



	Country Year	DR-CONGO		ETHIOPIA		GHANA		KENYA		MADAGASCAR		MALAWI		MOZAMBIQUE		SENEGAL		SOUTH AFRICA		TANZANIA		UGANDA		ZAMBIA		ZIMBABWE		AVERAGE
		2016	2016	2016	2016	2015	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2015	2016	2016	2016	2015	2016	2016	2016	2016	2016	
Focus crop 1	Area harvested in hectares	Maize 1,506,884	Maize 2,114,876	Maize 1,019,000	Maize 2,116,141	Maize 215,113	Maize 1,676,213	Maize 1,703,500	Maize 146,361	Maize 2,688,200	Maize 4,146,000	Maize 1,105,000	Maize 1,205,202	Maize 2,283,803	1,686,638													
Focus crop 2	Area harvested in hectares	Rice 405,074	Wheat 1,663,845	Rice 224,000	Sorghum 213,520	Rice 961,831	Beans 329,959	Rice 376,500	Rice 134,973	Soya bean 502,900	Beans 1,134,394	Sorghum 373,000	Rice 33,207	Beans 69,651	494,066													
Focus crop 3	Area harvested in hectares	Beans 459,100	Teff 3,762,000	Soya bean 97,957	Beans 1,052,408	Beans 73,017	Groundnut 373,925	Cowpea 377,900	Groundnut 878,659	Sunflower 598,950	Soya bean 5,907	Beans 674,000	Groundnut 237,423	Soya bean 56,312	665,197													
Focus crop 4	Area harvested in hectares	Soya bean 41,206	Sorghum 1,834,650	Cowpea 168,659	Cowpea 281,877	Groundnut 53,000	Soya bean 139,005	Soya bean 15,000	Millet 715,996	Wheat 476,570	Pigeon pea 250,509	Millet 175,000	Beans 88,673	Sorghum 588,945	371,468													
Number of farming households	Millions	15.6	15.6	2.5	6.4	2.43	2.64	3.17	0.76	2.3	5.8	9.1	1.47	0.6	4													
Population	Millions	78.7	102.4	28.2	44.0	24.9	18.1	28.8	15.4	55.9	55.6	41.5	16.6	16.2	40													
Total land area	Millions of hectares	234.5	110.4	23.8	58.0	58.7	11.8	78.6	19.3	121.3	88.6	24.0	74.3	38.7	72													
Arable land	% of total land area	3%	15%	21%	5%	15%	40%	7%	17%	10%	15%	34%	5%	10%	15%													
Ease of Doing Business rank	2017 rank out of 190 countries	184	159	108	92	167	133	137	147	74	132	115	98	161	131													
A. RESEARCH AND DEVELOPMENT																												
1	Number of active breeders	Crop 1	Maize 7	Maize 23	Maize 10	Maize 34	Maize 2	Maize 4	Maize 6	Maize 2	Maize 27	Maize 28	Maize 5	Maize 17	Maize 17	14												
		Crop 2	Rice 3	Wheat 20	Rice 5	Sorghum 7	Rice 21	Beans 3	Rice 8	Rice 4	Soya bean 7	Beans 7	Sorghum 5	Rice 5	Beans 5	8												
		Crop 3	Beans 2	Teff 3	Soya bean 5	Beans 17	Beans 3	Groundnut 2	Cowpea 4	Groundnut 3	Soya bean 10	Soya bean 7	Beans 3	Groundnut 3	Soya bean 6	6												
		Crop 4	Soya bean 2	Sorghum 16	Cowpea 6	Cowpea 5	Groundnut 3	Soya bean 2	Soya bean 2	Millet 3	Wheat 9	Pigeon pea 4	Millet 1	Beans 1	Sorghum 4	4												
		Total	14	74	26	63	29	8	20	12	53	46	14	26	32	32												
Adequacy of breeders (score out of 100)	Crop 1	Maize 60	Maize 75	Maize 83	Maize 68	Maize 66	Maize 71	Maize 90	Maize 17	Maize 84	Maize 63	Maize 51	Maize 64	Maize 84	67													
	Crop 2	Rice 50	Wheat -	Rice 70	Sorghum 48	Rice 69	Beans 46	Rice 90	Rice 50	Soya bean 88	Beans 54	Sorghum 39	Rice 80	Beans 83	64													
	Crop 3	Beans -	Teff 100	Soya bean 60	Beans 57	Beans 61	Groundnut 56	Cowpea 63	Groundnut 61	Sunflower 96	Soya bean 54	Beans 3	Groundnut 55	Soya bean 93	64													
	Crop 4	Soya bean -	Sorghum 10	Cowpea 80	Cowpea 48	Groundnut 73	Soya bean 54	Soya bean 68	Millet 25	Wheat 85	Pigeon pea 37	Millet 20	Beans 60	Sorghum 83	54													
	Average satisfaction	55	70	72	54	70	58	77	38	88	57	28	66	86	63													
2	Number of varieties released in last three years	Crop 1	Maize 6	Maize 12	Maize 17	Maize 61	Maize 0	Maize 17	Maize 5	Maize 0	Maize 236	Maize 44	Maize 19	Maize 37	Maize 34	38												
		Crop 2	Rice 4	Wheat 15	Rice 0	Sorghum 3	Rice 13	Beans 0	Rice 3	Rice 0	Soya bean 71	Beans 2	Sorghum 0	Rice 3	Beans 7	9												
		Crop 3	Beans 10	Teff 3	Soya bean 0	Beans 14	Beans 0	Groundnut 0	Cowpea 0	Groundnut 0	Sunflower 38	Soya bean 0	Beans 3	Groundnut 2	Soya bean 4	6												
		Crop 4	Soya bean 0	Sorghum 7	Cowpea 0	Cowpea 2	Groundnut 0	Soya bean 0	Soya bean 0	Millet 0	Wheat 17	Pigeon pea 4	Millet 0	Beans 2	Sorghum 3	3												
		Total	20	37	17	80	13	17	8	7	362	50	22	44	48	56												
3	Availability of foundation seed (score out of 100)	Crop 1	Maize 65	Maize 58	Maize 70	Maize 62	Maize 51	Maize 65	Maize 42	Maize 77	Maize 80	Maize 72	Maize 64	Maize 76	Maize 84	67												
		Crop 2	Rice 61	Wheat 54	Rice 62	Sorghum 77	Rice 62	Beans 49	Rice 85	Rice 74	Soya bean 49	Beans 61	Sorghum 50	Rice 68	Beans 76	64												
		Crop 3	Beans 63	Teff 58	Soya bean 68	Beans 53	Beans 63	Groundnut 58	Cowpea 40	Groundnut 82	Sunflower 66	Soya bean 65	Beans 59	Groundnut 40	Soya bean 80	61												
		Crop 4	Soya bean 62	Sorghum 60	Cowpea 68	Cowpea 52	Groundnut 54	Soya bean 52	Soya bean 46	Millet 79	Wheat 73	Pigeon pea 45	Millet 34	Beans 57	Sorghum 77	58												
		Average satisfaction	64	57	67	68	60	56	46	78	67	67	52	76	79	65												
4	Average age of varieties sold (years)	Crop 1	Maize 17.6	Maize 5.4	Maize 12.5	Maize 9.4	Maize 24.0	Maize 5.7	Maize 11.0	Maize 19.0	Maize 4.0	Maize 10.0	Maize 6.4	Maize 10.0	Maize 8.5	11												
		Crop 2	Rice 16.5	Wheat 4.8	Rice 5.0	Sorghum 24.1	Rice 19.0	Beans 11.0	Rice 2.0	Rice 17.0	Soya bean 4.0	Beans 18.0	Sorghum 14.5	Rice 4.0	Beans 5.6	11												
		Crop 3	Beans 22.0	Teff 6.7	Soya bean 8.5	Beans 14.7	Beans 18.0	Groundnut 18.0	Cowpea 21.0	Groundnut 20.0	Sunflower 5.0	Soya bean 10.0	Beans 9.9	Groundnut 29.0	Soya bean 8.2	15												
		Crop 4	Soya bean 18.0	Sorghum 6.0	Cowpea 14.0	Cowpea 16.9	Groundnut 51.0	Soya bean 8.0	Soya bean 5.0	Millet 16.0	Wheat 7.0	Pigeon pea 22.7	Beans 12.0	Sorghum 12.0	16													
		Total	41	23	18	74	3	57	11	3	24	44	8	13	10	38												
5	Percentage of varieties with climate-smart features released in last 3 years (%)	Crop 1	Maize 75%	Maize 75%	Maize 75%	Maize 75%	Maize 0%	Maize 88%	Maize 60%	Maize 63%	Maize 93%	Maize 14%	Maize 55%	Maize 51%	Maize 62%	57%												
		Crop 2	Rice 25%	Wheat 27%	Rice 7	Sorghum 100%	Rice 29%	Beans 0%	Rice 67%	Rice 47%	Soya bean 70%	Beans 0%	Sorghum 0%	Rice 33%	Beans 43%	37%												
		Crop 3	Beans 50%	Teff 25%	Soya bean 0%	Beans 36%	Beans 0%	Groundnut 0%	Cowpea 0%	Groundnut 44%	Sunflower 32%	Soya bean 0%	Beans 56%	Groundnut 50%	Soya bean 0%	23%												
		Crop 4	Soya bean 29%	Sorghum 29%	Cowpea 0%	Cowpea 100%	Groundnut 0%	Soya bean 0%	Soya bean 0%	Millet 57%	Wheat 50%	Pigeon pea 50%	Millet 0%	Beans 50%	Sorghum 100%	34%												
		Total	89	73	49	124	55	91	24	35	58	58	58	120	95	74												
B. INDUSTRY COMPETITIVENESS																												
6	Number of active seed companies (for focus crops only)	Crop 1	Maize 56	Maize 18	Maize 17	Maize 19	Maize 11	Maize 21	Maize 15	Maize 89	Maize 16	Maize 29	Maize 13	Maize 10	Maize 13	25												
		Crop 2	Rice 36	Wheat 8	Rice 8	Sorghum 9	Rice 41	Beans 19	Rice 3	Rice 51	Soya bean 12	Beans 6	Sorghum 8	Rice 5	Beans 8	16												
		Crop 3	Beans 28	Teff 9	Soya bean 5	Beans 12	Beans 20	Groundnut 14	Cowpea 11	Groundnut 109	Sunflower 9	Soya bean 2	Beans 13	Groundnut 4	Soya bean 6	19												
		Crop 4	Soya bean 28	Sorghum 3	Cowpea 9	Cowpea 9	Groundnut 11	Soya bean 18	Soya bean 6	Millet 93	Wheat 4	Pigeon pea 1	Millet 2	Beans 4	Sorghum 7	15												
		Total	73	21	17	22	48	22	35	138	41	30	13	10	16	37												
7	Time taken to import/export seed from neighbouring countries (days)	Import seed (days)	16	100	90	38	24	14	21	-	18	12	6	11	30	52												
		Import score (out of 100)	20	40	20	50	73	83	74	-	66	63	71	55	44	35												
		Export seed (days)	-	-	-	14	-	20	-	-	-	12	-	9	12	17												
		Export score (out of 100)	-	-	-	69	-	63	-	-	61	-	65	60	27	58												
		Total	16	100	90	38	24	14	21	-	18	12	6	11	30	52												
8	Total sales of certified seed (metric tons)	Crop 1	Maize 1,807	Maize 27,756	Maize 1,432	Maize 38,835	Maize 172	Maize 14,350	Maize 4,375	Maize 11,712	Maize 33,223	Maize 8,308	Maize 9,554	Maize 33,018	Maize 44,150	17,592												
		Crop 2	Rice 430	Wheat 40,544	Rice 103	Sorghum 1,075	Rice 1,233	Beans 1,061	Rice 650	Rice 12,485	Soya bean 7,659	Beans 77	Sorghum 4,213	Rice 295	Beans 1,078	5,454												
		Crop 3	Beans 331	Teff 2,654	Soya bean 43	Beans 1,322	Beans 193	Groundnut 1,561	Cowpea 364	Groundnut 75,286	Sunflower 2,444	Soya bean 4	Beans 1,143	Groundnut 621	Soya bean 2,750	6,824												
		Crop 4	Soya bean 244	Sorghum 60	Cowpea 87	Cowpea 463	Groundnut 22	Soya bean 1,614	Soya bean 689	Millet 5,908	Wheat 14,515	Pigeon pea 4	Beans 26	Groundnut 719	Sorghum 1,300	2,137												
		Market share concentration Herfindahl-Hirschman Index (out of 10,000)	914	1,904	1,620	5,438	2,272	3,539	2,623	274	3,079	1,973	1,317	1,952	3,380	2,330												
9	Market share of top four companies (weighted by volume)	Crop 1	Maize 48%	Maize 81%	Maize 72%	Maize 88%	Maize 94%	Maize 95%	Maize 80%	Maize 32%	Maize 94%	Maize 76%	Maize 71%	Maize 81%	Maize 95%	77%												
		Crop 2	Rice 40%	Wheat 97%	Rice 77%	Sorghum 93%	Rice 44%	Beans 87%	Rice 100%	Rice 37%	Soya bean 60%	Beans 94%	Sorghum 71%	Rice 100%	Beans 85%	76%												
		Crop 3	Beans 50%	Teff 95%	Soya bean 98%	Beans 82%	Beans 65%	Groundnut 80%	Cowpea 96%	Groundnut 30%	Sunflower 90%	Soya bean 100%	Beans 100%	Groundnut 100%	Soya bean 95%	83%												
		Crop 4	Soya bean 57%	Sorghum 100%	Cowpea 87%	Cowpea 91%	Groundnut 95%	Soya bean 93%	Soya bean 97%	Millet 40%	Wheat 99%	Pigeon pea 100%	Millet 87%	Beans 100%	Sorghum 91%	87%												
		No. of companies in top four, for four crops	13	7	8	10	7	7	7	7	8	7	6	7	8	8												

COLOR CODES: Extremely poor (0-19.99) Poor (20-39.99) Fair (40-59.99) Good (60-79.99) Excellent (80-100)



	Country Year	DR-CONGO 2016	ETHIOPIA 2016	GHANA 2016	KENYA 2015	MADAGASCAR 2016	MALAWI 2016	MOZAMBIQUE 2016	SENEGAL 2016	SOUTH AFRICA 2016	TANZANIA 2016	UGANDA 2015	ZAMBIA 2016	ZIMBABWE 2016	AVERAGE
C. SEED POLICY AND REGULATION															
10 Length of variety release process	Time (months)	26	46	42	33	43	34	24	36	20	31	20	24	18	31
	Satisfaction with variety release (out of 100)	62	71	43	47	54	58	53	74	83	70	60	84	83	65
11 Status of seed policy frameworks*	Seed Policy (year)	2006 (draft)	1993	2013	2010	no policy	1993 (2014)	no policy	no policy	2012	Agric policy	2014 (draft)	1999	no policy	2005
	Latest amendment to Seed Law (year)	2007 (draft)	2013	2010	2012	1995	1996 (2013)	no law	1994	2015	2014	2006	1995	1971	2003
	Latest Seed Regulations (year)	2007 (draft)	2016	2015	2016	2010	1997	2013	1997	2015	2007	2015	2015	2016	2011
	Regional harmonization	parliament appr. Pending (COMESA)	Amendments on-going (COMESA)	Amendments on-going (ECOWAS)	harmonized (COMESA)	Amendments on-going (COMESA)	Amendments on-going (COMESA)	harmonized (SADC)	harmonized (ECOWAS)	Not yet harmonized (SADC)	Amendments on-going (SADC)	harmonized (COMESA)	regulations appr. Pending (COMESA)	harmonized (COMESA)	
	Seed plan/strategy (year)	no seed plan	2013	2015	no seed plan	2008	no seed plan	2015	no seed plan	2015	no seed plan	no seed plan	no seed plan	no seed plan	no seed plan
12 Quality of seed law/regulations	Score (out of 100)	58	65	78	63	65	54	69	75	79	70	55	77	86	69
Quality of enforcement systems	Score (out of 100)	51	57	56	61	47	46	64	74	69	70	42	68	77	60
13 Adequacy of seed inspectors	# Public inspectors	105	32	32	64	64	60	37	25	21	400	48	6	35	14
	# Private inspectors	0	0	0	12	0	0	0	0	180	0	0	83	46	25
	# Total inspectors	0	0	0	0	60	37	25	21	0	0	6	0	0	11
	Score (out of 100)	33	68	49	62	63	49	59	22	79	59	40	67	84	56
14 Efforts to stamp out fake seed	Reported cases in 1 year	185	11	7	6	34	20	11	39	6	18		22	52	34
	Score (out of 100)	22	57	32	50	37	38	52	52	50	57	37	57	56	46
15 Use of smart subsidies[3]	% of seed sold as subsidy	0%	0%	0%	0%	0%	70%	16%		0%	46%	0%	38%	7%	15%
	Govt. expenditure on seed subsidy (\$ mill)	0	0	0	0	0	13	1		0	3	0	23	28	6
	% of price subsidy	0%	0%	0%	0%	100%		70%		0%	30%	0%	30%	0%	21%
	Years of subsidy (years up to 2016)	-	-	-	-	-	11	18		0	11	0	14	6	9
	Method of subsidy distribution	-	-	-	-	public	private (voucher)	private (voucher)		-	80% private (voucher)		private (e-voucher)	public (govt. warehouses)	
D. INSTITUTIONAL SUPPORT															
16 Availability of extension services	Households per extension officer	Relief prog. 5,898	592	1,500	910	26,000	1,388	1,045		1,059	831	4,019	560	127	3,661
	Score (out of 100)	54	55	52	40	47	56	22	46	56	55	55	72	50	
17 Quality of national seed traders' association (Score out of 100)	Activity on important seed sector issues	37	66	46	63	38	78	55	73	81	73	52	69	71	62
	Effectiveness in advocacy	32	53	44	57	41	75	52	66	82	75	53	64	64	58
	Managerial ability	32	63	43	60	44	69	53	59	86	71	44	65	63	58
	Providing value to members	30	71	38	62	39	74	54	59	84	69	51	65	50	57
	Democracy in the elections and decision making	35	69	64	73	40	84	77	60	87	74	68	85	49	67
	Ability to mobilize resources	23	65	36	57	39	63	51	58	82	68	43	58	51	53
	Overall score (out of 100)	32	66	46	62	45	73	59	62	81	71	51	69	50	59
E. SERVICE TO SMALLHOLDER FARMERS															
18 Concentration of rural-agro dealers	Number of agro-dealers	161	650	3,153	5,240	143	2,000	211	97		2000	1,167	450	1,278	1,379
	Agricultural households per agro-dealer	43,882	27,841	794	1,221	17,300	1,320	15,000	7,788		2900		3,276	438	11,069
	Score (out of 100)	30	47	64	64	64	25	61	66	57	75	55			
19 Availability of seed in small packages (% of seed sold in packages of 2kgs or less)	% volume sold (weighted)	31%	0%	66%	79%	32%	29%	64%	0%	<5%	93%	27%	19%	6%	37%
	Crop 1	Maize 28%	Maize 0%	Maize 74%	Maize 73%	Maize 27%	Maize 17%	Maize 66%	Maize 0%	Maize <5%	Maize 93%	Maize 32%	Maize 20%	Maize 7%	36%
	Crop 2	Rice 26%	Wheat 0%	Rice 29%	Sorghum 96%	Rice 35%	Beans 79%	Rice 60%	Rice 0%	Soya bean 0%	Beans 92%	Sorghum 20%	Rice 0%	Beans 7%	34%
	Crop 3	Beans 31%	Teff 1%	Soya bean 14%	Beans 93%	Beans 28%	Groundnut 87%	Cowpea 88%	Groundnut 0%	Sunflower <1%	Soya bean 34%	Beans 3%	Groundnut 0%	Soya bean 1%	32%
	Crop 4	Soya bean 55%	Sorghum 0%	Cowpea 42%	Cowpea 100%	Groundnut 28%	Soya bean 42%	Soya bean 21%	Millet 0%	Wheat 0%	Pigeon pea 30%	Millet 75%	Beans 4%	Sorghum 4%	31%
Score (out of 100)	57	60	72	50	78	73	50	86	75	67					
20 Seed price divided by grain price (at planting time)	Maize (seed price divided by grain price)	OPV 5.0	OPV 3.6	OPV 4.3	OPV 3.7	OPV 2.4	OPV 4.1	OPV 3.8	OPV 2.9	OPV 5.0	OPV 5.2	OPV 3.0	OPV 10.0	OPV 3.6	4.4
	Maize (seed price divided by grain price)	Hybrid 5.5	Hybrid 7.1	Hybrid 6.0	Hybrid 4.5	Hybrid n/a	Hybrid 4.2	Hybrid 4.8	Hybrid n/a	Hybrid 34.4	Hybrid 8.7	Hybrid 6.0	Hybrid 13.4	Hybrid 9.3	9.4
	Crop 2 (seed price divided by grain price)	Rice 1.8	Wheat 1.9	Rice 1.7	Sorghum 3.0	Rice 2.3	Beans 1.5	Rice 3.3	Rice 1.7	Soya bean 4.9	Beans 1.4	Sorghum 2.3	Rice 1.4	Beans 2.1	2.3
	Crop 3 (seed price divided by grain price)	Beans 1.4	Teff 1.4	Soya bean 4.4	Beans 1.8	Beans 2.2	Groundnut 1.9	Cowpea 1.5	Groundnut 1.1	Sunflower 22.9	Soya bean 2.0	Beans 1.6	G' nut OPV 1.3	Soya bean 2.6	3.7
	Crop 4 (seed price divided by grain price)	Soya bean 1.6	Sorghum 2.2	Cowpea 2.0	Cowpea 1.5	Groundnut 1.5	Soya bean 1.8	Soya bean 1.6	Millet 3.0	Wheat 3.0	Pigeon pea 1.7	Millet 1.7	Beans 2.3	Sorghum OPV 6.9	2.5
Seed price (USD per kg)	Maize (seed price in USD per kg)	OPV 1.6	OPV 0.6	OPV 1.5	OPV 1.7	OPV 0.6	OPV 1.2	OPV 1.9	OPV 0.9	OPV 1.2	OPV 1.3	OPV 1.0	OPV 1.5	OPV 1.4	1.3
	Maize (seed price in USD per kg)	Hybrid 3.1	Hybrid 1.3	Hybrid 2.2	Hybrid 1.8	Hybrid n/a	Hybrid 1.3	Hybrid 2.4	Hybrid n/a	Hybrid 8.0	Hybrid 2.2	Hybrid 2.0	Hybrid 2.6	Hybrid 2.8	2.7
	Crop 2 (seed price in USD per kg)	Rice 2.0	Wheat 0.7	Rice 1.0	Sorghum 1.5	Rice 0.6	Beans 1.5	Rice 0.8	Rice 0.8	Soya bean 2.4	Beans 1.1	Sorghum 0.8	Rice 1.8	Beans 2.8	1.4
	Crop 3 (seed price in USD per kg)	Beans 2.3	Teff 1.1	Soya bean 1.8	Beans 1.8	Beans 1.3	Groundnut 1.5	Cowpea 1.7	Groundnut 0.6	Sunflower 11.1	Soya bean 1.3	Beans 1.7	G' nut OPV 2.8	Soya bean 1.6	2.3
	Crop 4 (seed price in USD per kg)	Soya bean 2.6	Sorghum 0.7	Cowpea 2.1	Cowpea 1.5	Groundnut 1.3	Soya bean 1.1	Soya bean 1.4	Millet 0.9	Wheat 1.2	Pigeon pea 0.4	Millet 0.8	Beans 2.6	Sorghum OPV 1.6	1.4

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