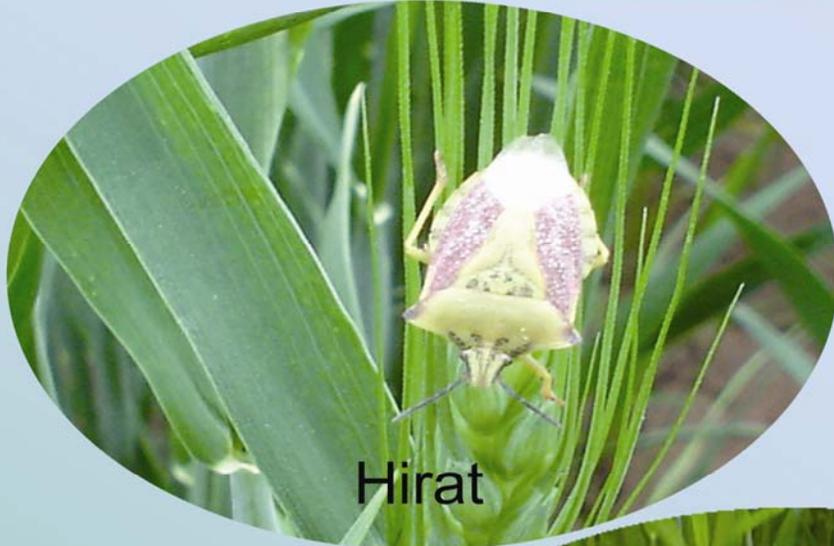


The Afghanistan Agrometeorological Monthly Bulletin



Issue No:38

April 2008



Hirat



Wardak



Paghman

The Agromet Project of USGS, supported by the US Agency for International Development (USAID), is working together with the Ministry of Agriculture and irrigation and the Afghan Meteorological Authority (AMA) of Ministry of Transport (MoT).

Agromet Network



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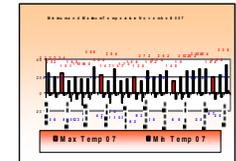
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Summary

Rainfall for the month of April 2008 had an increase in most parts of the country compared to the same month in 2007.

Zaranj with 24.4 ° C was the warmest spot and Cheghchran with - 13 ° C had lower temperature during the month of April 2008.

Region	Provinces	District	Station	Crop Stage	Crop Condition	Adverse Factor
Central	Kabul	Shakardara	Karizmir	Vegetative	Normal	Adverse Factors are not existed
		Paghman	Paghman	Vegetative	Normal	Excessive weeds
		Sarobi	Sarobi	Grain filling	Normal	No improved seed, Shortage of Agricultural inputs and Excessive weeds
	Panjsher	Dara	Dara	Vegetative	Poor (below normal)	Excessive weeds
		Dashtak	Dashtak	Vegetative	Normal	Excessive weeds
	Parwan	Syagerd	Ghorband	Vegetative	Normal	No improved seed, Shortage of Agricultural inputs Excessive weeds and sharp frost
		Charikar	Charikar	Vegetative	Good (better than normal)	Not improved seed, Shortage of Agricultural inputs, Less amount of rainfall
	Kapisa	Mahmoodraji	Mahmoodraji	Flowering	Normal	Excessive weeds, Wild oats,
	Wardak	Chak	Chak	Vegetative	Normal	Excessive weeds and Fatal frost damaged apple trees
		Jaghatoos	Jaghatoos	Vegetative	Good (better than normal)	Above normal rainfall and Fatal frost damaged apple and Apricot trees
East Central	Bamyan	Central Bamyan	Bamyan	Vegetative	Normal	Lack of rainfall, Lack of improved seed and Shortage of Agricultural inputs
		Yakawlang	Yakawlang	Vegetative	Normal	Lack of rainfall, Lack of improved seed and Shortage of Agricultural inputs
		Panjab	Panjab	Vegetative	Normal	Adverse Factors are not existed
Eastern	Nangarhar	Agam	Agam	Flowering	Normal	Adverse Factors are not existed
		Batikot	Ghaziabad	Harvesting	Normal	Less amount of rainfall, Excessive weeds
		Jalalabad	Sheshembagh	Harvesting	Normal	Less amount of rainfall, Excessive weeds
		Jalalabad	Farm Jadeed	Harvesting	Normal	Less amount of rainfall, Excessive weeds
	Konar	Asmar	Asmar	Flowering	Normal	Sharp frost
		Asadabad	Asadabad	Flowering	Normal	Sharp frost
	Laghman	Mihtarlam	Mihtarlam	Grain filling	Good (better than normal)	Sharp frost, lack of improved seeds and shortage of Agricultural inputs
Northeast	Takhar	Bangi	Bangi	Flowering	Normal	Less amount of rainfall, Locust and Potato Bark beetles
		Taloqan	Taloqan	Flowering	Normal	Less amount of rainfall
	Kunduz	Imam Sahib	Imam Sahib	Flowering	Poor (below normal)	Wheat cut worm, wheat smut and rust, oats
		Aqtipa	Aqtipa	Flowering	Poor (below normal)	Wheat cut worm, wheat smut and rust, oats
		Chardara	Chardara	Flowering	Poor (below normal)	Wheat cut worm, wheat smut and rust, oats
		Kunduz	Kunduz	Flowering	Poor (below normal)	Wheat cut worm, wheat smut and rust, oats
	Baghlan	Baghlan Jadid	Pozaishan	Flowering	Normal	Excessive weeds and Less amount of rainfall
	Badakhshan	Faizabad	Faizabad	Vegetative	Normal	Excessive weeds

Crop Stage, Crop Condition and Adverse Factor

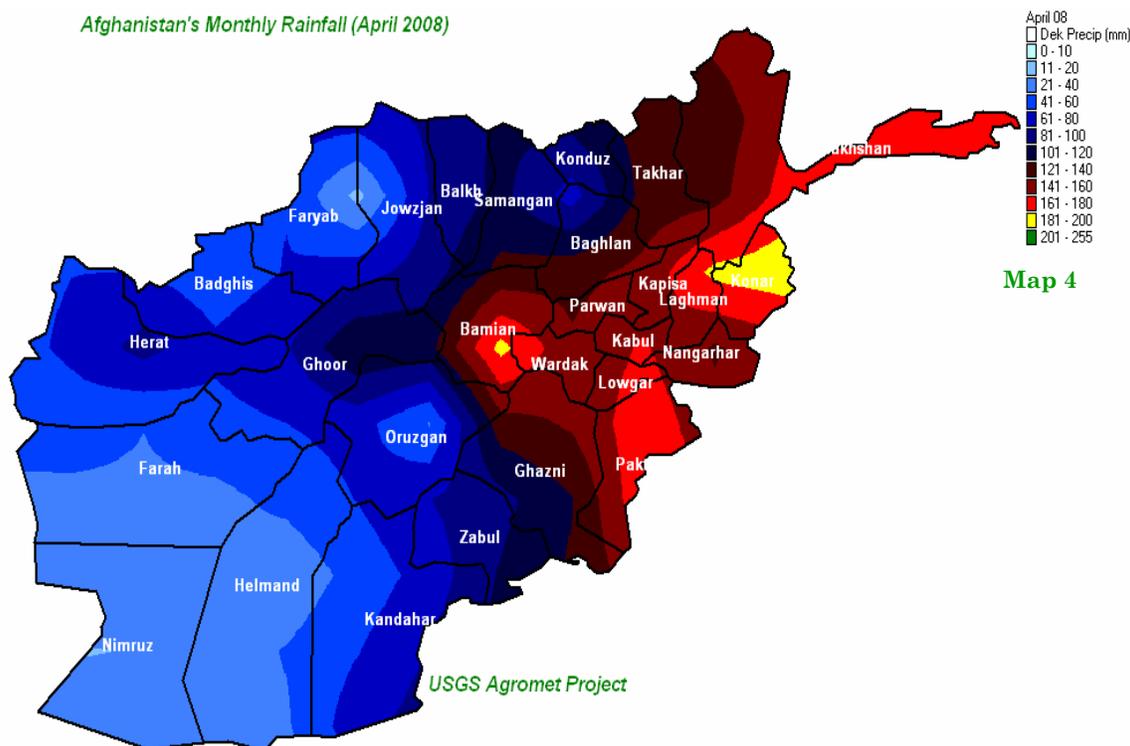
Region	Provinces	District	Station	Crop Stage	Crop Condition	Adverse Factor
South Eastern	Khost	Khost	Khost	Grain filling	Normal	Excessive weeds
		Shimal	Shimal	Grain filling	Normal	Excessive weeds
		Ali Sher	Ali Sher	Grain filling	Normal	Excessive weeds
	Paktai	Gardiz	Rohani Baba	Vegetative	Good (better than normal)	Adverse Factors are not existed
		Gardiz	Tera	Vegetative	Good (better than normal)	Adverse Factors are not existed
	Paktika	Urgon	Urgon	Vegetative	Good (better than normal)	Adverse Factors are not existed
		Sharana	Sharana	Vegetative	Normal	Adverse Factors are not existed
		Kairkot	Kairkot	Vegetative	Normal	Adverse Factors are not existed
	Ghazni	Muqur	Muqur	Vegetative	Poor (below normal)	Less amount of rainfall, drought and lack of water in spring and Gully(Kariz)
Bande Sardi		Bande Sardi	Vegetative	Normal	Less amount of rainfall	
Southern	Nimroz	Zaranj	Zaranj	Grain filling	Good (better than normal)	Less amount of rainfall
	Kandahar	Kandahar	Kandahar	Flowering	Normal	Not improved seed, Shortage of inputs, Less amount of rainfall and Sharp frost
	Zabul	Qalat	Qalat	Flowering	Poor (below normal)	Less amount of rainfall
	Urozgan	Trinkot	Trinkot	Flowering	Normal	Less amount of rainfall and heavy storm
	Hilmand	Nad Ali	Nad Ali	Grain filling	Normal	Less amount of rainfall and sunpest
		Greshk	Greshk	Grain filling	Normal	Less amount of rainfall and sunpest
		Nawa	Nawa	Grain filling	Normal	Less amount of rainfall and sunpest
		Lashkargah	Bolan	Grain filling	Normal	Less amount of rainfall and sunpest
North	Balkh	Dihdadi	Dihdadi	Flowering	Normal	Less amount of rainfall
		Nahrishahi	Nahrishahi	Flowering	Normal	Less amount of rainfall
	Jawzjan	Sheberghan	Sheberghan	Flowering	Normal	Less amount of rainfall
	Saripul	Saripul	Saripul	Flowering	Poor (below normal)	Less amount of rainfall, Locust and Excessive weeds
		Sozmaqala	Sozmaqala	Flowering	Poor (below normal)	Less amount of rainfall and Locust
	Faryab	Maimana	Maimana	Vegetative	Poor (below normal)	Less amount of rainfall
	Samangan	Aibak	Aibak	Vegetative	Poor (below normal)	Less amount of rainfall
Western	Badghis	Qalainow	Qalainow	Vegetative	Normal	Less amount of rainfall and Locust assault from Turkmenistan border
		Muqur	Muqur	Flowering	Poor (below normal)	Less amount of rainfall and Locust Problem
	Ghor	Chaghcharan	Chaghcharan	Vegetative	Normal	Less amount of rainfall and drought
	Hirat	Shindand	Shindand	Vegetative	Poor (below normal)	Less amount of rainfall, drought and Locust assault from Turkmenistan border
		Hirat	Farm Urdokhan	Vegetative	Poor (below normal)	Less amount of rainfall, drought and Locust assault from Turkmenistan border
	Farah	Farah	Farah	Grain filling	Normal	Not improved seed, Shortage of inputs, Less amount of rainfall and Sharp frost

Rainfall Situation

Rainfall for the month of April 2008 had an increase in most parts of the country compared to the same month in 2007.

Comparison of rainfall data for the month of April 2008 with the same month in 2007 (chart 1) shows increase of rainfall during the month of April 2008 over the same month of last year in most parts of the country except Faizababd, Kunduz, Sari Pul and Taluqan where the rainfall had small decrease in the month of April compared to last year. The percentage +/- of rainfall shown in Next Page ta-

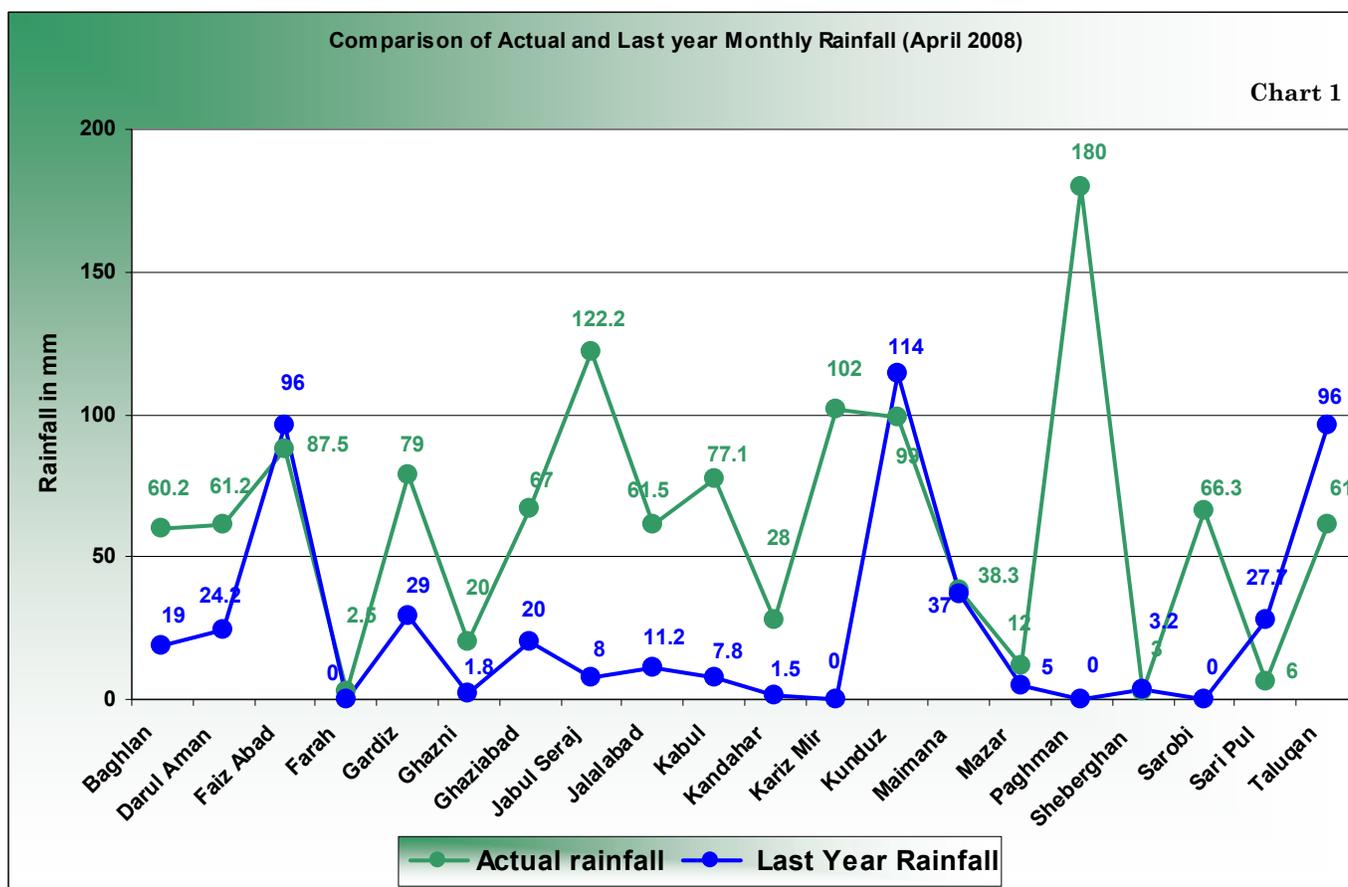
Comparison of rainfall data for the month of April 2008 with the same month of long term average (chart 2) shows there is no typical change of rainfall during the month of April 2008 compared to the same month of long term average other wise there was different situation of rainfall, some where rainfall had an increase and some where had a decrease but total amount of rainfall during the month of April 2008 had no significant change compared to the same month of long term average. The percentage +/- of rainfall shown in Next Page table:



The distribution of rainfall was variable in different region of the country for the month of April 2008. As map (4) shows the most amount of rainfall occurred in the Central Highlands, Eastern regions, some parts of the Northeastern region,

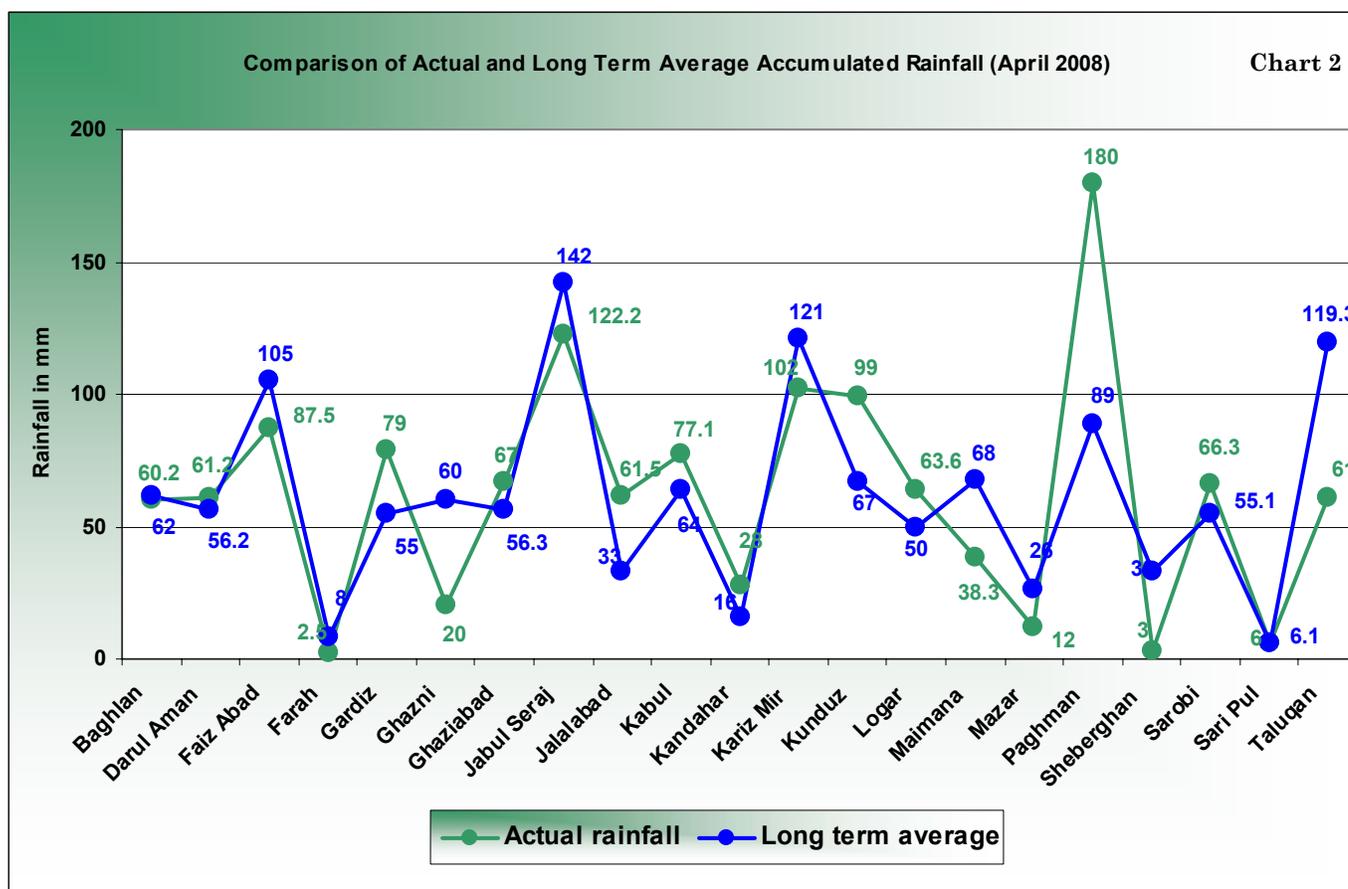
and the Southwestern region, Northwestern, Western and most parts of the Southern regions experienced less amount of rainfall during the month of April 2008.

Rainfall Graphs for the Month of April 2008



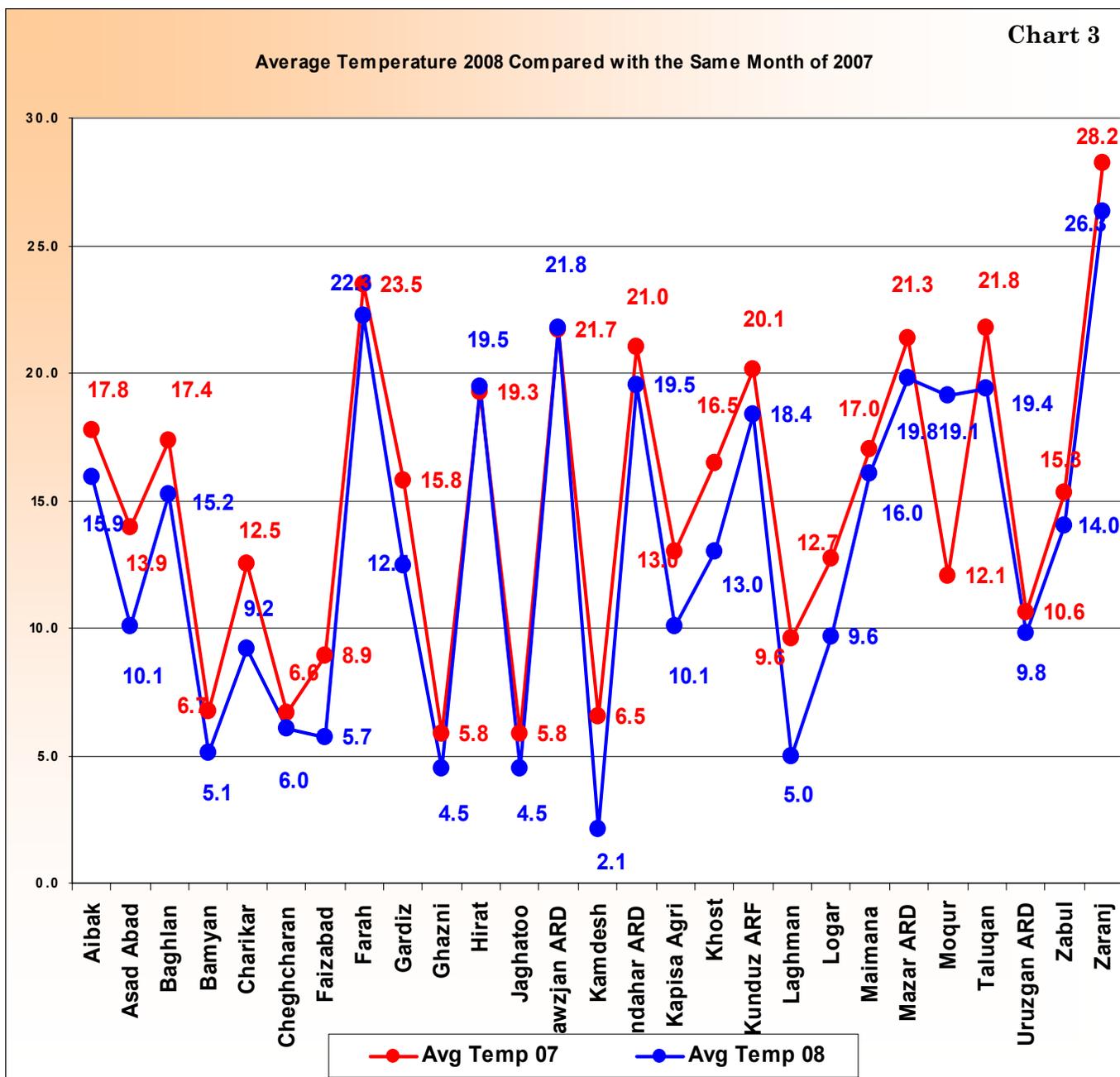
Station	Actual rainfall	Last Year Rainfall	%
Baghlan	60.2	19	217
Darul Aman	61.2	24.2	153
Faiz Abad	87.5	96	-9
Farah	2.5	0	
Gardiz	79	29	172
Ghazni	20	1.8	1011
Ghaziabad	67	20	235
Jabul Seraj	122.2	8	-100
Jalalabad	61.5	11.2	449
Kabul	77.1	7.8	888
Kandahar	28	1.5	1767
Kariz Mir	102	0	1428
Kunduz	99	114	-13
Maimana	38.3	37	4
Mazar	12	5	140
Paghman	180	0	
Sheberghan	3	3.2	-6
Sarobi	66.3	0	
Sari Pul	6	27.7	-78
Taluqan	61	96	-36

Rainfall Graphs for the Month of April 2008



Station	Actual rainfall	Long term average	%
Baghlan	60.2	62	-3
Darul Aman	61.2	56.2	9
Faiz Abad	87.5	105	-17
Farah	2.5	8	-69
Gardiz	79	55	44
Ghazni	20	60	-67
Ghaziabad	67	56.3	19
Jabul Seraj	122.2	142	-14
Jalalabad	61.5	33	86
Kabul	77.1	64	20
Kandahar	28	16	75
Kariz Mir	102	121	-16
Kunduz	99	67	48
Logar	63.6	50	27
Maimana	38.3	68	-44
Mazar	12	26	-54
Paghman	180	89	102
Sheberghan	3	33	-91
Sarobi	66.3	55.1	20
Sari Pul	6	6.1	-2
Taluqan	61	119.3	-49

Average Temperature for the Month of April 2008

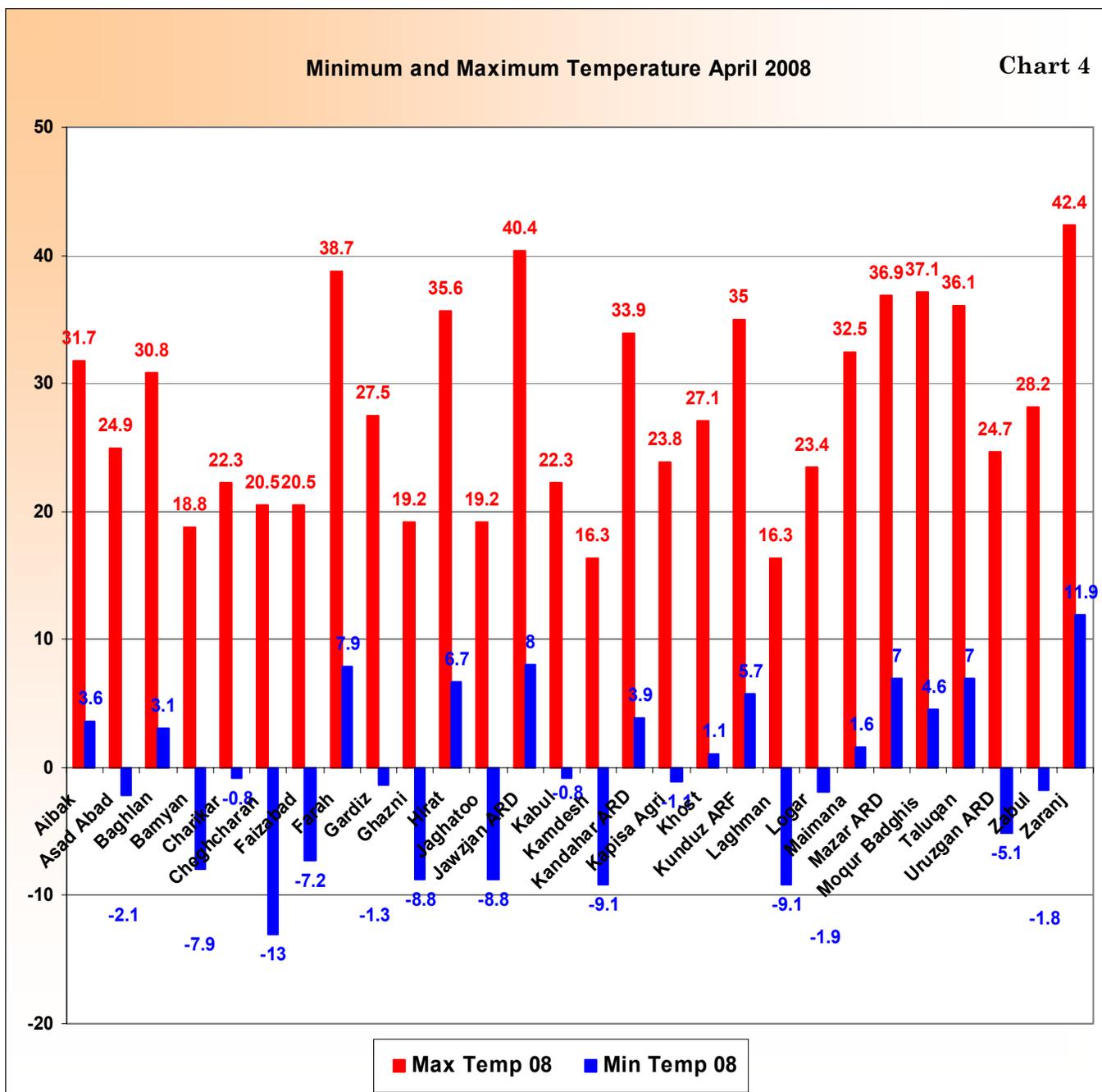


Temperature for the month of April 2008 was Lower compared to the same month in 2007.

Temperature for the month of April 2008 had a decrease compared to the same month in 2007 across the country. Comparison of temperature data (Figure 3) shows that temperature during the month of April 2008 was lower over the same month in last year. The temperature for

the month of April 2008 1 - 2 ° C was lower compared to last year around the country. The lower temperature during the month of April had negative effects to plants which were at sensitive phenological stage.

Temperature for the Month of April 2008

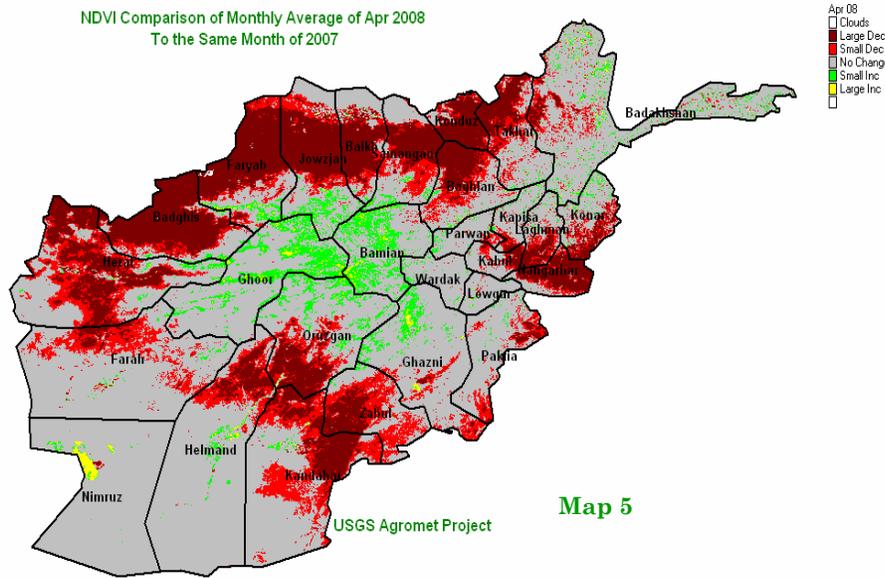


Zaranj with 24.4 C was the warmest Spot in the Country.

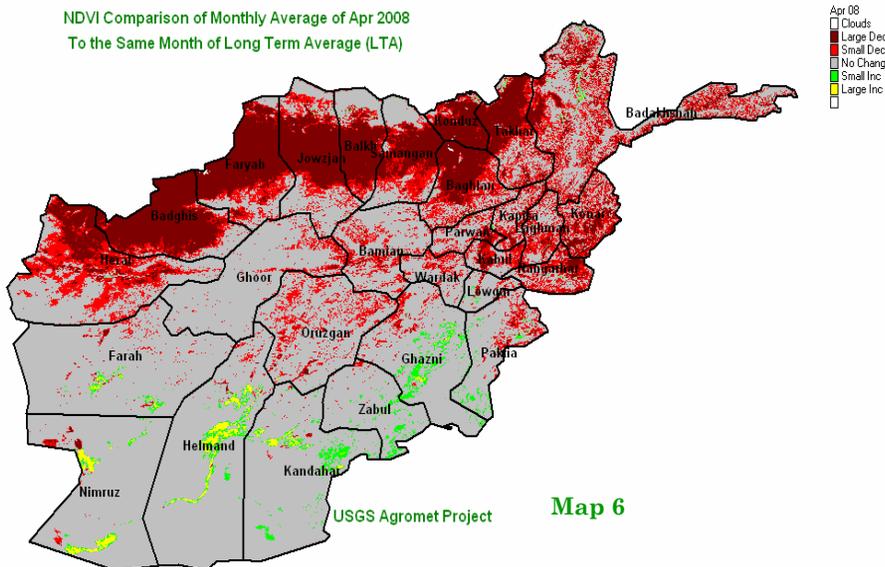
Chart (4) shows maximum and minimum temperature around the country, as chart (4) shows minimum temperature was at freezing point in most parts of the country,

Zaranj with 24.4 ° C was the warmest spot and Cheghchran with – 13 ° C had lower temperature during the month of April 2008.

Comparison of NDVI April 2008



Vegetation Index: Comparison to Last Year



Vegetation Index: Comparison to Long Term Average

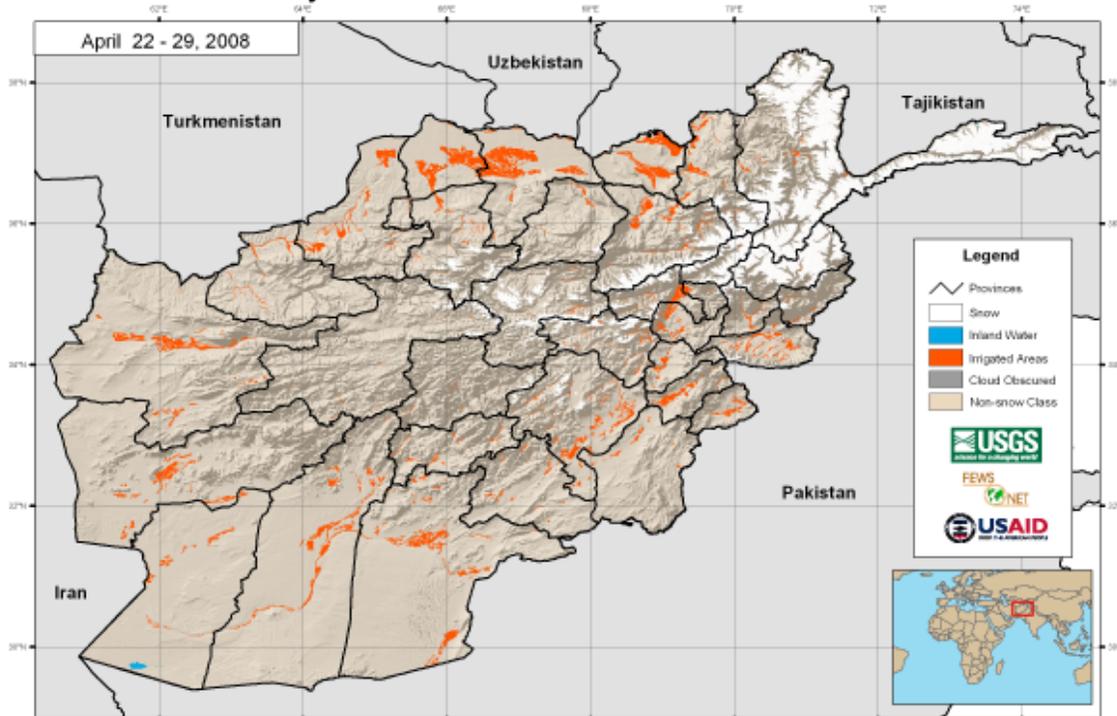
NDVI: April 2008

Comparison of monthly average of NDVI for the month of April 2008 with the same month in 2007 (map 5) shows large decrease of NDVI in the Northwestern region, Western, Northern flat areas, some parts of the Northeastern region and some parts of the Southern region during the month of April 2008 compared to the same month in 2007 and small increase occurred in NDVI value in the Central Highlands too. There is no change of NDVI in the Southwestern region during the month of April 2008 over the same month in 2007. Comparison of

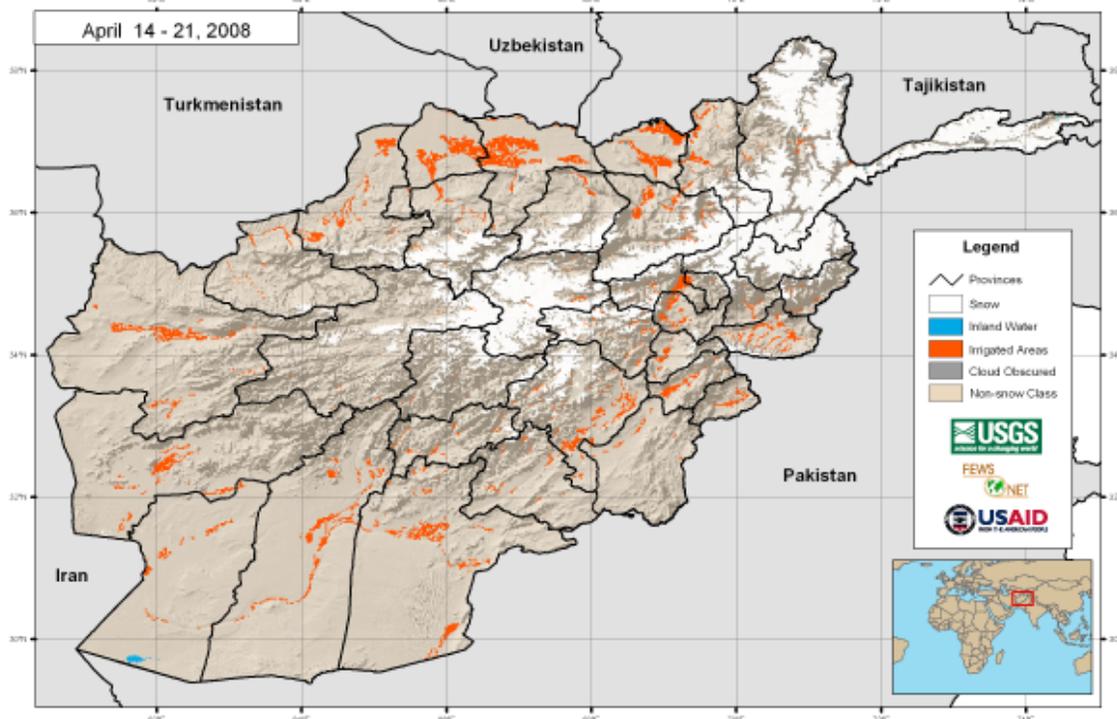
Monthly average of NDVI for the month of April 2008 with the same month of long term average (map 6) shows large decrease of NDVI in the most parts of the Western regions, Northern region, Northwestern and limited areas in the Capital regions during the month of April 2008 compared to the same month of long term average. There is no change in NDVI value in the remaining regions of the country for the month of April 2008 over the same month of long term average.

Comparison of Snow Extent

MODIS 8-day Snow Cover Extent - Current vs. Previous



Map 7



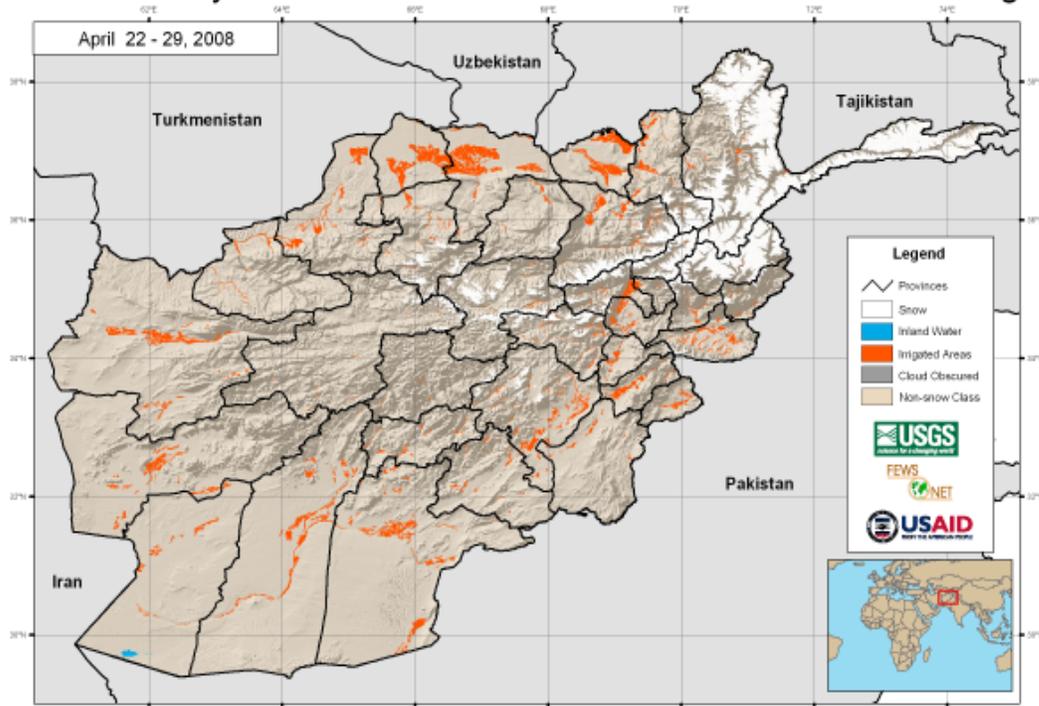
Map 8

Comparison of snow extent for the period (22 – 29) April 2008 with the same period in 2007 (maps 7 , 8) shows significant decrease of snow extent in the snow coverage areas particularly in the Central Highlands regions, Capital and Hindokosh

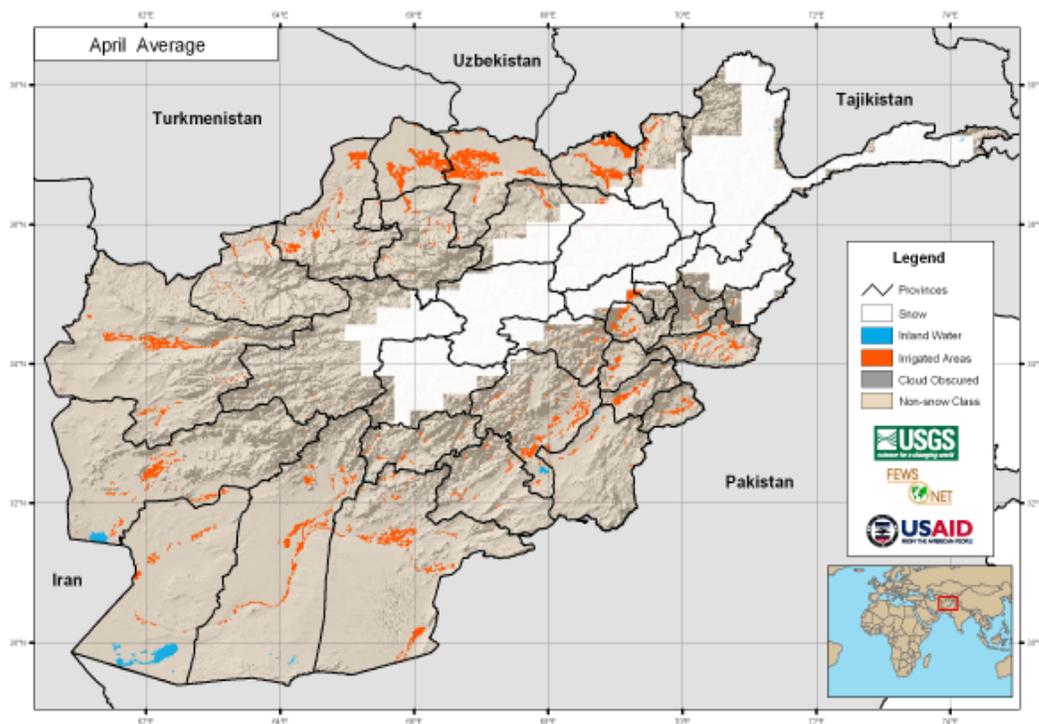
Mountainous areas the snow extent had significant decrease during the month of April 2008 compared to the same month in 2007. Decreasing in snow extent will strongly stress water resources in most parts of the country.

Comparison of Snow Extent

MODIS 8-day Snow Cover Extent - Current vs. Historical Average



Map 9

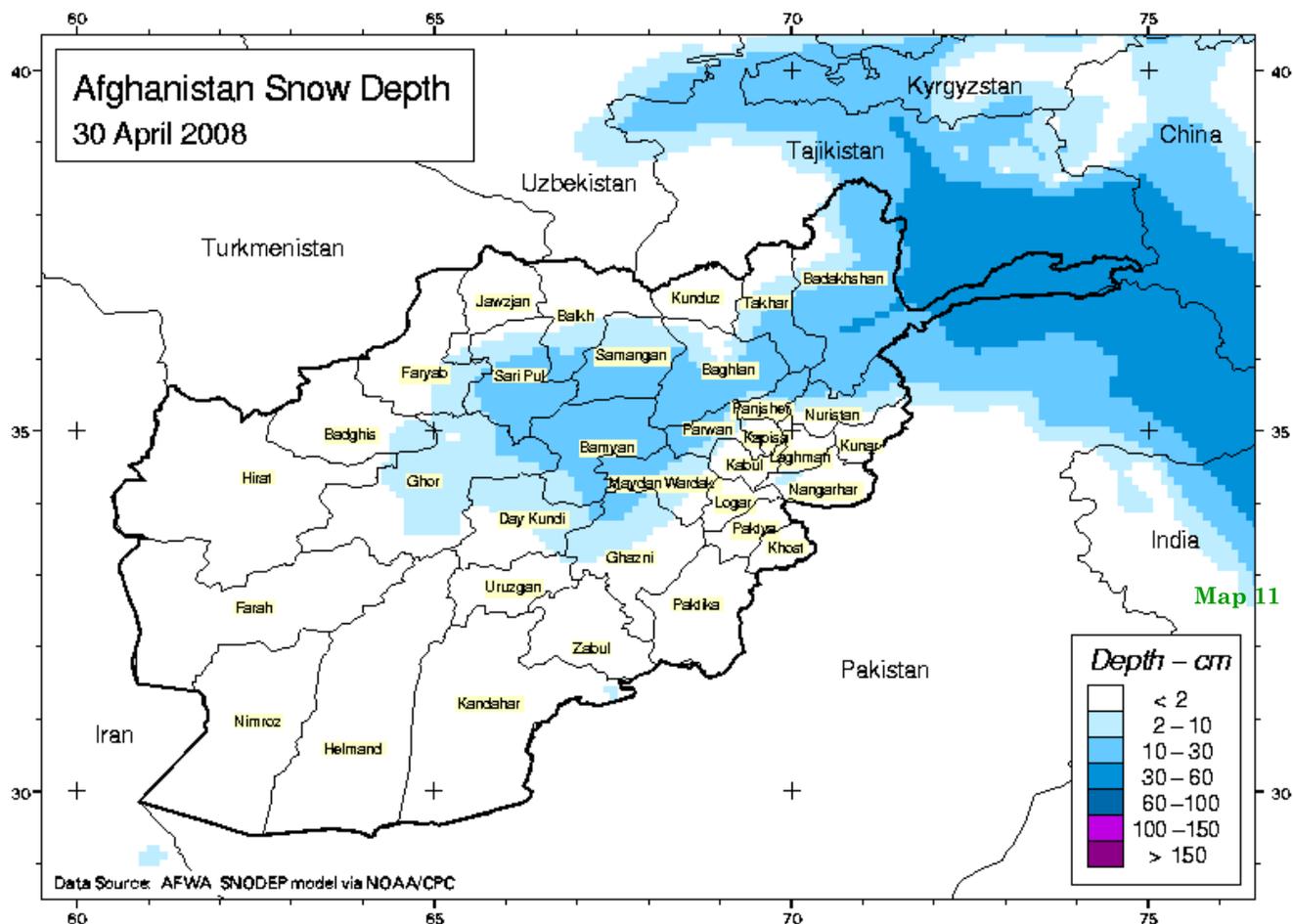


Map 10

Comparison of snow extent for the month of April 2008 with the same month of long term average (maps 9 , 10) shows significant decrease of snow extent in the snow coverage areas particularly the Central Highlands, Capital regions and Hindokosh mountainous areas

experienced less snow fall from February up to April and below normal snow fall resulted below normal snow extent in above mentioned regions.

Afghanistan Snow Depth for the month of April 2008



Map (11) shows snow depth in different regions of the country in the end of April 2008. As map shows the snow depth 30 – 60 cm for some parts of the Northeastern region

and 10 to 30 cm has been recorded for Central Highlands and neighboring areas.

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