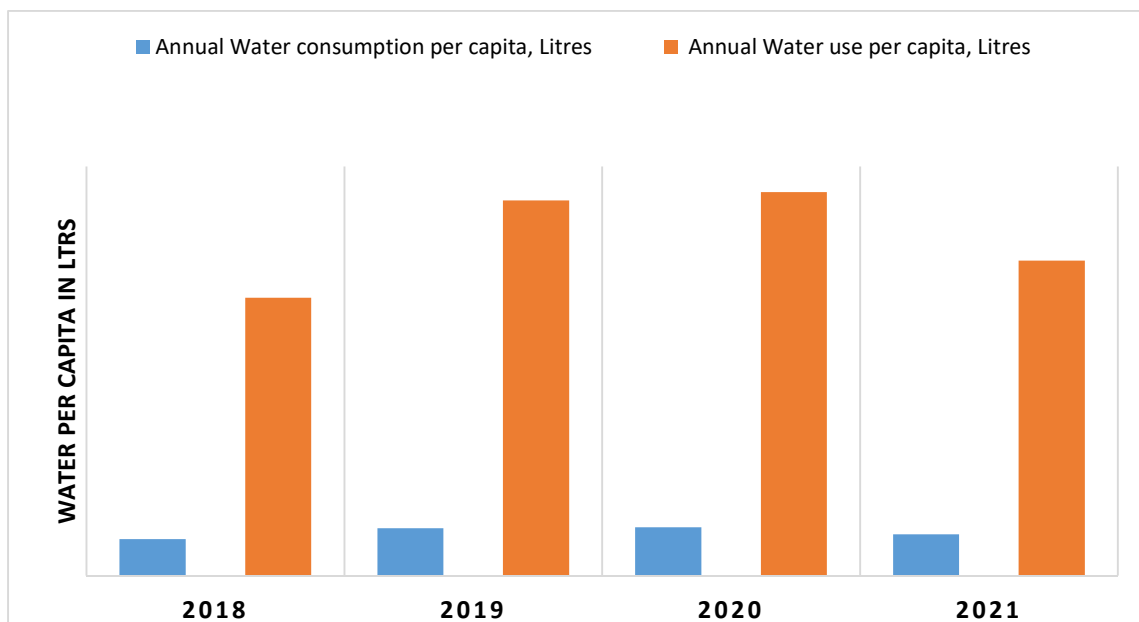


Source: Uganda Bureau of Statistics

## 4.3 Water Consumption and Use Per Capita

The annual water use per capita for 2021 was 5,389,531 litres and the annual water consumption per capita of 707,207 litres which was lower than 828,127 litres was registered in 2020 as shown in the Figure 3.

**Figure 5: Water Consumption and Use and Use Per Capita**

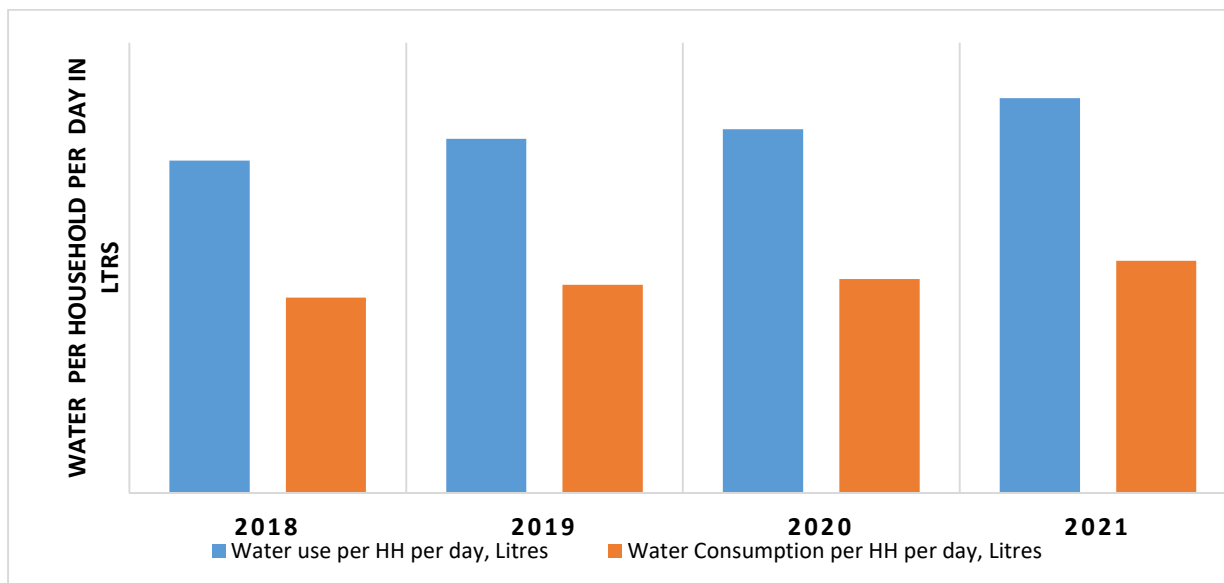


Source: Uganda Bureau of Statistics

#### 4.4 Water Consumption and Use per Household per Day

The average water use per household per day for 2021 increased to 52.6 litres from 48.5 litres recorded in 2020 while the average water consumption per household per day also increased to 30.9 litres from 28.49 recorded in 2020 as shown in the Figure below.

**Figure 6; Water Consumption and Use per Household per Day**



Source: Uganda Bureau of Statistics

## APPENDIX

**Table 1: Physical Supply and Use of Water ('000 cubic metres), 2018 to 2021**

	2018	2019	2020	2021
Total abstraction	212,317,874,963	255,463,815,992	261,209,916,032	220,407,327,498
Total supply	182,718,806,445	223,222,443,920	228,246,511,174	191,485,739,063
Total use of water	212,317,883,198	255,463,839,998	261,209,925,328	220,407,417,470
Total Water Consumption	29,599,076,753	32,241,396,078	32,963,414,154	28,921,678,407
All return flows to environment	153,119,729,691	190,981,047,841	195,283,097,020	162,564,060,657

Source: Uganda Bureau of Statistics

**Table 2: Water abstracted by water resource and purpose ('000 cubic metres), 2018 to 2021**

Water Resource and purpose	2018	2019	2020	2021
Surface Water (a)	100,727,282	110,605,252	138,701,719	106,400,331
Supply and distribution	118,354	143,577	164,536	102,971
Own Use	100,608,928	110,461,676	138,537,183	106,297,360
Groundwater (b)	183,943	219,862	222,771	230,238
Supply and distribution	9,025	10,587	10,996	8,559
Own Use	174,918	209,275	211,775	221,678
DWRM	5,675	7,008	6,802	8,125
Other ground	17,998	18,955	19,214	24,083
Other Valley dams & water	33,775	38,699	40,989	44,175
Other springs, fountains & wells	117,469	144,613	144,771	145,294
Precipitation (c)	212,216,963,738	255,352,990,877	261,070,991,542	220,300,696,930
Supply and distribution				
Own Use	212,216,963,738	255,352,990,877	261,070,991,542	220,300,696,930
Total Abstracted Water	212,317,874,963	255,463,815,992	261,209,916,032	220,407,327,498
Supply and distribution	127,379	154,164	175,531	111,531
Own Use	212,317,747,583	255,463,661,828	261,209,740,500	220,407,215,968

Source: Uganda Bureau of Statistics

**Table 3: Water Abstraction by Economic Activity ('000 cubic metres), 2018 to 2021**

	2018	2019	2020	2021
<b>Agriculture</b>	211,074,963,831	253,823,708,281	259,507,380,043	219,118,196,718
Agriculture (Irrigation)	155,288	262,585	190,610	43,157
Agriculture (Rain fed crop)	126,366,584,630	169,768,210,667	173,569,751,667	131,257,707,639
Agriculture (Livestock)	61,255,099,092	52,592,140,631	53,769,813,508	63,534,453,739
Agriculture (Forestry)	23,439,753,953	31,462,907,977	32,167,442,983	24,325,810,864
Agriculture (Fishing)	13,370,868	186,421	181,275	181,319
<b>Industry</b>	1,242,907,579	1,640,103,574	1,702,531,677	1,289,125,235
Crude oil and Mining	15,719	37,304	8,578	9,494
Manufacturing (Food & Beverages)	8,167	40,076	107,244	165,322
Manufacturing (Other)	10,655	7,414	7,443	7,972
Electricity	100,381,976	109,858,929	137,902,440	104,790,244
Water Supply; Sewerage & Waste Management Activities	1,142,476,634	1,529,935,581	1,564,212,055	1,182,895,689
Construction	14,428	224,270	293,918	1,256,513
<b>Services</b>	3,553	4,136	4,312	5,546
Accommodation	146	367	466	
Public Administration	15	78	71	120
Education	176	270	260	184
Health	1,063	1,066	1,141	1,266
Other	2,153	2,356	2,375	3,587
Households	-	-	-	-
<b>Total</b>	212,317,874,963	255,463,815,992	261,209,916,032	220,407,327,498

Source: Uganda Bureau of Statistics

**Table 4: Water Supply by Economic Activity ('000 cubic metres), 2018 to 2021**

	2018	2019	2020	2021
<b>Agriculture</b>	181,498,941,659	221,613,292,732	226,575,737,778	190,326,167,689
Agriculture (Irrigation)	77,644	131,293	95,305	21,578
Agriculture (Rain fed crop)	113,729,926,167	152,791,389,601	156,212,776,500	118,131,936,875
Agriculture (Livestock)	49,004,053,433	43,651,447,247	44,628,913,946	52,733,562,902
Agriculture (Forestry)	18,751,800,514	25,170,324,592	25,733,952,026	19,460,646,334
Agriculture (Fishing)	13,083,901	-	-	-
<b>Industry</b>	1,219,801,132	1,609,081,110	1,670,701,280	1,159,492,899
Crude oil and Mining	11,004	26,113	6,004	6,646
Manufacturing (Food and Beverages)	7,816	26,949	60,775	90,429
Manufacturing (Other)	8,541	8,510	8,670	9,349
Electricity	100,281,709	109,749,299	137,764,774	104,685,711
Water Supply; Sewerage and Waste Management Activities	1,119,488,842	1,499,224,842	1,532,801,710	1,054,448,848
Construction	3,221	45,398	59,347	251,915
<b>Services</b>	63,654	70,077	72,116	78,476
Accommodation	766	895	946	1,006
Public Administration	5,851	6,474	6,701	7,285
Education	340	549	570	602
Health	796	1,159	1,212	1,324
Other	2,033	3,056	3,154	3,629
Households	53,868	57,944	59,533	64,629
<b>Total</b>	182,718,806,445	223,222,443,920	228,246,511,174	191,485,739,063

Source: Uganda Bureau of Statistics



**Table 5: Water Use by Economic Activity ('000 cubic metres), 2018 to 2021**

	2018	2019	2020	2021
<b>Agriculture</b>	211,074,978,408	253,823,737,239	259,507,410,016	219,118,229,260
Agriculture (Irrigation)	155,288	262,585	190,610	43,157
Agriculture (Rain fed crop)	126,366,584,630	169,768,210,667	173,569,751,667	131,257,707,639
Agriculture (Livestock)	61,255,113,669	52,592,169,589	53,769,843,481	63,534,486,282
Agriculture (Forestry)	23,439,753,953	31,462,907,977	32,167,442,983	24,325,810,864
Agriculture (Fishing)	13,370,868	186,421	181,275	181,319
<b>Industry</b>	1,242,745,034	1,639,917,529	1,702,324,572	1,288,980,212
Crude oil and Mining	16,406	38,668	9,989	11,027
Manufacturing (Food and Beverages)	14,495	52,643	120,251	179,448
Manufacturing (Other)	13,851	13,762	14,013	15,108
Electricity	100,382,091	109,859,158	137,902,677	104,790,502
Water Supply; Sewerage and Waste Management Activities	1,142,302,778	1,529,727,077	1,563,981,698	1,182,725,411
Construction	15,413	226,223	295,944	1,258,716
<b>Services</b>	159,756	185,230	190,741	207,998
Accommodation	2,796	3,332	3,550	3,748
Public Administration	20,913	23,164	23,975	26,080
Education	1,104	2,090	2,169	2,271
Health	2,802	4,495	4,715	5,162
Other	6,859	11,632	11,996	14,047
Households	125,283	140,516	144,336	156,691
<b>Total</b>	212,317,883,198	255,463,839,998	261,209,925,328	220,407,417,470

*Source: Uganda Bureau of Statistics*

**Table 6: Water Consumption by Economic Activity ('000 cubic metres), 2018 to 2020**

	2018	2019	2020	2021
<b>Agriculture</b>	29,576,036,749	32,210,444,507	32,931,672,238	28,792,061,572
Agriculture (Irrigation)	77,644	131,293	95,305	21,578
Agriculture (Rain fed crop)	12,636,658,463	16,976,821,067	17,356,975,167	13,125,770,764
Agriculture (Livestock)	12,251,060,236	8,940,722,342	9,140,929,534	10,800,923,380
Agriculture (Forestry)	4,687,953,439	6,292,583,384	6,433,490,957	4,865,164,530
Agriculture (Fishing)	286,967	186,421	181,275	181,319
<b>Industry</b>	22,943,902	30,836,419	31,623,292	129,487,313
Crude oil and Mining	5,402	12,555	3,985	4,381
Manufacturing (Food and Beverages)	6,679	25,694	59,476	89,019
Manufacturing (Other)	5,311	5,251	5,343	5,758
Electricity	100,382	109,859	137,903	104,790
Water Supply; Sewerage and Waste Management Activities	22,813,936	30,502,235	31,179,988	128,276,563
Construction	12,192	180,825	236,597	1,006,801
<b>Services</b>	96,102	115,152	118,625	129,522
Accommodation	2,030	2,437	2,603	2,741
Public Administration	15,062	16,690	17,275	18,795
Education	764	1,541	1,599	1,669
Health	2,006	3,336	3,503	3,838
Other	4,826	8,576	8,841	10,418
Households	71,415	82,572	84,803	92,062
Total excl. households	29,599,005,338	32,241,313,506	32,963,329,351	28,921,586,345

Source: Uganda Bureau of Statistics

**Table 7: Water productivity by Economic Activity (UGX per cubic metre, 2018 to 2021)**

	2018	2019	2020	2021
<b>Agriculture</b>	0.98	1.02	1.00	1.22
Agriculture (Irrigation)	11,393.69	7,240.76	9,969.74	46,019.55
Agriculture (Rain fed crop)	1.33	1.06	1.04	1.44
Agriculture (Livestock)	0.34	0.56	0.55	0.52
Agriculture Support Services				
Agriculture (Forestry)	1.01	0.87	0.87	1.24
Agriculture (Fishing)	8,479.62	18,252.38	18,314.55	19,146.01
<b>Industry</b>	1,457.62	1,167.57	1,163.02	290.88
Crude oil and Mining	286,638.45	138,296.25	579,828.62	563,322.17
Manufacturing (Food and Beverages)	1,455,595.22	408,968.81	177,322.96	123,836.81
Manufacturing (Other)	1,928,263.85	2,107,943.44	2,079,336.26	2,016,674.55
Electricity	16,614.63	16,222.94	13,579.15	18,914.44
Water Supply; Sewerage and Waste Management Activities	130.53	101.68	99.76	24.23
Construction	597,692.70	43,171.09	33,089.27	7,420.95
<b>Services</b>	667,514.48	607,272.58	591,458.95	531,214.39
Accommodation	1,820,325.58	1,545,285.34	1,479,059.91	1,274,907.63
Public Administration	209,655.89	219,623.09	212,348.34	215,056.92
Education	7,289,114.86	3,881,576.20	3,728,658.51	3,298,275.65
Health	2,080,451.38	1,370,748.80	1,297,638.58	1,212,105.73
Other	9,650,170.76	5,932,332.16	5,776,849.19	4,805,450.34
Households	13,766.49	12,929.77	12,490.86	11,398.68
<b>Total</b>	4.24	4.27	4.21	4.86

Source: Uganda Bureau of Statistics

**Table 8: Water Use Efficiency (WUE) by Economic Activity - UGX**

<b>Industry</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Agriculture</b>	85,962	65,785	77,204	122,731
Agriculture (Irrigated crop)	5,697	3,620	4,985	23,010
Agriculture (Livestock)	85,512	74,281	70,866	73,411
Agriculture (Fishing)	18,188	19,962	20,083	20,994
<b>Industry</b>	92,752	56,442	45,487	21,624
Crude oil and Mining	94,387	44,903	231,297	223,797
Manufacturing (Food and Beverages)	670,707	199,611	87,704	61,432
Manufacturing (Other)	739,326	804,350	792,802	768,644
Electricity	9,594	11,302	9,462	11,736
Water Supply; Sewerage and Waste Management Activities	23,528	20,830	18,250	28,594
Construction	472,772	34,508	26,454	5,936
<b>Services</b>	641,214	587,606	567,574	506,294
Accommodation	1,321,503	1,130,319	1,084,748	932,612
Public Administration	150,997	158,241	152,999	154,983
Education	5,045,214	2,861,328	2,749,247	2,424,261
Health	1,489,483	1,017,355	964,087	901,109
Other	6,789,850	4,373,755	4,257,778	3,563,849
Activities of Households	14,993	14,371	13,719	12,406
<b>Total, excluding households</b>	171,455	116,444	108,305	67,573
<b>Total, excluding households, US\$</b>	46.0	31.4	29.2	18.1

Source: Uganda Bureau of Statistics

**Table 9: Summary of derived Aggregates and Indicators**

	2018	2019	2020	2021
<b>Gross Water Input '000 cubic metres</b>	212,317,874,963	255,463,815,992	261,209,916,032	220,407,327,498
<b>Net Domestic Water use '000 cubic metres</b>	212,317,861,727	255,463,804,109	261,209,903,733	220,407,314,145
<b>Water Consumption '000 cubic metres</b>	29,599,076,753	32,241,396,078	32,963,414,154	28,921,586,345
<b>Water productivity, Shs</b>	4.24	4.27	4.30	4.86
<b>Water Use Efficiency - Shs/cubic meters of value added</b>	171,455	116,444	110,463	67,573
<b>Annual Water use per capita, Litres</b>	5,481,558	6,417,932	6,387,257	5,389,531
<b>Annual Water consumption per capita, Litres</b>	764,180	809,990	806,041	707,207
<b>Water use per HH per day, Litres</b>	42.08	47.20	48.48	52.6
<b>Water Consumption per HH per day, Litres</b>	23.99	27.74	28.49	30.9
<b>% of losses in the supply and distribution chain</b>	29.38	25.27	27.19	35.5%

Note 1: Volume of imported water is not included.

Source: Uganda Bureau of Statistics

**Table 10 A: 2020 Physical Supply Table for Water Accounts, '000 cubic metres**

Industries by SIC	Agriculture (Irrigation)	Agriculture (Rain fed crop)	Agriculture (Livestock)	Agriculture (Forestry)	Agriculture (Fishing)	Crude oil and Mining	Manufacturing (Food and Beverages)	Manufacturing (Other)	Electricity	Water Supply; Sewerage and Waste Management Activities	Construction	Accommodation	Public Administration	Education	Health	Other	Households	Accumulation	Rest of the World	Flows from the environment	Total Supply
(I) Sources of Abstracted Water																					
Inland Water Resources																					
Surface Water																				138,701,719	138,701,719
Groundwater																				222,771	222,771
Soil Water																					
Total																				138,924,489	138,924,489
Other water sources																					
Precipitation																				261,070,991,542	261,070,991,542
Total																				261,070,991,542	261,070,991,542
Total Supply Abstracted Water																				261,209,916,032	261,209,916,032
(II) Abstracted water																					
For distribution NWS										165,904											165,904
For distribution Other distributors										6,626											6,626
For own use	190,610	173,569,751,667	53,769,813,508	32,167,442,983	181,275	8,578	107,244	7,443	137,902,440	1,564,036,523	293,918	466	71	260	1,141	2,375					261,209,740,500
Total	190,610	173,569,751,667	53,769,813,508	32,167,442,983	181,275	8,578	107,244	7,443	137,902,440	1,564,209,053	293,918	466	71	260	1,141	2,375					261,209,916,032
(III) Supply of water to other economic units of which:																					
Wastewater																					
Wastewater to treatment			2,997				1,299	656	24		198	295	2,382	170	336	944	2,997				12,299
Own treatment																					
Reused water																					
For distribution																					
For own use																					
Total			2,997				1,299	656	24		198	295	2,382	170	336	944	2,997				12,299
(IV) Return flows of water																					
To inland water resources																					
Surface Water		52,070,925,500	13,442,443,057	3,216,744,003			35,686	4,007	137,764,750	1,532,699,313											70,400,616,316
Groundwater	95,305	34,713,950,333	8,065,465,834	6,433,488,007			11,895			102,397											49,213,113,771
Other sources		69,427,900,667	23,121,002,058	16,083,720,016		6,004	11,895	4,007		59,149	651	4,319	400	876	2,210	56,535					108,632,768,788
Total returns flows	95,305	156,212,776,500	44,628,910,949	25,733,952,026		6,004	59,476	8,014	137,764,750	1,532,801,710	59,149	651	4,319	400	876	2,210	56,535				228,246,498,875
of which: Losses in distribution										102,397											102,397
(V) Evaporation of abstracted water, transpiration and water incorporated into products	95,305	17,356,975,167	9,140,929,534	6,433,490,957	181,275	3,985	59,476	5,343	137,903	31,182,991	236,597	2,603	17,275	1,599	3,503	8,841	84,803				32,963,417,156
Evapotranspiration of abstracted water		249,084,242	77,163,291	46,162,439	206,447	12	154	11	197,899	2,244,653	422	1	0	0	2	3	96				
Transpiration																					
Water incorporated into products																					
<b>Total supply</b>	<b>381,221</b>	<b>347,139,503,333</b>	<b>107,539,656,989</b>	<b>64,334,885,967</b>	<b>362,549</b>	<b>18,567</b>	<b>227,495</b>	<b>21,456</b>	<b>275,805,116</b>	<b>3,128,193,753</b>	<b>589,862</b>	<b>4,015</b>	<b>24,046</b>	<b>2,429</b>	<b>5,856</b>	<b>14,370</b>	<b>144,336</b>			<b>261,209,916,032</b>	<b>783,629,757,392</b>

**Table 10 B: 2020 Physical Use Table for Water Accounts, “000 cubic metres**

	Agriculture (Irrigation)	Agriculture (Rain fed crop)	Agriculture (Livestock)	Agriculture (Forestry)	Agriculture (Fishing)	Crude oil and Mining	Manufacturing (Food and Beverages)	Manufacturing (Other)	Electricity	Water Supply; Sewerage and Waste Management Activities	Construction	Accommodation	Public Administration	Education	Health	Other	Households	Accumulation	Rest of the World	Flows to the environment	Total Use
(I) Sources of Abstracted Water																					
Inland Water Resources																					
Surface Water	190,092		110	2,941	32,274	5,798	105,174	5,101	137,902,313	170,819	284,804	358	2	74	1,093	766					138,701,719
Groundwater	518		41,170	10	133,036	2,780	2,070	2,342	127	29,585	9,114	108	69	186	48	1,608					222,771
Soil Water																					
Total	190,610		41,280	2,951	165,310	8,578	107,244	7,443	137,902,440	200,404	293,918	466	71	260	1,141	2,375					138,924,489
Other water sources																					
Collection of Precipitation		173,569,751,667	53,769,772,228	32,167,440,033	15,964					1,564,011,651											261,070,991,542
Total		173,569,751,667	53,769,772,228	32,167,440,033	15,964					1,564,011,651											261,070,991,542
Total Use of Abstracted Water	190,610	173,569,751,667	53,769,813,508	32,167,442,983	181,275	8,578	107,244	7,443	137,902,440	1,564,212,055	293,918	466	71	260	1,141	2,375					261,209,916,032
(II) Abstracted water																					
Distributed Water-NWSC			29,973			1,411	12,986	6,559	237		1,982	2,955	23,822	1,699	3,362	9,440	71,477				165,904
Distributed Water-other Water supply industry							21	10	0		45	129	83	210	212	181	5,735				6,626
For own use	190,610	173,569,751,667	53,769,813,508	32,167,442,983	181,275	8,578	107,244	7,443	137,902,440	1,563,969,399	293,918	466	71	260	1,141	2,375	67,124				261,209,740,500
Total	190,610	173,569,751,667	53,769,843,481	32,167,442,983	181,275	9,989	120,251	14,013	137,902,677	1,563,969,399	295,944	3,550	23,975	2,169	4,715	11,996	144,336				261,209,913,030
(III) Wastewater and reused water																					
Wastewater																					
Wastewater received from other units										12,299											12,299
Own treatment																					
Reused water																					
Distributed reused																					
Own use																					
Total										12,299											12,299
(IV) Return flows of water																					
Return flows of water to the environment																					
To inland water resources																					
Surface Water																					70,400,616,316
Groundwater																					49,213,113,771
To other sources																					108,632,768,788
Total returns flows																					228,246,498,875
(V) Evaporation of abstracted water, transpiration and water incorporated into products																					32,963,417,156
Evapotranspiration of abstracted water																					
Transpiration																					
Water incorporated into products																					
<b>Total use</b>	381,221	347,139,503,333	107,539,656,989	64,334,885,967	362,549	18,567	227,495	21,456	275,805,116	3,128,193,753	589,862	4,015	24,046	2,429	5,856	14,370	144,336			261,209,916,032	783,629,757,392

**Table 11 A: 2021 Physical Supply Table for Water Accounts, “000 cubic metres**

Industries by SIC	Agriculture (Irrigation)	Agriculture (Rain fed crop)	Agriculture (Livestock)	Agriculture (Forestry)	Agriculture (Fishing)	Crude oil and Mining	Manufacturing (Food and Beverages)	Manufacturing (Other)	Electricity	Water Supply; Sewerage and Waste Management Activities	Construction	Accommodation	Public Administration	Education	Health	Other	Households	Accumulation	Rest of the World	Flows from the environment	Total Supply	
(I) Sources of Abstracted Water																						
Inland Water Resources																						
Surface Water																					10,640,331	106,400,331
Groundwater																					230,238	230,238
Soil Water																						
Total																					10,663,0569	10,6630,569
Other water sources																						
Precipitation																					220300696930	220,300,696,930
Total																					220300696930	220300696930
Total Supply Abstracted Water																					220407327498	220407327498
(II) Abstracted water																						
For distribution-NWSC										180126												180126
For distribution-Other distributors										8023												8023
For own use	43157	131257707639	63534453739	24325810864	181319	9494	165322	7972	104790244	1182784158	1256513	390	120	184	1266	3587					220407215968	
Total	43157	131257707639	63534453739	24325810864	181319	9494	165322	7972	104790244	1182972307	1256513	390	120	184	1266	3587					220407404117	
(III) Supply of water to other economic units of which:																						
Wastewater																						
Wastewater to treatment			3254				1410	712	26		215	321	2586	184	365	1025	3254				13353	
Own treatment																						
Reused water																						
For distribution																						
For own use																						
Total			3254				1410	712	26	0	215	321	2586	184	365	1025	3254				13353	
(IV) Return flows of water																						
To inland water resources																						
Surface Water		39377312292	15883602303	2432580792			53412	4319	104685685	1159067916											58957306718	
Groundwater	21578	26251541528	9530161382	4865161583			17804			-104619068											40542284807	
Other sources		52503083056	27319795962	12162903959		6646	17804	4319			251700	685	4699	417	959	2604	61375				91986134185	
Total returns flows of which: Losses in distribution	21578	118131936875	52733559647	19460646334	0	6646	89019	8637	104685685	1054448848	251700	685	4699	417	959	2604	61375				191485725710	
(V) Evaporation of abstracted water, transpiration and water incorporated into products																						
Evapotranspiration of abstracted water	21578	13125770764	10800923380	4865164530	181319	4381	89019	5758	104790	128199945	1006801	2741	18795	1669	3838	10418	92062				28921601788	
Water incorporated into products		211541305	102395216	39204660	195633	15	266	13	168885	1906296	2025	1			2	6	116					
Total supply	86313	262515415278	127068940021	48651621728	362639	20521	344770	23080	209580746	2365621100	2515229	4137	26200	2455	6428	17633	156691			220407327498	661222072467	



**Table 11 B: 2021 Physical Use Table for Water Accounts, “000 cubic metres**

	Agriculture (Irrigation)	Agriculture (Rainfed crop)	Agriculture (Livestock)	Agriculture (Forestry)	Agriculture (Fishing)	Crude oil and Mining	Manufacturing (Food and Beverages)	Manufacturing (Other)	Electricity	Water Supply; Sewerage and Waste Management Activities	Construction	Accommodation	Public Administration	Education	Health	Other	Households	Accumulation	Rest of the World	Flows to the environment	Total Use	
<b>(I) Sources of Abstracted Water</b>																						
<b>Inland Water Resources</b>																						
Surface Water	42,647	-	110	2,941	32,273	5,533	163,247	5,385	104,790,190	109,117	1,245,680	274	1	41	1,226	1,667					106,400,331	
Groundwater	510	-	44,416	6	133,083	3,962	2,075	2,587	54	30,376	10,833	116	119	142	40	1,919					230,238	
Soil Water																						
<b>Total</b>	43,157	-	44,525	2,947	165,355	9,494	165,322	7,972	104,790,244	139,493	1,256,513	390	120	184	1,266	3,587					106,630,569	
<b>Other water sources</b>																						
Collection of Precipitation		131,257,707,639	63,534,409,214	24,325,807,917	15,964					1,182,756,196											220,300,696,930	
<b>Total</b>		131,257,707,639	63,534,409,214	24,325,807,917	15,964					1,182,756,196											220,300,696,930	
<b>Total Use of Abstracted Water</b>	43,157	131,257,707,639	63,534,453,739	24,325,810,864	181,319	9,494	165,322	7,972	104,790,244	1,182,895,689	1,256,513	390	120	184	1,266	3,587					220,407,327,498	
<b>(II) Abstracted water</b>																						
Distributed Water-NWSC			32,542			1,532	14,099	7,122	257		2,151	3,208	25,864	1,845	3,650	10,250	77,604				180,126	
Distributed Water-other Water supply industry							27	14			52	149	96	242	246	211	6,986				8,023	
<b>For own use</b>	43,157	131,257,707,639	63,534,453,739	24,325,810,864	181,319	9,494	165,322	7,972	104,790,244	1,182,712,058	1,256,513	390	120	184	1,266	3,587	72,101				220,407,215,968	
<b>Total</b>	43,157	131,257,707,639	63,534,486,282	24,325,810,864	181,319	11,027	179,448	15,108	104,790,502	1,182,712,058	1,258,716	3,748	26,080	2,271	5,162	14,047	156,691				220,407,404,117	
<b>(III) Wastewater and reused water</b>																						
Wastewater																						
Wastewater received from other units										13,353											13,353	
Own treatment																						
Reused water																						
Distributed reused																						
Own use																						
<b>Total</b>										13,353												13,353
<b>(IV) Return flows of water</b>																						
Return flows of water to the environment																						
To inland water resources																						
Surface Water																					58,957,306,718	58,957,306,718
Groundwater																					40,542,284,807	40,542,284,807
To other sources																					91,986,134,185	91,986,134,185
<b>Total returns flows</b>																					191,485,725,710	191,485,725,710
(V) Evaporation of abstracted water, transpiration and water incorporated into products																						
Evapotranspiration of abstracted water																						
Water incorporated into products																						
<b>Total use</b>	86,313	262,515,415,278	127,068,940,021	48,651,621,728	362,639	20,521	344,770	23,080	209,580,746	2,365,621,100	2,515,229	4,137	26,200	2,455	6,428	17,633	156,691		0	220,407,327,498	661,222,072,467	

