

## Indicators and Sources



## ANNEX 1: RIVER NILE STATE OF BASIN INDICATORS 2012

### WATER RESOURCES

Mean precipitation for Nile Basin	1,046 mm/year	GIS/CRU Database 1950–90
Mean annual flow of Main Nile (at Aswan)	84 billion cubic metres/year	JMP Scoping Study Report

	Resources	Withdrawals				Storage
	Total internal renewable (billion m <sup>3</sup> /yr) 2009	Total (billion m <sup>3</sup> /yr) latest 2000–10	As % of total actual renewable latest 2000–10	As % of total withdrawal in Nile region latest 2000–10	Agricultural as % of total withdrawal latest 2000–10	Dam capacity, m <sup>3</sup> per person latest available 2012
Burundi	10.1	0.29	2.9%	0.2%	77.1%	no data
DR Congo	900.0	0.62	0.1%	0.5%	17.7%	1
Egypt	1.8	68.30	3,794.4%	56.5%	86.4%	2,073
Eritrea	2.8	0.58	20.8%	0.5%	94.5%	8
Ethiopia	122.0	5.56	4.6%	4.6%	93.6%	67
Kenya	20.7	2.74	13.2%	2.3%	79.2%	611
Rwanda	9.5	0.15	1.6%	0.1%	68.0%	no data
South Sudan*	–	–	–	–	–	–
Sudan**	30.0	37.14	123.8%	30.7%	97.1%	200
Tanzania	84.0	5.18	6.2%	4.3%	89.4%	2,324
Uganda	39.0	0.32	0.8%	0.3%	37.8%	2,393
Source	FAO AQUASTAT 2012		Computed from AQUASTAT 2012		FAO AQUASTAT 2012	

### POPULATION OF THE BASIN

	Population 2012	% of population living in Nile Basin 2012	% of country population living in rural areas
Burundi	8,749,387	58.8%	89%
DR Congo	69,575,394	3.8%	66%
Egypt	83,958,369	95.7%	57%
Eritrea	5,580,862	37.6%	79%
Ethiopia	86,538,534	40.3%	83%
Kenya	42,749,418	39.7%	76%
Rwanda	11,271,786	82.6%	81%
South Sudan	9,614,498	99.0%	82%
Sudan, The	36,107,585	87.3%	67%
Tanzania	47,656,367	21.5%	73%
Uganda	35,620,977	99.4%	84%
Source	World Population Prospects, 2010	From combining Landscan 2009 and World Population Prospects, 2010	World Urbanization Prospects 2011

\*No data are available yet for South Sudan.

\*\* Data relate to the state prior to 9 July 2011, except for final column.

## AGRICULTURAL LAND USE

	Cultivated area as % of total country area 2009	Irrigated land in Nile Basin area (ha) 2009	Irrigated land in entire country (ha) 2009	Change in forest area 1990–2008
Burundi	44.9%	14,625	90,000	-39.2%
DR Congo	3.2%	–	–	-3.5%
Egypt	3.7%	2,963,581	5,419,000	56.4%
Eritrea	5.9%	–	–	–
Ethiopia	13.6%	90,769	187,000	–
Kenya	10.4%	34,156	77,000	-5.9%
Rwanda	60.0%	17,638	1,697,000	30.5%
South Sudan*	–	–	–	–
Sudan**	8.1%	1,749,300	108,000	-8.5%
Tanzania	12.1%	110,544	4,000	-17.5%
Uganda	36.6%	25,131	9,000	-33.4%
Source	FAO AQUASTAT, 2012	EWUAP, 2009	FAO AQUASTAT, 2012	Human Development Report, 2011

## ENVIRONMENTAL RESOURCES

Land-use type	Area km <sup>2</sup> 2005	Area km <sup>2</sup> 2009	Percentage cover 2009	Percentage change 2005–09
Shrubland and woodlands	1,173,669	1,185,620	37.3%	1.0%
Bare soils	965,165	978,918	30.8%	1.4%
Agricultural land	327,632	367,777	11.6%	12.3%
Grasslands	342,344	326,096	10.3%	-4.7%
Forests	266,783	218,941	6.9%	-17.9%
Water bodies	95,992	94,727	3.0%	-1.3%
Cities	4,882	4,391	0.1%	-10.1%

## FOOD SECURITY

	Dietary energy supply	Under-nourished	Cereal trade balance	Intra-basin trade in agricultural and processed food products		Fertilizer	Cereal yield
	Kcal per person per day 2005–07	As % of total population	Export–import 1,000 tonnes 2005–09	Imports 2009 million US\$	Exports 2009 million US\$	Kg used per hectare of arable land 2005	Tons per hectare 2009
Burundi	1,680	62%	-63.7	16.2	16.1	3.4	1.3
DR Congo	1,590	69%	-722.3	–	–	–	0.8
Egypt	3,160	<5%	-9,003.7	263.5	246.6	732	7.6
Eritrea	1,590	64%	-235.1	–	–	2.3	0.9
Ethiopia	1,950	41%	-1,166.8	14.1	84.7	12	1.6
Kenya	2,060	31%	-1,374.8	117.8	476.8	38	1.2
Rwanda	2,050	34%	-91.5	98.1	41.2	2.6	1.1
South Sudan*	1,890	47%	–	–	–	–	–
Sudan**	2,270	22%	-1,863.6	–	–	10	0.6
Tanzania	2,020	34%	-654.4	39.1	103.8	1.1	1.2
Uganda	2,250	21%	-425.7	104.4	364.2	2.6	1.5
Source	FAOSTAT 2011	FAOSTAT 2011	FAOSTAT 2011	FAOSTAT 2011		World Bank African Development Indicators	

\* Few data are yet available for South Sudan.

\*\*Data relate to the country prior to 9 July 2011.

## SOCIO-ECONOMIC CONDITIONS

	Gross National Income (GNI)	Living in poverty	Human Development Index	Labour force participation	
	Per capita 2011 PPP\$	Percentage on less than PPP \$1.25 a day 2000–09	Score 2011	Employed men as a % of working age male population	Employed women as a % of working age female population
Burundi	368	81.3%	0.316	88%	91%
DR Congo	280	59.2%	0.286	86%	57%
Egypt	5,269	<2.0%	0.644	75%	22%
Eritrea	536	–	0.349	83%	63%
Ethiopia	971	39.0%	0.363	90%	81%
Kenya	1,492	19.7%	0.509	88%	76%
Rwanda	1,364	76.8%	0.429	85%	87%
South Sudan*	–	51.0%	–	–	–
Sudan**	1,894	–	0.408	74%	31%
Tanzania	1,328	67.9%	0.466	91%	86%
Uganda	1,124	28.7%	0.446	91%	78%
Source	Human Development Report 2011				

	Access to clean water		Access to improved sanitation		Under-five mortality
	Percentage of rural population 2008	Percentage of urban population 2008	Percentage of rural population 2008	Percentage of urban population 2008	Per 1,000 live births 2005–10
Burundi	71%	83%	46%	49%	164
DR Congo	28%	80%	23%	23%	192
Egypt	98%	100%	92%	97%	30
Eritrea	57%	74%	4%	52%	72
Ethiopia	26%	98%	8%	29%	113
Kenya	52%	83%	32%	27%	101
Rwanda	62%	77%	55%	50%	128
South Sudan	53%	67%	14%	54%	135
Sudan**	64%	52%	18%	55%	101
Tanzania	80%	45%	21%	32%	98
Uganda	91%	64%	49%	38%	126
Source	WHO/UNICEF 2010		WHO/UNICEF 2010		World Population Prospects 2010 Revision; Statistical Yearbook of Southern Sudan 2010

\* Few data are yet available for South Sudan.

\*\*Data relate to the country prior to 9 July 2011.

## ENERGY SUPPLY

	Electricity		Hydropower		Power trade	
	Percentage of rural population with access 2010	Percentage of urban population with access 2010	MW potential 2010	MW installed 2010	Power imports as % of total annual consumption 2010	Power exports as % of total annual consumption 2010
Burundi	3%	26%	20	0	0.0%	0.0%
DR Congo	0%	45%	78	0	11.2%	9.8%
Egypt	99%	100%	40	2,862	0.9%	0.8%
Eritrea	3%	57%			0.0%	0.0%
Ethiopia	2%	86%	13,947	931	0.0%	0.0%
Kenya	12%	51%	191	25	0.4%	0.4%
Rwanda	2%	12%	20	27	27.5%	0.0%
South Sudan*	1%	17%	2,570	–	–	–
Sudan, The	7%	60%	3,280	1,593	0.0%	0.0%
Tanzania	2%	40%	280	0	0.0%	0.0%
Uganda	6%	40%	4,343	380	1.0%	1.0%
Source	CBWS 2011 – Section 5	CBWS 2011 – Section 5	CBWS 2011 – Section 4		CBWS 2010 – Appendix 5	

## TRANSPORT

	Roads				Airports			Inland waterways
	Total (km)	Paved (km)	Unpaved (km)	Density (km/100 km <sup>2</sup> )	Total number	Number paved	Number unpaved	Number of ports
	12,322	1,200	11,122	43.9	8	1	7	1
DR Congo	153,497	2,794	150,703	6.4	198	26	172	13
Egypt	65,050	47,500	17,550	6.5	86	73	13	18
Eritrea	4,010	874	3,136	3.3	21	3	18	–
Ethiopia	36,469	6,980	29,489	3.2	61	17	44	–
Kenya	160,866	11,189	149,677	27.1	191	17	174	1
Rwanda	12,000	1,000	11,000	48.9	9	4	5	3
South Sudan	7,000	50	6,950	1.1	84	3	81	6
Sudan, The	11,900	4,320	7,580	0.6	72	15	57	8
Tanzania	86,472	7,092	79,380	9.3	124	9	115	4
Uganda	81,329	3,600	77,729	33.7	46	5	41	18
Source	The World Factbook							

## MONITORING

	Hydrometric stations	
	Historic number, 1970s	Currently operational, 2011
Burundi	21	13
DR Congo	–	–
Egypt	300	300
Eritrea	–	–
Ethiopia	177	176
Kenya	216	63
Rwanda	27	16
South Sudan*	–	–
Sudan	43	36
Tanzania	34	14
Uganda	161	65
Source	WRPM 2011 and National DSS Specialists	

\*Few data are yet available for South Sudan.

## ANNEX 2: PROPOSED ADDITIONAL STATE OF BASIN INDICATORS FOR FUTURE REPORTING

### WATER QUALITY

<b>Annual water quality conditions</b>
Colour (min/max/average)
Electrical conductivity (min/max/average)
Dissolved oxygen (min/max/average)
Faecal coliform (min/max/average)
<b>At following locations:</b>
White Nile at Jinja
Blue Nile at Wad Medani
Main Nile at Khartoum
Main Nile at Cairo

### ENVIRONMENT

<b>Annual sediment load in the Nile at Dongola</b>
<b>Environmental performance index, by country</b>

### TRANSPORT

<b>Annual volume of goods transported on inland waterways (tons)</b>
Cairo to Aswan
Khartoum to Juba
Lake Victoria

### CLIMATE CHANGE

<b>Floods and droughts</b>
Number of people affected
Number of floods
Number of droughts

## ANNEX 3: SOURCES

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### AGRICULTURAL WATER WITHDRAWALS

### WATER WITHDRAWALS AND RESOURCES

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