Annexes

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^3/yr) *2009*	Total (billion m^3/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^3 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 km²** *2005*	**Area km²** *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^2)	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

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

ENVIRONMENT

Annual sediment load in the Nile at Dongola
Environmental performance index, by country

TRANSPORT

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

CLIMATE CHANGE

Floods and droughts
Number of people affected
Number of floods
Number of droughts

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