



**SOUTH SUDAN**

**Irrigated crop calendar**

**2011**

Calendar used in 2012 'Irrigation water use' study is downloadable in [PDF](#)

Irrigated crops	Area	Crop area as percentage of the full control equipped and actually irrigated area by month											
	1000 ha	J	F	M	A	M	J	J	A	S	O	N	D
Wheat	5	26	26	26	26	26						26	26
Sorghum	13						68	68	68	68	68		
Millet*	0						1	1	1	1	1		
Maize and other cereals*	1						6	6	6	6	6		
Vegetables*	2	10	10	10	10								10
Sunflower*	0						2	2	2	2	2		
Groundnut*	1	5	5	5								5	5
Potatoes*	0	2	2	2								2	2
Other roots and tubers*	0	2	2	2								2	2
Sugarcane	1	7	7	7	7	7	7	7	7	7	7	7	7
Fodder temporary*	3	14	14	14	14							14	14
Cotton	3				16	16	16	16	16	16	16		
<b>Harvested irrigated crop area [AHI<sub>full</sub>]</b>	<b>29</b>												
<b>Area equipped for full control irrigation actually irrigated [AAI<sub>full</sub>]</b>	<b>18</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>72</b>	<b>49</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>55</b>	<b>64</b>
<b>Cropping intensity (%) = 100 x [AHI<sub>full</sub>]/[AAI<sub>full</sub>]</b>	<b>157</b>												
<b>Area equipped for full control irrigation [AEI<sub>full</sub>]</b>	<b>32</b>												
<b>% of full control equipped actually irrigated = 100 x [AAI<sub>full</sub>]/[AEI<sub>full</sub>]</b>	<b>58</b>												
<b>Total area equipped for irrigation [AEI<sub>tot</sub>]</b>	<b>38</b>												

\* These figures refer to the year 2000



## Narrative South Sudan

The irrigated crop calendar has first been prepared for the pre-2011 Sudan, and in the absence of separate data for both Sudan and South Sudan after independence of the latter, the respective crop calendars have been prepared proportionally to the respective irrigated areas. So for pre-2011 Sudan,  $AEI_{tot}$  is 1 890 000 ha in 2011 while  $AEI_{full}$  is 1 757 970 ha for the same year (FAO, 2014). A partial  $AHI_{full}$  including irrigated cereals, cotton and sugarcane for 2010-2011 was 1 191 000 ha (AWF, 2011; FAO, 2011). It was completed with other irrigated crops from the previous cropping calendars for 2000. Finally  $AHI_{full}$  equals to 1 592 000 ha. As a result and because  $AAI_{tot}$  which was 800 000 ha in 2000,  $AAI_{full}$  is estimated at 1 012 000 ha, eventuating in a cropping intensity of 157 percent. The main irrigated crops are cereals (64 percent, mainly sorghum and wheat), cotton (10 percent), fodder (9 percent). It is assumed that fodder is temporary as indicated in the AQUASTAT database. Some vegetables, sugarcane, groundnut, sunflower, roots and tubers are also irrigated. Irrigation is practiced mostly during the dry winter, from November to March or April, except for maize, sorghum, sunflower and cotton. For South Sudan after its independence,  $AEI_{tot}$  is 38 100 ha in 2011 while  $AEI_{full}$  is 32 100 ha for the same year (FAO, 2014) and  $AHI_{full}$  is 29 070 ha (AWF, 2011; FAO, 2011 and 2014). As a result  $AAI_{full}$  is estimated at 18 480 ha, eventuating in a cropping intensity of 157 percent. It was assumed that irrigated crops and cropping intensity were similar in the 2 separate countries.

## References

**FAO.** 2014. AQUASTAT, FAO's global information system on water and agriculture. <http://www.fao.org/nr/aquastat>

**AWF.** 2011. *Darfur Water Project for Conflict Resolution and Peace-Building: Investment Planning, Priority Rehabilitation Works and Capacity Building to Meet Water and Sanitation Needs in 15 to 20 Towns.* Appraisal Report. Republic of Sudan. African Water Facility. Tunis.

**FAO.** 2011. *Farming Systems Report.* Project "Information Products for Nile Basin Water Resources Management". Food and Agriculture Organization of the United Nations. Rome.