Annex A. Agroclimatic indicators and BIOMSS

Tables in this Annex provide additional information about the agroclimatic indicators—RAIN, TEMP, and RADPAR—and BIOMSS for the Monitoring and Reporting Units (MRU) (table A.1), thirty-one main producing and exporting countries (A.2), regions or provinces within large countries—Argentina, Australia, Brazil, Canada, India, Kazakhstan, Russia, and the United States (tables A.3 through A.10), and China (table A.11).

Table A.1. October 2014 to January 2015 agroclimatic indicators and biomass by global Monitoring and Reporting Unit, current value and departure from average

		RAIN		TEMP		RADPAR		BIOMSS	
	65 Global MRUs	Current (mm)	13YA dep. (%)	Current (°C)	13YA dep. (°C)	Current (MJ/m^2)	13YA dep. (%)	Current (gDM/m^2)	5YA dep. (%)
1	Equatorial central Africa	465	-18	26.0	1.0	1208	7	1399	-11
2	East African highlands	185	-8	19.5	0.1	1237	1	607	-8
3	Gulf of Guinea	245	5	27.3	0.5	1131	-1	680	-5
4	Horn of Africa	262	-23	24.8	0.6	1303	1	858	-11
5	Madagascar (main)	898	18	25.4	0.9	1274	0	1765	7
6	Southwest Madagascar	328	-31	25.6	-0.1	1458	2	848	-29
7	North Africa-Mediterranean	172	-5	14.0	0.8	688	-2	529	-3
8	Sahel	59	26	28.0	0.6	1252	-1	190	6
9	Southern Africa	429	-5	25.4	0.6	1374	3	1173	-10
10	Western Cape (South Africa)	55	-60	19.2	1.7	1567	1	243	-52
11	British Columbia to Colorado	306	8	-6.6	1.7	138	-4	387	11
12	Northern Great Plains	224	54	0.2	0.1	478	-4	667	37
13	Corn Belt	376	4	1.3	-1.0	426	-6	764	-4
14	Cotton Belt to Mexican Noreste	418	17	11.5	-0.4	660	-3	1061	15
15	Sub-boreal America	165	9	-7.9	-0.8	247	-6	394	-6
16	West Coast (North America)	284	-18	9.2	2.2	527	-4	685	1
17	Sierra Madre	148	17	15.3	0.6	982	-5	479	18
18	Southwest U.S. and north Mexican highlands	91	1	9.2	1.3	748	-5	355	0
19	Northern South and Central America	428	-8	26.1	0.7	940	0	1032	-5
20	Caribbean	299	-11	25.2	0.7	943	3	784	-12
21	Central-northern Andes	556	-6	18	1	1149	3	1230	-4
22	Nordeste (Brazil)	203	-27	28.8	2.3	1352	-1	632	-23
23	Central eastern Brazil	630	-17	27.4	1.7	1296	7	1674	-12
24	Amazon	670	-19	28.2	0.7	1132	5	1787	-10
25	Central-north Argentina	465	9	26.3	0.8	1298	0	1436	13
26	Pampas	787	30	23.8	1.2	1366	0	1865	18
27	Western Patagonia	66	-60	13.5	-0.4	1457	1	280	-47
28	Semi-arid Southern Cone	87	-28	18.7	0.0	1482	-1	340	-16
29	Caucasus	345	27	3.7	-0.2	516	-5	810	6
30	Pamir area	186	48	3.1	0.3	684	-6	476	19
31	Western Asia	136	2	7.3	0.4	632	-4	422	-5
32	Gansu-Xinjiang (China)	94	95	-3.8	0.0	556	-5	286	42
33	Hainan (China)	166	-55	21.8	1.0	793	0	384	-51
34	Huanghuaihai (China)	105	44	6.8	0.9	634	-3	376	16
35	Inner Mongolia (China)	66	52	-4.8	0.8	555	-3	259	4
36	Loess region (China)	87	34	2.1	0.7	651	-4	347	18
37	Lower Yangtze (China)	171	-28	12.2	0.8	707	0	592	-24
38	Northeast China	108	28	-7.4	0.1	479	-2	354	-1
39	Qinghai-Tibet (China)	113	16	1.5	0.7	841	-1	336	13
40	Southern China	201	20	16.2	0.5	776	-3	659	16
41	Southwest China	252	81	9.8	0.8	587	-3	762	59
42	Taiwan (China)	32	-84	18.3	0.3	775	-1	168	-77

	65 Global MRUs	RAIN		TEMP		RADPAR		BIOMSS	
		Current (mm)	13YA dep. (%)	Current (°C)	13YA dep. (°C)	Current (MJ/m^2)	13YA dep. (%)	Current (gDM/ m^2)	5YA dep. (%)
43	East Asia	164	-25	-1.4	-0.3	500	-4	515	-8
44	Southern Himalayas	152	9	17.8	0.6	873	-1	490	26
45	Southern Asia	239	6	23.7	0.6	1006	-2	637	11
46	Southern Japan and Korea	280	-33	8.9	-0.1	565	-5	948	-18
47	Southern Mongolia	102	413	-8.0	1.1	467	-3	375	167
48	Punjab to Gujarat	26	-9	21.2	0.6	940	-3	99	-11
49	Maritime Southeast Asia	1073	-5	26.4	1.0	989	1	2109	-7
50	Mainland Southeast Asia	332	0	25.6	1.1	1000	1	807	0
51	Eastern Siberia	159	-5	-9.7	0.4	271	-2	306	-12
52	Eastern Central Asia	59	13	-14.6	0.6	350	-2	199	0
53	Northern Australia	539	-13	27.5	0.7	1320	3	1331	-14
54	Queensland to Victoria	258	6	19.5	-0.5	1482	0	908	3
55	Nullarbor to Darling	97	-3	19.0	0.1	1591	1	428	-5
56	New Zealand	101	-69	14.0	0.8	1313	1	453	-57
57	Boreal Eurasia	323	28	-2.8	1.7	115	-14	526	13
58	Ukraine to Ural mountains	190	-6	-1.4	-0.3	202	0	588	-8
59	Mediterranean Europe and Turkey	273	-18	10.0	1.4	524	-2	848	-13
60	W. Europe (non Mediterranean)	296	4	7.0	2.1	287	-8	958	6
61	Boreal America	343	44	-2.5	1	441	-5	549	24
62	Ural to Altai mountains	191	53	-7.9	-0.5	238	-10	372	-8
63	Australian desert	136	48	20.8	-0.7	1598	0	574	23
64	Sahara to Afghan deserts	57	-12	18.3	1.1	943	-1	184	-10
65	Sub-arctic America	106	129	-21.4	-2.5	25	-5	146	226

Note: Departures are expressed in relative terms (percentage) for all variables, except for temperature, for which absolute departure in degrees Celsius is given. Zero means no change from the average value; Relative departures are calculated as (C-R)/R*100, with C=current value and R=reference value, which is the five-year (5YA) or thirteen-year average (13YA) for the same period between October and January.

Table A.2. October 2014-January 2015 agroclimatic indicators and biomass by country, current value and departure from average

	31 Countries	RAIN		TEMP		RADPAR		BIOMSS	
		Current (mm)	13YA Departure (%)	Current (°C)	13YA Departure (°C)	Current (MJ/m^2)	13YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
[ARG]	Argentina	591	22	23.2	0.7	1384	-1	1539	14
[AUS]	Australia	254	1	20.2	-0.3	1487	0	832	0
[BGD]	Bangladesh	134	-43	22.2	0.6	926	0	508	8
[BRA]	Brazil	634	-14	27.3	1.5	1268	5	1618	-10
[CAN]	Canada	264	15	-5.2	0.0	291	-7	476	5
[CHN]	China	166	14	7.4	0.8	647	-2	478	10
[DEU]	Germany	281	10	6.3	1.8	230	-8	1057	13
[EGY]	Egypt	38	-41	18.1	0.3	784	1	127	-31
[ETH]	Ethiopia	174	15	20.0	0.0	1223	1	544	0
[FRA]	France	275	-15	10.2	3.6	325	-7	916	-10
[GBR]	U. Kingdom	481	36	8.4	2.1	189	-8	1192	16
[IDN]	Indonesia	1042	-10	26.7	1.1	1018	3	2115	-8
[IND]	India	149	5	21.5	0.5	968	-2	436	13
[IRN]	Iran	193	3	8.0	0.3	720	-4	517	-7
[KAZ]	Kazakhstan	160	41	-6.5	-0.8	299	-8	423	-1
[KHM]	Cambodia	402	20	27.6	1.3	1068	3	976	5
[MEX]	Mexico	211	9	19.1	0.4	914	-5	555	20
[MMR]	Myanmar	248	25	13.6	0.8	725	-2	710	29
[NGA]	Nigeria	189	12	27.2	0.4	1207	-1	447	-7
[PAK]	Pakistan	56	-16	14.4	0.3	841	-3	129	-8
[PHL]	Philippines	872	-5	25.5	0.3	897	0	1667	-9

	31 Countries	RAIN		TEMP		RADPAR		BIOMSS	
		Current (mm)	13YA Departure (%)	Current (°C)	13YA Departure (°C)	Current (MJ/m^2)	13YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
[POL]	Poland	206	8	4.5	1.6	221	-5	887	13
[ROM]	Romania	298	42	4.1	1.1	334	-10	911	17
[RUS]	Russia	187	7	-5.6	-0.6	220	-4	422	-11
[THA]	Thailand	340	17	25.4	0.8	1013	1	793	2
[TUR]	Turkey	376	18	6.1	1.0	555	-5	917	-2
[UKR]	Ukraine	172	-8	1.8	-0.1	287	5	722	-3
[USA]	United States	340	17	5.3	-0.2	550	-4	769	14
[UZB]	Uzbekistan	148	4	4.1	-1.1	534	-6	501	10
[VNM]	Vietnam	289	-18	27.9	0.8	1057	3	932	-15
[ZAF]	South Africa	345	-9	20.8	0.7	1431	2	1132	-9

See note table A.1.

Table A.3. Argentina, October 2014-January 2015 2014 agroclimatic indicators and biomass (by province), current value and departure from average

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	13YA Departure (%)	Current (°C)	13YA Departure (°C)	Current (MJ/m^2)	13YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Buenos Aires	510	17	20.4	0.3	1476	-1	1562	15
Chaco	518	-4	26.8	1.3	1314	-3	1536	3
Cordoba	463	6	22.9	0.6	1431	0	1512	9
Corrientes	1094	57	25.4	1.1	1331	-3	2129	27
Entre Rios	822	49	23.2	0.5	1381	-4	2106	36
La Pampa	340	-9	21.7	0.6	1502	-2	1196	-4
Misiones	1255	50	25.3	1.4	1324	2	2269	19
Santiago Del Estero	432	0	26.2	0.9	1291	-3	1443	11
San Luis	404	4	22.4	0.9	1485	2	1376	9
Salta	631	43	25.1	0.2	1222	1	1618	34
Santa Fe	679	29	24.3	1.1	1368	-3	1879	20
Tucuman	-	-	-	-	-	-	-	-

See note table A.1.

Table A.4. Australia, October 2014-January 2015 agroclimatic indicators and biomass (by state), current value and departure from average

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	13YA Departure (%)	Current (°C)	13YA Departure (°C)	Current (MJ/m^2)	13YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
New South Wales	287	20	19.6	-1.0	1508	0	996	14
South Australia	136	23	18.5	0.3	1506	-1	620	24
Victoria	200	-1	16.8	0.0	1449	-2	827	0
Western Australia	138	15	19.8	0.1	1577	1	458	-4

See note table A.1.

Table A.5. Brazil, October 2014-January 2015 agroclimatic indicators and biomass (by state), current value and departure from average

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	13YA Departure (%)	Current (°C)	13YA Departure (°C)	Current (MJ/m^2)	13YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Ceara	119	-38	29.1	1.6	1387	0	489	-11
Goias	654	-25	27.0	1.9	1315	8	1818	-18
Mato Grosso Do Sul	627	-8	27.9	1.3	1324	4	1835	-3
Mato Grosso	876	-14	28.4	1.3	1218	7	2184	-7
Minas Gerais	566	-33	26.0	2.6	1355	10	1537	-21
Parana	761	2	25.2	2.4	1328	9	1960	2
Rio Grande Do Sul	1082	55	23.5	1.2	1318	-1	2211	30
Santa Catarina	1071	38	22.7	2.2	1278	6	2108	9
Sao Paulo	629	-21	26.2	2.6	1349	10	1771	-11

See note table A.1.

Table A.6. Canada, October 2014-January 2015 agroclimatic indicators and biomass (by province), current value and departure from average

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	13YA Departure (%)	Current (°C)	13YA Departure (°C)	Current (MJ/m^2)	13YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Alberta	136	29	-5.4	0.7	271	-4	481	15
Manitoba	101	-17	-7.2	-0.3	302	-6	418	-3
Saskatchewan	89	-11	-6.5	0.8	292	-7	431	8

See note table A.1.

Table A.7. India, October 2014-January 2015 agroclimatic indicators and biomass (by state), current value and departure from average

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	13YA Departure (%)	Current (°C)	13YA Departure (°C)	Current (MJ/m^2)	13YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Arunachal Pradesh	126	-43	16.5	1.4	811	1	548	-12
Andhra Pradesh	168	-25	25.2	0.6	1048	0	562	-1
Assam	95	-49	22.3	1.3	854	3	416	-4
Bihar	70	-24	21.0	-0.2	908	-3	272	-7
Chandigarh	-	-	-	-	-	-	-	-
Chhattisgarh	117	8	21.7	0.3	1006	-2	475	25
Daman and Diu	18	-23	27.1	2.7	1062	-2	95	-38
Delhi	68	77	18.6	-0.4	881	-3	324	101
Dadra and Nagar Haveli	154	72	25.2	1.2	1041	-2	407	-6
Gujarat	40	76	25.1	1.4	1035	-2	170	27
Goa	343	88	26.5	0.6	1096	-2	762	33
Himachal Pradesh	200	70	3.0	0.0	836	-4	362	-1
Haryana	79	98	17.7	-0.4	869	-3	293	94
Jharkhand	76	-38	20.5	0.3	962	-2	347	-20
Kerala	710	31	26.9	1.6	1021	-7	1443	23
Karnataka	243	26	24.4	0.9	1091	-1	671	14
Meghalaya	135	-51	18.7	1.0	896	2	520	30
Maharashtra	137	38	23.7	0.5	1045	-2	476	23
Manipur	167	-16	17.2	1.1	915	4	651	31
Madhya Pradesh	79	35	20.9	0.1	965	-5	339	16
Mizoram	242	-5	19.6	0.7	948	2	785	31
Nagaland	149	-14	17.7	1.1	860	3	635	39
Orissa	129	-32	22.6	0.5	1000	-1	418	-21
Puducherry	655	54	26.8	1.3	981	-8	1356	26
Punjab	43	-29	16.9	-0.4	824	-3	174	-4
Rajasthan	13	-28	21.0	0.5	948	-3	50	-47
Sikkim	257	79	7.2	1.5	799	-7	556	49
Tamil Nadu	582	14	27.0	1.4	947	-6	1384	28
Tripura	192	-24	21.8	0.4	933	1	677	26
Uttarakhand	274	186	8.6	1.0	874	-2	540	59
Uttar Pradesh	122	100	19.5	-0.4	896	-4	422	56
West Bengal	109	-41	22.0	0.7	931	0	446	2

See note table A.1.

Table A.8. Kazakhstan, October 2014-January 2015 agroclimatic indicators and biomass (by province), current value and departure from average

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	13YA Departure (%)	Current (°C)	13YA Departure (°C)	Current (MJ/m^2)	13YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Akmolinskaya	140	44	-8.4	-0.8	246	-9	371	-7
Karagandinskaya	135	48	-8.2	-0.7	311	-7	381	-2
Kustanayskaya	142	37	-7.4	-0.7	231	-10	392	-11
Pavlodarskaya	125	63	-8.1	-0.2	239	-10	374	5
Severo kazachstanskaya	155	54	-8.3	-0.7	192	-13	347	-16
Vostochno kazachstanskaya	212	48	-8.7	0.0	330	-12	377	4
Zapadno kazachstanskaya	115	-10	-4.3	-1.7	280	0	503	-11

See note table A.1.

Table A.9. Russia, October 2014-January 2015 agroclimatic indicators and biomass (by oblast), current value and departure from average

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	13YA Departure (%)	Current (°C)	13YA Departure (°C)	Current (MJ/m^2)	13YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Bashkortostan Rep.	220	23	-6.5	-0.6	168	-17	396	-14
Chelyabinskaya Oblast	144	27	-6.9	-0.2	188	-13	376	-12
Gorodovikovsk	-	-	-	-	-	-	-	-
Krasnodarskiy Kray	198	-18	-2.3	0.5	282	0	507	-5
Kurganskaya Oblast	172	55	-7.9	-0.7	171	-13	341	-19
Kirovskaya Oblast	253	11	-6.1	-1.2	118	-9	391	-19
Kurskaya Oblast	121	-36	-0.7	-0.4	241	9	587	-17
Lipetskaya Oblast	128	-33	-1.6	-0.5	227	6	591	-12
Mordoviya Rep.	180	-11	-3.8	-1.0	179	0	494	-15
Novosibirskaya Oblast	207	51	-9.5	-0.4	171	-13	306	-19
Nizhegorodskaya Oblast	220	3	-3.7	-0.6	144	-6	489	-13
Orenburgskaya Oblast	158	5	-5.8	-0.9	228	-8	442	-13
Omskaya Oblast	199	63	-9.3	-0.5	167	-9	304	-22
Permskaya Oblast	249	20	-7.9	-1.3	119	-15	340	-21
Penzenskaya Oblast	173	-13	-4.0	-1.3	205	1	498	-15
Rostovskaya Oblast	215	-5	0.6	-1.7	306	2	689	-8
Ryazanskaya Oblast	152	-24	-2.5	-0.7	183	2	554	-11
Stavropolskiy Kray	192	-3	3.1	-1.6	352	-1	740	4
Sverdlovskaya Oblast	185	37	-8.3	-1.2	143	-10	326	-20
Samarskaya Oblast	161	-2	-4.7	-1.1	202	-6	476	-14
Saratovskaya Oblast	139	-12	-3.7	-1.6	249	1	522	-16
Tambovskaya Oblast	151	-25	-2.6	-1.1	224	5	557	-14
Tyumenskaya Oblast	189	52	-9.2	-1.1	160	-7	303	-24
Tatarstan Rep.	206	10	-5.0	-0.9	151	-16	445	-16
Ulyanovskaya Oblast	150	-14	-4.4	-1.1	185	-7	478	-15
Udmurtiya Rep.	256	23	-6.5	-1.1	122	-17	385	-18
Volgogradskaya Oblast	184	11	-1.9	-1.9	281	3	589	-15
Voronezhskaya Oblast	137	-26	-1.3	-1.0	259	7	601	-17

See note table A.1.

Table A.10. United States, October 2014-January 2015 agroclimatic indicators and biomass (by state), current value and departure from average

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	13YA Departure (%)	Current (°C)	13YA Departure (°C)	Current (MJ/m^2)	13YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Arkansas	687	42	9.2	-0.5	602	-4	1346	11
California	222	-9	10.2	2.3	626	-4	543	-6
Idaho	281	49	-0.5	1.2	473	-4	574	8
Indiana	346	-12	3.2	-1.5	479	-7	908	-5
Illinois	374	8	3.3	-1.2	485	-8	912	-1
Iowa	292	45	0.7	-0.8	494	-5	774	16
Kansas	261	62	5.1	0.0	606	-4	821	56
Michigan	296	-6	-0.2	-1.5	370	-8	694	-10
Minnesota	223	33	-3.2	-0.6	402	-4	573	13
Missouri	497	53	5.5	-0.6	542	-5	1039	13
Montana	256	152	-1.4	0.4	434	-3	658	47
Nebraska	206	71	1.9	-0.1	569	-1	758	55
North Dakota	196	95	-3.7	0.0	405	-4	560	37
Ohio	249	-30	3.2	-1.2	456	-6	893	-6
Oklahoma	367	49	8.7	-0.2	628	-7	1086	46
Oregon	255	-27	5.1	1.7	417	-6	794	12
South Dakota	260	139	-0.2	-0.1	491	-2	738	64
Texas	294	20	12.8	-0.1	700	-6	829	31
Washington	407	14	3.8	1.4	342	-6	873	24
Wisconsin	261	5	-1.8	-1.3	391	-9	624	-7

See note table A.1.

Table A.11. China, October 2014-January 2015 agroclimatic indicators and biomass (by province), current value and departure from average

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	13YA Departure (%)	Current (°C)	13YA Departure (°C)	Current (MJ/m^2)	13YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Anhui	228	21	10.1	0.5	674	-1	784	23
Chongqing	206	24	9.8	1.1	498	-3	703	17
Fujian	57	-76	13.5	0.7	782	2	277	-65
Gansu	67	-57	17.4	0.7	781	-6	291	-50
Guangdong	113	129	0.7	0.4	665	-4	388	92
Guangxi	349	83	16.0	0.8	698	-5	930	43
Guizhou	307	85	10.7	0.9	529	-4	967	77
Hebei	32	-35	1.8	0.9	601	-3	152	-38
Heilongjiang	142	42	8.2	1.1	651	-4	555	36
Henan	123	52	-9.7	-0.3	443	-1	353	7
Hubei	233	33	9.8	1.0	635	-3	750	19
Hunan	252	4	12.1	1.1	647	-2	800	-1
Jiangsu	104	15	-5.9	0.0	511	-2	391	-4
Jiangxi	194	34	9.6	0.3	665	-1	628	19
Jilin	95	-67	13.1	0.9	735	1	406	-56
Liaoning	87	-7	-1.1	0.7	560	-3	364	-18
Inner Mongolia	78	87	-7.2	0.8	512	-2	276	18
Ningxia	95	173	0.0	0.5	661	-5	341	79
Shaanxi	159	64	8.5	0.6	580	-4	549	52
Shandong	103	55	6.7	0.9	628	-3	393	15
Shanxi	129	33	3.9	0.5	609	-5	470	21
Sichuan	48	-19	0.2	0.8	638	-4	222	-26
Yunnan	292	94	12.2	0.5	776	0	823	83
Zhejiang	101	-65	11.5	0.7	716	4	389	-58

See note table A.1.