



Food and Agriculture Organization
of the United Nations



South Sudan 2019 Crop and Food Security Assessment Mission¹: Crop performance findings of the 2019 cropping season

Mission Highlights

- The 2019 net cereal production (after deduction of post-harvest losses and seed use) in the traditional sector is estimated at about 818 500 tonnes, 10 percent above the 2018 output and 4 percent below the average of the previous five years.
- With a projected population of about 11.8 million in mid-2020, the overall cereal deficit in the January-December 2020 marketing year is estimated at about 482 500 tonnes, 7 percent below the deficit estimated for 2019, but still 22 percent above the 2015-2019 average.
- The increase in cereal production compared to the previous year was driven by abundant and well-distributed rains over most cropping areas increasing yields and by an expansion in harvested area.
- The harvested area in 2019 is estimated at about 930 000 hectares, over 5 percent above the 2018 level, but still well below the pre-conflict levels. The increase is mainly due to security improvements that prompted some displaced households to return to their places of origin and engage in agricultural activities as well as encouraging farmers to expand plantings to fields far from homesteads.
- Excessive rains in former Northern Bahr el Ghazal, Jonglei, Upper Nile, Warrap and Unity states have triggered unusually widespread floods in the low-lying areas, which affected about 900 000 people and caused significant losses of crops and livestock.
- In 2019, outbreaks of Locusts and Quelea Quelea birds caused some localized crop losses, especially in former Upper Nile State. Damages from Fall Armyworm (FAW) were less than in previous years as the heavy seasonal rains largely neutralized the pest. Weed infestations were exceptionally severe in most cropping areas this year due to the abundant precipitation.
- The above average rains benefited the availability of pasture and water for livestock, with a favourable impact on animal body conditions, assessed as generally good. In flood-affected areas, a substantial increase in water-borne livestock diseases are reported.
- Despite the improvements, the security situation is still volatile and continues to alter livestock marketing activities and migration routes. Cattle raiding incidents have increased in 2019 compared to 2018, particularly in former Jonglei, Warrap and Unity states.
- The Gross Domestic Product increased by about 8 percent in 2019, mainly due to increased oil revenues, after having remained mostly stable in 2018 and having declined by 24 percent between 2014 and 2017.
- The South Sudanese Pound depreciated by 32 percent in 2019 on the parallel market and the spread between official and parallel market exchange rates further widened, increasing from about 60 percent in late 2018 to almost 100 percent in late 2019.
- Inflation, already at high levels owing to insufficient food supplies, high fuel costs and a weak local currency, surged between August and October 2019, mainly due to trade and market disruptions caused by the widespread floods. In October 2019, the year-on-year inflation rate was estimated at 170 percent.
- Prices of sorghum, maize and wheat continued to increase in 2019 and, in December, they were 45-90 percent higher than one year earlier and 15-20 times above their levels in July 2015, when they

¹ With funding from the European Union



started to surge. High prices are also the result of limited cereal supplies and the lingering impact of the conflict on trade and agricultural activities.

- The number of Internally Displaced Persons (IDPs) in the country stood at 1.47 million in December 2019 and the number of South Sudanese refugees in neighbouring countries was close to 2.22 million. Following improvements in security, about 417 000 displaced people returned to their places of origin in 2019, of which about 276 000 from within South Sudan and 141 000 from abroad.
- Under the 2020 Emergency Livelihood Response programme, FAO plans to support 775 000 severely food insecure farming, fishing and agro-pastoral households with emergency livelihood support, by giving priority to the most vulnerable people, including women-headed households, internally displaced persons, returnees and host communities.

OVERVIEW

An FAO/WFP Crop and Food Security Assessment Mission (CFSAM) visited South Sudan from 15 to 20 December 2019 to estimate the cereal production during 2019 and assess the overall food security situation in the country. The CFSAM reviewed the findings of several Crop Assessment Missions conducted from June to December 2019 at planting and harvest time in different agro-ecological zones of the country. As during the past five years, all the missions were carried out by a Task Force Team that comprised staff from the Ministry of Agriculture and Food Security (MAFS), the National Bureau of Statistics (NBS), FAO and the respective State Ministries of Agriculture. Task Force Team members have been trained during the past years to conduct rapid assessments using established CFSAM protocols and techniques, including walking transects, scoring standing crops according to the Pictorial Evaluation Tool (PET) yield levels and livestock body condition, perform key informant interviews and farmer case studies. Starting from 2016, in the framework of the concluded FAO/AFIS Project and the ongoing FAO-EU Project “Strengthening the resilience of pastoral and agro-pastoral communities in South Sudan’s cross border areas with Sudan, Ethiopia, Kenya and Uganda” (OSRO/SSD/703/EU), 64 County Crop Monitoring Committees (CCMCs) have been established with the aim to improve the local capacity to collect reliable and accurate data. The European Union through the FAO Representation in South Sudan has financially supported all assessments and training activities.

The 2019 annual crop assessment followed a year-long roadmap. However, insecurity still prevailing in some areas has precluded the full execution of the initial plan and field work activities were carried out only in accessible areas. Overall, 34 assessment missions (13 at planting time and 21 at harvest time) were conducted in former Western, Central and Eastern Equatoria, Northern Bahr el Ghazal, Lakes, Warrap, Upper Nile, Jonglei and Western Bahr el Ghazal states. In former Unity State and in parts of former Jonglei, Central, Eastern and Western Equatoria states, access has been precluded at both planting and harvesting times. The CFSAM team had access to the information on yields and production generated by the surveys carried out by FAO and other partners aiming at evaluating the impact of seeds distributed through the Emergency Livelihood Response Programme (ELRP) throughout the country. For instance, the Monitoring and Evaluation Team of FAO has managed to conduct yield assessment in three counties of Unity State, namely Abiemnhom, Panyijar and Mayom, where seed distributions were carried out by FAO and its partners. The reports from these counties were used to estimate yields and production also for similar agro-ecological zones of the State. In all visited areas, concerns over security precluded to conduct driving transects and yield assessments were mainly performed through walking transects and crop cutting (sampling) accomplished by both Task Force and CCMCs. In addition, 1 448 interviews (1 342 farmer case studies and 106 interviews with key informants) were conducted between June and December 2019. A total of 51 counties were assessed by the Task Force in 2019.

Using standard CFSAM procedures, the Task Force Team reviewed secondary sources of information regarding the main factors that affected crop performance during the 2019 agricultural season, estimated the aggregate national cereal production and assessed the overall food security situation. Where risks to team safety due to insecurity were considered too severe to allow access at crucial times, telephone interviews with key informants were used to derive the estimates. Information from CCMCs operating in insecure areas not accessible by Task Force teams were sent to the crop assessment team in Juba through various means, including hand delivery of reports.

The aggregate cereal harvested area in the traditional farming sector in 2019 is estimated at about 929 600 hectares, over 5 percent above the 2018 level and almost similar to the average of the previous five years. The expansion in harvested area is due to an increase in the number of farming households (5.2 percent), following an improved security situation, which prompted about 417 000 displaced people to return to their places of origin in 2019. However, with 1.47 million individuals still displaced within the country and 2.22 million South Sudanese refugees still sheltering in neighbouring countries, the lingering impact of the prolonged conflict continues to affect agricultural activities and the overall harvested area in 2019 remained well below the pre-conflict level. At sub-national level, the harvested area increased in Unity (17.8 percent), Western Equatoria (17.7 percent), Western Bahr el Ghazal (15.1 percent), Central Equatoria (14.7 percent), Eastern Equatoria (9.7 percent), Jonglei (5.3 percent) and Lakes (by 3 percent) states. By contrast, a contraction of the harvested area has been recorded in Northern Bahr el Ghazal (-3.6 percent), and Upper Nile (-13.5 percent) states due to persisting insecurity and to the impact of flooding on planting operations and harvestable areas.

The net cereal production in 2019 from the traditional sector, after deduction of post-harvest losses and seed use, is estimated at about 818 500 tonnes, 10 percent higher than 2018 and 4 percent below the average of the previous five years. Cereal production benefitted from the expansion of harvested area and from abundant seasonal precipitation which boosted yields. However, in most flood prone areas of the country, torrential rains triggered unusually widespread flooding, especially in former Northern Bahr el Ghazal, Jonglei, Warrap, Unity and Upper Nile states, which resulted in significant crop losses. Infestation of migratory pests, including Locusts, Quelea Quelea Birds and Fall Armyworm were generally mild to moderate. Fall Armyworm outbreaks were reported at the start of the season, but the pest was largely neutralized by the heavy rains in following months reducing losses in most maize and sorghum growing areas. Hence, less substantial losses were reported in 2019 compared to recent years. Cereal production increased from the previous year in former Central Equatoria (by 39.7 percent), Eastern Equatoria (35.6 percent), Western Equatoria (30.9 percent), Western Bahr el Ghazal (29.1 percent), Unity (21 percent), Lakes (by 12.2 percent) states, while it remained mostly stable in Warrap State (+0.3 percent). By contrast, cereal production decreased in Upper Nile (-25.3 percent), Northern Bahr el Ghazal (-21.6 percent) and Jonglei (-4.9 percent) states. With a mid-2020 projected population of about 11.81 million people, consuming on average of about 110 kg of cereals/capita/year, the cereal requirement in 2020 is estimated at about 1.3 million tonnes. Accordingly, an overall rounded deficit of about 482 500 tonnes of cereals is estimated in the traditional sector during the January-December 2020 marketing year, 7 percent below the deficit estimated for 2019, but still 22 percent above the 2015-2019 average.

The country is facing a protracted macro-economic crisis. Although the Gross Domestic Product increased in 2019 for the first time since 2014, mainly due to increased oil revenues, the macroeconomic situation remains dire. The South Sudanese pound continued to depreciate in 2019 on the parallel market, and in December 2019 the average exchange rate was about 315 SSP/USD, compared to about 240 SSP/USD in December 2018. In addition, the already substantial spread between the official and the parallel market exchange rates further widened, increasing from about 60 percent in December 2018 to almost 100 percent in December 2019. Inflation, already at high levels owing to insufficient food supplies, high fuel costs and a weak local currency, surged between August and October 2019 mainly due to trade and market disruptions caused by the widespread floods and the year-on-year inflation rate was estimated in October 2019 at 170 percent. Between 2011 and 2019, the average real income has declined by 70 percent. In the capital, Juba, prices of sorghum, maize and wheat, soaring since early 2016, continued to increase in 2019, and in December they were 45-90 percent higher than one year earlier and 15-20 times above their levels in July 2015, when they started to surge as a result of the rapidly depreciating currency. Cereal prices are also underpinned by limited cereal supplies and the lingering impact of the conflict on trade and agricultural activities. As a result of reduced incomes and soaring food prices, large segments of the population are facing daunting constraints in access to food and other basic services. Following the beginning of peace talks in mid-2018 and the signing in September 2018 of the Revitalized Agreement on the resolution of the conflict in the Republic of South Sudan, the number of security incidents declined by about 30 percent in 2018 and further decreased by about 40 percent in 2019. The improved security situation benefitted food trade and marketing operations in several areas of the country. However, market activity still remains below the pre-conflict levels, mainly due to the macroeconomic crisis severely affecting purchasing power, with high inflation reported to hamper credit operations.

Estimated cereal harvested area, yield, production, consumption and balance (traditional sector)

State/ County	2019				2020		
	Cereal area (hectares)	Gross yield (tonne/ hectare)	Gross cereal production (tonnes)	Net cereal production (tonnes)	Population (mid-2020)	Cereal require- ment (tonnes)	Surplus/ deficit (tonnes)
Central Equatoria	64,844	1.32	85,432	68,345	1,133,165	145,235	-76,889
Juba	19,175	1.20	23,010	18,408	419,542	58,736	-40,328
Kajo Keji ^{1/}	5,730	1.40	8,023	6,418	113,064	13,568	-7,150
Lainya ^{1/}	5,131	1.30	6,671	5,337	107,164	12,860	-7,523
Morobo ^{1/}	4,881	1.90	9,274	7,419	147,359	17,683	-10,264
Terekeka	19,265	1.00	19,265	15,412	173,459	20,816	-5,404
Yei ^{1/}	10,661	1.80	19,190	15,352	172,576	21,572	-6,220
Eastern Equatoria	122,355	1.26	154,220	123,376	1,062,619	131,982	-8,606
Budi	17,435	1.30	22,666	18,132	99,962	11,995	6,137
Ikotos	22,020	1.20	26,424	21,139	132,051	16,506	4,633
Kapoeta East	13,149	1.00	13,149	10,519	174,632	21,829	-11,310
Kapoeta North	7,456	1.00	7,456	5,965	110,632	13,829	-7,864
Kapoeta South	4,400	1.20	5,280	4,224	72,366	9,408	-5,184
Lafon	13,183	1.20	15,820	12,656	109,570	13,149	-493
Magwi	26,734	1.70	45,448	36,359	197,763	23,731	12,627
Torit	17,978	1.00	17,978	14,382	165,643	21,534	-7,152
Jonglei	59,507	0.79	47,111	37,689	1,864,549	209,296	-171,607
Akobo	6,426	1.00	6,426	5,141	195,775	21,536	-16,395
Ayod	1,078	0.80	862	690	183,117	20,143	-19,453
Bor South	11,445	0.75	8,584	6,867	255,793	29,416	-22,549
Duk	2,758	0.70	1,931	1,545	123,764	13,614	-12,069
Fangak	1,491	0.70	1,044	835	184,273	20,270	-19,435
Khorflus/ Pigi/Canal	865	0.70	606	484	105,426	11,597	-11,112
Nyirrol	4,455	0.60	2,673	2,138	186,594	20,526	-18,388
Pibor	8,512	1.00	8,512	6,810	204,437	24,532	-17,723
Pochalla	6,941	1.10	7,635	6,108	87,131	10,456	-4,348
Twic East	5,880	0.60	3,528	2,822	128,409	14,125	-11,303
Uror	9,656	0.55	5,311	4,249	209,831	23,081	-18,833
Lakes	132,502	1.22	162,124	129,700	1,310,142	144,117	-14,418
Awerial	17,449	0.90	15,704	12,564	156,974	17,267	-4,704
Cueibet	27,621	1.20	33,146	26,516	200,243	22,027	4,490
Rumbek Centre	14,170	1.20	17,003	13,603	277,623	30,539	-16,937
Rumbek East	19,963	1.30	25,952	20,762	226,117	24,873	-4,111
Rumbek North	3,549	0.90	3,194	2,555	65,384	7,192	-4,637
Wulu	11,938	1.40	16,713	13,371	79,700	8,767	4,604
Yirol East	12,624	1.20	15,149	12,119	118,403	13,025	-906
Yirol West	25,188	1.40	35,263	28,210	185,698	20,427	7,783
Northern Bahr el Ghazal	151,550	0.87	131,776	105,420	1,498,460	164,830	-59,410
Aweil Centre	11,148	0.75	8,361	6,689	117,522	12,928	-6,239
Aweil East	54,560	0.80	43,648	34,918	588,879	64,776	-29,858
Aweil North	35,883	0.90	32,295	25,836	299,576	32,953	-7,117
Aweil South	16,579	0.85	14,092	11,274	160,163	17,618	-6,344
Aweil West	33,380	1.00	33,380	26,704	332,320	36,555	-9,851
Unity	19,975	0.72	14,366	11,493	912,883	78,396	-66,903
Abiemnhom	958	0.70	670	536	30,970	2,632	-2,095
Guit	881	0.60	528	423	41,170	3,499	-3,076
Koch	2,713	0.80	2,171	1,737	131,512	11,178	-9,442
Leer	2,557	0.70	1,790	1,432	113,298	9,631	-8,199
Mayendit	1,617	0.65	1,051	841	92,239	7,841	-7,000
Mayom	4,226	0.70	2,958	2,366	182,692	15,529	-13,162
Panyijar	3,091	0.60	1,854	1,483	98,474	8,370	-6,887
Pariang	2,949	0.90	2,655	2,124	142,515	12,114	-9,990
Rubkona	983	0.70	688	551	80,013	7,601	-7,051

Estimated cereal harvested area, yield, production, consumption and balance (traditional sector) (continued)

State/ County	2019				2020		
	Cereal area (hectares)	Gross yield (tonne/hectare)	Gross cereal production (tonnes)	Net cereal production (tonnes)	Population (mid-2020)	Cereal requirement (tonnes)	Surplus/ deficit (tonnes)
Upper Nile	44,632	0.66	29,534	23,628	1,064,751	91,975	-68,347
Baliet	1,160	0.75	870	696	52,686	4,478	-3,782
Fashoda ^{1/}	595	0.60	357	285	50,565	4,298	-4,013
Longochuk	3,545	0.60	2,127	1,701	79,600	6,766	-5,064
Luakpiny/Nasir	10,664	0.80	8,531	6,825	317,833	27,016	-20,191
Maban	3,974	0.60	2,384	1,908	62,799	5,338	-3,430
Maiwut	1,987	0.65	1,292	1,033	44,357	3,770	-2,737
Malakal	647	0.80	518	414	79,214	7,525	-7,111
Manyo	1,211	0.85	1,030	824	29,691	2,524	-1,700
Melut	5,639	0.56	3,158	2,526	80,481	6,841	-4,315
Panyikang	711	0.80	569	455	26,157	2,223	-1,768
Renk	10,334	0.60	6,200	4,960	135,815	12,223	-7,263
Ulang	4,165	0.60	2,499	1,999	105,554	8,972	-6,973
Western Bahr el Ghazal	43,068	1.18	50,797	40,637	579,360	65,733	-25,095
Jur River	14,015	1.10	15,416	12,333	169,145	18,607	-6,274
Raga	5,163	1.30	6,712	5,369	104,939	10,494	-5,124
Wau	23,891	1.20	28,669	22,935	305,276	36,632	-13,697
Warrap	62,193	0.99	161,171	128,937	1,570,108	151,330	-22,394
Abyei	7,653	0.80	6,122	4,898	83,794	7,541	-2,643
Gogrial East	13,270	0.75	9,952	7,962	146,595	13,927	-5,965
Gogrial West	49,593	1.10	54,552	43,642	364,420	38,265	5,377
Tonj East	9,388	0.80	7,511	6,008	124,946	12,494	-6,486
Tonj North	26,705	0.80	21,364	17,091	257,272	25,727	-8,635
Tonj South	20,285	1.30	26,371	21,096	138,252	12,442	8,654
Twic	35,299	1.00	35,299	28,239	454,828	40,935	-12,696
Western Equatoria	128,923	1.45	186,577	149,262	814,451	118,095	31,166
Ezo ^{1/}	13,543	1.60	21,669	17,335	112,678	16,338	997
Ibba ^{1/}	10,034	1.50	15,051	12,041	42,144	6,111	5,930
Maridi ^{1/}	12,798	1.50	19,197	15,357	81,838	11,867	3,491
Mundri East ^{1/}	4,329	1.15	4,978	3,983	63,172	9,160	-5,177
Mundri West ^{1/}	4,008	1.10	4,409	3,527	58,060	8,419	-4,891
Mvolo	6,517	1.00	6,517	5,214	91,228	13,228	-8,014
Nagero	1,645	1.20	1,974	1,580	15,321	2,222	-642
Nzara ^{1/}	18,172	1.70	30,892	24,714	63,334	9,183	15,530
Tambura ^{1/}	25,043	1.50	37,564	30,051	79,442	11,519	18,532
Yambio ^{1/}	32,833	1.35	44,325	35,460	207,235	30,049	5,411
Total	929,548	1.10	1,023,108	818,486	11,810,488	1,300,990	-482,504

^{1/} first and second season harvests combined.

Cereal harvested area and net production (rounded) in the traditional sector, 2015-2019

Region/State	2015			2016			2017			2018			2019		
	Area ('000 ha)	Net Prod. ('000 t)	Net Yields (t/ha)	Area ('000 ha)	Net Prod. ('000 t)	Net Yields (t/ha)	Area ('000 ha)	Net Prod. ('000 t)	Net Yields (t/ha)	Area ('000 ha)	Net Prod. ('000 t)	Net Yields (t/ha)	Area ('000 ha)	Net Prod. ('000 t)	Net Yields (t/ha)
Upper Nile	108	68	0.63	118	73	0.62	124	82	0.65	125	81	0.65	124	73	0.59
Upper Nile	45	27	0.53	48	30	0.63	53	35	0.65	52	32	0.61	45	24	0.53
Unity	16	9	0.55	16	9	0.56	18	10	0.54	17	9	0.56	20	11	0.58
Jonglei	47	32	0.76	54	34	0.63	54	37	0.68	57	40	0.70	60	38	0.63
Bahr el Ghazal	440	379	0.86	480	416	0.87	470	417	0.89	480	410	0.85	489	405	0.83
Northern Bahr el Ghazal	147	114	0.84	157	124	0.79	153	129	0.85	157	134	0.86	152	105	0.70
Western Bahr el Ghazal	65	58	0.89	51	45	0.88	37	33	0.89	37	31	0.84	43	41	0.94
Lakes	97	94	1.01	117	106	0.91	125	112	0.9	129	116	0.90	133	130	0.98
Warrap	131	113	0.9	155	141	0.91	156	143	0.92	157	129	0.82	162	129	0.79
Greater Equatoria	467	465	1	346	336	0.97	268	266	0.99	278	254	0.91	316	341	1.08
Central Equatoria	197	216	1.19	117	120	1.03	60	62	1.04	57	49	0.87	65	68	1.05
Eastern Equatoria	139	116	0.98	116	99	0.85	107	94	0.87	112	91	0.82	122	123	1.01
Western Equatoria	131	133	1	113	117	1.04	101	110	1.09	110	114	1.04	129	149	1.16
Total	1 015	912	0.9	940	826	0.88	863	764	0.89	883	745	0.84	930	818	0.88

RECOMMENDATIONS FOR 2020

The recurring conflicts in 2019 have displaced millions of people from their homesteads into Protection of Civilian (POCs), and others have fled the country as refugees into neighbouring countries. The number of Internally Displaced Persons (IDPs) in the country stood at 1.47 million in December 2019 and the number of South Sudanese refugees in neighbouring countries was close to 2.22 million. Following improvements in security, about 417 000 displaced people returned to their places of origin in 2019, of which about 276 000 from within South Sudan and 141 000 from abroad. Conflict continues to exacerbate food insecurity and vulnerability through limited access to markets and disruption of livelihoods, forced farmers not to efficiently utilize their agricultural fields, significantly curtails the supply of goods and basic services, and limits humanitarian assistance.

Hence, the signing of the Revitalized Agreement on the Resolution of the Conflict in South Sudan in September 2018 led to a significant reduction of the armed conflict that started in the country in December 2013. The relative calm in the country has also resulted in the gradual return of 417 000 displaced people to their places of origin in 2019. This helped increase the number of farming households and contributed to the recorded increase in production. Therefore, cessation of all hostilities and the implementation of the Peace Agreement is the primary recommendation to progress in terms of agricultural development and improving food security.

While understanding the complexity of the prevailing situation during the process of reconciliation and peace-building, the following recommendations are made with the hopes that the national peace deal is sustained for a better future of the people of South Sudan.

Agriculture

In order to strengthen domestic food production and reduce the food requirement/needs in 2020 it is recommended to:

- Provide seeds and tools (farm inputs) to stimulate production deficit to former surplus levels in the more productive and stable counties.
- Maintain support to small scale subsistence producers (often the pastoral/ agro-pastoral areas) in less agricultural productive locations.
- Provide support to the 2020 cereal production by timely provision of agricultural inputs and seed fairs, together with the necessary technological packages and farmers' training/orientation. Flood impacted areas need timely support of seeds and tools for 2020 season.
- Support targeted farmers to use improved agricultural practices like good land preparation, proper weeding, *Striga* weed control techniques, integrated pest management and soil fertility maintenance practices, among others
- Develop a strategy to minimize the impact of some problematic weeds like *Striga* that seriously reduce the productivity of sorghum, which is the main staple food crop in the country. This may include, urgent preparation and dissemination of a package for *Striga* management and control is highly recommended.
- Serious post-harvest losses were noted by Task Forces every year. Farmers need to be provided with training and equipment to enable them manage the increasing storage losses of crops due to various storage pests.
- Address the main challenges of the FAW damage, the magnitude of which might increase depending on the favourability of the coming seasons for the FAW multiplication and infestation.
- While strengthening the county-based CCMCs, there is a need for establishing strong linkages between the counties and SMOAs, and also the states with national Task Forces (MAFS and NBS).
- Maximum care should be taken in estimating farming populations for CFSAM analysis, to separate those actively involved in agricultural activities and in-coming households, especially the late arrivals after the planting season is over. This will help the CFSAM team to avoid any overestimation of cultivated area during the specific year. The CCMC reporting format could be used to track population movement at least at county level for cross-checking the population figures provided by the concerned agencies and the population working group of IPC. The suggested CCMC format contains columns including Name of County, Mid-year Population, Incoming Population, Outgoing Population and Current balance of available population.
- Desert Locust monitoring and control is necessary. There is a risk that some swarms of desert locust could appear in South Sudan from neighboring east African countries. A further increase in locust swarms is likely

to continue until about June 2020 due to the continuation of favourable ecological conditions for Locust breeding.

Livestock

- Design a strategy and conduct a comprehensive livestock census for the whole country using remote sensing.
- Expand animal health interventions, in particular:
 - train new community animal health workers to replace drop-outs and expand delivery of animal health services at community level
 - review the vaccination programme in regard to coverage, effectiveness and ensure a risk – based approach;
 - promote privatized / cost recovery delivery of animal health services, and support access to veterinary drugs and supplies;
- Support commercialization of the livestock sector. In particular:
 - Promote value addition activities, including improved fodder production, training of livestock owners in fodder production, processing and conservation techniques, introduce livestock conditioning and pen fattening, promote peri-urban smallholder milk production working with producer groups and women's groups, and support backyard poultry production;
 - Support community – based livestock improvement programme (animal breeding, e.g. using Sudan breeds like Botana and Kenana, trainings in improved animal husbandry practices);
 - Conduct a comprehensive study on the livestock economy and contribution of livestock towards the Gross Domestic Product; and
 - Rollout livestock shows (emphasis on the quality of animals as opposed to numbers).
- Support implementation of the Strategic Response plan to mitigate cattle raiding-related conflict in South Sudan (2019 – 2025);
- Re-establish access to seasonal grazing areas and routes that have been disrupted since the start of the conflict by supporting a process of negotiation amongst various herding groups;
- Establish a livestock information system to monitor key indicators, including animal production, productivity, marketing, movements and health.

Markets

- Provide market based livelihood support by enhancing the capacity of existing growing marketing institutions.
- Promote local purchase of seed and crop production by facilitating the distribution of seed or food from surplus to deficit areas, taking into consideration local market dynamics, as well as along the main corridors for both commercial and humanitarian commodities.
- Maintain and strengthen the existing collaboration in price and market monitoring by expanding to essential and emerging commodities which were not reported before and improve cross border market monitoring.
- Expand the use of Cash-Based Plus Transfers (CBTs) in the areas where markets are functioning to encourage supply and greater market stability through demand side stimulation.
- Promote livestock trade and improve access to livestock markets, including in cross-border areas. This will involve working the North Eastern Africa Livestock Council (South Sudan Chapter).