Chapter 3 Key Countries: Production and Crop Conditions

3.1 Summary of production estimates by country

The CropWatch estimate for the 2013 production of main crops is as follows: wheat, 705 million tons, up 4.1 percent over preliminary 2012 FAOSTAT estimates; rice as paddy, 739 million tons, up 1.6 percent; maize, 944 million tons, up 0.3 percent; and soybean, 282 million tons, an increase of 1.2 percent compared with 2012 (table 3.1). For the thirty one major producers and exporting countries, increases are more modest for wheat (+2.3 percent) and for rice (+0.8 percent), while they exceed the rest of the world for maize (+1.7 percent) and for soybean (+1.6 percent). The "rest of the world," usually regarded as of little relevance, has achieved spectacular trend-based increases (+13.4 percent for wheat, +8.4 percent for rice) and decreases (-6.1 for maize). Soybean stagnates at about -0.8 percent, resulting from the behavior of the many countries that attempt to join the very small group of soybean exporting countries, but usually give up after some years of experimenting with the crop.

Major exporters

Considering only the nine countries (from the United States to Argentina) that normally contribute 80 percent of world wheat exports, the variation over 2012 is +3.8 percent. However, Russia, which normally ranks 5th, thanks to a spectacular +24.5 percent increase in production rises to the second position this year as the first four exporters (United States, France, Canada, and Australia) all suffered decreases, sometimes significant ones (-5.9 percent, -2.8 percent, -3.2 percent and -4.2 percent, respectively).

Although their accumulated rice production remained virtually unchanged over last year (252 million tons), the five major rice exporters show a situation that is not unlike the one described for wheat, as the first four exporters all underwent a production decrease (Thailand: -4.3 percent; Vietnam: -1.5 percent; Pakistan: -1.1 percent and the United States: -3.6 percent). The production increase in India (+ 1.74 percent) is relatively modest and represents about 2.6 million tons of paddy (about 1.8 million tons of milled rice equivalent), which is of the same order of magnitude as the population-based increase in demand. Considering that wheat production decreased by about 4 million, the increased domestic demand for rice may lead to a reduction in Indian rice exports.

Considering maize, the four major exporters (United States, Argentina, Brazil, and France) jointly increased their production by 3 percent, with an increase in the United States (+7.3 percent) compensating decreases in Argentina (-3.7 percent) and especially Brazil (-11.0 percent). For soybean, the United States, Brazil and Argentina increased their joint output by 2.2 percent, again with one country (Brazil, +6.9 percent) making up for the reduction in another (Argentina, -2.5 percent).

Other notable changes

For wheat, the decrease in U.S. production is this year's most negative change compared with 2012, as estimated by CropWatch. It is followed by India (-4.2 percent) and by Australia (-4.2 percent). On the American continent, Mexico performed significantly better than last year (+30.3 percent) followed by both Brazil and Argentina at about +14 percent. In Eurasia, four neighbors hold the records with +17.3 percent in Romania, +20.8 percent in the Ukraine, +25.0 percent in Russia, and as much as +35 percent in Kazakhstan.

Table 3.1 2013 production (maize, rice, soybean, wheat), by country (thousand tons)

	Maize		Rice (paddy)		Soybean		Wheat	
	2013	**Δ%**	**2013**	**Δ%**	**2013**	**Δ%**	**2013**	**Δ%**
AFRICA								
Egypt	6938	-0.9	6088	-6.3	31	-3.5	8602	-2.2
Ethiopia	5528	-9.0	90	1.0	26	-28.0	2886	-1.0
Nigeria	9295	-1.2	4700	-2.7	507	12.7	133	32.5
S-Africa	11430	-8.6			780	-8.2	1899	5.9
WEST ASIA								
Iran	1259	2.9	2350	-2.1	185	-7.5	13650	-1.1
Turkey	4400	-4.3	890	1.1	109	-5.5	20950	4.2
Central Asia								
Kazakhstan	295	175.1	284	28.0	152	-10.9	18019	35.4
Uzbekistan	232	11.6	120	0.1				
EAST ASIA								
China	194178	3.1	200145	0.6	13245	-6.8	118178	-1.3
SOUTH ASIA								
Bangladesh	1529	-25.0	42414	24.0	64	3.1	1001	-2.8
India	21410	1.7	155250	1.7	11857	3.1	90877	-4.2
Pakistan	3903	10.4	9297	-1.1			24365	3.6
SE ASIA								
Cambodia	754	-4.6	9040	-2.8	117	-2.3		
Indonesia	18503	-4.5	67393	-2.4	848	-0.5		
Myanmar	1492	-0.5	31005	-6.1	221	7.8	179	-3.6
Philippines	7189	-2.9	17358	-3.7				
Thailand	4815	0.04	36194	-4.3	178	-1.1		
Vietnam	4819	0.3	43030	-1.5	221	26.0		
EUROPE-RUSSIA								
France	15764	1.0	126	2.1	113	8.7	39161	-2.8
Germany	5088	1.9			2	0.0	22616	0.8
Poland	2731	-19.8					8975	4.3
Romania	8835	48.4	58	14.1	123	18.4	6215	17.3
United Kingdom							14259	7.5
Ukraine	21900	4.5	165	3.2	2337	-3.0	19043	20.8
Russia	7588	-7.6	1054	0.2	1781	-1.4	46980	24.5
N. AMERICA								
Canada	11196	-4.3			4558	-6.4	26137	-3.2
Mexico	19852	-10.1	176	-1.2	226	-8.5	2943	30.3
United States	293890	7.3	8719	-3.6	83123	1.3	58084	-5.9
S. AMERICA								
Argentina	24750	-3.7			50189	-2.5	12547	14.1
Brazil	63478	-11.0	12434	9.1	70258	6.9	5035	14.9
OCEANIA								
Australia	403	-10.4	821	-10.6	57	-32.7	28957	-4.2
Sub-total	**773444**	**1.7**	**649201**	**0.8**	**241308**	**1.6**	**591691**	**2.3**
Other countries	171021	-6.1	89831	8.4	40772	-0.8	113777	13.4
Overall total	**944465**	**0.3**	**739032**	**1.6**	**282080**	**1.2**	**705468**	**4.1**

Note: Δ% indicates difference with 2012 FAO estimates. For some of the major producers sub-national data are provided in section 3.3. The production for "other countries" is extrapolated from FAOSTAT data using a regression technique based on the two previous years (2010 and 2011) but calibrated against the latest twelve years. Empty cells indicate "no or insignificant production," basically below 1000 tons.

Two significant rice producers, Egypt (-6.3 percent) and Myanmar (-6.1 percent) decreased their productions compared with last year, albeit for different reasons; Thailand suffered a 4.3 percent reduction, while Argentina and Brazil saw increased outputs (5.7 percent and 9.1 percent, respectively).

Among the countries that normally produce more than 1 million tons of maize, significant decreases are computed by CropWatch in Bangladesh (-25.0 percent), Poland (-19.8 percent), Brazil, and Mexico (both countries close to -10 percent) and South Africa, a major producer in the African region (-8.6 percent). Pakistan (+10 percent) and Romania (+48 percent) are the best performers this season.

China and Argentina, two of the major soybean producers, underwent a reduction in their output this year, amounting to -6.8 percent in the first and -2.5 percent in the second country. Improved soybean production was recorded in India (+3.1 percent) and particularly in Brazil (+6.9 percent).

3.2 Cropland use intensity

Table 3.2 lists several indicators for land use and land use intensity for the countries covered by CropWatch, including cropping intensity (number of crops), the area of uncropped arable land (percentage), and the potential biomass ratio (as a fraction of 0 to 1).

The highest values for cropping intensity are recorded in the mostly equatorial countries in Southeast Asia. They are followed by African countries and countries in Central Asia, North and South America, and Australia, which have intensities around 150 percent. European countries are generally characterized by low cropping intensities of close to 100 percent, as they usually practice one winter crop, a rainfed spring crop, and sometimes a summer crop (maize), which is sprinkler or gravity irrigated (mostly rice in Italy, France and Spain).

Compared with the average of the previous five years, changes in cropping intensities are usually in the range of -5 percent to +5 percent, with most of the changes negative. The extreme values constitute marked changes when they occur at the national scale, and negative departures are in all likelihood associated with adverse crop and environmental conditions, such as in Ethiopia (-4.2 percent) with a poor belg season. Other changes seem to be associated with changes in agricultural policy. The largest variation is found in Uzbekistan (-10.2 percent). Significant positive long-term trends are observed in China, Nigeria, the Philippines, Vietnam, and Argentina. Long-term negative trends can be associated with shortages of resources (land, water, inputs) or environmental degradation. The only significant negative trends affecting cropping intensity are noted in Egypt and could be associated with government efforts to limit rice cultivation, to reduce Nile water consumption under international pressure of fellow Nile Basin countries. The long term trends in general all indicate that the countries are undergoing concerted efforts, or efforts by individual farmers, to keep pace with demand.

Similar to the situation of decreasing cropping intensities, increasing uncropped arable land can result from a variety of factors that can be assessed only based on detailed analysis of national data on policies and environment driven farm dynamics. When the variable itself (UAL) is low, changes are naturally of little interest and the risk of observational errors is high. Conjectural effects are clearly at work as well, when environmental stresses such as drought or frost artificially depress NDVI. The countries with the highest UAL values include Egypt, Iran, and Pakistan. In the two last countries, the UAL is associated with a large percent decrease. Significant long term trends affecting UAL are particularly interesting. Significant negative trends signal countries that make efforts to more efficiently use their land; this includes China, Bangladesh, Thailand, Vietnam and the Philippines (trend significant), as well as some

countries where the trend is very significant: Pakistan, India, Egypt, and Cambodia. Positive trends affect Brazil (*significant) and Russia (**very significant).

Table 3.2 Cropping intensity (number of crops), uncropped arable land (percentage), and potential biomass ratio (fraction), by country

	Cropping Intensity			Uncropped arable land			Potential biomass ratio		
	2013	Δ%	Trend	2013(%)	Δ%	Trend	2013	Δ%	Trend
AFRICA									
Egypt	134	-2.5	-0.560*	21.37	-3	-0.807**	0.872	1.889	0.643**
Ethiopia	140	-4.2	-0.226	0.42	-65	0.036	0.881	0.138	-0.761**
Nigeria	133	4.5	0.758**	1.61	-45	0.067	0.867	-0.159	-0.586 *
S-Africa	123	2.3	-0.156	6.18	+359	-0.290	0.812	-7.393	0.377
WEST ASIA									
Iran	140	-3.6	-0.195	16.44	-46	0.090	0.738	7.266	-0.014
Turkey	159	5.3	-0.425	0.85	-89	-0.332	0.881	7.116	0.664**
Central Asia									
Kazakhstan	100	-3.4	0.253	3.01	-78	0.470	0.834	13.825	-0.527*
Uzbekistan	111	-10.2	-0.291	3.16	-80	0.300	0.804	0.742	-0.341
EAST ASIA									
China	169	-3.0	0.773**	1.07	-29	-0.593*	0.902	0.117	0.796 **
S. Asia									
Bangladesh	180	0.8	0.250	1.27	+16	0.542*	0.858	-3.407	0.116
India	165	1.9	-0.011	0.74	-48	-0.712**	0.854	-0.893	0.771**
Pakistan	153	0.9	0.072	12.45	-23	-0.786**	0.798	4.476	0.688**
SOUTHEAST ASIA									
Cambodia	256	-3.3	-0.007	0.17	-46	-0.657**	0.805	-6.929	-0.042
Indonesia	296	0.9	0.219	0.08	+30	0.320	0.918	-0.858	0.026
Myanmar	204	-4.2	-0.010	0.98	+47	0.258	0.848	-5.450	-0.410
Philippines	293	0.1	0.531*	0.04	+40	-0.633*	0.910	-1.518	0.398
Thailand	260	-0.7	0.066	0.03	-41	-0.602*	0.862	-3.662	0.308
Vietnam	230	-4.8	0.442*	0.29	-16	-0.488*	0.891	-2.421	0.324
EUROPE-RUSSIA									
France	101	-2.1	0.090	0.12	-55	0.244	0.905	-0.646	-0.149
Germany	101	-4.4	0.284	0.03	+15	-0.204	0.916	0.100	-0.209
Poland	100	-4.8	0.260	0.01	0	-0.092	0.926	1.053	0.045
Romania	100	-1.7	0.084	0.04	-37	-0.205	0.899	0.067	-0.066
United Kingdom	100	-3.3	0.016	0.03	+31	0.257	0.882	-4.195	-0.206
Ukraine	101	-2.5	0.438	0.20	-23	0.332	0.885	-0.538	-0.084
Russia	106	-0.7	0.161	0.69	-44	0.649**	0.884	1.088	-0.677 **
NORTH AMERICA									
Canada	127	-0.9	-0.366	0.18	-76	-0.426	0.942	3.979	0.629 *
Mexico	130	-1.2	-0.388	3.49	-2	0.225	0.849	-1.485	-0.282
United States	135	-1.4	-0.011	3.54	-1	0.117	0.889	-0.023	-0.250
SOUTH AMERICA									
Argentina	153	2.4	0.600*	0.51	-18	0.278	0.802	-7.481	-0.367
Brazil	135	4.0	0.043	0.62	+388	0.491*	0.892	-1.121	0.266
Oceania									
Australia	141	-6.2	0.324	2.17	-52	-0.443	0.854	8.116	0.298

Note: For each variable, Δ% indicates the difference between the current year and the average of the last five years (2008-2012). The trend is the 2001-2013 trend, expressed by the coefficient of correlation accompanied by the level of significance (if significant: * for p<=0.05 and ** for p<=0.01).

Finally, the lowest potential biomass ratios (PBR) are observed in Iran, Pakistan and Argentina, while values are particularly high in Poland, Indonesia and Canada, thereby describing extreme situations of realization of the local potential yield during 2013. In Argentina, the mentioned low PBR results from a recent drop compared with the last five years, but in Cambodia and South Africa the low values seem to

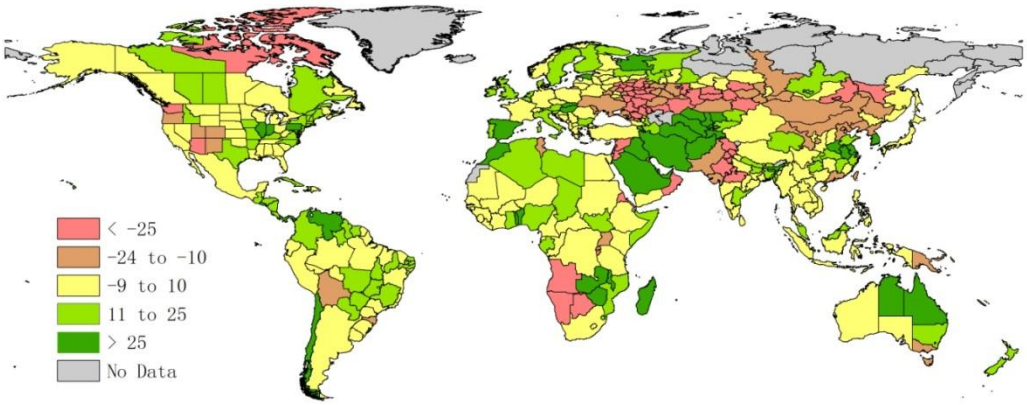
be more structural. Together with Myanmar, Argentina is one of several countries with long-term drops in PBR. Among the countries with positive PBR trends, the following deserve mentioning: Canada (*), China (**), Egypt (**), Ethiopia (**), India (**), Kazakhstan (*), Nigeria (*), Pakistan (**), Philippines (*), S-Africa (*), Turkey (**) and Russia (*), describing the efforts undertaken by the respective countries to improve their farming efficiency.

Finally, it is stressed that the above indicators are not mutually independent: both the intensity (2013 value) and the direction of the trends associated with PBR and UAL tend to vary in a coherent way as efficiency gains are associated with decreases in unproductive land. Cropping intensity, on the other hand, is only loosely correlated with UAL and PBR; only a weak association exists between the cropping intensity value and the PBR trend.

3.3 Country narratives and figures

For each of the thirty countries covered, CropWatch analyses include a comprehensive array of variables and indicators. The environmental indices—rainfall, temperature, and PAR—are presented in annex D, covering October 2012 to September 2013 or, as shown in figure 3.1, for selected months that are more relevant to the recent and ongoing cropping seasons.

Figure 3.1 Accumulated rainfall index anomaly, April to September 2013 (percent)

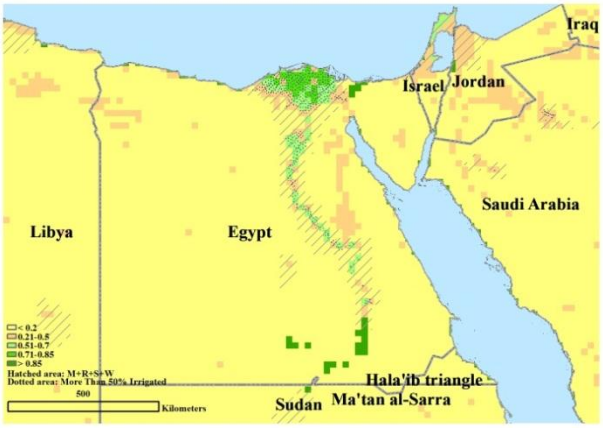


On the subsequent pages, results are presented for each of the thirty key countries. For each, a short narrative is provided, along with maps and graphs showing (a) General setting, provided by a NDVI background showing combined maize, rice, soybean, and wheat cultivation area, and areas where more than 50 percent of the land is irrigated; (b) Crop condition map compared with the average of the previous five years; (c) Crop condition development graph: a comparison of NDVI of the current year with the previous year and the average of the previous five years; (d) Spatial NDVI patterns of the latest or ongoing season; and (e) NDVI profiles associated with the spatial patterns. In addition, production tables are provided for some of the major countries.

Additional information for all countries is provided in annex D, including CropWatch estimates of 2013 yield and the area cultivated by crop. Annex F provides additional background information for the countries covered, while annex G presents basic agricultural statistics and an overview of longer term trends derived from international data.

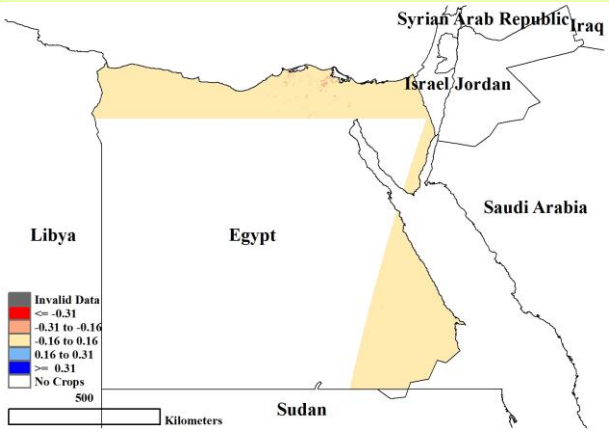
Africa

Egypt

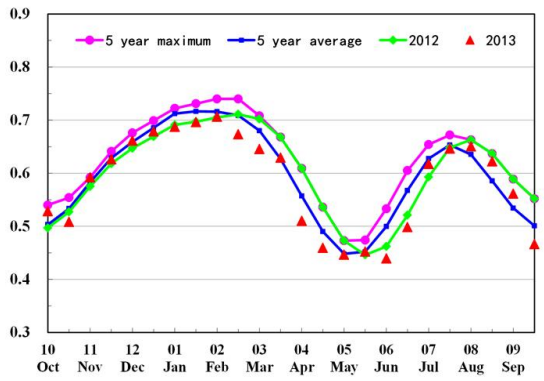


(a)

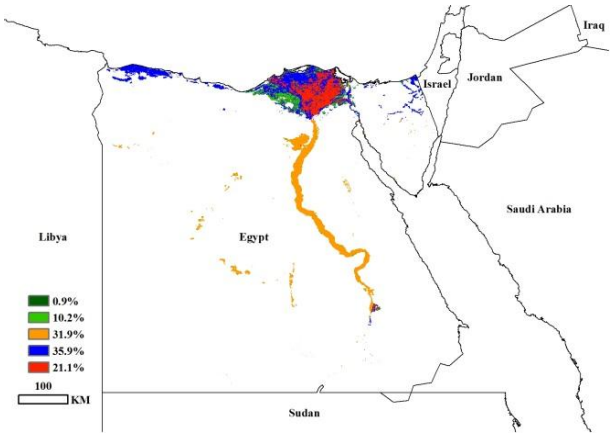
The NDVI profile of the recent summer crop in Egypt is comparable with the recent past (last five years) in about 80 percent of the country, in particular in the Nile Valley. Condition was below average in the south-eastern delta in July and particularly in August, but recovered in September. Altogether, the country enjoyed favorable crop conditions in contrast with declining production estimates.



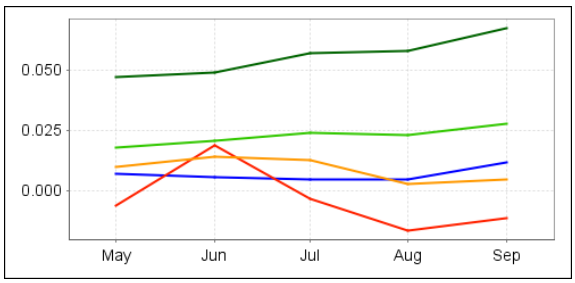
(b)



(c)



(d)



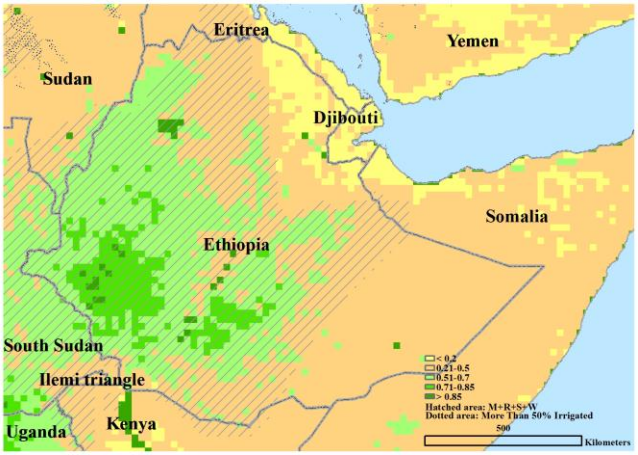
(e)

Figure 3.2 Crop condition Egypt

(a) General setting, provided by a NDVI background showing combined maize, rice, soybean, and wheat cultivation area, and areas where more than 50 percent of the land is irrigated; (b) Crop condition map compared with the average of the previous five years; (c) Crop condition development graph: a comparison of NDVI of the current year with the previous year and the average of the previous five years; (d) Spatial NDVI patterns of the latest or ongoing season; and (e) NDVI profiles associated with the spatial patterns.

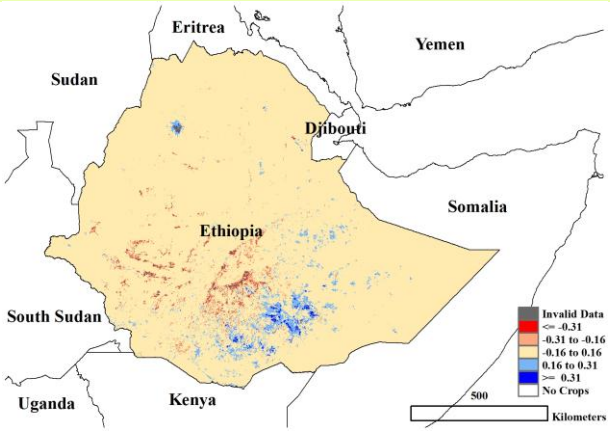
Africa

Ethiopia

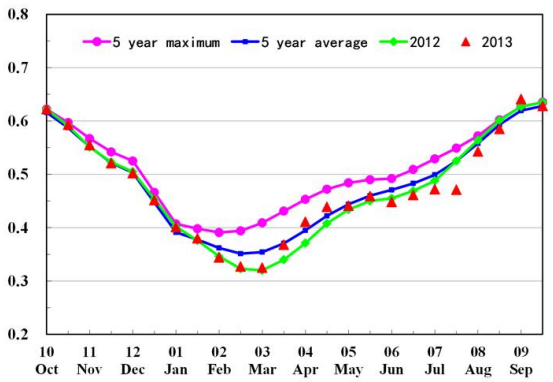


(a)

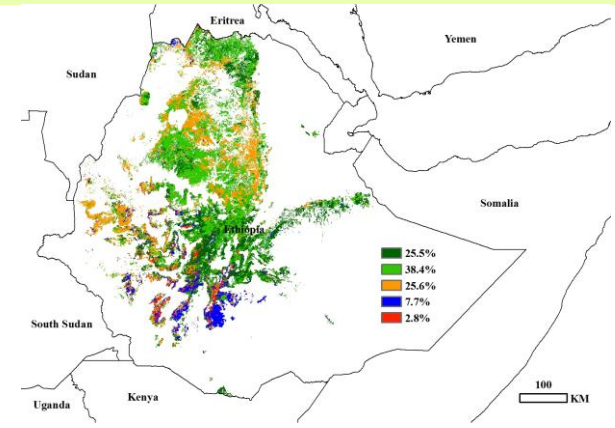
Crop condition was and is close to the average of the previous five years in most of the country, except in southern-central Oromyia, where unfavorable conditions were experienced in June, to recover thereafter. In June, July, and August, crop condition was below average in many parts of southern-central Ethiopia (3.3b).



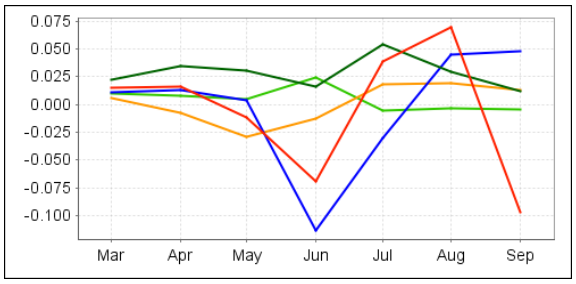
(b)



(c)



(d)



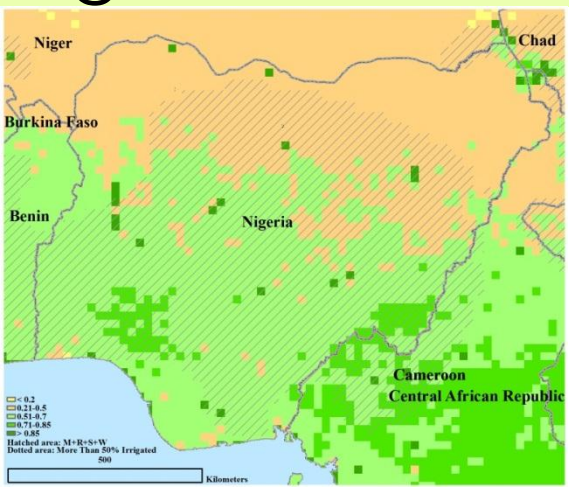
(e)

Figure 3.3 Crop condition Ethiopia

For descriptions of figures a-e, see figure 3.2 for Egypt.

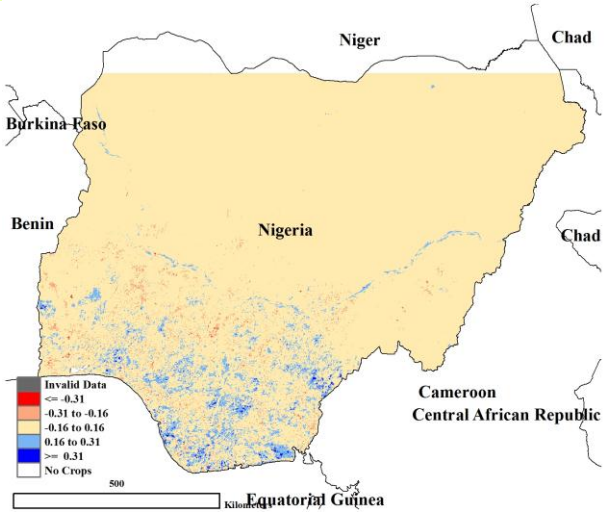
Africa

Nigeria

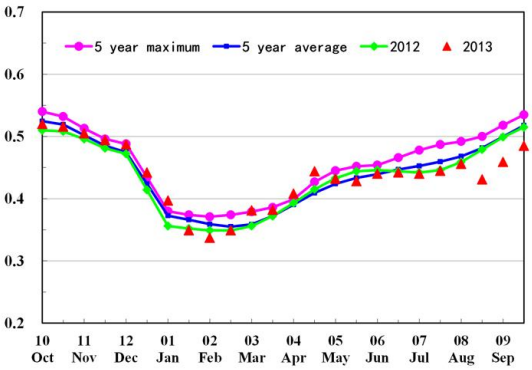


(a)

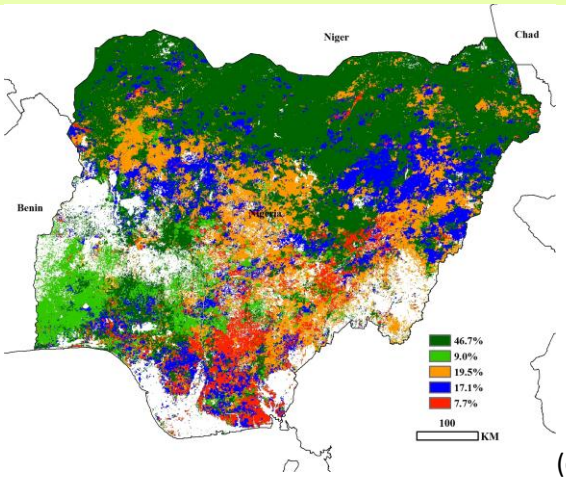
Nigeria has satisfactory crop condition on a level comparable with recent years in about 50 percent of the country, mostly in the northern Sahelian parts. Main maize producing areas in Plateau, Kaduna or Bauchi suffered poor condition particularly in August; this occurred somewhat earlier (July) in more southern areas. The situation improved but remained generally poor in September. Below average output is likely.



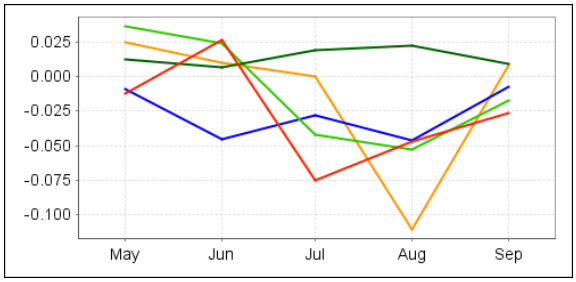
(b)



(c)



(d)



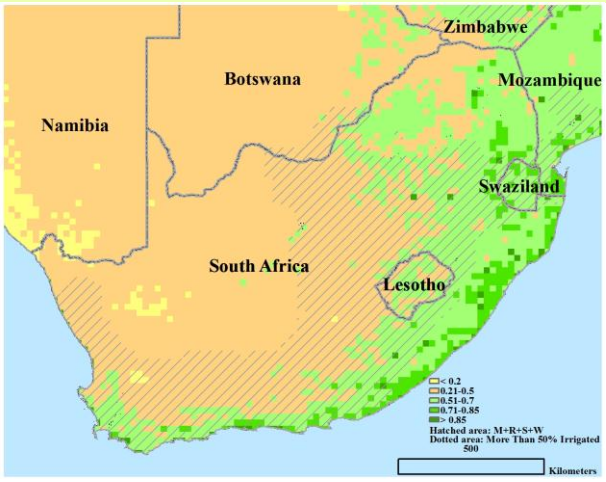
(e)

Figure 3.4 Crop condition Nigeria

For descriptions of figures a-e, see figure 3.2 for Egypt.

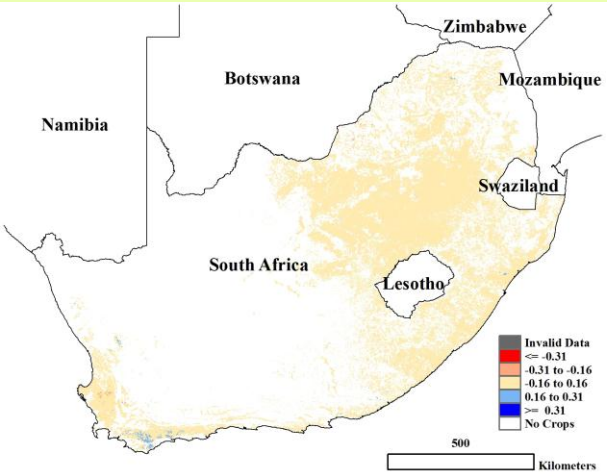
Africa

South Africa

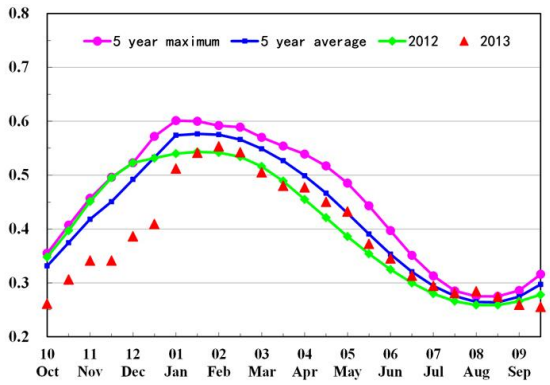


(a)

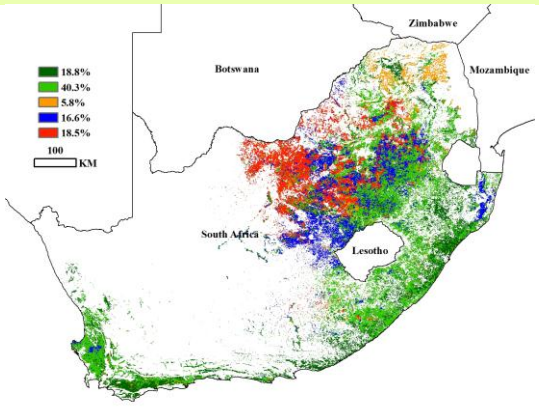
In South Africa, conditions in winter crop areas in Southern Cape province were mostly satisfactory up to June for wheat. The 2012-2013 harvest suffered poor conditions in maize areas, particularly during the early parts of the season in the North-West Province, while the east experienced average or above-average conditions.



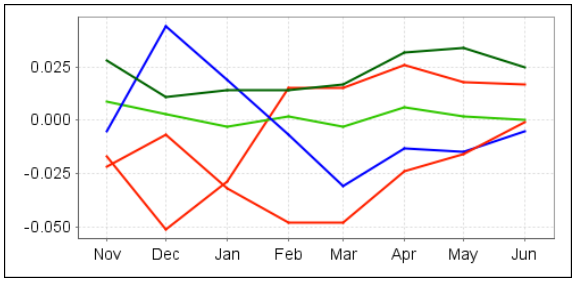
(b)



(c)



(d)



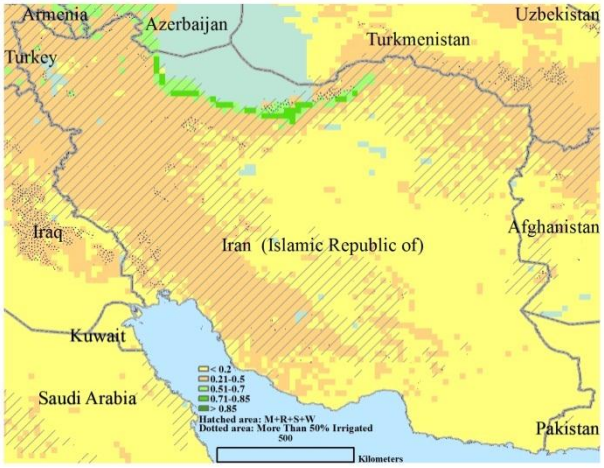
(e)

Figure 3.5 Crop condition South Africa

For descriptions of figures a-e, see figure 3.2 for Egypt.

Asia - West and Central

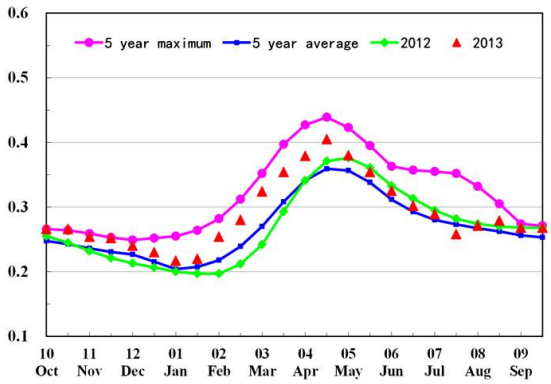
Iran



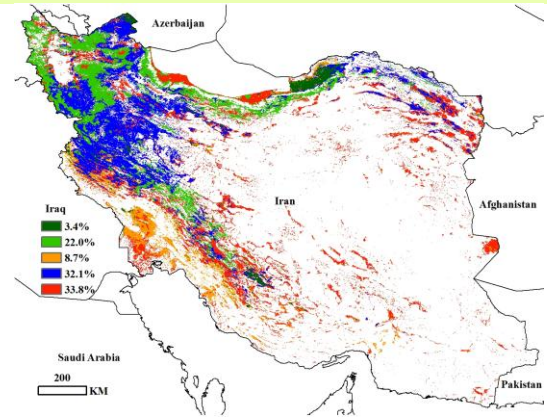
(a)

Conditions are above the five-year average in most of the country for the development of the recent 2012-13 wheat crop, in particular in the east and north of the country. Unfavorable conditions affected Golestan in June.

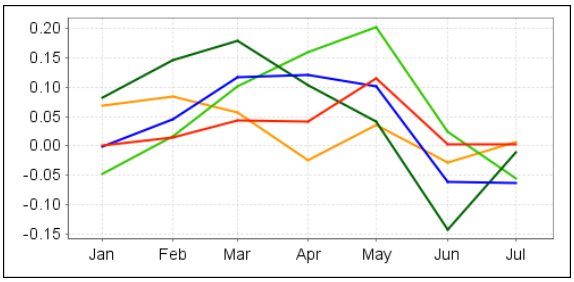
(b)



(c)



(d)



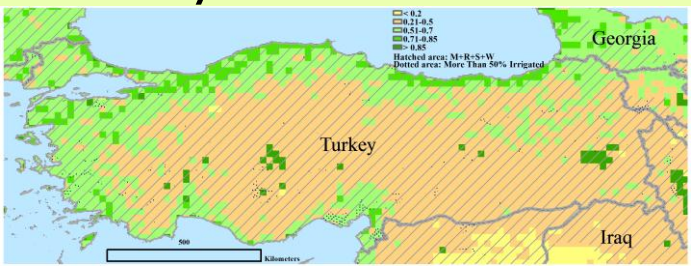
(e)

Figure 3.6 Crop condition Iran

For descriptions of figures a-e, see figure 3.2 for Egypt.

Asia - West and Central

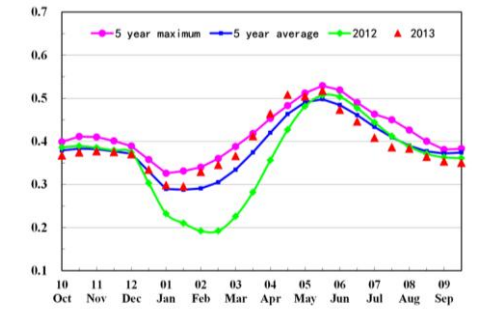
Turkey



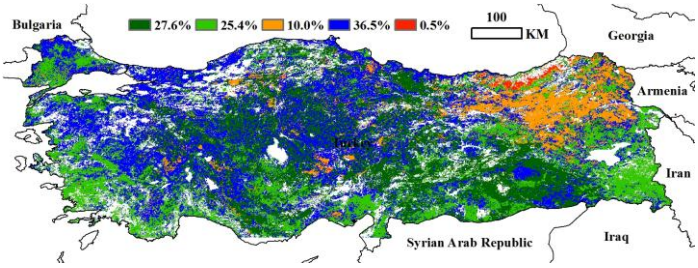
(a)

Turkey's latest 2012-13 winter crop generally underwent favorable conditions, particularly so in the south, in an area from Mugla to Van. The northeast also experienced close-to-average crop conditions, better than average in April and May, but slightly below average in July. The only areas where conditions were definitely below expectations are located in Rize and Trabzon near the Black Sea coast.

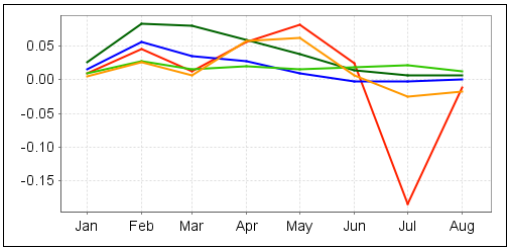
(b)



(c)



(d)



(e)

Figure 3.7 Crop condition Turkey

For descriptions of figures a-e, see figure 3.2 for Egypt.

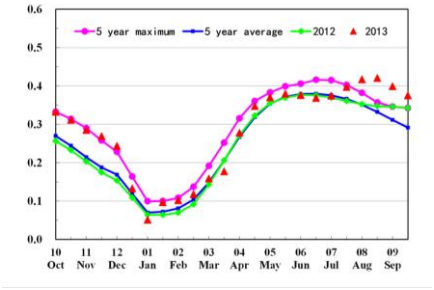
Asia - West and Central

Kazakhstan-Uzbekistan

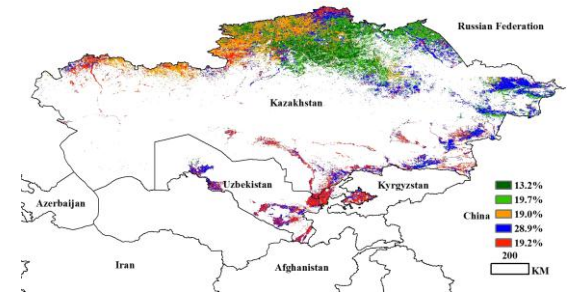
(a)

Kazakhstan and Uzbekistan experienced mostly close to average conditions at the end of the winter wheat cycle (March to June), which was followed by a marked improvement from July, affecting particularly the central northern areas of Kazakhstan: most of the provinces of Akmolinsk, north Kazkhstan (former Severo-Kazahstanskaja oblast), the northern part of Kostanay, and most of Pavlodar.

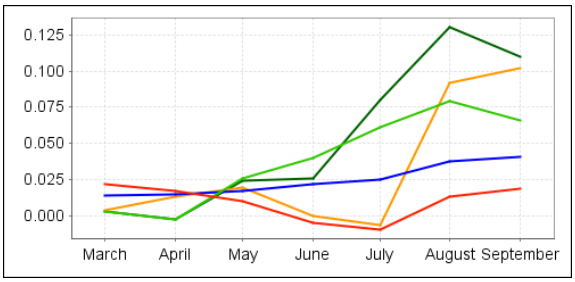
(b)



(c)



(d)



(e)

Figure 3.8 Crop condition Kazakhstan and Uzbekistan

For descriptions of figures a-e, see figure 3.2 for Egypt.

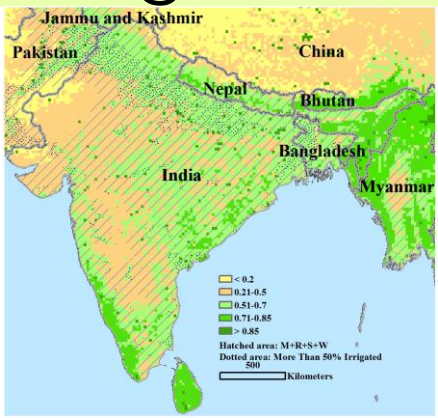
Table 3.3 Kazakhstan, 2013 production, in representative major agricultural states (thousand tons)

	Wheat	
	2013	Δ%
Akmolinskaya	4231	103.9
Karagandinskaya	185	35.6
Kustanayskaya	2570	106.8
Pavlodarskaya	547	-7.7
Severo-kazachstanskaya	7828	26.7
Vostochno-kazachstanskaya	487	3.3
Zapadno-kazachstanskaya	36	49.3
Sub total	**15884**	
Other provinces	2135	
Kazakhstan	**18019**	**35.4**

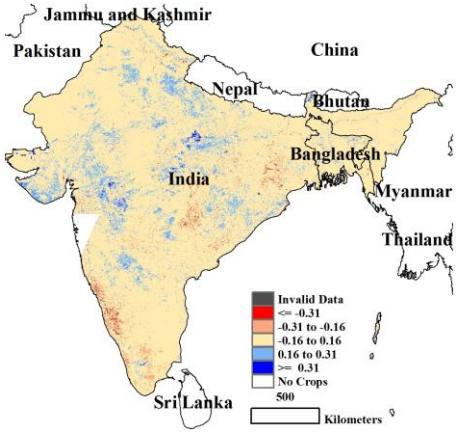
Note: Δ% indicates percent difference with 2012

Asia - South

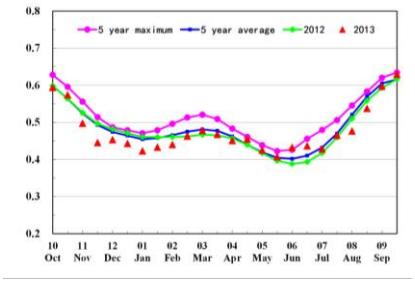
Bangladesh-India



(a)



(b)

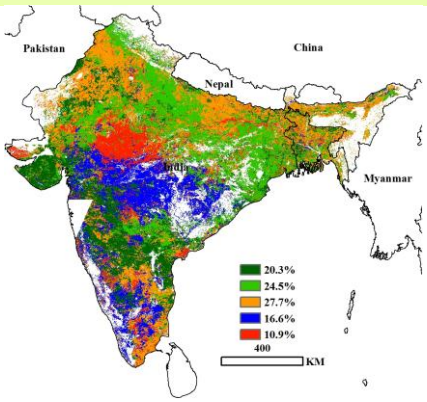


(c)

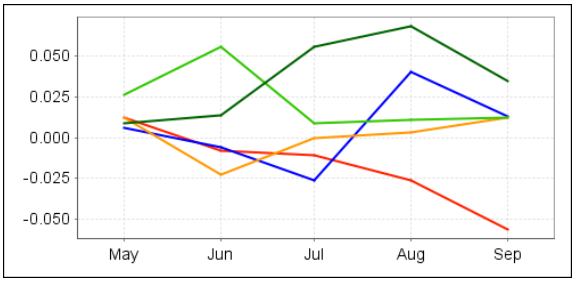
The Indian agricultural seasons are organized around the rainfall patterns: they are centered around June to September in the north-western lowlands (e.g. Haryana State), but grow longer in the east (e.g., May-October in West Bengal), and occur later in the south (e.g., May to November, with abundant rainfall in September-November in Tamil Nadu).

This bulletin covers the June to January rice and maize kharif crops. Irrigation plays a major part, mainly in the north (from Punjab to Uttar Pradesh) and in the north-west (West Bengal). The period from June to September enjoyed favorable conditions in about half the country, mostly in the western half of Uttar Pradesh, West Bengal, Jharkhand, and most of Orissa. The most favorable conditions occurred in Gujarat and parts of Maharashtra in July and August. Remaining areas have more mixed prospects: In Punjab, Haryana, North Rajasthan, and eastern Uttar Pradesh, conditions were unfavorable in June.

As illustrated in figures 3.1 and 3.2, India suffered from a combination of below average rainfall and temperature, mostly in the north-west and west. The situation was unfavorable in most of Madhya Pradesh in July, but recovered rapidly in August. Finally, an area centered around northern-central Madhya Pradesh underwent constantly deteriorating conditions from May to September. Conditions in Bangladesh were mostly close to average in the south, but less favorable in the northern half, which experienced the June deterioration also observed in parts of India.



(d)



(e)

Figure 3.9 Crop condition Bangladesh and India.

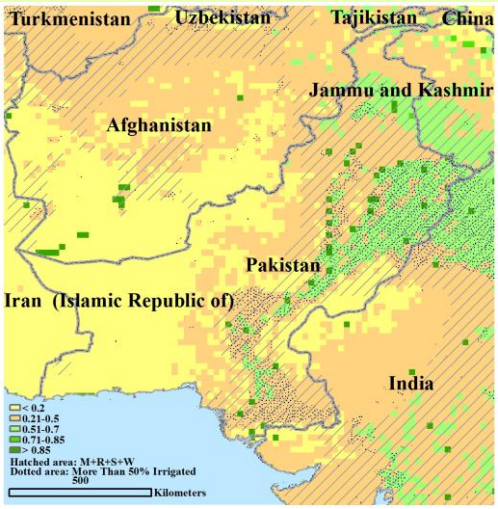
Table 3.4 India, 2013 production by state (thousand tons)

	Maize		Rice (paddy)		Wheat	
	2013	**Δ%**	**2013**	**Δ%**	**2013**	**Δ%**
Andhra Pradesh	3807	4.1	13657	5.9	12	9.1
Assam	15	-3.3	4626	2.4	57	-6.2
Delhi	2	166.9	30	-0.3	98	15.5
Goa			118	-2.8		
Gujarat	803	2.2	1643	-8.2	4046	-0.7
Haryana	22	-10.4	3616	-3.8	12158	-4.2
Himachal Pradesh	693	-3.1	130	-1	571	-4.1
Karnataka	4265	4.4	4072	3	236	22.3
Kerala			546	-4.1		
Maharashtra	2518	3.5	2769	-2.6	1807	37.6
Manipur	38	8.7	556	-5.9	5	-1.1
Meghalaya	26	-1.2	212	-2.2	1	7.7
Mizoram	11	31.2	51	-6.5		
Nagaland	134	-0.1	382	-0.1	5	-0.5
Orissa	255	20.4	6317	8.8	3	36.9
Punjab	497	-1.1	10690	1.4	16876	-2.3
Rajasthan	1860	11.6	259	2.4	8267	-11.3
Sikkim	66		21	0.2	3	1.1
Tamil Nadu	1361	-19.7	6626	-11.2		
Tripura	5	-9.5	710	-1.1	1	9.1
West Bengal	358	-1.6	13826	-5.3	874	0.1
Arunachal Pradesh	67	-2.8	244	-4.1	6	-4.6
Bihar	1525	-5.3	5132	-28.4	4411	-6.6
Chhattisgarh	179	4	6094	1.1	130	-2.4
Dadra-Nagar Haveli			19	7.4		
Jharkhand	292	-9.3	2120	-32.3	231	-23.8
Madhya Pradesh	1169	-9.2	2000	-10.2	9583	-17
Puducherry			47	11.7		
Uttar Pradesh	1211	-7.4	13007	-7.2	30147	-0.5
Uttarakhand	42	2	572	-3.7	878	
Sub-total	**21221**		**100092**		**90405**	
Other states total	189		55158		472	
National total	**21410**	**1.7**	**155250**	**1.7**	**90877**	**-4.2**

Note: Δ% indicates percent difference with 2012.

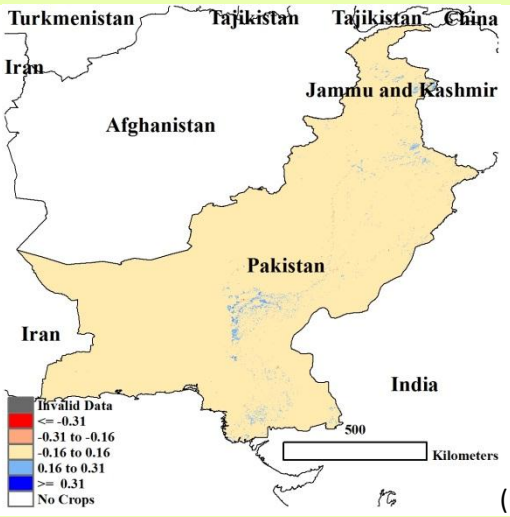
Asia - South

Pakistan

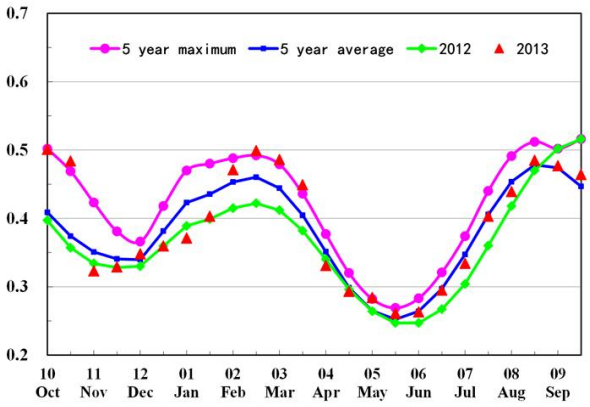


(a)

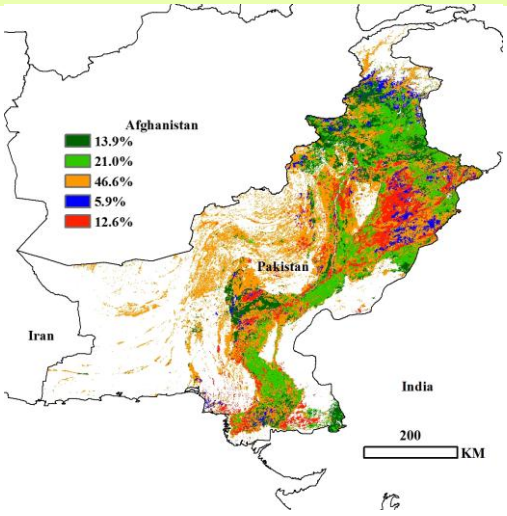
The 2012-13 rabi (winter; wheat) season in India ended with conditions that were generally comparable to or better than those in the recent past (the last five years). The kharif (summer; rice and maize) season underwent contrasting conditions in July, but mostly unfavorable in the northern Northwestern Frontier Province (NWFP) and east of that area. In August and September, much of north Punjab displayed below average crop condition.



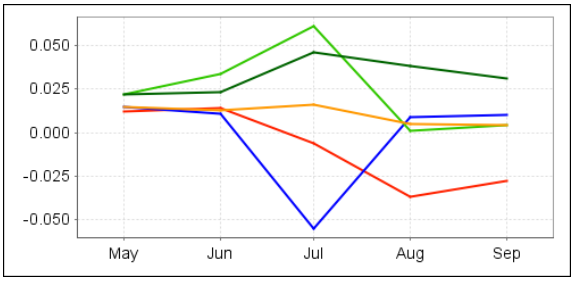
(b)



(c)



(d)



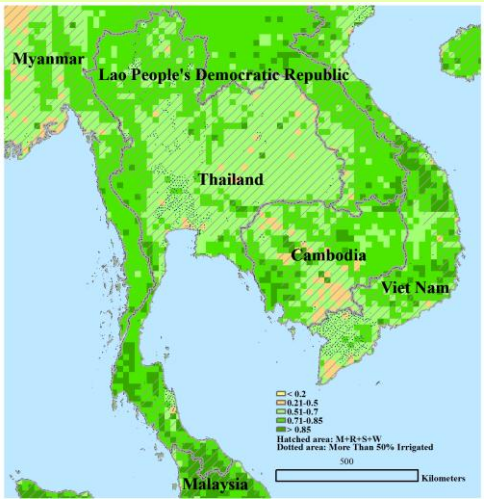
(e)

Figure 3.10 Crop condition Pakistan

For descriptions of figures a-e, see figure 3.2 for Egypt.

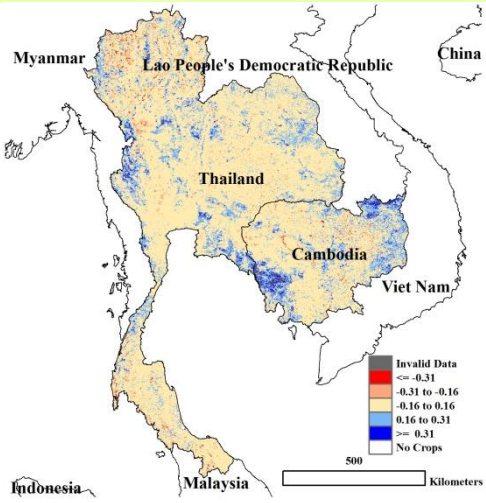
Asia -Southeast

Cambodia-Thailand

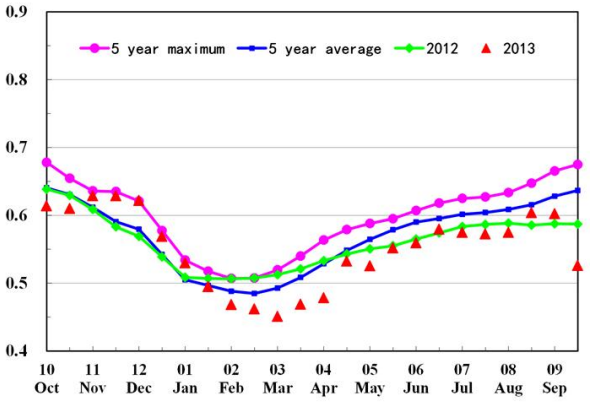


(a)

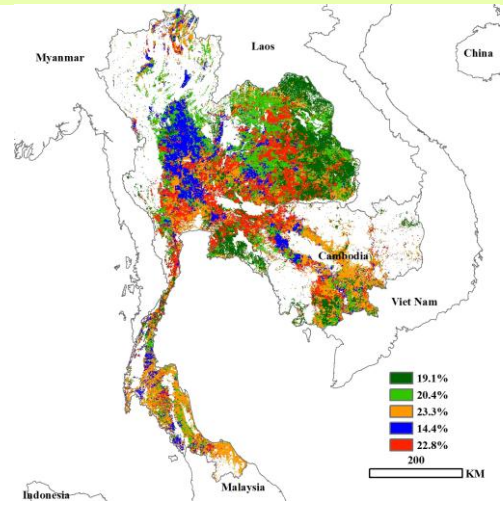
Conditions from May to September were mostly above average, with large spatial differences. In June, conditions were below average in an area approximately stretching from Sukhotai to Lopburi provinces. Similarly, in September a deterioration that affected the maize harvest impacted east (Nonkhai to Suri and the Lao border) as well as southeast Cambodia (Kampong Chang to Takeo) and, in a more diffuse way, the center of the country. The second rice crop (harvested in June) was unaffected, while for the first crop (planted in May and due for harvest early next year, the final condition will largely depend on conditions at the end of 2013 and early 2014.



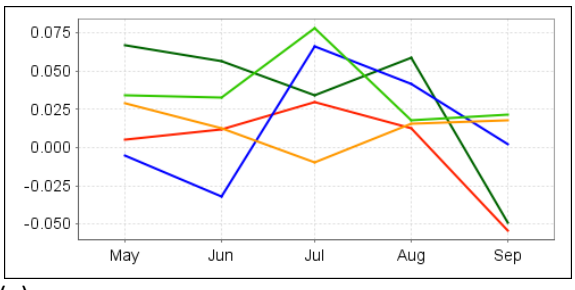
(b)



(c)



(d)



(e)

Figure 3.11 Crop condition Cambodia and Thailand

For descriptions of figures a-e, see figure 3.2 for Egypt.

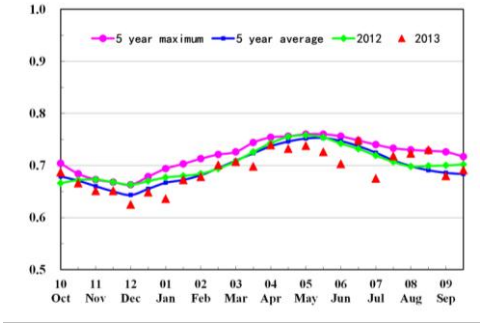
Asia -Southeast

Indonesia

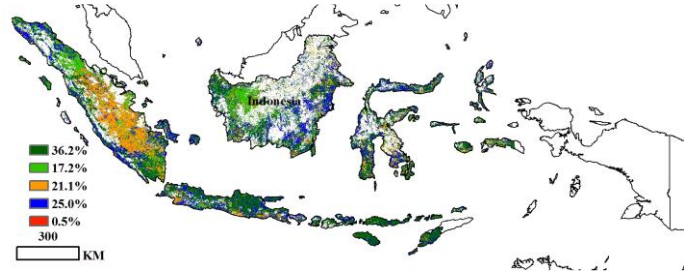
(a)

Monsoon season crops are currently in the field, to be harvested in December. Compared with the recent past, conditions are generally average (the last five years), with the exception of a marked drop in crop condition during August, which affected about 40 percent of the crops, mostly in central Sumatra (Utera to Selatan).

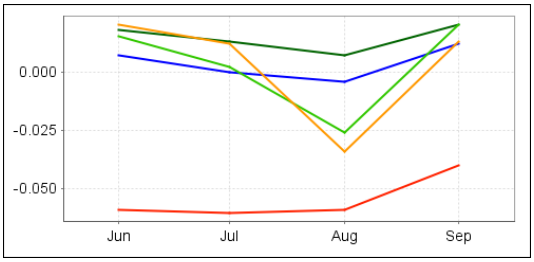
(b)



(c)



(d)



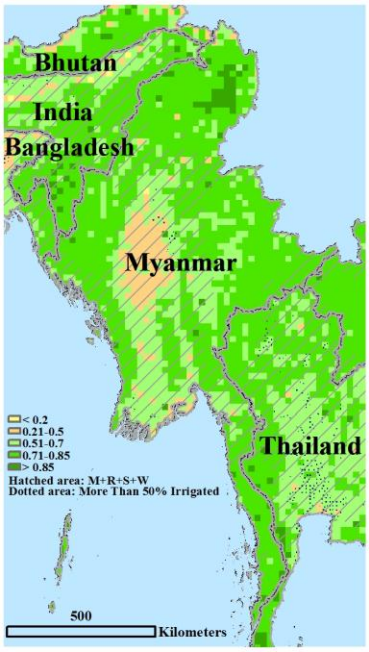
(e)

Figure 3.12 Crop condition Indonesia

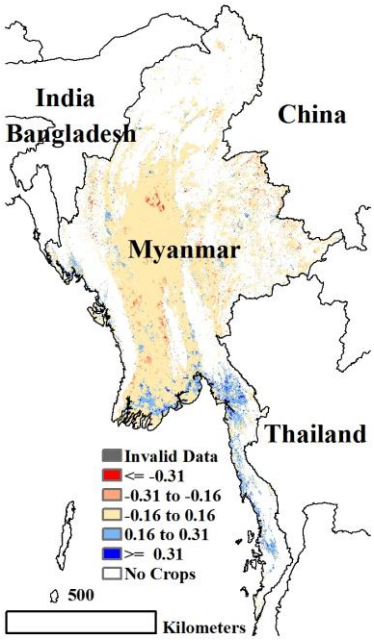
For descriptions of figures a-e, see figure 3.2 for Egypt.

Asia -Southeast

Myanmar

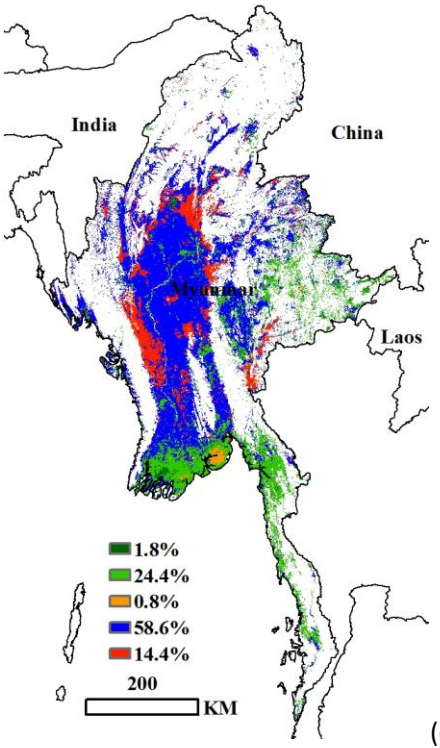


(a)

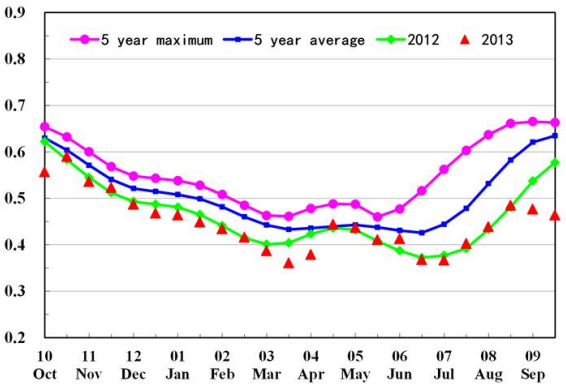


(b)

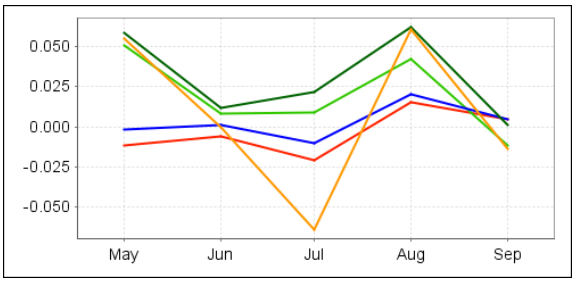
In Myanmar, the period covered by the analysis corresponds to the main rice harvest in the country from May to December (about 80 percent of production). About 85 percent of the cropped areas enjoyed good or better crop prospects. About 14 percent—mainly at the edges of the main producing areas (Magway, west Chan)—display conditions that are consistently below average. Average crop condition, as assessed by NDVI, sharply deteriorated in September.



(d)



(c)



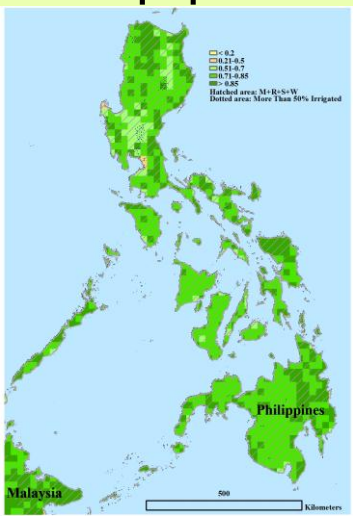
(e)

Figure 3.13 Crop condition Myanmar

For descriptions of figures a-e, see figure 3.2 for Egypt.

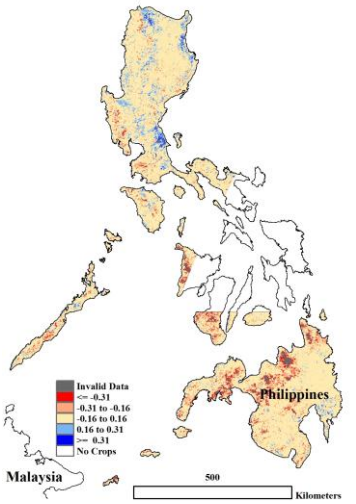
Asia -Southeast

Philippines

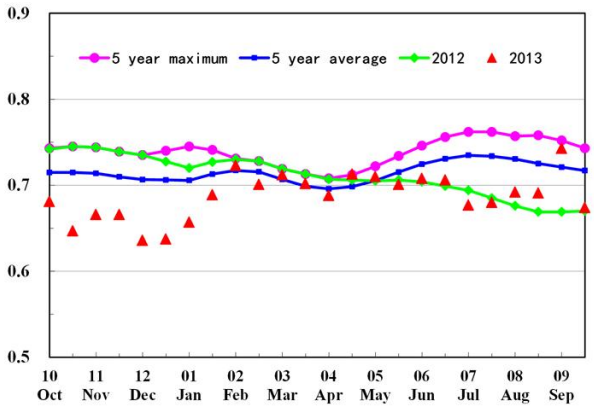


(a)

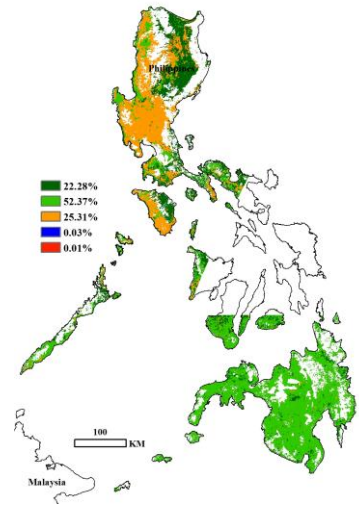
The Philippines, like Indonesia, mostly enjoy a very long humid season with ample moisture supply, interrupted locally by a short dry season around the beginning of the year. As a result, crops planted in April (for harvesting around October) rarely suffer drought conditions, the main limiting factor for crop production being solar radiation. NDVI profiles indicate that throughout the season the country underwent average conditions comparable with those of previous years. According to the recent crop condition map (3.14b and c) Luzon generally enjoyed favorable conditions, in stark contrast with Mindanao.



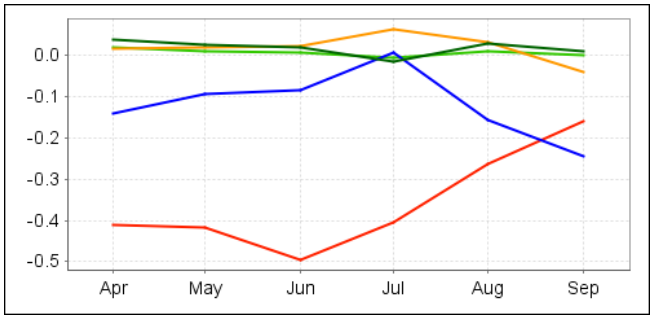
(b)



(c)



(d)



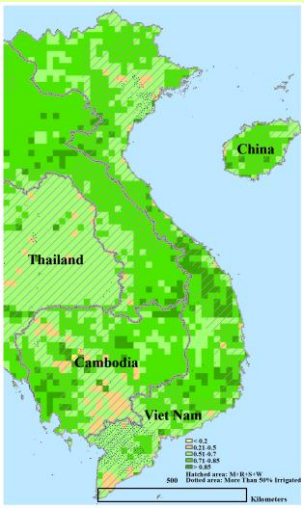
(e)

Figure 3.14 Crop condition Philippines

For descriptions of figures a-e, see figure 3.2 for Egypt.

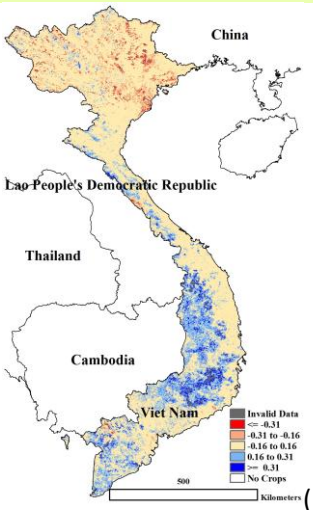
Asia -Southeast

Vietnam

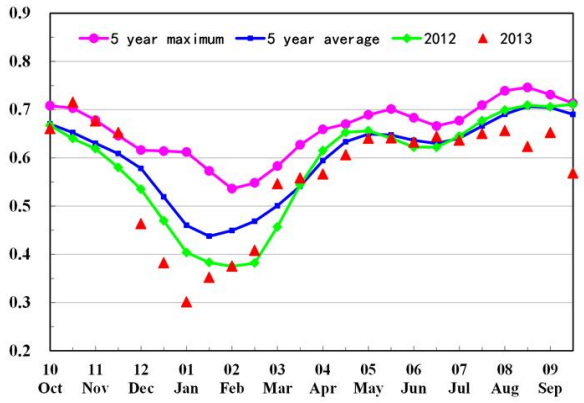


(a)

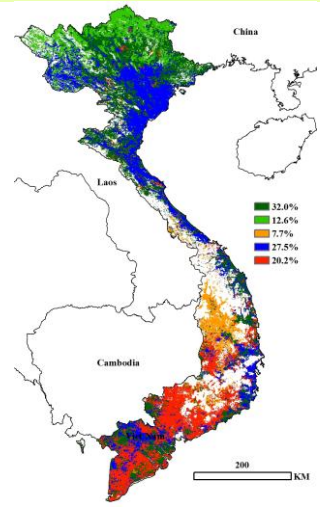
Summer rice season normally extends from May to October, while the first rice crop in the north is planted somewhat later (June) to be harvested at the end of the year. The extreme north of the country, along the Chinese border from Ha Giang to CaoBang, suffered a marked drop in crop condition in June, affecting early summer rice. In September, a drop in crop condition was observed in the south, approximately from Gia Lai to Ca Mau (but avoiding central coastal provinces), for an area including the Mekong delta, the major single rice producing area in the country. Average crop condition (3.15c) shows the deterioration in recent months, particularly affecting the North and limited areas in the Mekong Delta along the Cambodian border.



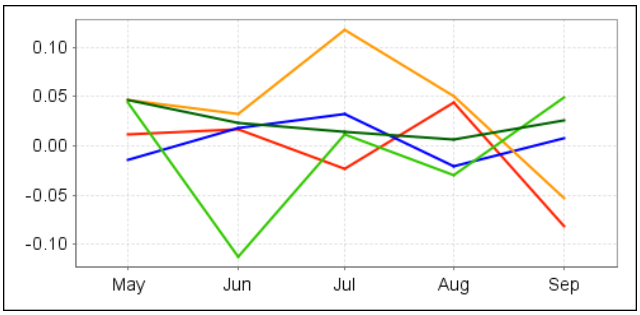
(b)



(c)



(d)



(e)

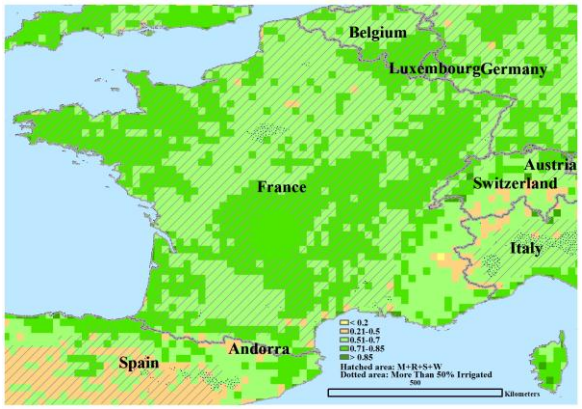
Figure 3.15 Crop condition Vietnam

For descriptions of figures a-e, see figure 3.2 for Egypt.

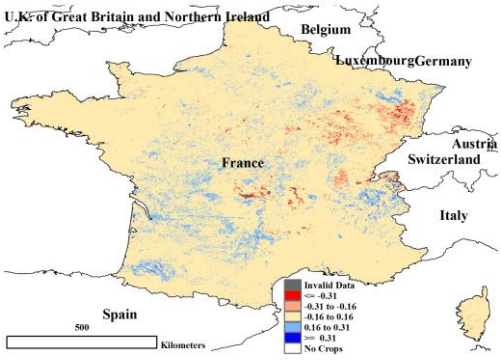
Europe and Russia

France

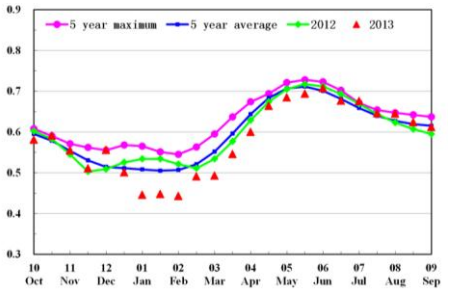
For France, the monitored period from March to August covers the final stages and the harvest of the winter wheat crop (planted from September 2012), the whole cycle of spring wheat (May to August), and the early and mid-season stages of maize, the harvest of which is nearing completion. Consistent crop condition patterns can be observed: only about half the crops enjoyed conditions comparable with the previous seasons, while about 15 percent, mostly in the center-north (Pas de Calais to North Centre region) suffered well-below average conditions in March, which gradually improved until reaching near-normal values in June and above-average ones in July. In the extreme south (Pyrenees) and the southeast (east of Rhone-Alpes and northeast of Provence-Alpes Côte d'Azur) conditions kept deteriorating from March to June, after which they improved, returning to normal in July. Finally, large areas from Bretagne to Franche-Comté and Alsace (but avoiding Poitou Charentes) display poor condition in May, which affects about 27 percent of the country's crops. Altogether winter conditions were relatively poor (3.16c), while summer crops (maize) are average.



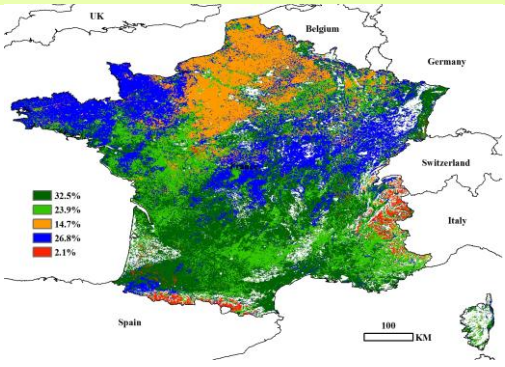
(a)



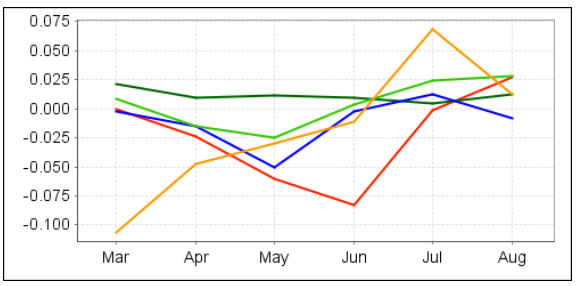
(b)



(c)



(d)



(e)

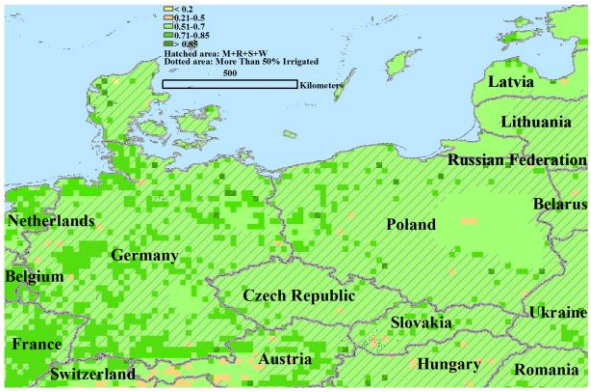
Figure 3.16 Crop condition France

For descriptions of figures a-e, see figure 3.2 for Egypt.

Europe and Russia

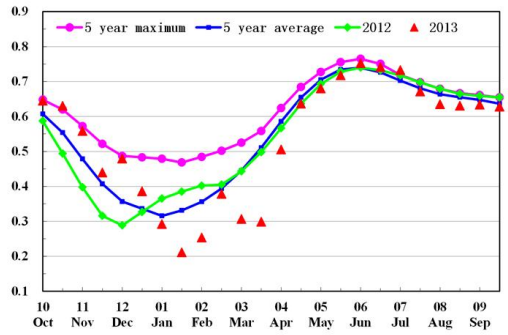
Germany-Poland

In April and May, Germany and Poland enjoyed conditions very similar to those of the last five years. Before April however, conditions are markedly different in two groups of areas. In the first, covering about 60 percent of the countries, conditions deteriorated after March to approximately average conditions, which lasted until the harvest of the wheat crops, including both winter wheat (planted Sep. 2012) and spring wheat (planted around May). In the second area, conditions are characterized by well-below average conditions in March, which turned about average in April and especially May. The affected areas include (i) Schleswig-Holstein to north Dolnoslaskie; (ii) a narrow strip from south Dolnoslaskie to the Belgian border in Rheinland-Pfalz, opening fan-like and becoming more patchy in the west; and (c) the eastern third of Poland along the borders of Lithuania, Belarus, Ukraine, and Slovakia. Particularly in the east (3.17a) winter wheat suffered from a cold spring.

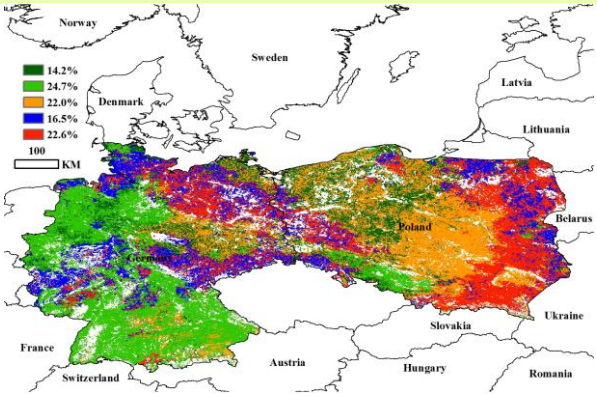


(a)

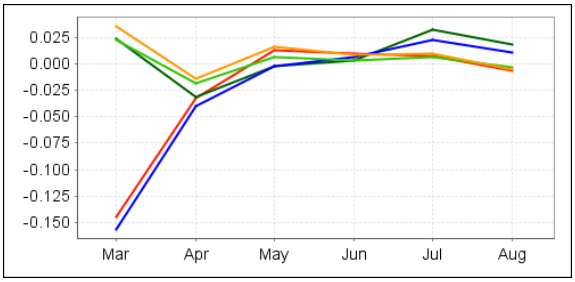
(b)



(c)



(d)



(e)

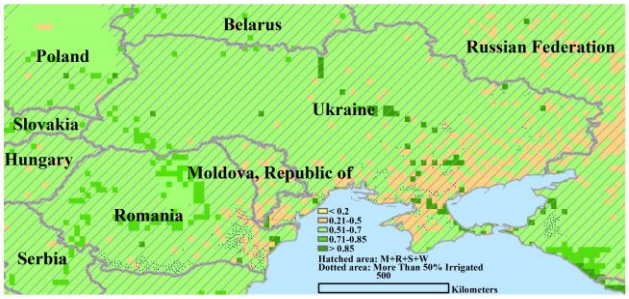
Figure 3.17 Crop conditions Germany and Poland

For descriptions of figures a-e, see figure 3.2 for Egypt.

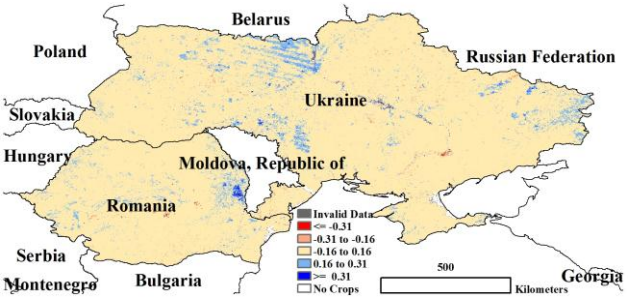
Europe and Russia

Romania-Ukraine

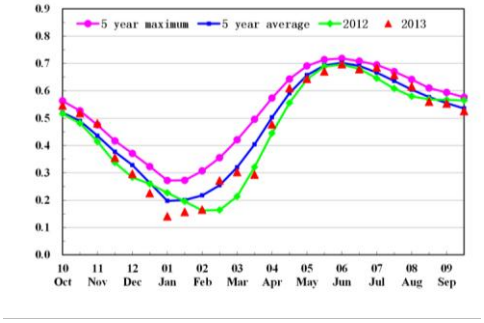
For Romania-Ukraine, the west of the region continues the pattern that was observed in Germany and Poland, i.e., very poor crop conditions in March. The pattern affects about one quarter of the region. Contrary to their western neighbors, however, Romania and the Ukraine again suffered from poor conditions in August and September in the same areas, thus including the harvest time of spring and winter wheat as well as mid-season stages of maize. Other areas in the two countries underwent a multiplicity of conditions (figure e). They range from (i) very favorable in July (poor in May and average in September) in a south-west oriented zone stretching from northeast Ukraine (Chernihiv and Sum regions) to the Moldovan border in Romania, to (ii) very favorable until May, poor in July and August, and recovering thereafter.



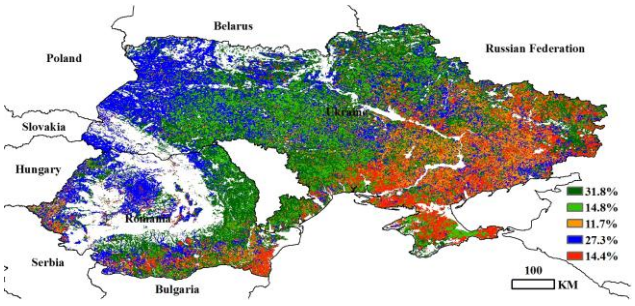
(a)



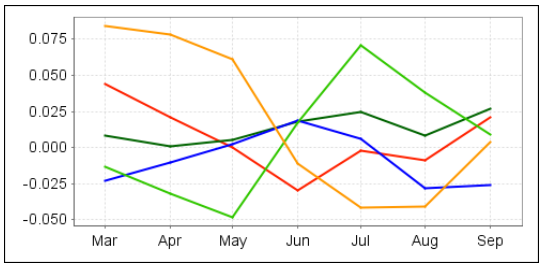
(b)



(c)



(d)



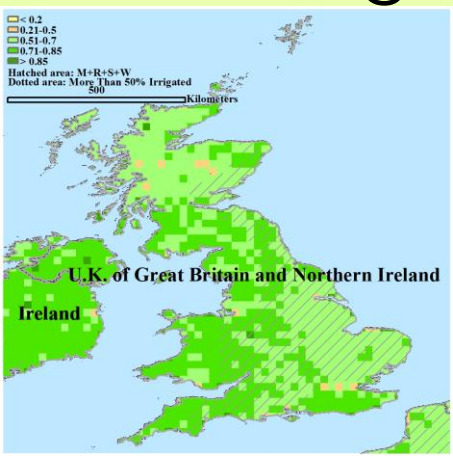
(e)

Figure 3.18 Crop condition Romania and Ukraine

For descriptions of figures a-e, see figure 3.2 for Egypt.

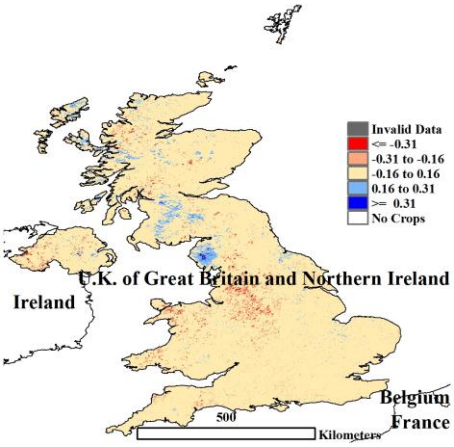
Europe and Russia

United Kingdom

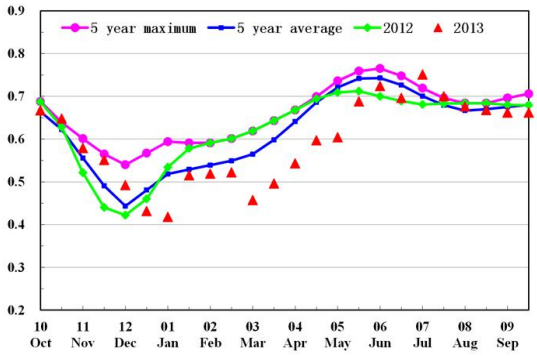


(a)

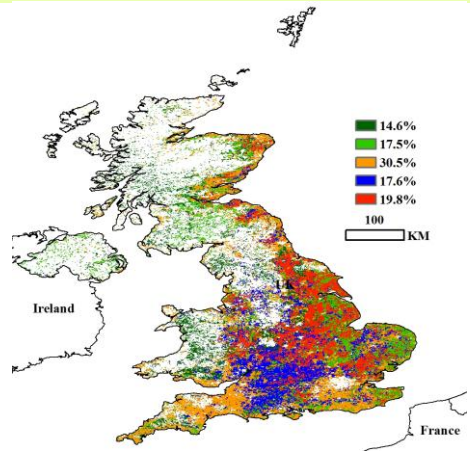
Crops conditions in the United Kingdom are easily described as having undergone constant improvement from poor and very poor conditions in April to average and above average condition in August. Unusually poor conditions were recorded in May in southern-central England.



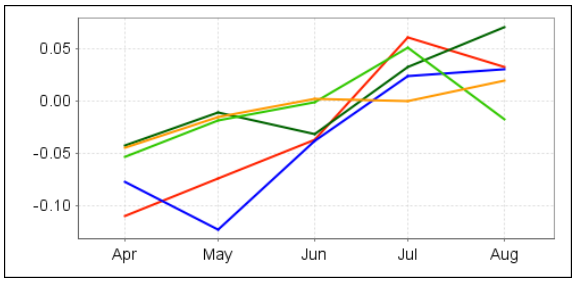
(b)



(c)



(d)



(e)

Figure 3.19 Crop condition United Kingdom

For descriptions of figures a-e, see figure 3.2 for Egypt.

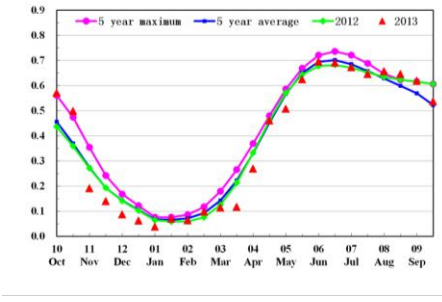
Europe and Russia

Russia

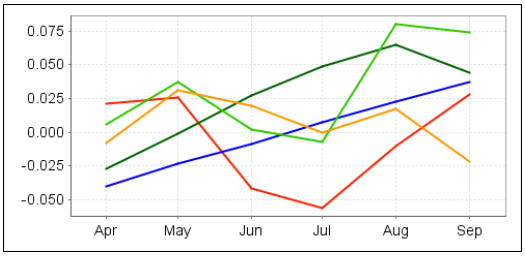
Compared with its western and less continental neighbors, crops in Russia follow a different crop calendar: spring wheat and maize are harvested in September (planted in May and April, resp.) and the cycle of winter wheat covers the period from August to July. Poor conditions (a significant deterioration in June and July compared with the recent average) affected mostly the southern oblasts of Rostov, Stavropol and the autonomous Kalmyk Republic. Areas where crop condition is poor at the time of harvest (September) include about 35 percent of the cropped area in Russia and affects the western regions north of the oblasts of Saratov and Belgorod. Large areas in the southeast enjoyed better than average conditions during summer (3.20c).

(a)

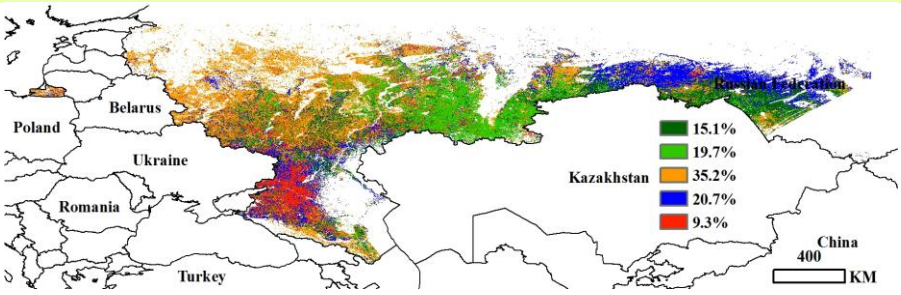
(b)



(c)



(e)



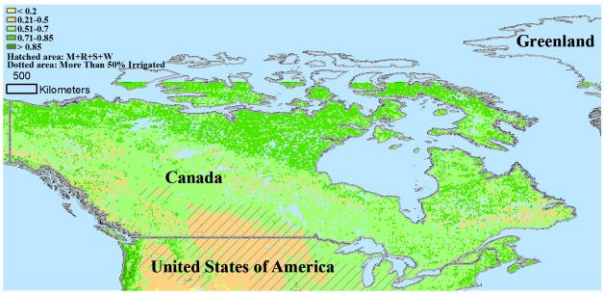
(d)

Figure 3.20 Crop condition Russia

For descriptions of figures a-e, see figure 3.2 for Egypt.

North America

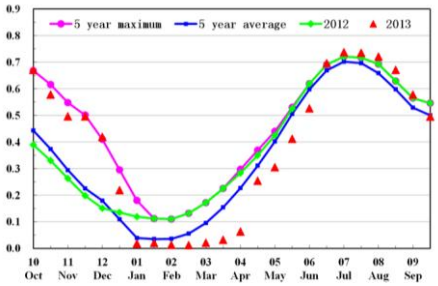
Canada



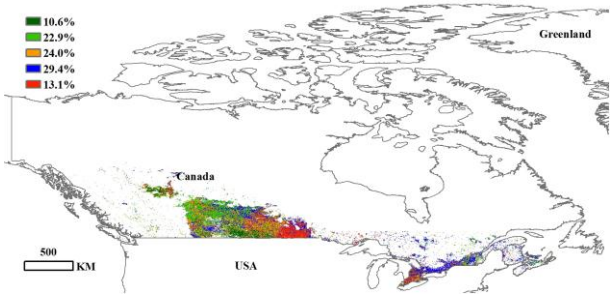
(a)

Throughout the country, crop conditions, compared with their recent average, were normal at the end of September, one month before the maize harvest and the planting time for winter wheat. However, spring conditions were consistently poor and they gradually increased to above normal from around July, coinciding with the harvest of winter wheat. On average (3.21a) the country experienced poor conditions, well below the recent five-year average.

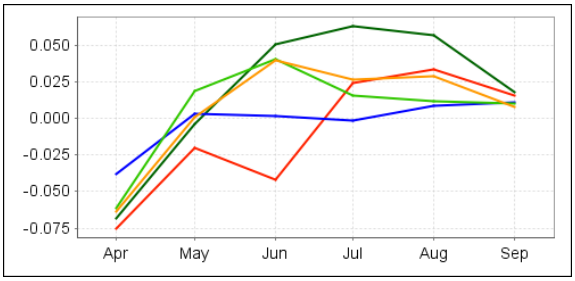
(b)



(c)



(d)



(e)

Figure 3.21 Crop condition Canada

For descriptions of figures a-e, see figure 3.2 for Egypt.

Table 3.5 Canada, 2013 production by province (thousand tons)

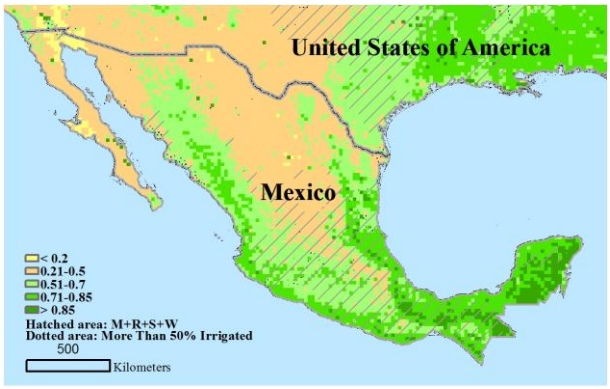
	Maize		Rice		Soybean		Wheat	
	2013	**Δ%**	**2013**	**Δ%**	**2013**	**Δ%**	**2013**	**Δ%**
Alberta							8604	3.0
Manitoba							3076	-22.0
Saskatchewan							12127	-5.0
Sub total							**23807**	
Other provinces							2330	
National total							**26137**	**-3.0**

Note: Δ% indicates percentage difference with 2012.

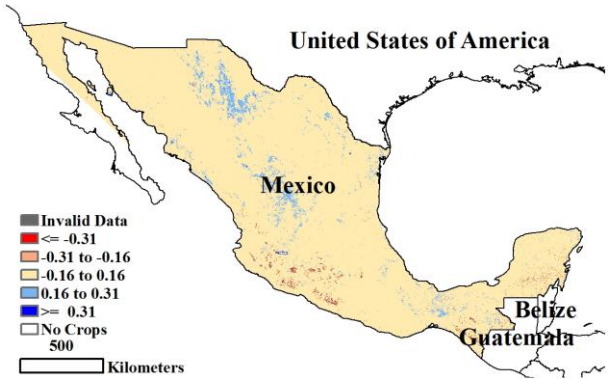
North America

Mexico

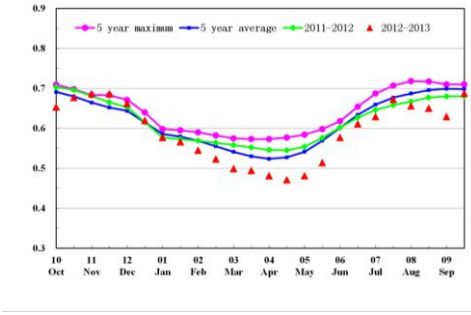
At the end of September, most areas in Mexico were characterized by close to average crop conditions, although the situation developed along rather different trajectories. For instance, the main maize growing areas in the center of the country and the north-west started with unfavorable conditions at the time of planting in April. The bulk of the maize harvest (about three quarters) is due in January, so that the final outcome of the season largely depends on current conditions (reported on by the next CropWatch bulletin). The bulk of the wheat harvest occurred in June, mostly in the north-west, where condition is at least average. Except during mid-July (3.22c), crop condition was usually below the recent five-year average. At the end of September, both NDVI clusters (3.22e) and crop condition (3.22c) had returned to 'normal'.



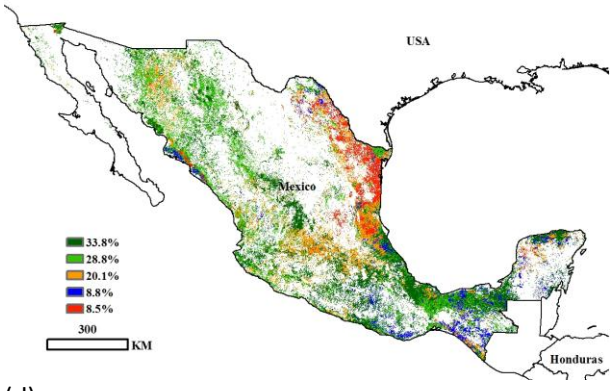
(a)



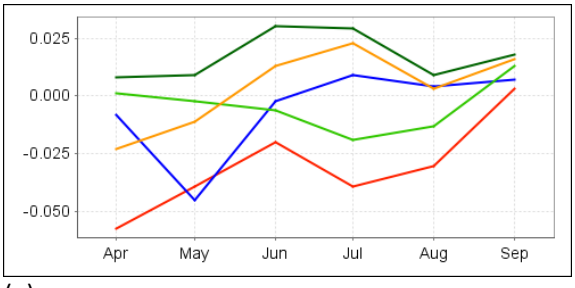
(b)



(c)



(d)



(e)

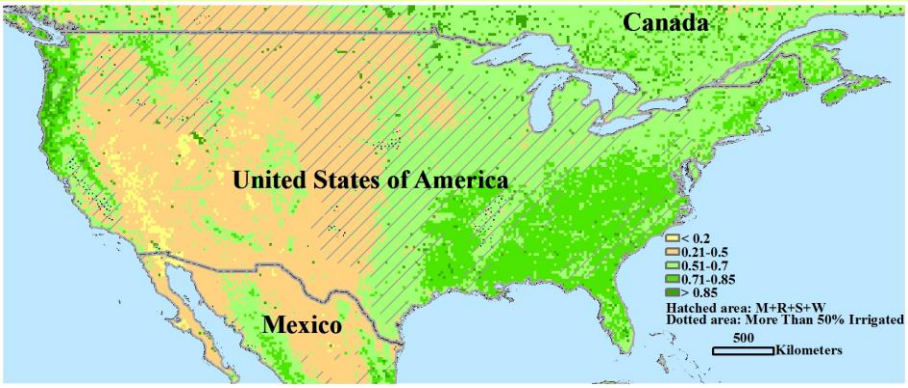
Figure 3.22 Crop condition Mexico

For descriptions of figures a-e, see figure 3.2 for Egypt.

North America

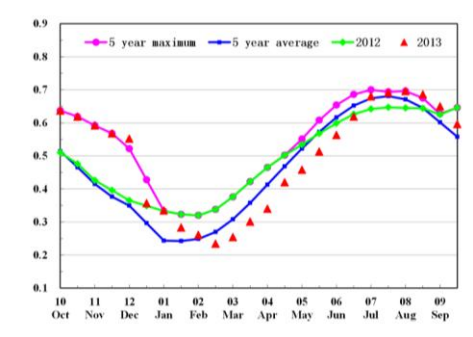
United States

In June almost all crop areas in the United States could be listed as about “average” by the standard of the last five years. A month later, when winter wheat was being harvested, and two months later (spring wheat harvest), crop condition curves had opened fanlike (3.23e), providing a range of different conditions that remained stable until September. Conditions were favorable along the Canadian border, although a number of patches suffered poor conditions, including in South Dakota, parts of Missouri, Iowa, Colorado and Texas. Crop condition (3.23c) stayed below the recent reference curves from February to June, improving thereafter, while maize and soybean matured.

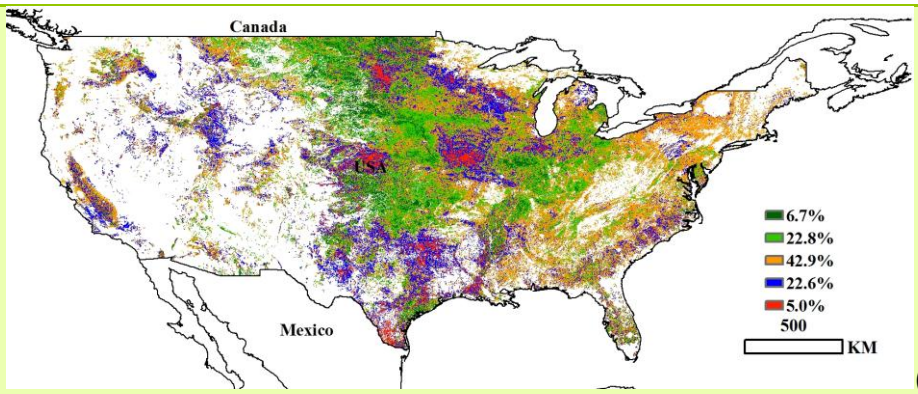


(a)

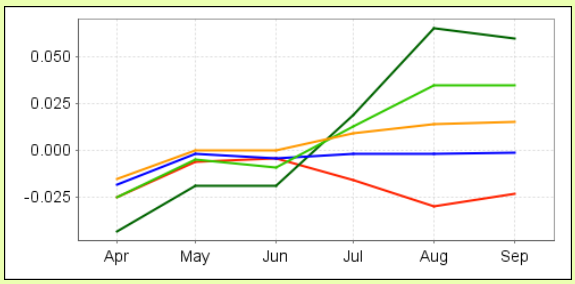
(b)



(c)



(d)



(e)

Figure 3.23 Crop condition United States

For descriptions of figures a-e, see figure 3.2 for Egypt.

Table 3.6 United States, 2013 production by state (thousand tons)

	Maize		Rice (paddy)		Soybean		Wheat*	
	2013	**Δ%**	**2013**	**Δ%**	**2013**	**Δ%**	**2013**	**Δ%**
Arkansas	2509	-20.2	3948	11.5	3540	-4.3	747	10.9
California			2120	-3.4			844	17.7
Idaho							1665	3.3
Illinois	41062	25.7			10886	4.3	1188	7.4
Indiana	18244	20.3			6282	3.2		
Iowa	53765	12.8			11974	6.3		
Kansas	10524	9.3			2518	10.4	8963	-13.8
Michigan	8293	2.7			2326	-0.1	1252	12.1
Minnesota	32712	-6.3			7768	-5		
Missouri	7588	20.7	469	24.5	4694	11.2	998	-6.8
Montana							2373	3.1
Nebraska	35920	9.4			6334	12.4	1613	11.2
North Dakota	8108	-24.4			3720	-15	735	-32.7
Ohio	12163	6.7			5739	2.3	1093	29.4
Oklahoma							3064	-27.3
Oregon							1569	11.3
South Dakota	15097	11			3972	3.3	1732	5.2
Texas	4295	-16.1	548	-6.7		-20.1	1979	-24.3
Washington							3379	4.7
Wisconsin	11649	14.9			1962	2.2		
Sub total	**261931**		**7085**		**71716**		**33197**	
Other states	31959		1634		11407		24887	
United States	**293890**	**7.3**	**8719**	**-3.6**	**83123**	**1.3**	**58084**	**-5.9**

Note: *Wheat production for the individual states is winter wheat, while the last line for the United States includes winter wheat, durum wheat, and spring wheat. The wheat production of other states was calculated by total wheat production minus 'subtotal' winter wheat production. Δ% indicates percentage difference with 2012.

South America

Argentina

May and June are the months in Argentina during which most summer crops are harvested, in particular maize, rice, and the first and second soybean crops. The crop condition profiles, assessed by their departure from the average of the previous five years, was average or above average for those crops in most areas, except in areas including and north of Santiago del Estero, where conditions had been poor since February. In central Buenos Aires and adjacent areas in east La Pampa province, conditions deteriorated rapidly between January and March, but returned to normal starting in April.

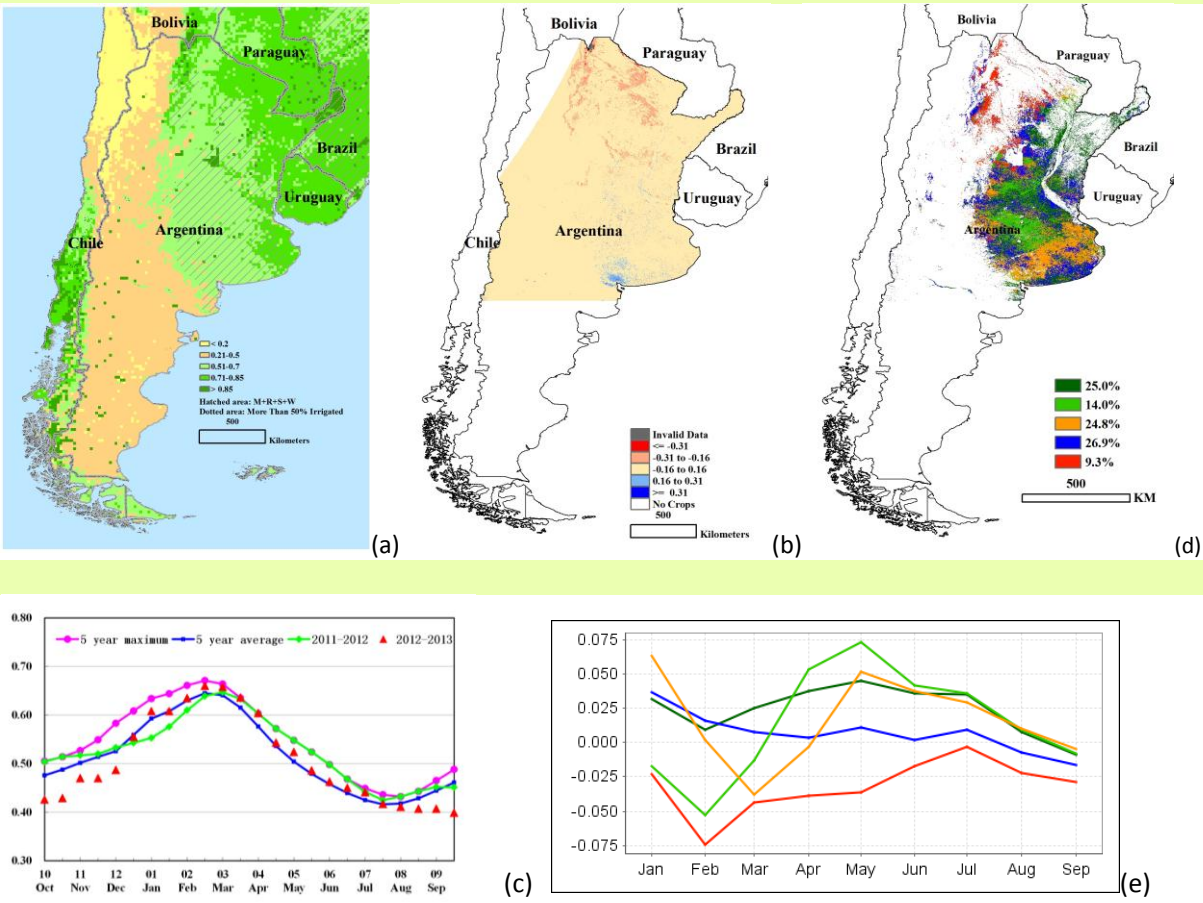


Figure 3.24 Crop condition Argentina

For descriptions of figures a-e, see figure 3.2 for Egypt

Table 3.7 Argentina, 2013 production by province (thousand tons)

	Maize		Soybean		Wheat	
	2013	**Δ%**	**2013**	**Δ%**	**2013**	**Δ%**
Buenos Aires	8710	-11.0	16604	-6.8	6188	61.2
Córdoba	7792	-27.8	11432	-12.6	1404	1.8
Santa Fe	4647	-14.9	9343	-11.1	1451	6.0
Sub total	**21149**		**37380**		**9043**	
Other provinces	3601		12809		3504	
Argentina	**24750**	**-3.7**	**50189**	**-2.5**	**12547**	**14.1**

Δ% indicates percentage difference with 2012

South America

Brazil

Compared with the last five years, most areas in Brazil benefited from average to above average conditions. Unfavorable conditions have affected the east of Rio Grande do Norte to Espirito Santo, which are not among the major producing areas for maize, soybean, rice and wheat. Wheat, grown mostly in the areas that actually have winter conditions, is mostly produced in the southernmost part of the country, such as Ro Grande do Sul where conditions were favorable from the time of planting (April) to now (harvest is currently underway in November). Soybean growing areas, essentially Mato Grosso and Paranà, displayed average or above average conditions at the time of harvest in May. The same applies to rice and maize, harvested between June and August (except for the Nordeste where harvest season is still to start (December)).

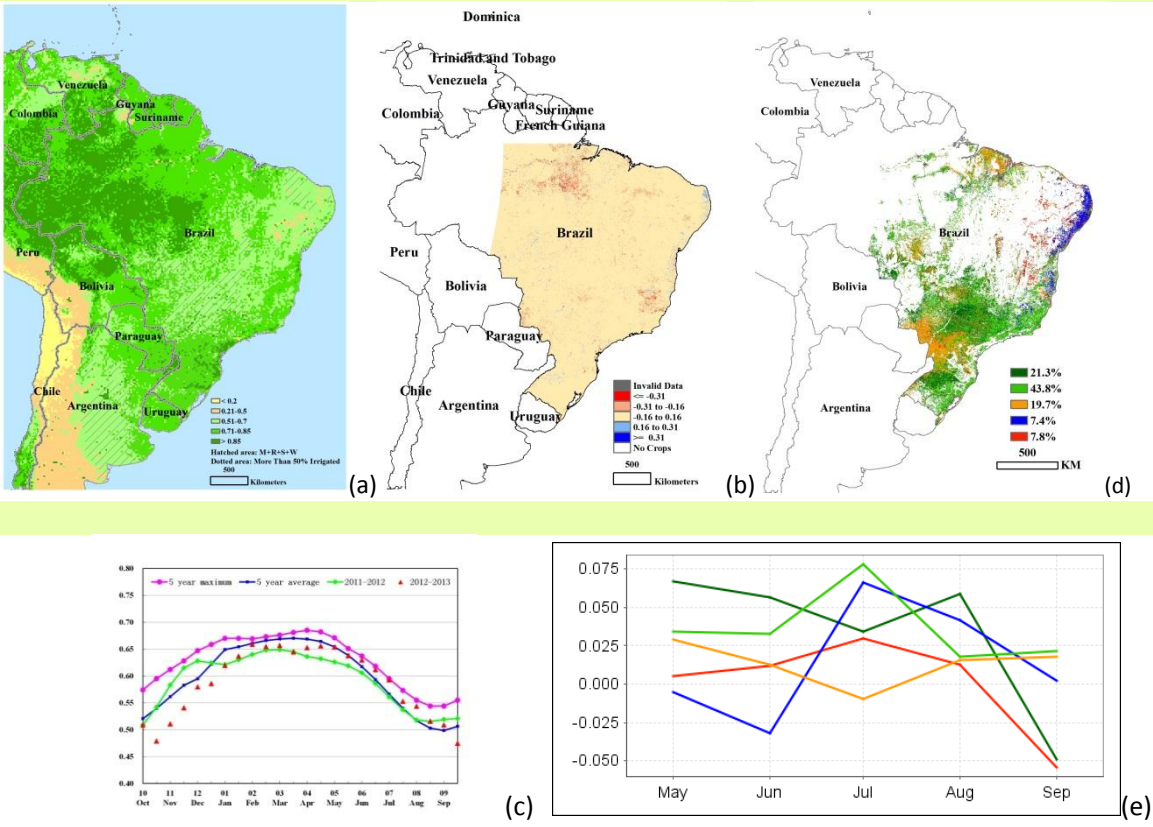


Figure 3.25 Crop condition Brazil

For descriptions of figures a-e, see figure 3.2 for Egypt

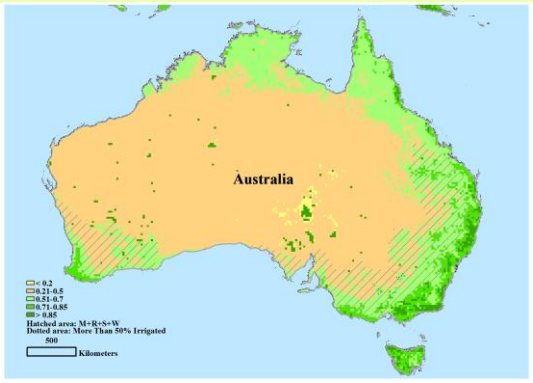
Table 3.8 Brazil, 2013 production by state (thousand tons)

	Maize		Rice		Soybean		Wheat	
	2013	**Δ%**	**2013**	**Δ%**	**2013**	**Δ%**	**2013**	**Δ%**
Mato Grosso	20186	29.0	497	8.9	23417	7.2		
MG Do Sul	7574	16.9	96	-9.6	5781	25.8	9	-61.7
Minas Gerais	7437	-30.9	43	-30.9	3376	9.8	119	48.7
Parana	17489	-1.4	175	-1.4	15921	45.7	1711	-18.5
Rio Gr. Do Sul	5350	5.3	8098	5.3	12757	114.6	2717	45.6
Santa Catarina	3326	-6.7	1024	-6.7	1587	47	218	56.2
Sao Paulo	4596	13.4	93	13.4	1933	31.4	87	-29.6
Total	**65958**	**3.6**	**10026**	**3.6**	**64771**	**32.4**	**4861**	**12.2**

Δ% indicates percentage difference with 2012.

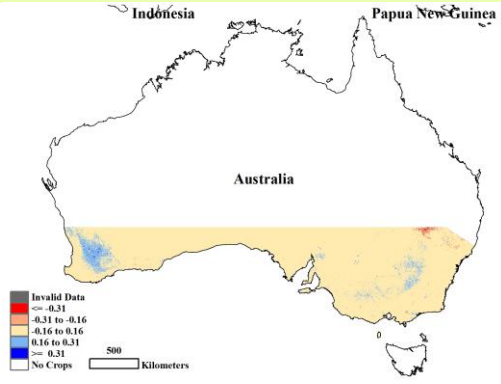
Oceania

Australia

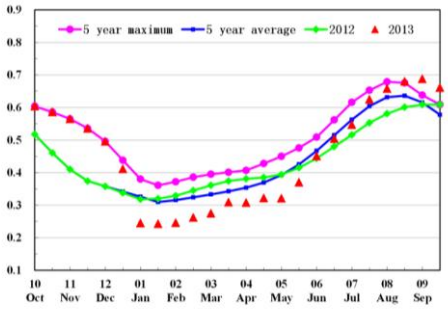


(a)

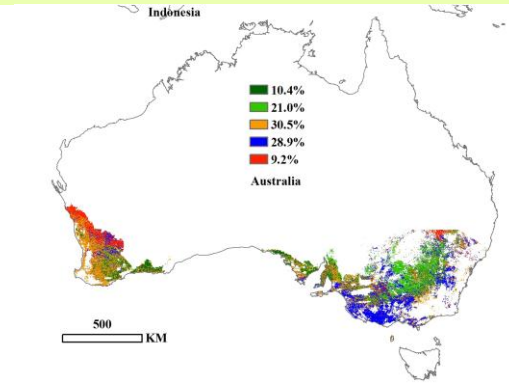
In Australia, overall crop conditions compared with the most recent five years were generally average to above average in September, about two months before the start of the ongoing wheat harvest. Condition is poor in about 10 percent of the areas and confined to the northernmost cropping areas of Western Australia and New South Wales.



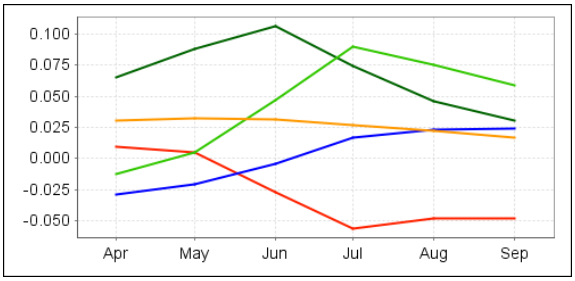
(b)



(c)



(d)



(e)

Figure 3.26 Crop condition Australia

For descriptions of figures a-e, see figure 3.2 for Egypt.

Table 3.9 Australia, 2013 production by state (thousand tons)

	Wheat	
	2013	Δ%
Western Australia	8020	-27.0
South Australia	5241	16.0
New South Wales	9512	11.0
Victoria	4160	6.0
Sub total	**26934**	
Other states	2023	
National total	**28957**	**-4.17**

Δ% indicates percentage difference with 2012;