



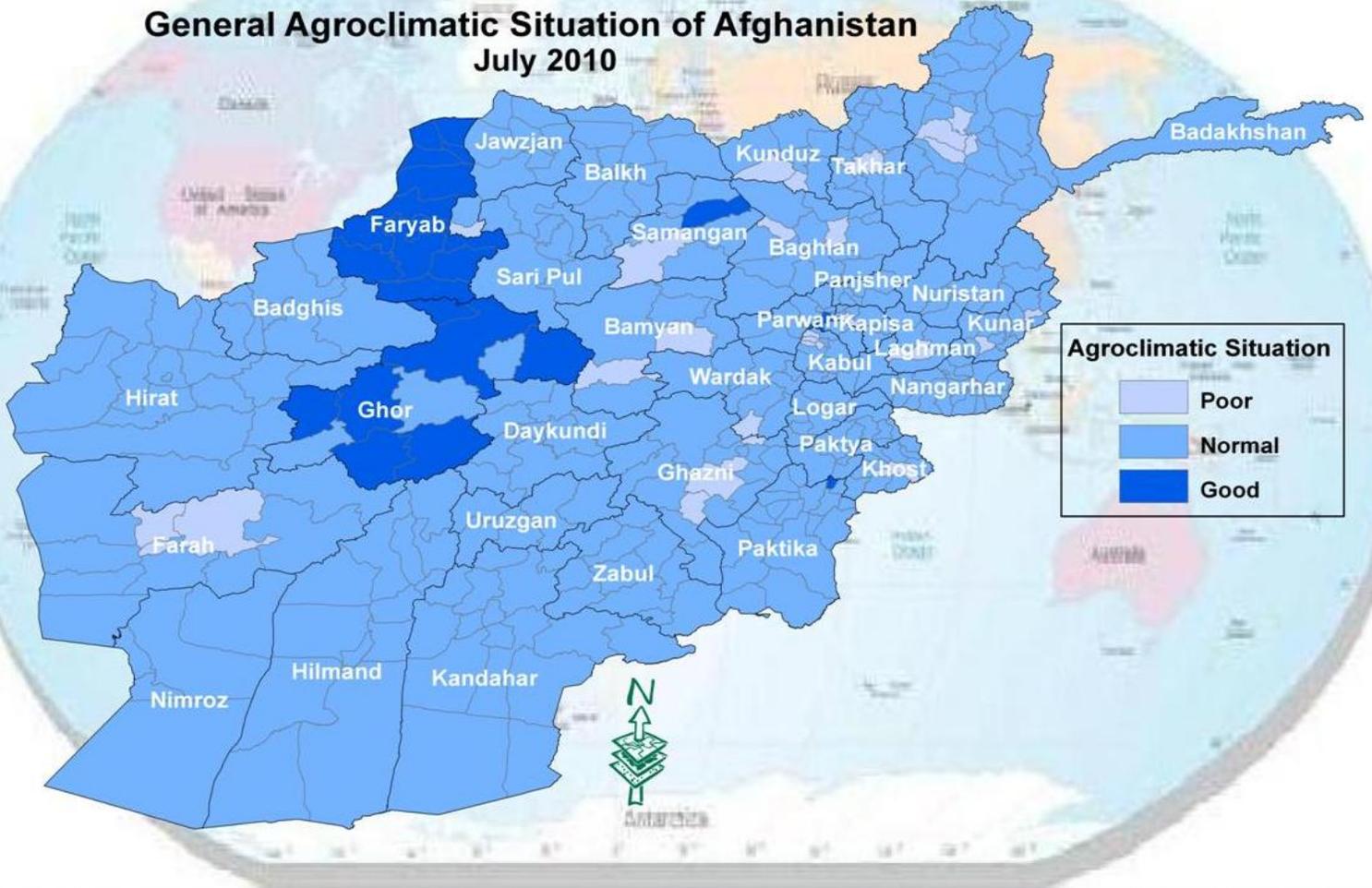
Issue No: 65

July: 2010

The **f**ghanistan grometeorological **AAM**onthly Bulletin

Topics Crop Information Precipitation Temperature NDVI

General Agroclimatic Situation of Afghanistan July 2010



Adverse Factor

1 Crop Condition

2 Crop Stage

3



The Agromet Project of USGS, supported by United State Agency for International Development (USAID), is working together with the Ministry of Agriculture, Irrigation and Livestock (MAIL) and the Afghan Meteorological Authority (AMA) of Ministry of Transport (MoT)

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Data Source:

Ministry of Agriculture , Irrigation and Livestock (MAIL), Agromet Project , Afghan Meteorological Authority (AMA), United States Geological Survey (USGS), Food and Agriculture Organization of United Nation (FAO)

Summary

Most of Afghanistan received above-average rainfall during the month of July, 2010, when moisture from the Indian monsoon resulted in unusually heavy seasonal precipitation.

The Eastern, Southeastern, Northwestern, and Capital regions received significantly more precipitation than recorded in recent years.

The heavy rainfall in these regions produced flash floods that caused deaths and the loss of property, damaging agricultural lands, roads, and canals.

In some regions, 2010 temperatures were higher than those of the 2009, but these increases were accompanied by temperature decreases in other regions. Overall, there was no significant change of temperature in Afghanistan between 2009 and 2010, except in Lashkargah and Kunduz, where temperatures were significantly higher than in other parts of the country.

The highest temperature in the country (47.6° C) was measured in Zarange and the lowest temperature (9.2° C) was measured in Bamyan.

Wheat Crop Stage, Crop Condition and Adverse Factor

Zone	Province	District	Station	Crop Stage	Crop Condition	Adverse Factor
Central	Kabul	Shakardara	Karizmir	Harvesting		
		Paghman	Paghman	Grain filling	Normal	Not existed
		Kabul	Darulaman	Harvesting		
		Surubi	Surubi			
	Panjsher	Dara	Dara	Grain Filling	Good	Not existed
		Dashtak	Dashtak	Harvesting		
	Parwan	Syagerd	Gor band			
		Charikar	Charikar			
	Kapisa	Mahmoodraqi	Mahmoodraqi			
		Kohistan	Kohistan			
	Wardak	Chake	Chake			
		Jaghato	Jaghato			
East Central	Bamyan	Bamyan	Bamyan	Grain filling	Good (better than normal)	Shortage of inputs
		Yakawlang	Yakawlang	Flowering	Normal	Weeds
		Panjab	Panjab	Grain filling	Poor	Weeds
Eastern	Noristan	Paroon	Paroon	Grain filling	Normal	Not existed
		Duab	Duab	Grain filling	Normal	Shortage of inputs

Wheat Crop Stage, Crop Condition and Adverse Factor

Zone	Province	District	Station	Crop Stage	Crop Condition	Adverse Factor				
Eastern	Nangarhar	Agam	Agam	Harvesting						
		Batikot	Ghaziabad							
		Jalalabad	Sheshembagh							
		Asmar	Asmar							
	Kunar	Asmar	Asmar							
		Asad Abad	Asad Abad							
	Laghman	Mihtarlam	Mihtarlam							
North Eastern	Takhar	Bangi	Bangi							
		Taluqan	Taluqan							
	Kunduz	Imam Sahib	Imam Sahib							
		Qaliazal	Aqtipa							
		Chardara	Chardara							
		Kunduz	Kunduz							
		Ali Abad	Ali Abad							
	Baghlan	Pulikhomri	Pozaishan	Flowering	Good	Not existed				
	Badakhshan	Faiz Abad	Faiz Abad	Harvesting						
		Argo	Argo	Grain filling	Normal	Pests and diseases				
Baharak		Baharak	Harvesting							
Khost	Khost	Khost								
	Khost	Shimal								
	Ali Sher	Ali Sher								
South Eastern	Paktia	Zormat					Rohani Baba	Grain filling	Normal	Not existed
		Gardiz					Tera	Harvesting		
	Paktika	Urgon					Urgon	Vegetative	Good	Not existed
		Sharana					Sharana	Vegetative	Good	Not existed
		Tera					Tera	Grain filling	Good	Not existed
	Ghazni	Muqur					Muqur	Harvesting		
Andar		Bande Sardi								

Wheat Crop Stage, Crop Condition and Adverse Factor

Zone	Province	District	Station	Crop Stage	Crop Condition	Adverse Factor			
Southern	Nimroz	Zaranj	Zaranj	Harvesting					
	Kandahar	Kandahar	Kandahar						
	Zabul	Qalat	Qalat						
	Urozgan	Tirin Kot	Tirin Kot						
	Hilmand	Nad Ali	Nad Ali						
		Greshk	Greshk						
		Nawa	Nawa						
		Lashkargah	Bolan						
Northern	Balkh	Dihdadi	Dihdadi	Grain filling	Normal	Not existed			
		Nahrishahi	Nahrishahi	Grain filling	Good	Not existed			
	Jawzjan	Sheberghan	Sheberghan	Harvesting					
		Darzab	Darzab						
	Saripul	Saripul	Saripul						
		Sozmaqala	Sozmaqala						
	Faryab	Maimana	Maimana						
		Andkhoy	Andkhoy						
	Samangan	Aibak	Aibak						
		Dara Souf	Dara Souf						
		Sar bagh	Sarbagh					Grain filling	Narmal
	Western	Badghis	Qalainow					Qalainow	Harvesting
Muqur			Muqur						
Ghor		Chaghcharan	Chaghcharan	Grain filling	Good (better than normal)	Weeds			
Hirat		Shindand	Shindand	Harvesting					
		Zindajan	Zindajan						
		Gwazara	Falahat						
		Hirat	Farm Urdokhan						
Farah		Farah	Farah						

Maize Crop Stage, Crop Condition and Adverse Factor

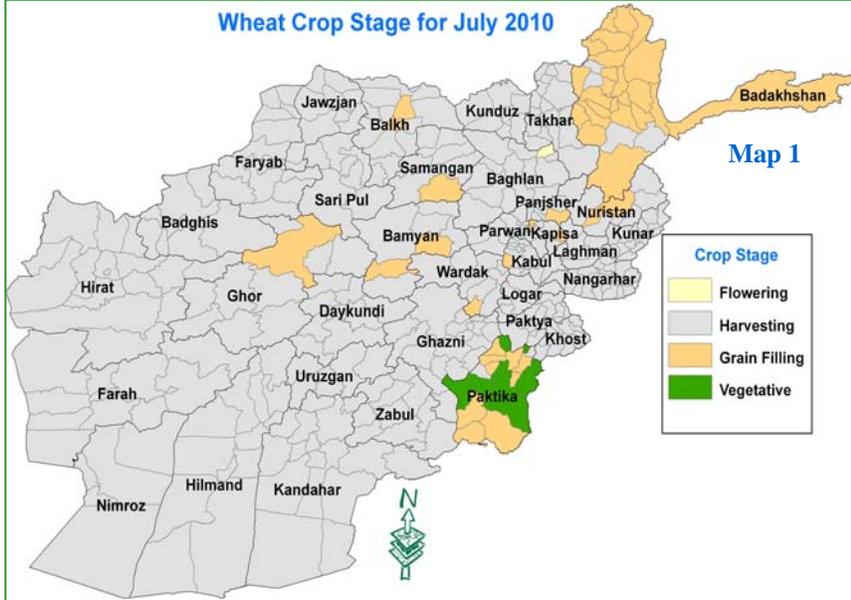
Zone	Province	District	Station	Crop Stage	Crop Condition	Adverse Factor
Central	Kabul	Surubi	Surubi	Vegetative	Normal	Not existed
	Parwan	Charikar	Charikar	vegetative	Good	Shortage of inputs
		Syagerd	Syagerd	Planting	Normal	Not existed
	Panjshir	Dashtak	Dashtak	planting	Good	Not existed
Eastern	Nangarhar	Agam	Agam	Vegetative	Normal	Good rain fall
		Batikot	Ghazi Abad	Planting	Normal	Not existed
		Jalalabad	Sheshembagh	Flowering	Normal	Not existed
		Jalalabad	Farm Jadeed	Flowering	Normal	Not existed
	Kunar	Asmar	Asmar	vegetative	Normal	Poor Rain fall
		Asadabad	Asadabad	Emergence	Normal	Poor Rainfall
North Eastern	Kunduz	Imam Sahib	Imam Sahib	Vegetative	Normal	Not existed
		Qala - e - Zal	Aqtipa	Planting	Normal	Not existed
		Chardara	Chardara	Planting	Normal	Not existed
		Kunduz	Kunduz	Planting	Normal	Not existed
		Ali Abad	Ali Abad	Planting	Normal	Not existed
South Eastern	Khost	Khost	Khost	Vegetative	Good	Not existed
		Khost	Shimal	Vegetative	Good	Not existed
		Ali Sher	Ali Sher	Flowering	Good	Not existed
	Paktia	Zormat	Rohani Baba	Flowering	Normal	Not existed
		Gardiz	Tera	Planting	Normal	Not existed
	Paktika	Urgon	Urgon	Vegetative	Normal	Not existed
South- Eastern	Hilmand	Nad Ali	Nad Ali	Vegetative	Normal	Not existed
		Greshk	Greshk	Vegetative	Normal	Not existed
		Nawa	Nawa	Vegetative	Normal	Not existed
		Lashkargah	Bolan	Planting	Normal	Poor Rainfall
	Takhar	bangi	Bangi	Vegetative	Normal	Not existed
	Samangan	Dara sof	Dara sof	Vegetative	Good	Not existed
		Sar bagh	Sar bagh	Grain filling	Normal	Not existed
	Baghlan	Polikhomri	Poza ieshan	Planting	Normal	Not existed
		Polikhomri	Polikhomri	Vegetative	Normal	Not existed
	Urozgan	Urozgan	Urozgan	Planting	Normal	Not existed
	Hirat	Shendand	Shendand	Vegetative	Normal	Not existed
		Zenda jan	Zenda jan	Vegetative	Normal	Not existed
Kapisa	Kapisa	Mahmod Raqi	Pre planting	Normal	Storm	

Rice Crop Stage, Crop Condition and Adverse Factor

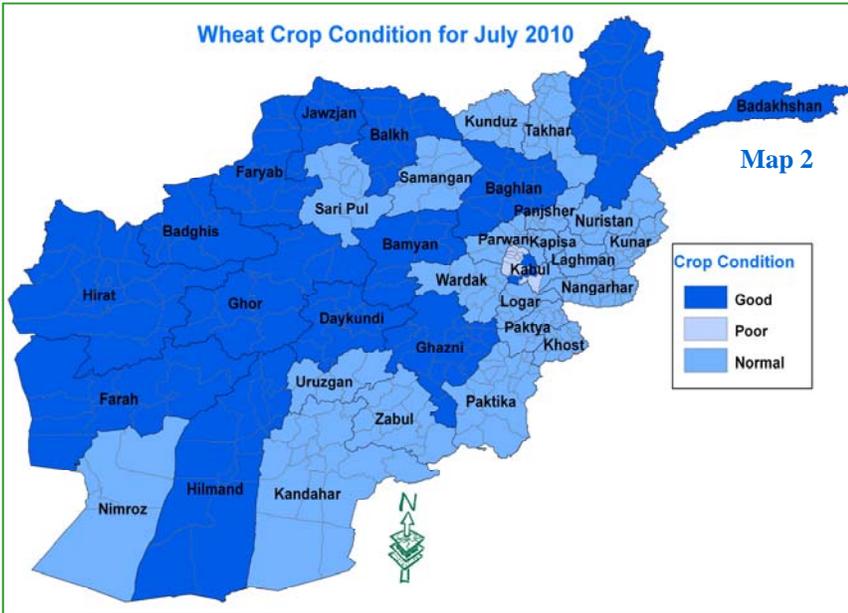
Zone	Province	District	Station	Crop Stage	Crop Condition	Adverse Factor
Central	Kabul	Sarubi	Sarubi	Vegetative	Normal	Not existed
Eastern	Nangarhar	Agam	Agam	Vegetative	Normal	Not existed
		Batikot	Ghazi Abad	Emergence	Good	Not existed
		Jalalabad	Sheshembagh	Emergence	Normal	Not existed
		Jalalabad	Farm Jadeed	Emergence	Normal	Weeds
	Kunar	Asmar	Asmar	Emergence	Normal	Poor rain fall
		Asad Abad	Asad Abad	Emergence	Normal	Poor Rainfall
	Laghman	Mihtarlam	Mihtarlam	Vegetative	Normal	Good Rainfall
North Eastern	Kunduz	Imam Sahib	Imam Sahib	Emergence	Normal	Shortage of inputs
		Qaliazal	Aqtipa	Emergence	Normal	Shortage of inputs
		Chardara	Chardara	Emergence	Normal	Not existed
		Kunduz	Kunduz	Flowering	Normal	Not existed
		Khan Abad	Khan Abad	Flowering	Normal	Not existed
		Ali Abad	Ali Abad	Emergence	Normal	Not existed
South Eastern	Khost	Khost	Khost	Vegetative	Good	Not existed
		Khost	Shimal	Emergence	Good	Not existed
		Ali Sher	Ali Sher	Vegetative	Normal	Shortage of inputs
	Takhar	Bangi	Bangi	Emergence	Normal	Not existed
	Baghlan	Taloqan	Taloqan	Vegetative	Normal	Not existed
		Polikhomri	Polikhomri	Ploughing	Normal	Not existed
		Poza Ishan	Poza Ishan	Emergence	Normal	Not existed
	Urozgan	Urozgan	Urozgan	Planting	Normal	Not existed
	Hirat	Shendand	Shendand	Vegetative	Normal	Not existed

Wheat Crop Stage, Condition and Adverse Factor Maps

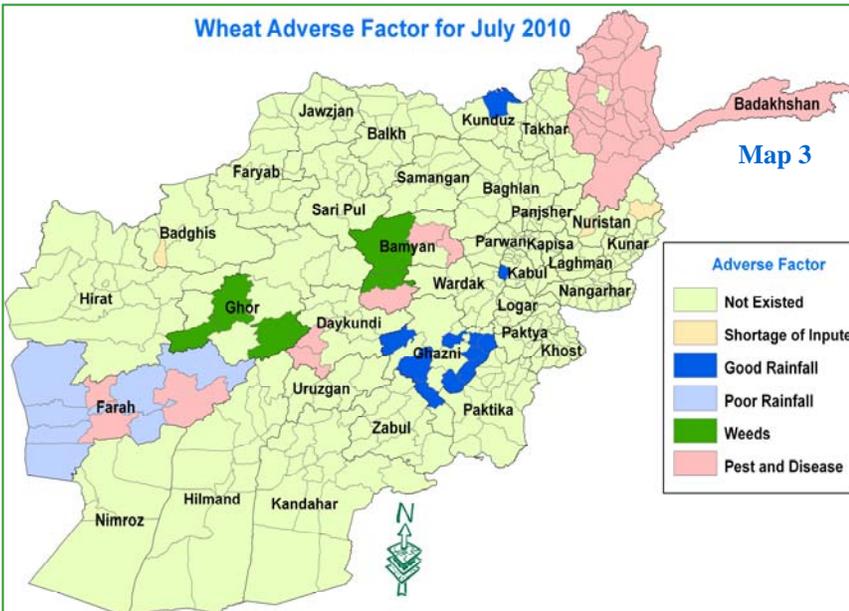
Wheat Crop Stage for July 2010



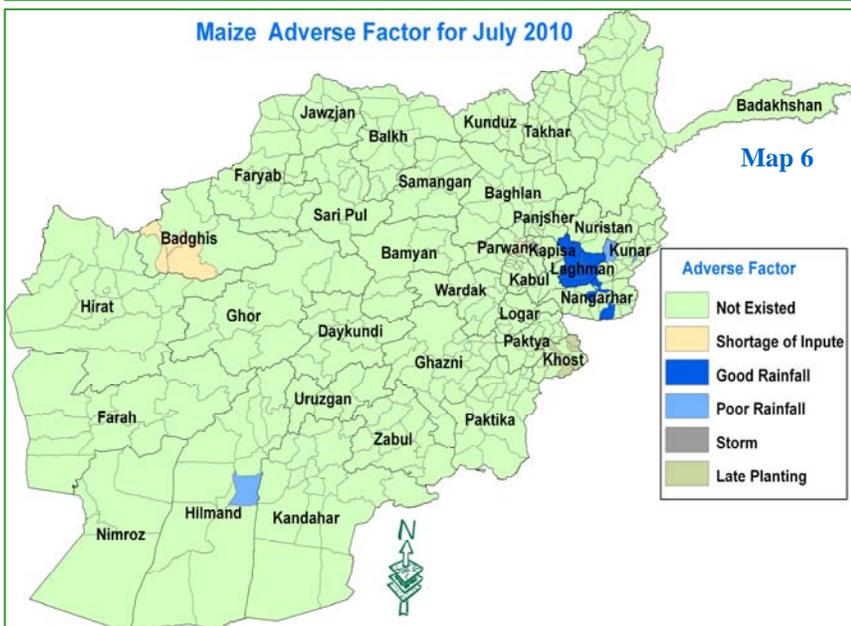
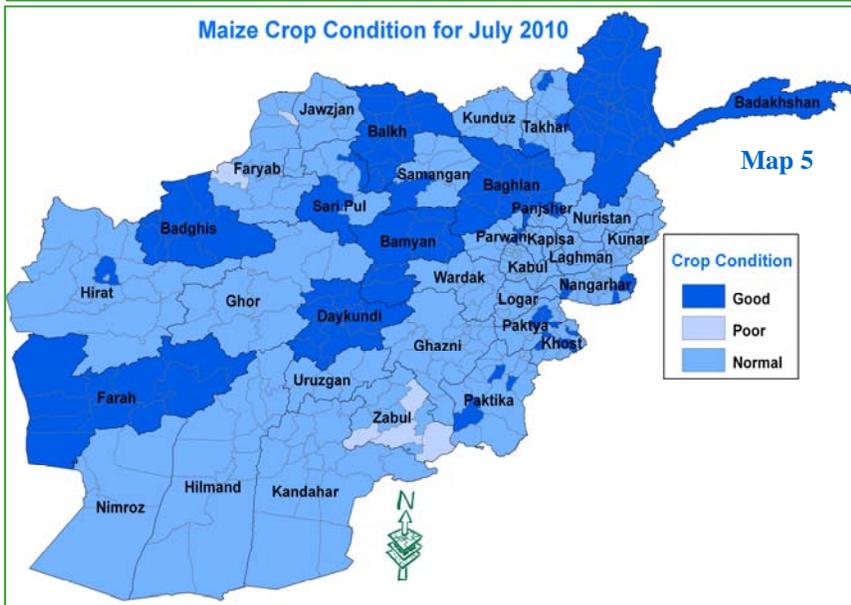
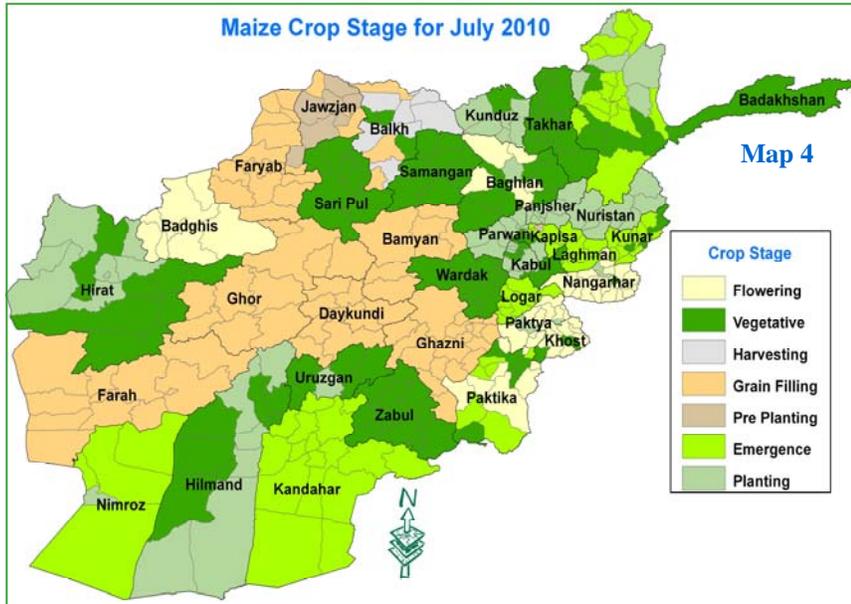
Wheat Crop Condition for July 2010



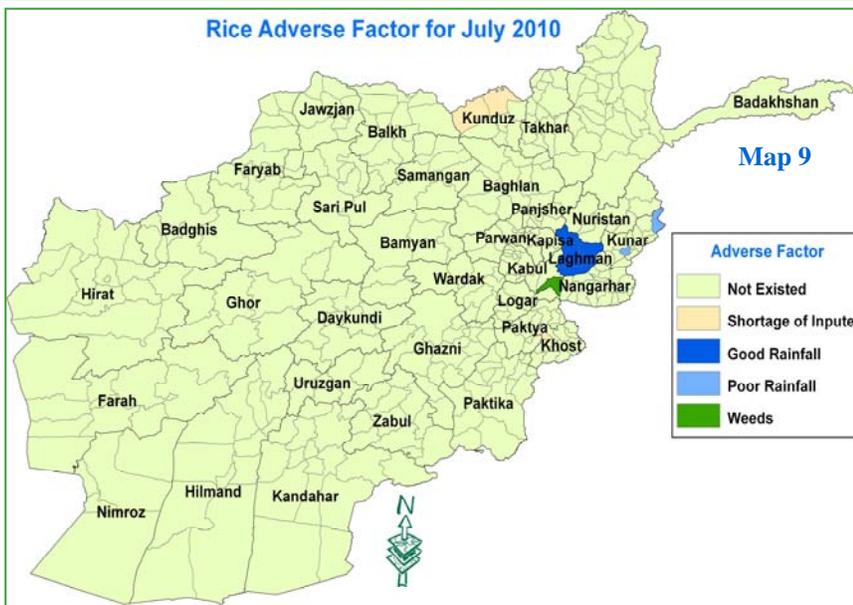
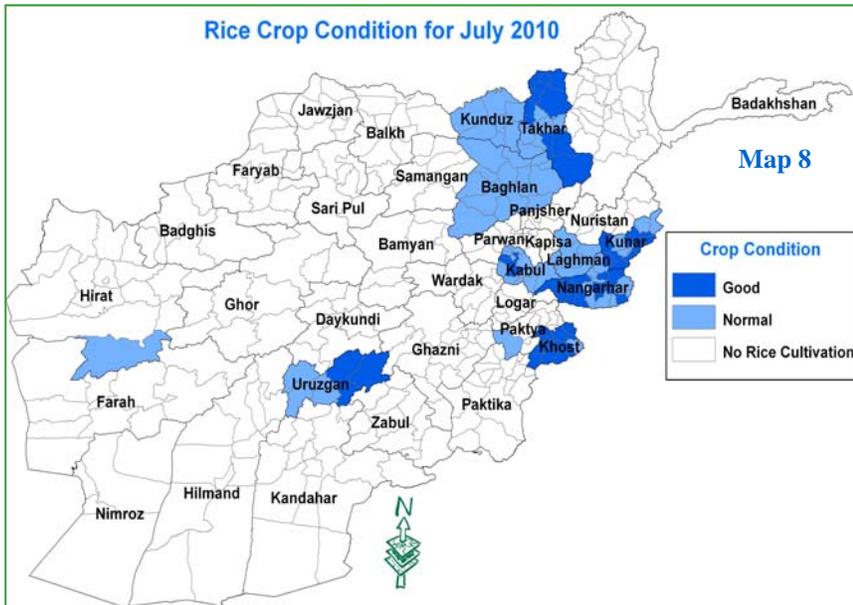
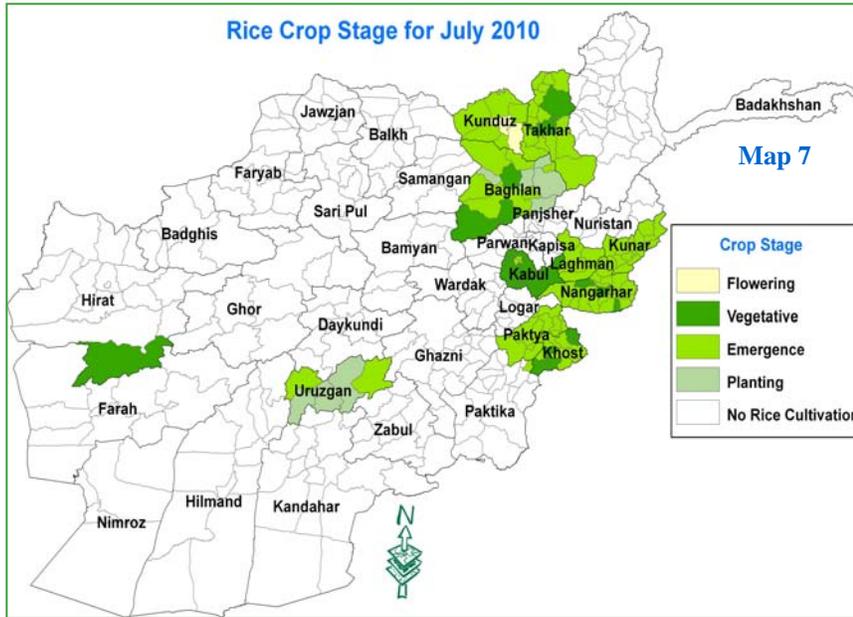
Wheat Adverse Factor for July 2010



Maize Crop Stage, Condition and Adverse Factor Maps



Rice Crop Stage, Condition and Adverse Factor Maps



Data Source: Agromet Network

Precipitation

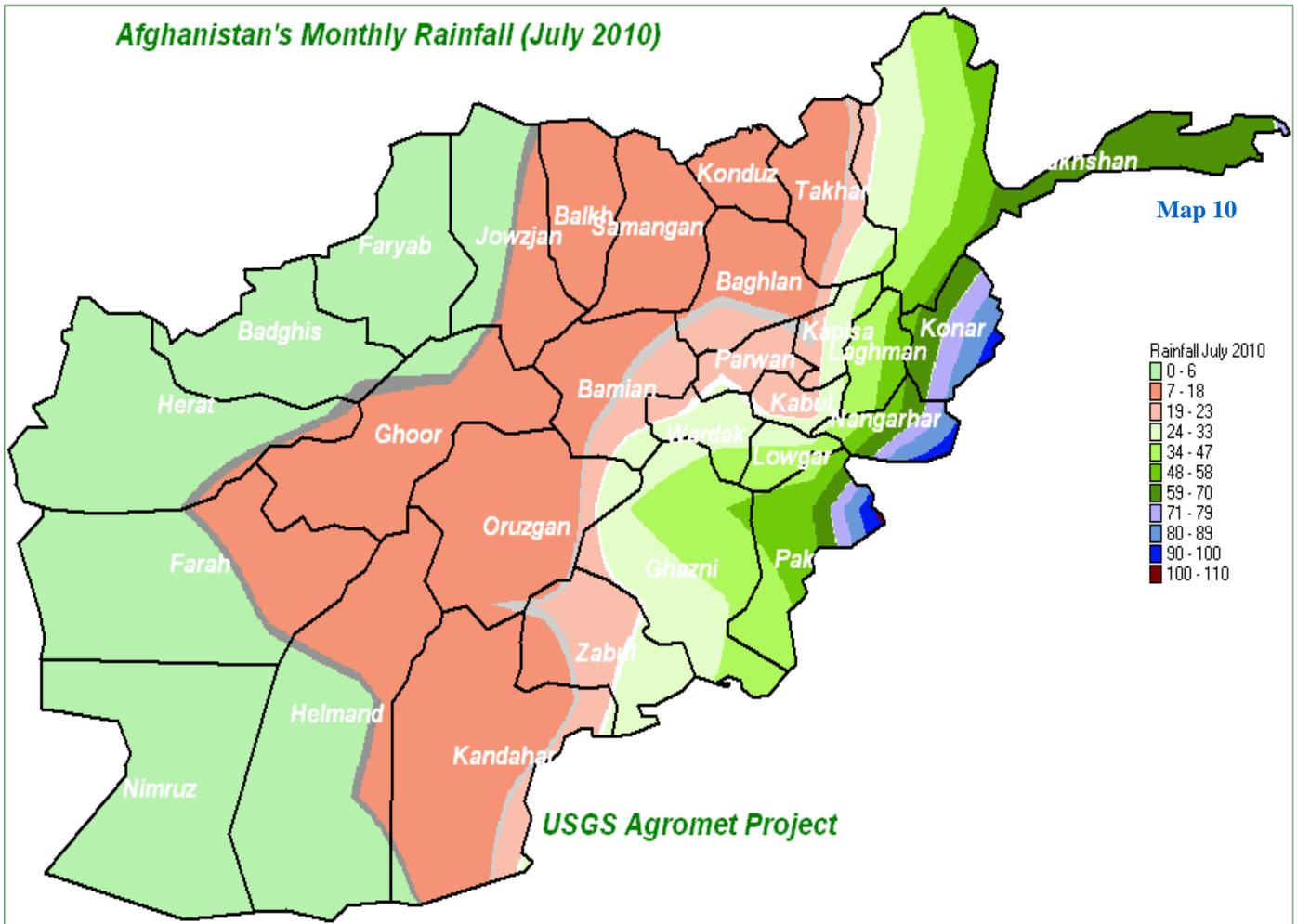
Most of Afghanistan received above-average rainfall during the month of July, 2010, when moisture from the Indian monsoon resulted in unusually heavy seasonal precipitation. The Eastern, South-eastern, Northwestern, and Capital regions received significantly more precipitation than recorded in recent years. The heavy rainfall in these regions produced flash floods that caused deaths and the loss of property, damaging agricultural lands, roads, and canals.

Comparison of rainfall data for the month of July 2010 with the same month in 2009 (Chart 1) shows significant increase of rainfall during the month of July 2010 over the same month of last year around the country.

Rainfall during the month of July 2010 in Afghanistan was significantly higher than the year before (Chart 1), and well above the long term July 2010 average (Chart 2).

Map 10 shows distribution of rainfall for the month of July 2010; most of the rainfall occurred in the eastern part of the country, with significant amounts also measured in Southeastern region.

The Northeastern region and some parts of the Capital region also received moderate rainfall, but the remaining regions received low monthly precipitation during that time.



Comparison of Actual Rainfall July 2010 with the Same Month of Last Year

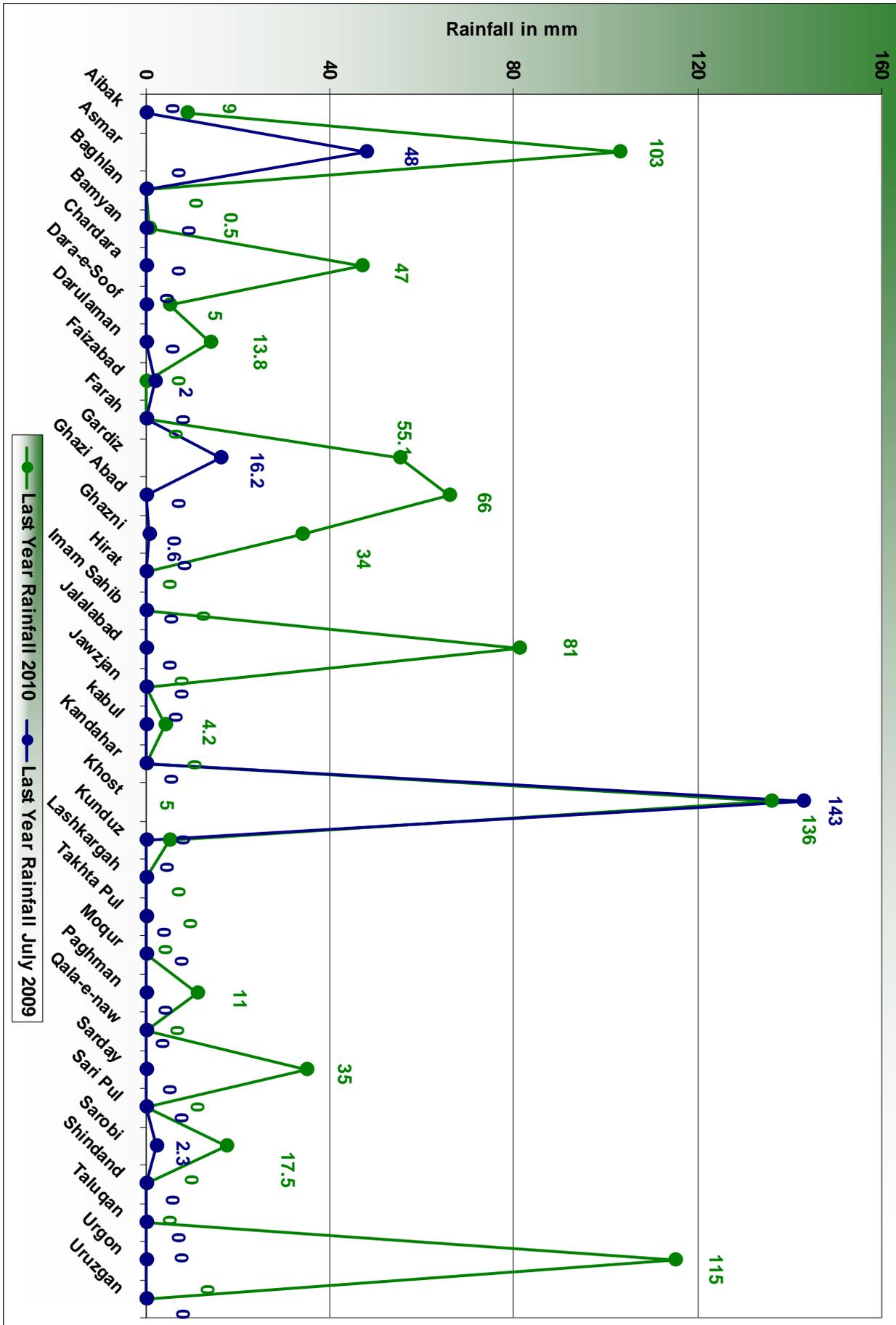
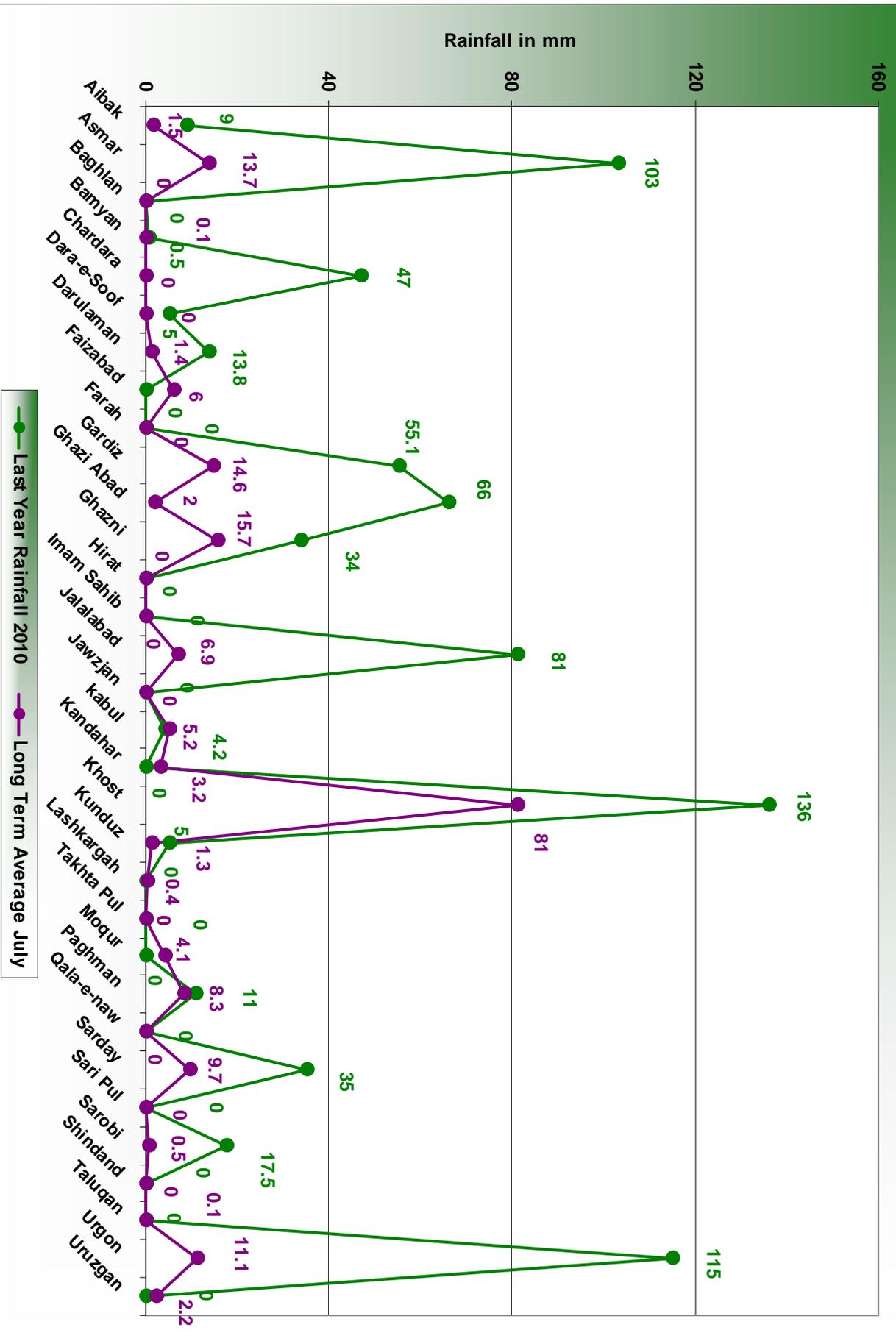


Chart 1

Comparison of Actual Rainfall July 2010 with the Same Month of Long Term Average

Chart 2

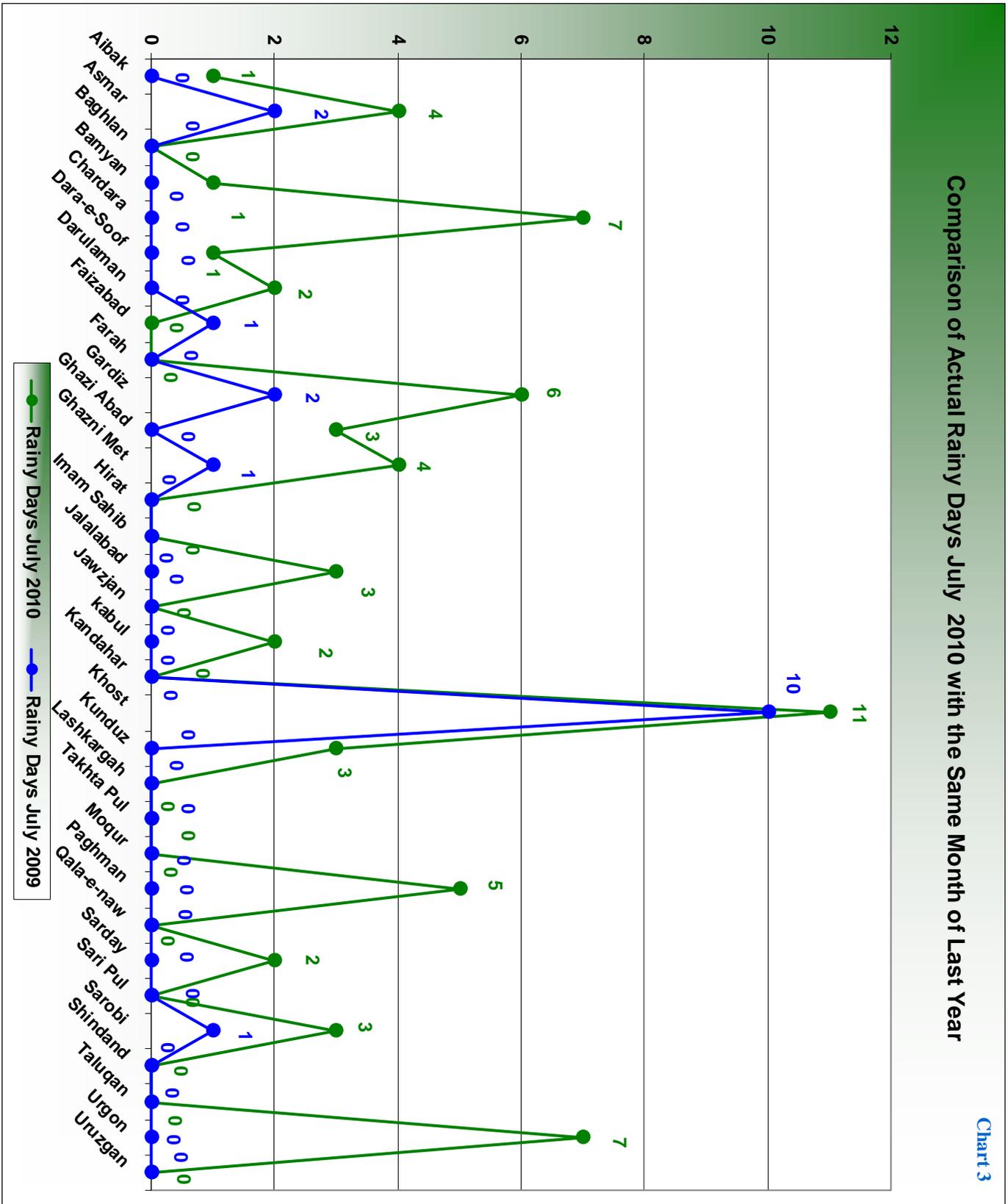


Rainfall for the Month of July 2010

Table 1

Name	Last Year Rainfall July 2009	Last Year Rainfall July 2010	Long Term Average
Aibak	0	9	1.5
Asmar	48	103	13.7
Baghlan	0	0	0
Bamyan	0	0.5	0.1
Chardara	0	47	0
Dara-e-Soof	0	5	0
Darulaman	0	13.8	1.4
Faizabad	2	0	6
Farah	0	0	0
Gardiz	16.2	55.1	14.6
Ghazi Abad	0	66	2
Ghazni	0.6	34	15.7
Hirat	0	0	0
Imam Sahib	0	0	0
Jalalabad	0	81	6.9
Jawzjan	0	0	0
kabul	0	4.2	5.2
Kandahar	0	0	3.2
Khost	143	136	81
Kunduz	0	5	1.3
Lashkargah	0	0	0.4
Takhta Pul	0	0	0
Moqur	0	0	4.1
Paghman	0	11	8.3
Qala-e-naw	0	0	0
Sarday	0	35	9.7
Sari Pul	0	0	0
Sarobi	2.3	17.5	0.5
Shindand	0	0	0
Taluqan	0	0	0.1
Urgon	0	115	11.1
Uruzgan	0	0	2.2

Rainy Days for the Month of July 2010



Comparison of Actual Rainy Days July 2010 with the Same Month of Last Year

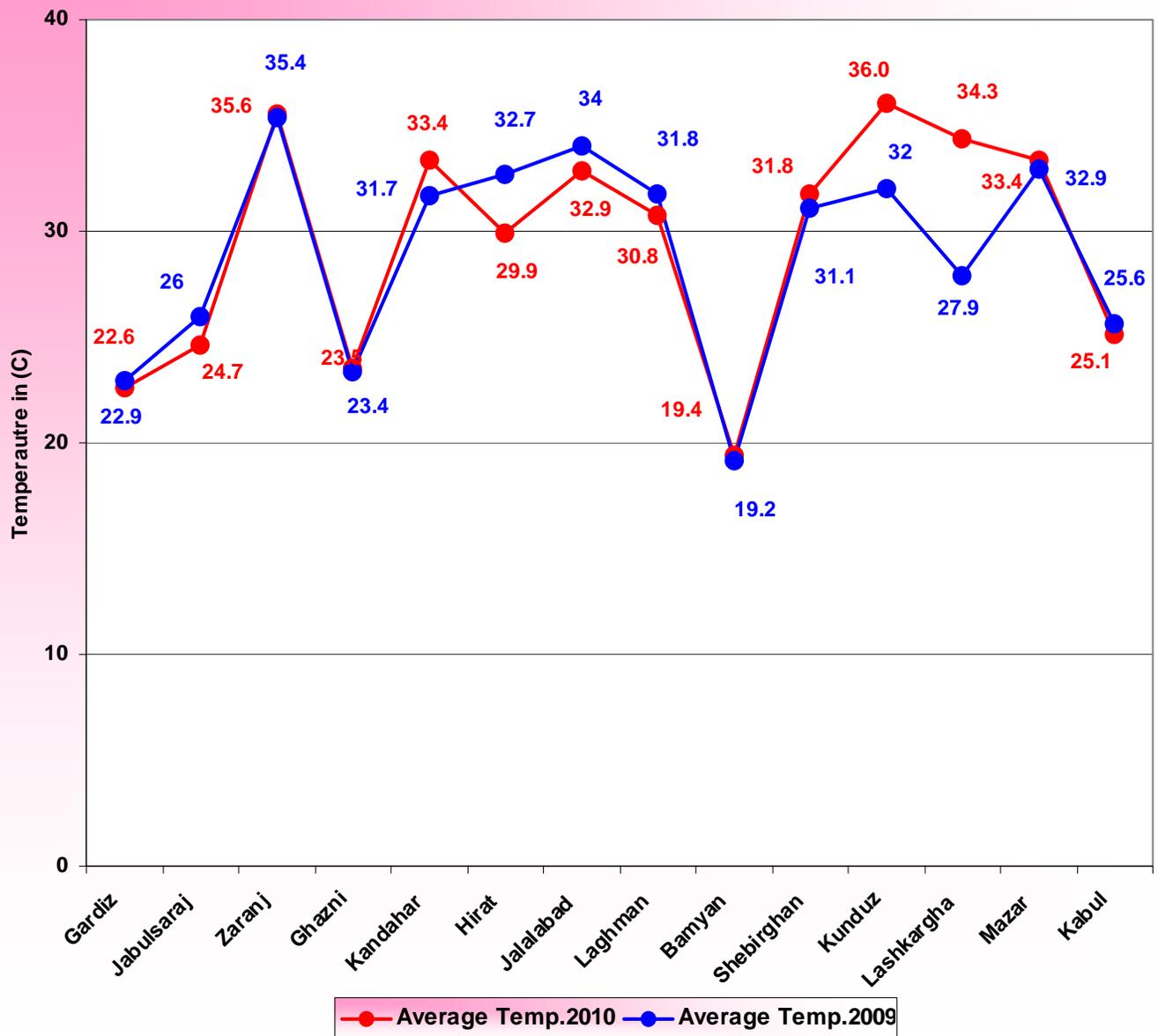
Chart 3

Chart (3) shows comparison of rainy days for the month of July 2010 with the same month in 2009. As chart (3) shows, rainy days had significant increase during the month of July 2010

compared to the same month in 2009 around the country, it was unusual in this time. Continuation of rainfall almost for the whole month accompanied with heavy rains.

Chart 4

Comparison of Average Temperature of 2010 and 2009



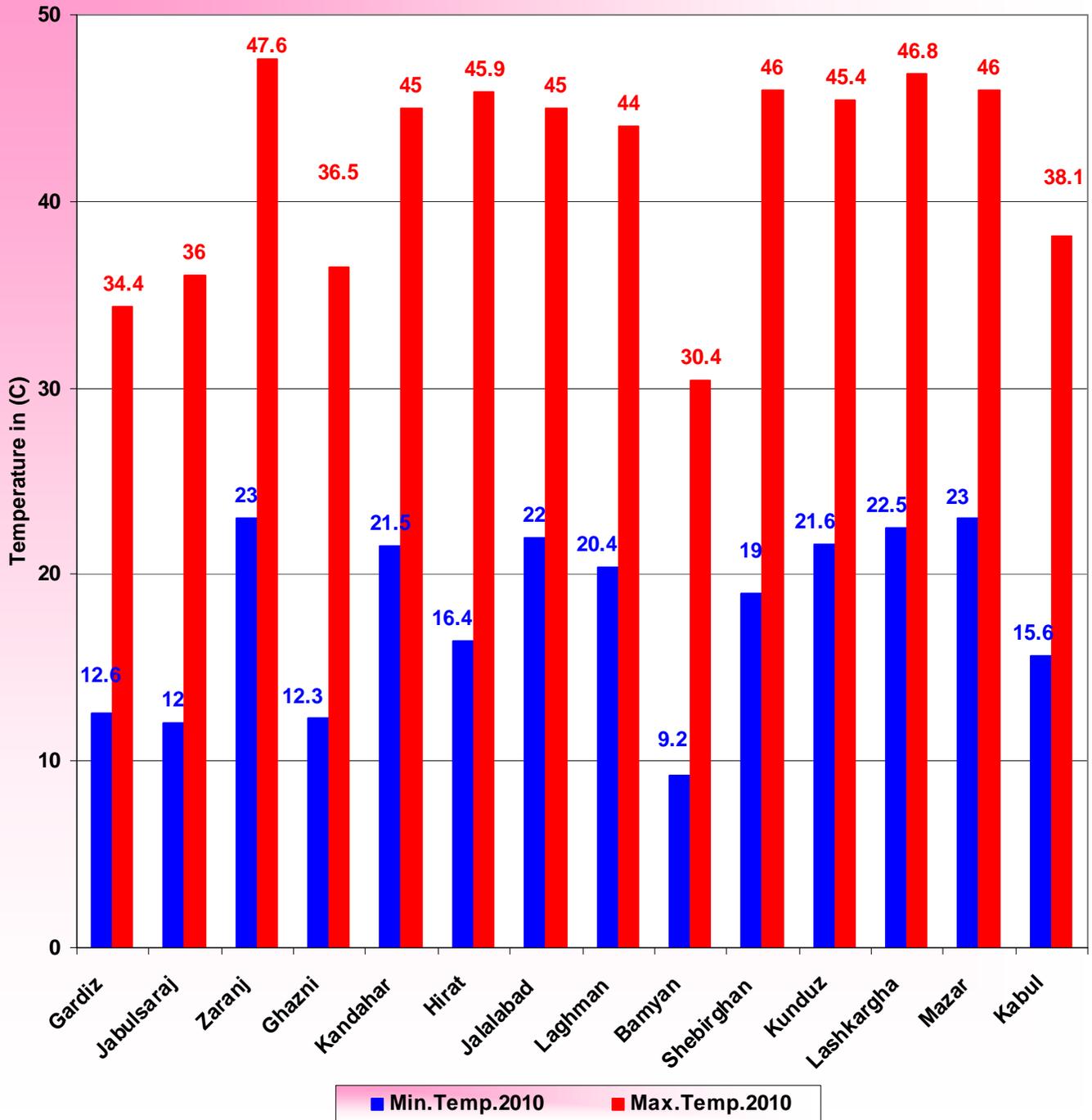
During the month of July 2010 the temperature was slightly higher than the same month of last year.

However temperature was slightly higher during June 2010 than the same month in 2009, but temperature had variable situations during July 2010. Temperature had positive departure in some parts of the country while temperature accompanied with negative departure in some areas. Although there was no significant change of temperature in most parts of the country, but in Lashkargha and Kunduz temperature was higher than other parts of the country.

Comparison of monthly average of temperature for the month of July 2010 with the same month in 2009 (chart4) shows variable situation of temperature around the country, however there is no significant change occurred in temperature, but temperature had an increase in some parts during the month of July 2010 over the same month of last year and in some parts of the country temperature was lower.

Comparison of Minimum and Maximum Temperature of July 2010

Chart 5

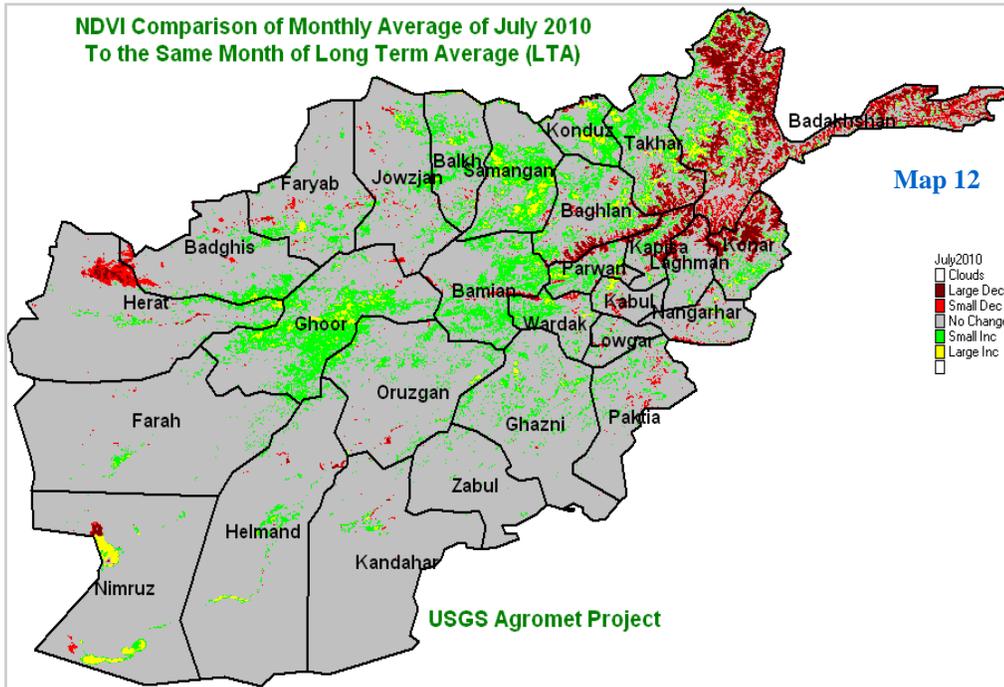
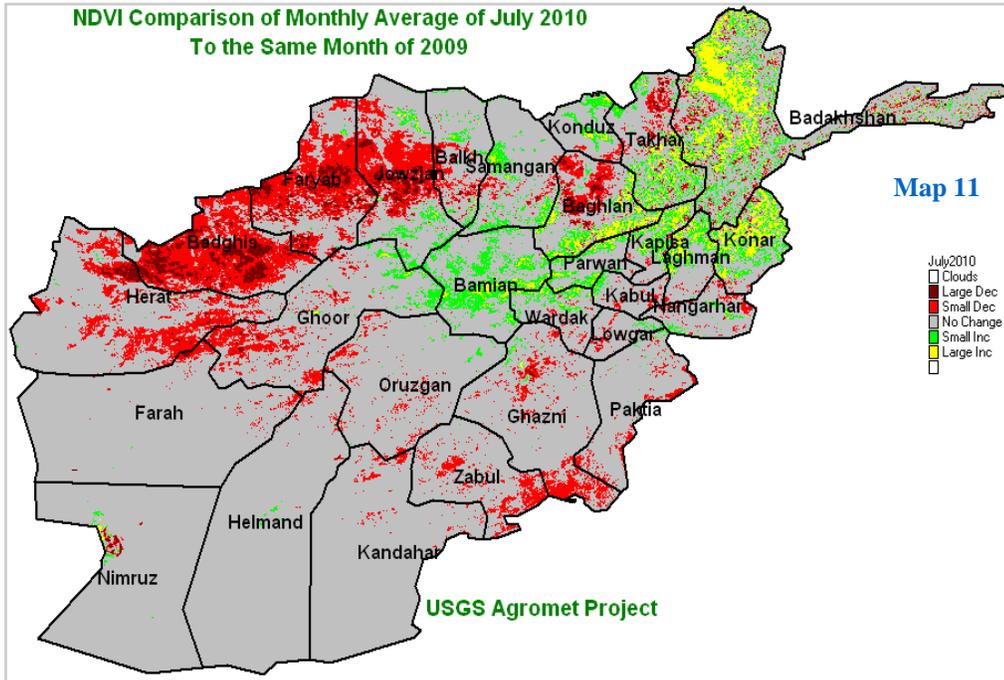


Zaranj with 47.6 C° was the warmest spot of the country during the month of July 2010.

Chart (5) shows maximum and minimum temperature for the month of July 2010 around the country. As chart (5) shows Zaranj with 47.6 ° C was the

warmest spot of the country and Bamyar with 9.2 ° C experienced the lowest temperature.

Comparison of (NDVI) July 2010



Comparison of the Normalized Difference Vegetation Index (NDVI) monthly average for July 2010 with the same month in 2009 (Map 11) shows a significant increase in NDVI in the Northeastern region and some parts in the Eastern region in 2010, while small NDVI increases occurred in the Central Highlands too.

Large NDVI decreases occurred in the Northern, Northwestern, and Western regions. No NDVI changes between 2009 and 2010 were observed in other regions.

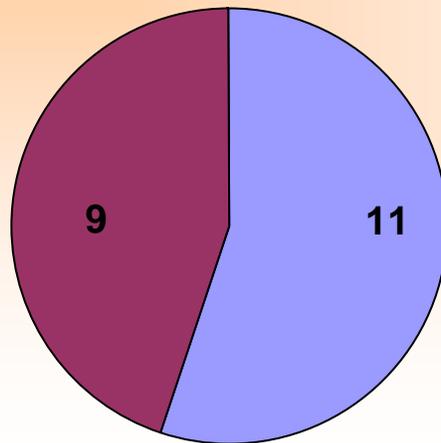
Comparison of the NDVI monthly average for the month of July 2010 with the long term July averages (Map 12) shows a small NDVI increase in the Central Highlands and some parts in the Northern region, as well as a small NDVI decrease in the Northeastern region in 2010.

No significant discrepancies were observed in other regions between the July 2010 NDVI average and the long term averages.

Flood Information

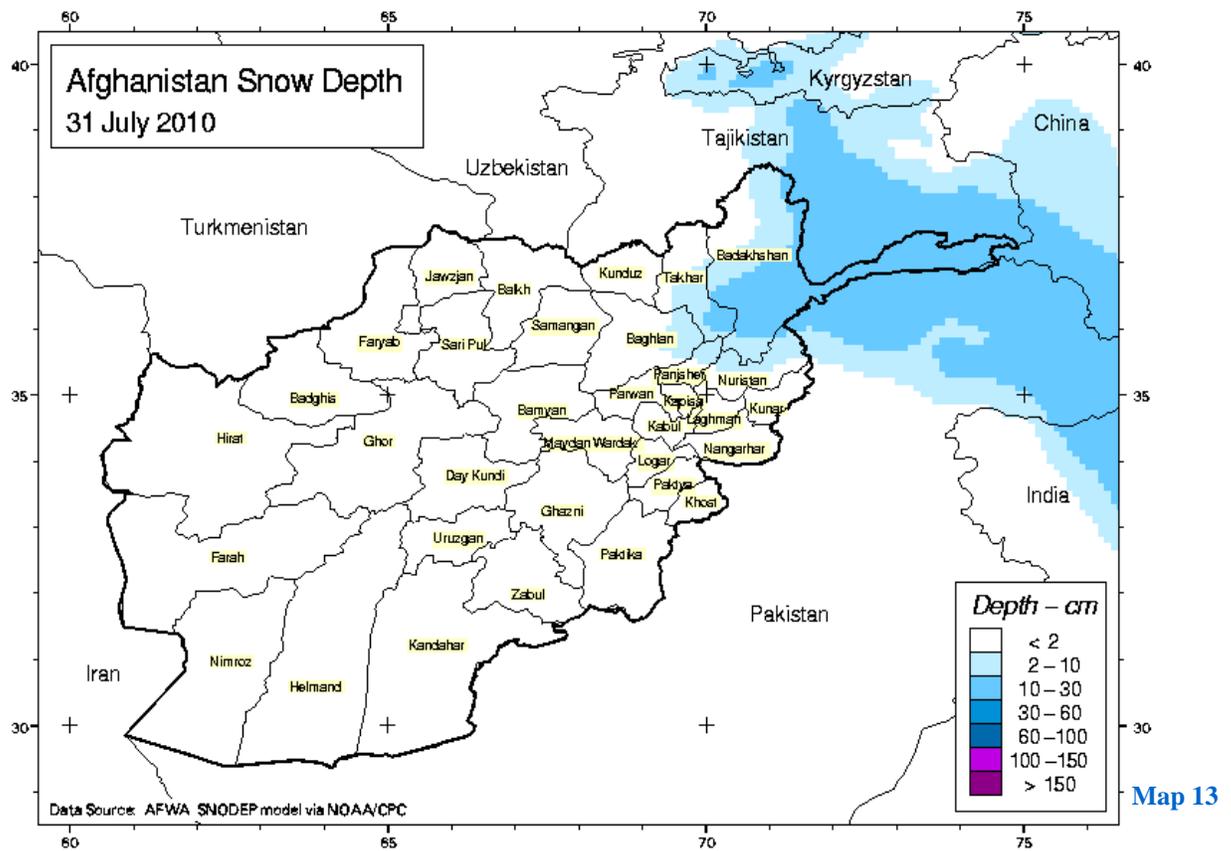
Date	Province	Damaged lands	Animal mortality
12/July/2010	Sarobi	38 Jereb	25
14/July/2010	Sarobi	35 Jereb	5
14/July/2010	Bangi Takhar	1000 Jereb	0
28/July/2010	Hesarak,Aab Dara Panjshir	40 Jereb	0
28/July/2010	Kapisa	10870 Jereb	657
26/July/2010	Ali Shing Laghman	4210 Jereb	0
20/July/2010	Dangam Kunar	15 Jereb	0
20/July/2010	Mango Kunar	17 Jereb	0
26/July/2010	Yakawolang Bamyar	7 Village	0

Comparison of Historical Number of Floods in July to the Number of Reported Floods During July 2010



■ Historical Floods in the Month of July
■ Floods During July 2010

Afghanistan Snow Depth for the of July 2010



Snow usually remains at high elevations in Northeastern Afghanistan for a long time. However, due to rising temperatures and increasing snowmelt,

Water levels have risen, creating additional water resources in the Northeastern region this year. Map (13) shows that only 10 – 30 cm of snowpack remains in northeastern regions at high elevations.

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