Monthly Agromet Bulletin
National Agromet Centre
Pakistan Meteorological Department Islamabad

Vol: 5-2013 **May 2013**

Highlights…

• Light to moderate rainfall with isolated heavy spells was reported from the agricultural plains of the country during the month. Hails with wind storm/ duststorms were also reported in areas of Punjab and KP. These heavy rains/ hail damaged/affected crops, livestock and infrastructure in some areas of KP and Punjab.
• Slightly warmer temperature trend was observed in most of the agricultural plains of the country.
• ETo remained normal to below normal and R.H exhibits mixed trend in most of the agricultural plains of the country.
• Agricultural-Soils e observed normal to cooler than normal in most of the agricultural plains except Tandojam , where it observed as slightly warmer than normal.
• Spraying/manual weedicides operations on standing crops and orchards, harvesting/threshing of wheat in central and upper parts of the country, and irrigation as per requirement were the major field activities during the month.

Contents

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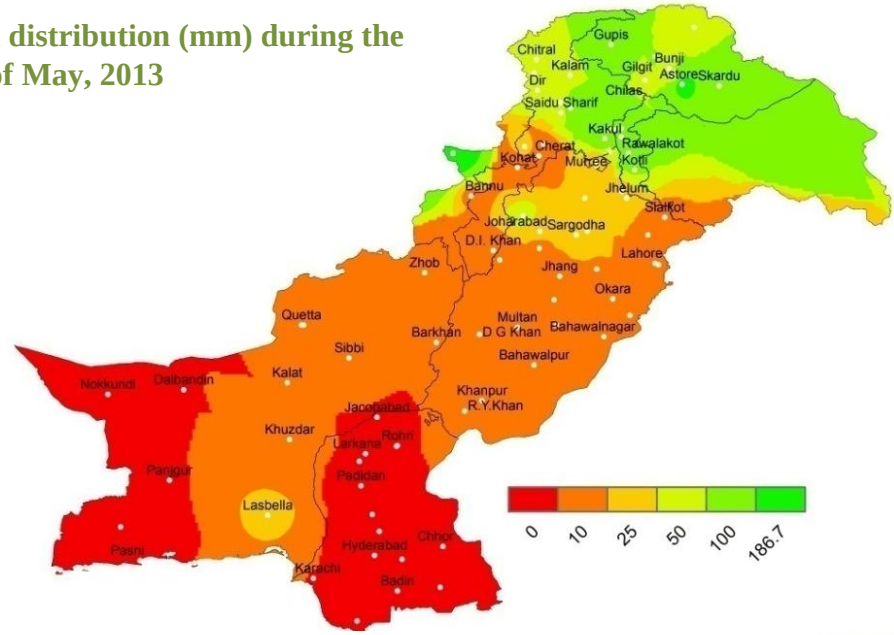
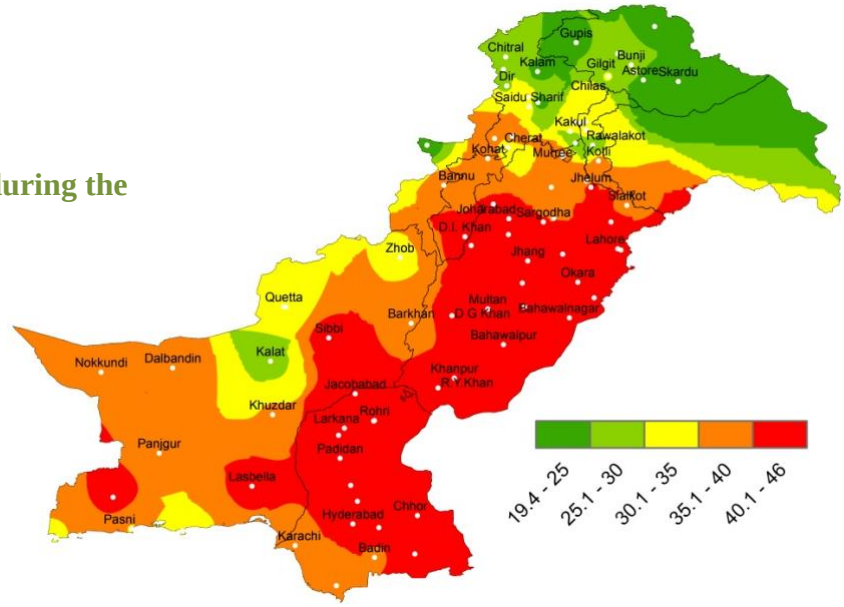
EXPLANATORY NOTE

1. This Agrometeorological bulletin is prepared on the basis of data from 15 stations of Pakistan Meteorological Department (PMD). These stations, selected in consultation with the agricultural authorities, represent major agricultural areas of the country. There are still important agricultural areas which are not represented by the stations included in the bulletin. This may be (a) because there are no PMD stations in these areas and /or (b) the fact that we had to limit the number of stations due to the requirement of speedy data communication and processing (both of which are important for producing and dispatching timely agrometeorological bulletins).
2. Due to the above, all inferences and conclusions hold true primarily for the above areas and not for Pakistan territory which include areas that may not be very important from the agricultural point of view and the climate of which may not bear directly on agriculture in the major producing areas.
3. The precipitation probability graphs at the end of the bulletin are computed using the long term records of these stations. The precipitations of the current season are plotted in this probability back ground. The use and interpretation of these graphs is clarified by an example. If the precipitation of a month in a station talley to an 80% probability, this means that 80% of the years (or on average 8 out of 10 years or 4 out of 5 years) the precipitation is equal to or less than the amount which was received during this month. One can also conclude that in 20% (100% - 80%=20%) of the years (or on the average 2 out of 10 years or one out of 5 years) the precipitations during this month exceeds the present level.
4. The evapotranspiration graphs at the end of the bulletin are based on computations using long term records of these stations. The evapotranspiration of the current season are plotted against this background. The reference crop evapotranspiration (ETo) is indicative of the evaporative demand of the prevailing atmospheric condition. It shows the rate of evapotranspiration from an extended surface of 8-15cm tall green grass cover of uniform height, actively growing. Evapotranspiration is, very roughly, 70% to 80% of ETo. However, it ranges from below 10% for a crop just emerging from the soil to over 100% for well watered densely planted tall crops under windy condition.
5. The normally expected weather of next month is prepared on the basis of premise of normal or near normal weather prevailing during the coming month. As such it should not be confused with synoptic weather of the next month.
6. In the tables, the values in the parentheses are based on 1961 to 1990 normal. Normal values (in parenthesis) of Soil Temperatures are based upon 10 years data. Doted line (---) means missing data. Solar radiation intensities are computed from sunshine duration using co-efficients developed by Dr. Qamar-uz-Zaman Chaudhry of Pakistan Meteorological Department.

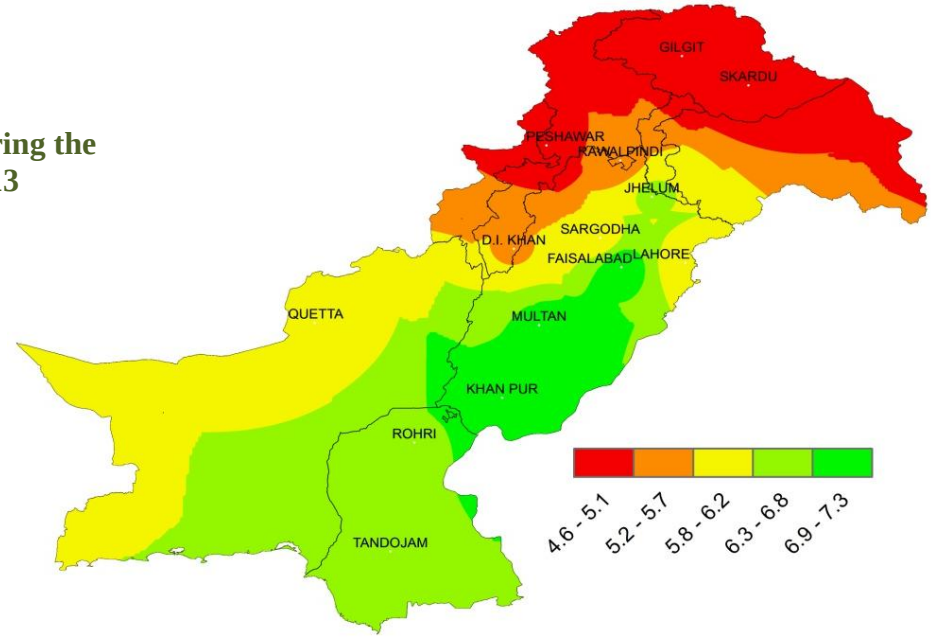
Rainfall distribution (mm) during the month of May, 2013



Maximum Temperature (°C) during the month of May, 2013



ETo (mm/day) during the month of May, 2013



CROP REPORT DURING MAY, 2013

Harvesting/threshing of wheat and other Rabi crops and sowing of kharif crops especially cotton and maize were the major field activities during the month. Operations of weeds removing and chemical spraying against pest attacks on fruit orchards and irrigation practices as per requirement were also in progress during the month. Pace of growth and development of standing crops both in irrigated and rainfed areas remained satisfactory due to favorable weather conditions.

In **Punjab:** Harvesting and threshing of wheat crop was in full swing and good yield is expected this year both in rainfed and irrigated planes. Harvesting and threshing of oilseed, Gram and Lentil is also in progress and better yield is expected due to favorable weather conditions during the season. Growth of seasonal vegetables is reported satisfactory and picking of early grown verities is in progress. Growth of fruit orchards including mango is reported satisfactory. Mango orchards are reported mostly at fruit formation stage.

In **Sindh:** Threshing/picking of wheat and other Rabi crops like castor oil, linseed and safflower has been completed and good yield is expected. The sunflower is reported at maturity stage and its growth is satisfactory. Sowing of cotton crop has been completed in most of the growing area and the crop was observed at germination/third true leaf stage. Growth of summer vegetable is reported satisfactory and their picking is in full swing. Mangoes are growing at full fruit formation stage. Early matured mangos are available in market.

In **Khyber Pakhtunkhwa:** Overall growth and development of wheat crop in the province is reported satisfactory. Harvesting/threshing of the crop is reported in progress during the month in most areas of province. Above normal yield is expected in the irrigated areas of the province. However due to wind storm in the plain areas human casualties along with crops and livestock damages are reported. Growth of summer vegetable has been reported satisfactory. Harvesting/marketing of winter vegetables is also in progress in upper hilly areas of the province. Growth of fruit orchards is also reported satisfactory and are at flowering stage. Chemical spraying on orchards against insects and fungus attacks was in progress.

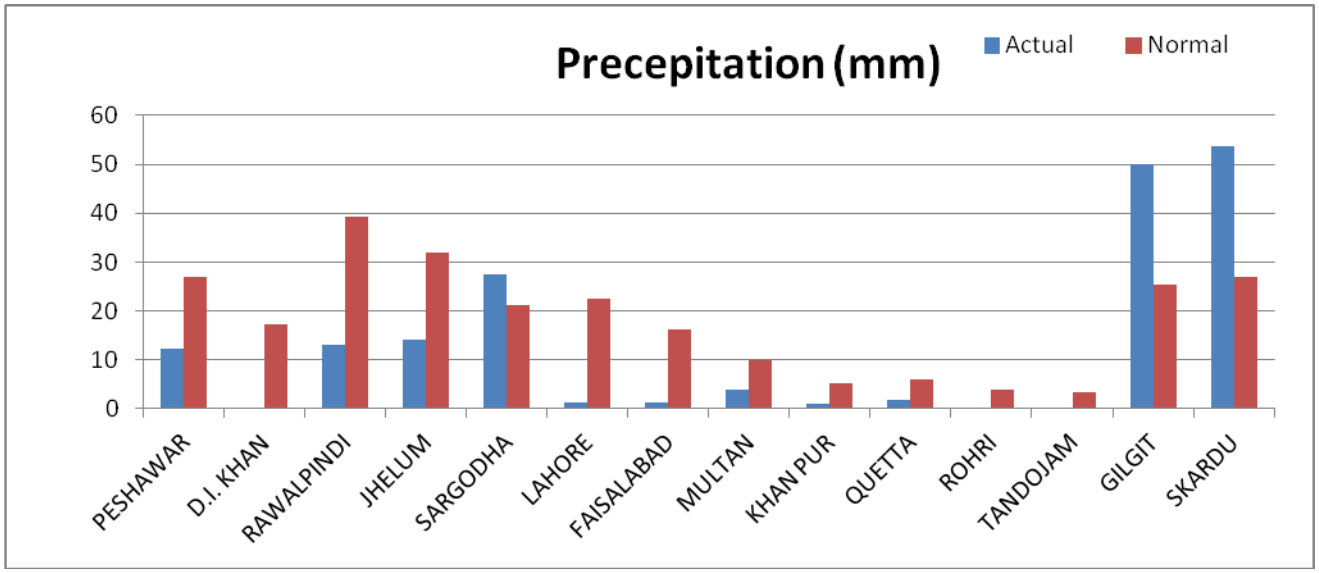
In **Balochistan:** Condition of standing crops like wheat, maize and canola has been reported satisfactory. Wheat crop is at maturity/full maturity and its growth is reported satisfactory. Growth of fruit orchards and that of seasonal vegetables is satisfactory and picking/harvesting is in progress.

In **Gilgit Baltistan**: The growth of wheat crop is in progress and is reported satisfactory. The crop is at stem extension/shooting stage in most of the regions. The growth of seasonal orchards and vegetables is also reported satisfactory.

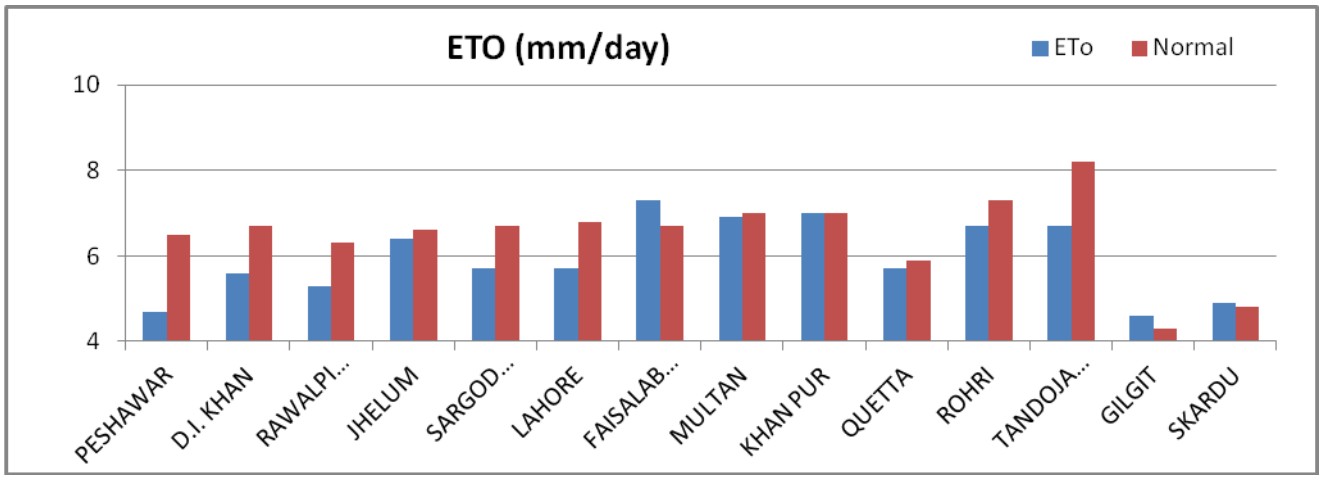
Moisture Regime during May, 2013

May is considered as one of hot/warm and dry month of Pakistan. During this May, mostly below normal rains were reported from the agricultural plains of the country except Sargodha and GB where rainfall was reported above normal. Due t this below normal rainfall in these areas, moisture content in root zone has decreased much which may put negative effect on standing and coming Kharif crops. Farmers are also facing problems in sowing Kharif crops in areas where there is shortage of irrigated water.

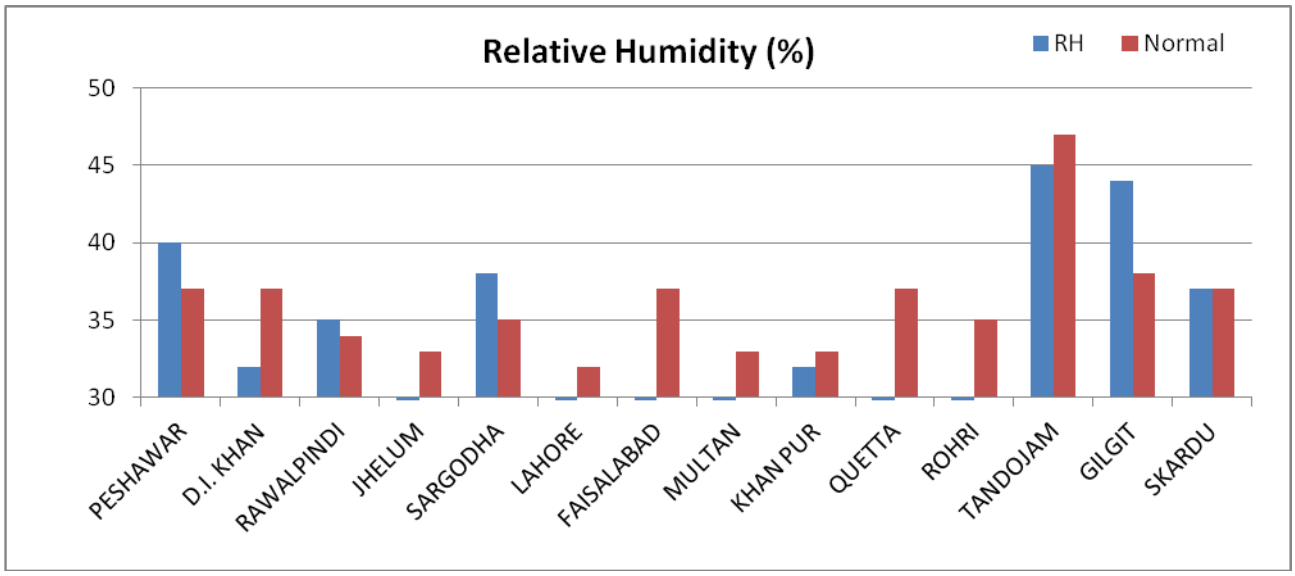
The highest amount of rainfall reported in the month was 187mm in Parachinar, followed by134mm in Astore, 92mm in Malam Jaba and Kakul each and 82 mm in Gupis.



The evaporative demand of the atmosphere represented by reference crop evapotranspiration (ETo) remained mostly normal to below normal in the agricultural plain except Faisalabad in Punjab and Skardu in Gilgit Baltistan where it was observed above normal. This below normal trend of ETo is mainly due to comparatively more number of cloudy days than previous season. Highest value of reference crop evapotranspiration was estimated in Faisalabad which is due to the dry and hot weather reported during the month.



The mean daily Relative Humidity (R.H) showed mixed trend in the country. It remained above normal in the upper plains of Khyber Pakhtunkhwa, Gilgit Baltistan region, Potohar region and Sargodha division in Punjab while it was reported below normal in lower parts of Khyber Pakhtunkhwa, most of central and southern agricultural plains of Punjab, high elevated regions of Balochistan represented by Quetta and upper parts of Sindh represented by Rohri. Maximum value of mean Relative Humidity was observed 45% at Tandojam followed by 44% at Gilgit and 40% at Peshawar division. Number of days with mean R.H greater or equal to 80% was observed nil during the month.

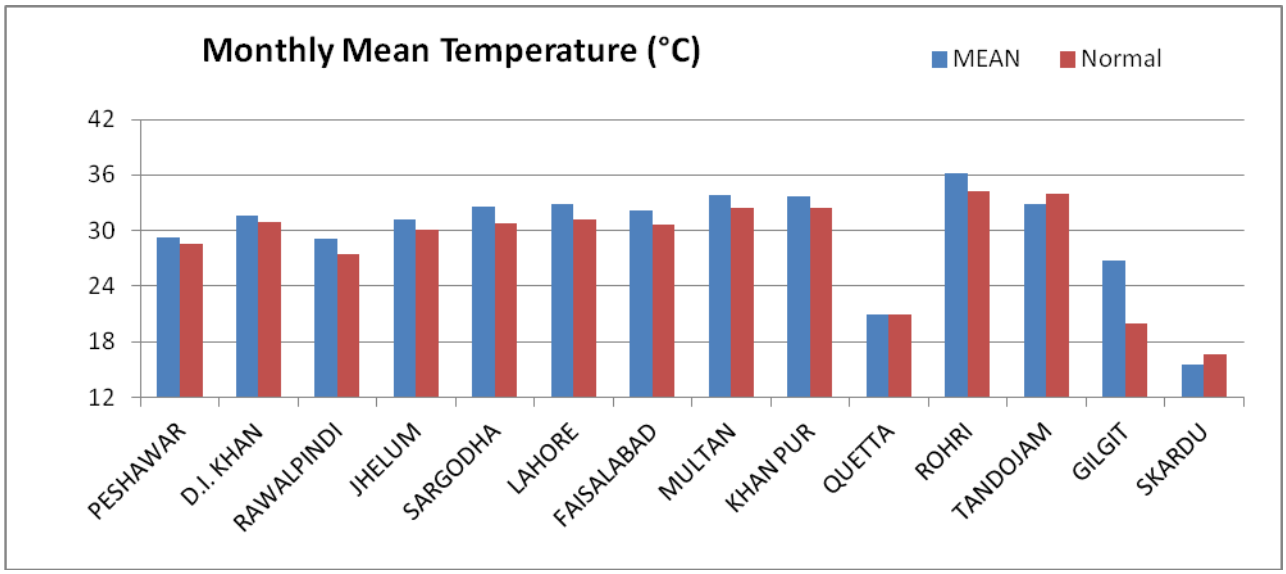


Below normal ETo and above normal relative humidity in the areas mentioned above are in conformity with each other producing favorable conditions for crops in these areas. However, due to below normal R.H and above normal ETo in agricultural plains of the country especially in Punjab and Sindh Kharif crops in these areas may come under water/moisture stress conditions which may negatively affect their normal growth/yield in coming June. Farmers are therefore advised to make best use of available water resources to meet water demand of the crops in these regions.

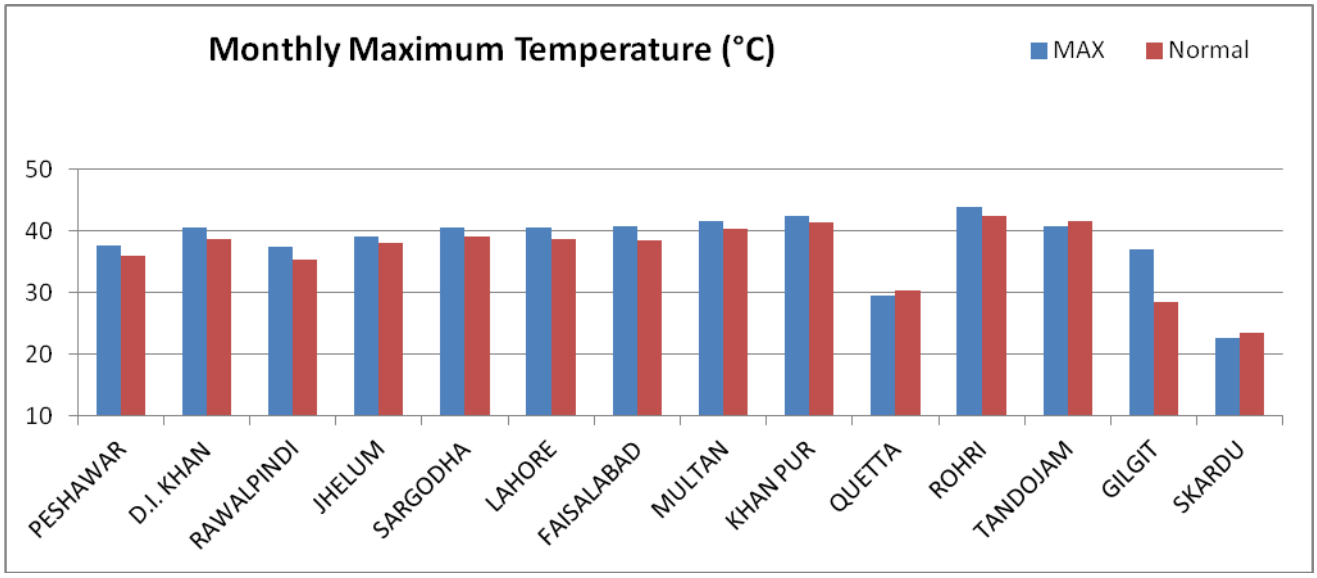
Temperature Regime during May, 2013

Temperature plays vital role in the growth and development of crops. Thermal regime in this month generally remained above normal. Due to heat wave prevailing this month in the agricultural plains of Sindh and southern Punjab including cotton belt temperature also remained high. This above normal heat in the crop atmosphere especially in the last week of this month may cause increased evapotranspiration and moisture stress to standing crops due to which Kharif crops may suffer.

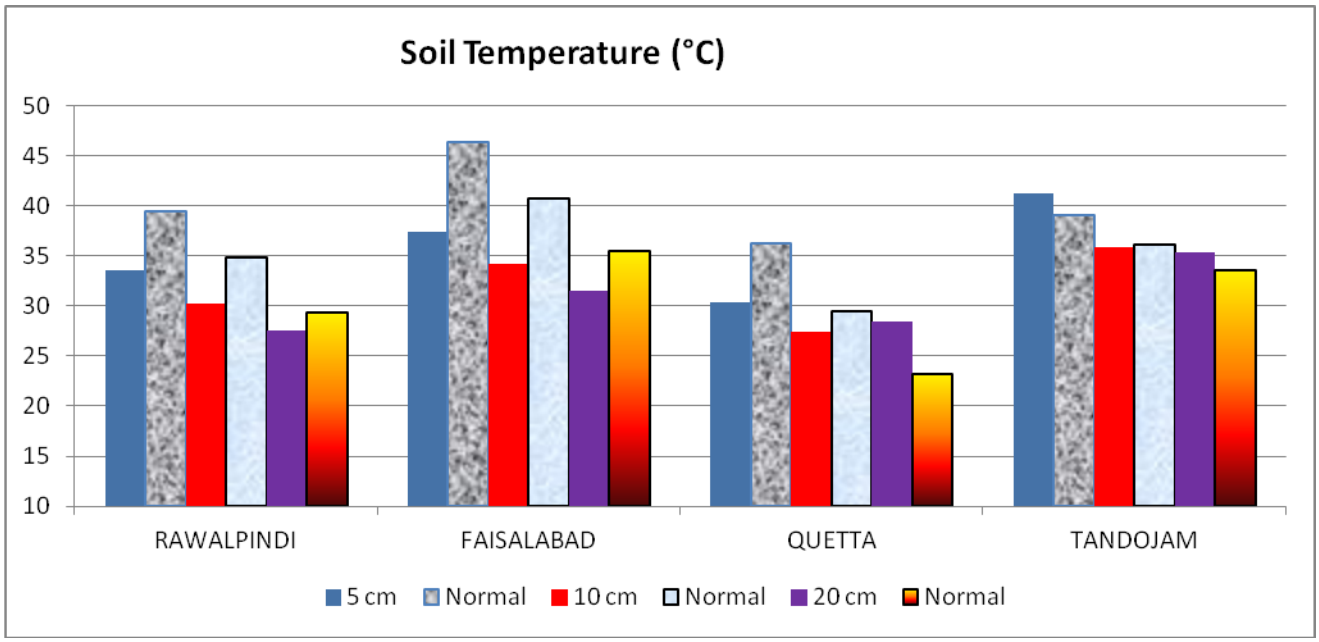
Mean daily temperature remained above normal by 1 to 2°C in all agricultural plains of the country except lower Sindh represented by Tandojam where it was observed slightly below normal by 1°C. Mean daily temperature ranged 29 to 32°C in Khyber Pakhtunkhwa, 29 to 31°C in the Potohar plateau and 32 to 34°C in the remaining agricultural plians of the Punjab. In Sindh it ranged 32 to 34°C in Gilgit Baltistan region and it was observed 21°C in the high elevated agricultural plains of Balochistan represented by Quetta valley.



The day time temperature represented by mean maximum also remained above normal by 1-2°C in the country except lower Sundh represented by Tandojam and Quetta valley, where it was observed 1°C below normal. The highest maximum temperature was recorded 51°C at Larkana.

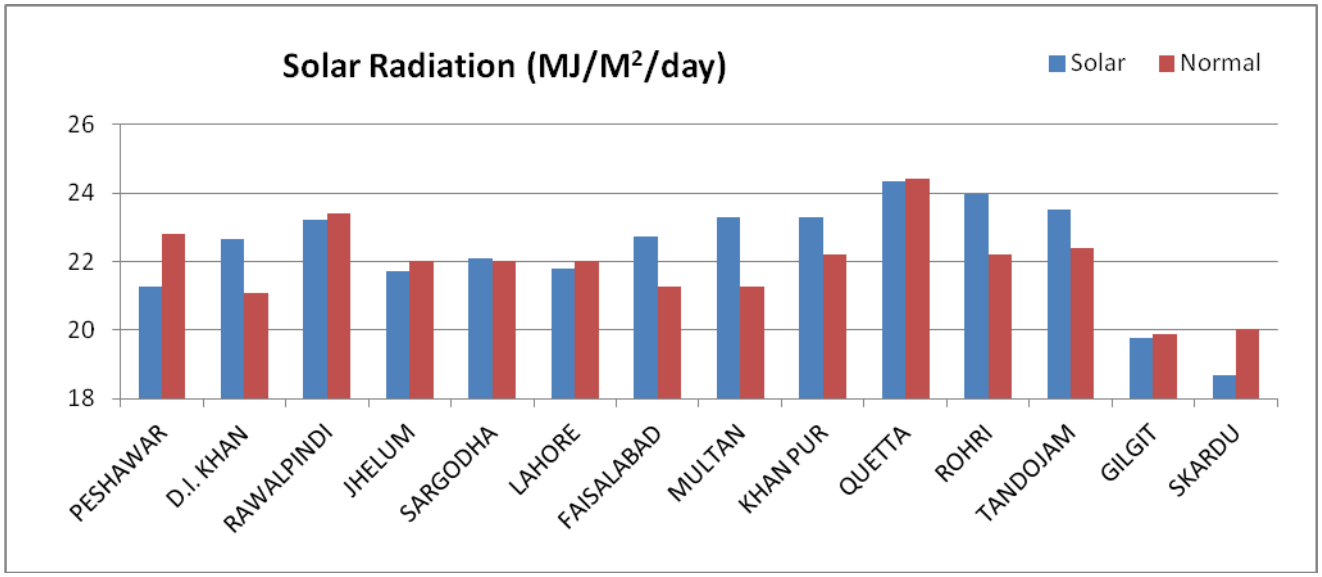


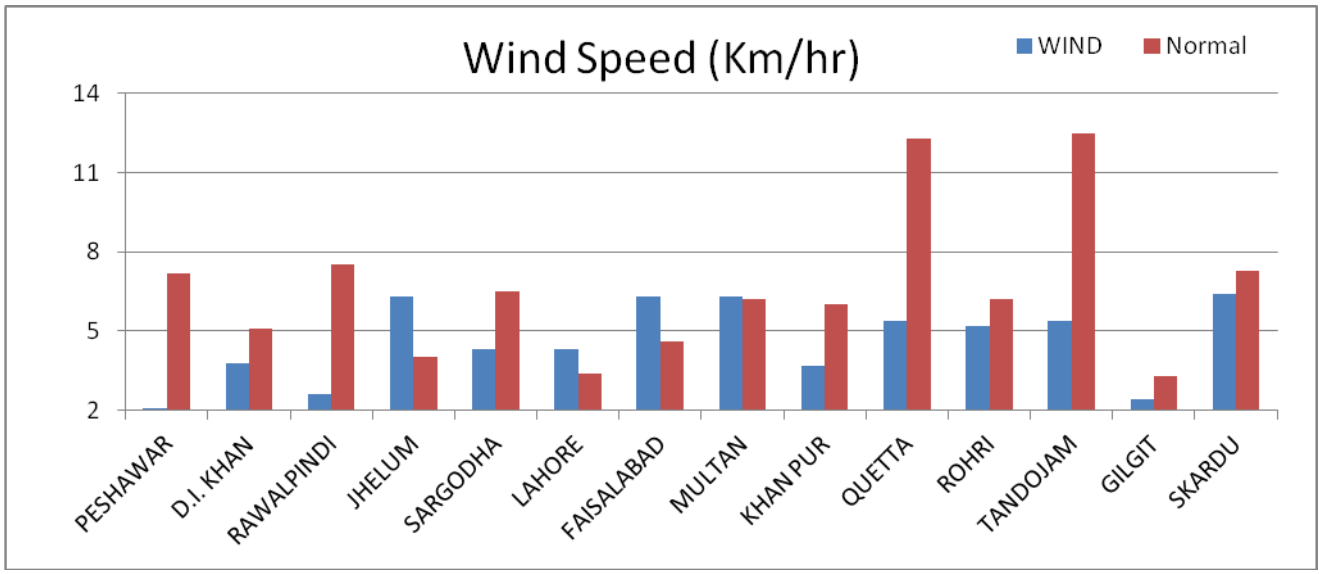
Agricultural soils also showed normal to cooler trend in Rawalpindi, Faisalabad and Quetta valley. Whereas it was observed above normal in Tandojam. Soil temperature remained significantly below normal at shallow layers. But it gradually reached near to normal/normal range in deep layers. Over all soil temperature/ soil moisture condition is satisfactory in most of the agricultural plains of the country. Generally the coming month of June is the hottest and dry month in Pakistan; therefore farmers of irrigated areas should be cautious about in time supply of water to the crops, so that standing crops like sugarcane and cotton may not suffer due to any heat wave or rising temperature.



Solar Radiation and Wind Regime during May, 2013

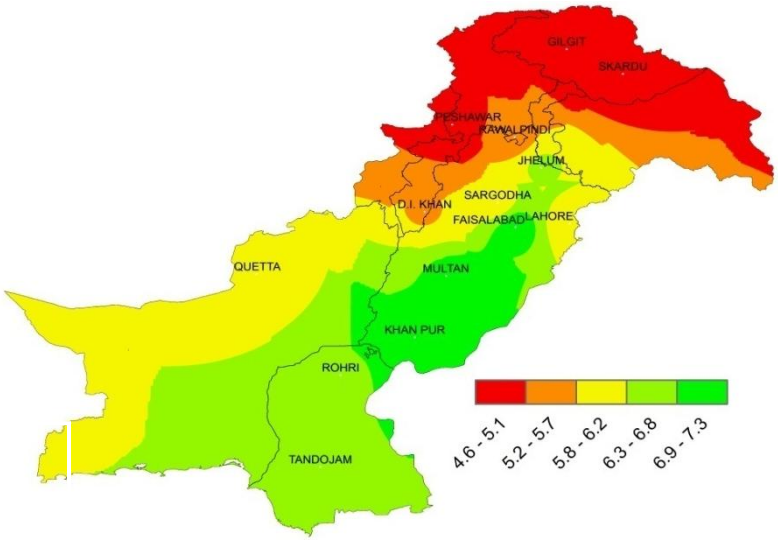
Total bright sunshine hours and solar radiation intensity remained normal to below normal in upper KP, Potohar region and most of central Punjab and Gilgit Baltistan. Whereas these values were observed above normal lower KP, Faisalabad in central Punjab, southern Punjab and Sindh. Mean wind speed throughout agricultural plains of the country reached up to 6km/h with North to North-West trend.



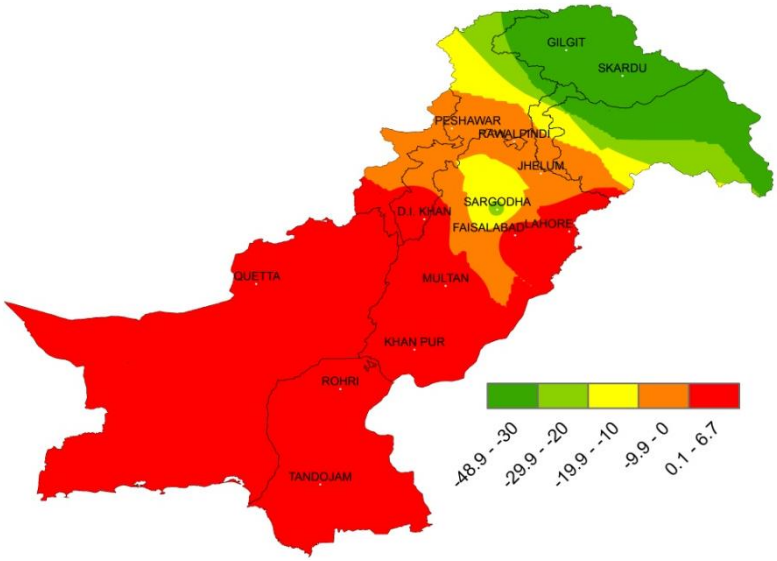


Comulative Rainfall, ETo and water stress for Rabi Season (Sep to May)

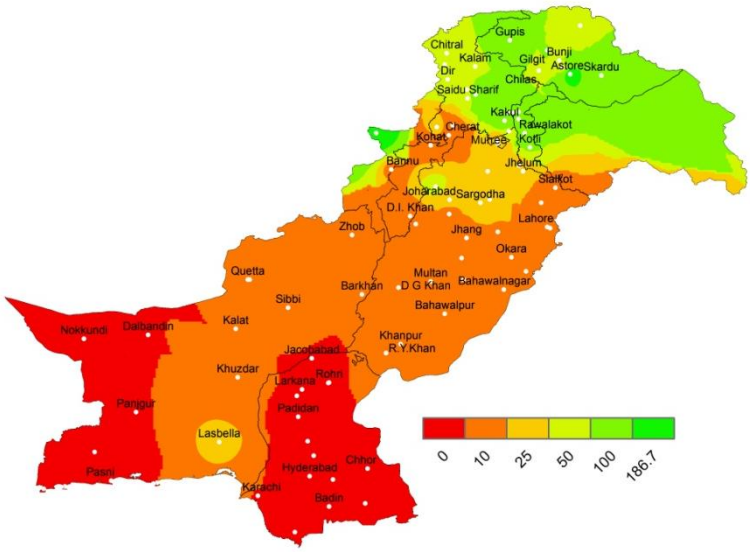
Cumulative ETo (m m) during Rabi Season up to May, 2013



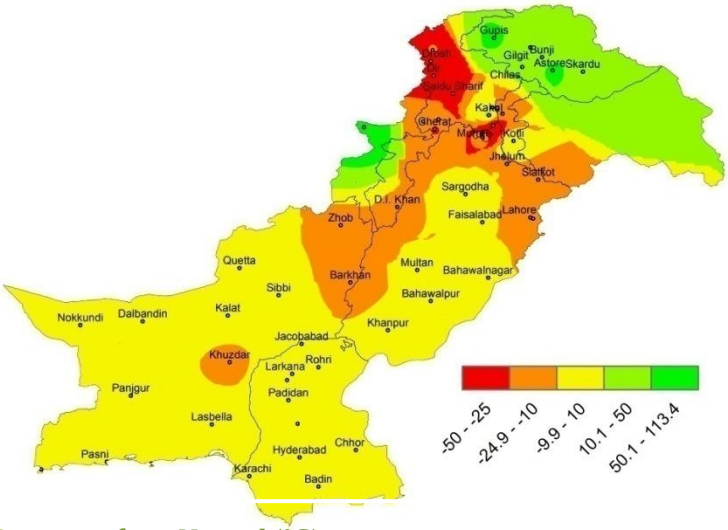
Water Stress (Rain-ETo) during Rabi Season up to May, 2013



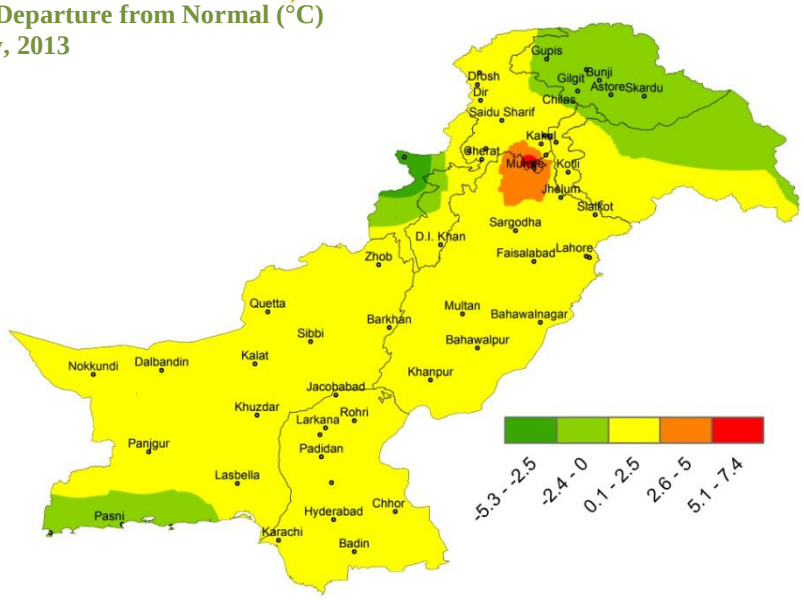
Cumulative rainfall (mm) during Rabi Season up to May, 2013



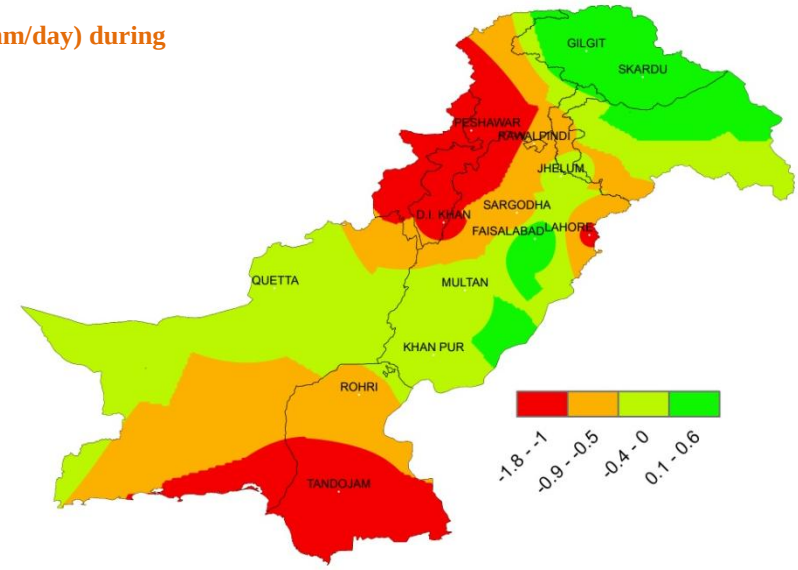
Rainfall Departure from Normal (mm) during the month of May, 2013



Minimum Temperature Departure from Normal (°C) during the month of May, 2013



ETo Departure from Normal (mm/day) during the month of May, 2013



Normally Expected Weather during June, 2013

Generally June is the hottest and driest month except some pre-monsoon showers. Towards the end of the month seasonal low will fully mature over Balochistan and adjoining areas. Usually northern parts of the country first experience the onset of monsoon and hence the frequency of occurrence of rain over northern parts of Punjab is greater than other parts of the country.

Two to three troughs of westerly low pressure waves are expected to pass across central Asian countries and their trough may effect northern part of the country. Under the influence of these westerly troughs and pre-monsoon system, more than 50mm of rainfall is expected in the north of the country and Potohar region, 25 to 30mm of rain fall in central Punjab and about 10mm rainfall is expected over Khyber Pakhtunkhwa, lower Sindh and southern Punjab. Upper Sindh and most of Balochistan may remain partially dry. The probability of occurrence of rainfall during June over Potohar plains is given below:-

AMOUNT/DATES	**PERCENTAGE PROBABILITY OF OCCURRENCE OF DIFFERENT AMOUNT OF RAINFALL IN JUNE**					
	1-5	**6-10**	**11-16**	**17-20**	**21-25**	**26-30**
10 mm	6	13	30	26	36	41
15 mm	5	10	27	13	30	38
25 mm	1	4	21	8	16	25

Due to intense heating and relatively clear skies, the evaporative demand of atmosphere will increase sharply and may range from 7.5 mm/day to 8.5 mm/day over most of the agricultural areas of the country except southern Khyber Pakhtunkhwa, high agriculture plains of Balochistan and extreme northern parts of the country where it may remain close to 7 mm/day.

Mean maximum temperature may remain above 40 °C over most of the agricultural plains of the country. However, in high plains of Balochistan, it may remain close to 35 °C. Highest maximum temperature may reach to upper forties over most of agricultural plains of the country. Due to lower humidity level and high temperatures, the frequency of occurrence of stress conditions for crops may increase considerably. Irrigation will be the only remedy to decrease the effect of stress conditions to crops. The mean minimum temperature may range from 25-28 °C throughout the country except high plains of Balochistan where it may average to 16 °C.

The duration of bright sunshine may remain greater than 10 hrs/day in northern Khyber Pakhtunkhwa and high agricultural plains of Balochistan. In rest of the country it may range from 8.5 hrs/day to 9.5 hrs/day. The intensity of solar radiation may decrease over most of agricultural plains of the country due to haze, dust in suspension and increased cloudiness. Towards the end of the month it may range between 22 MJ/M^2/day over most of the country. However, in northern Khyber Pakhtunkhwa and Rawalpindi region, it may average to 24.3 MJ/M^2/day due to relatively clear skies. Maximum intensity of Solar Radiation may be experienced at Quetta valley amounting to 26.3 MJ/M^2/day.

Gusty wind and dust storms will be normal phenomena during the month. However, mean wind speed may remain below 10 Km/hr over most of the agricultural plains of the country except lower Sindh, where it may average to 14Km/hr. In high agricultural plains of Balochistan, wind speed may remain above 10 Km/hr. mostly southwesterly wind may prevail over Sindh and adjoining Balochistan. However, above 30 degree latitude, southerly and southeasterly wind may prevail during the month.

The water requirement of disease free full canopied crop growing is given as under:-

S. No.	**Region**	**Water Requirement**	
		(mm)	**Cubic Meter/Hectare**
1	Northern Punjab, KPK and high plains of Balochistan	180-210	1800-2100
2	Southern Punjab and Upper Sindh	220-240	2200-2400
3	Lower Sindh and Southern Balochistan	250-260	2500-2600

Seasonal Weather Update

Introduction

A variety of methods including dynamical models, statistical methods, regional expert judgments and combination of them have been used to generate long-range weather forecast by the different climate prediction centers around the world. National Agromet Center (NAMC), Pakistan Meteorological Department adopts an ensemble approach to formulate its seasonal weather outlook for Pakistan (on experimental basis), taking into consideration available products from major climate prediction centres and different Global Climate Models (GCMs).

Regional weather (precipitation and temperature) outlook is predicted from different global climate models by using persisted sea surface temperature on 0000 May 01, 2013. That might be somewhat different from actual weather because of time to time variation in Sea Surface Temperature (SST) during the season. Accuracy of Outlook seasonal weather mainly depend upon SST used in global climate models. Even with use of accurate SST, still is uncertainty in the climate forecast due to chaotic internal variability of the atmosphere.

Synoptic Situation

- No significantly change in location, convergence areas, strength and movement of zonal winds at 200 hPa (Jet stream) during current month from normal.
- Geo-potential height at 500 hPa over the region follows normal patterns with less intensity during start of the season and gradually weaken with time
- No significantly change is expected in Surface temperature pattern from normal (1982-2010) during Jun, 2013 over the country. However, surface temperature is on higher side than normal over Indian region.
- North Atlantic Oscillation (NAO) is in slightly positive phase (nearly zero) and may cause to shift western disturbances towards north during coming months. (Data source: CPU, monthly mean index)
- Most of the set of dynamical and statistical model predictions neutral conditions for the Jun-Jul-Aug (JJA).During Mid May the observed ENSO conditions in the slightly on negative side (La Nina) ENSO condition. The SST anomaly in the Nino3.4 regions during recent period is -0.2. Data source: http://iri.columbia.edu/climate/ENSO/currentinfo/SST_table.html
- Arabian Sea Surface Temperatures are normal.
- Caspian Sea surface temperatures are normal to slightly above normal.
- Mediterranean Sea surface temperatures are normal to slightly above normal.
- Bay of Bengal Sea Surface Temperatures are slightly below than normal over western coast.

Seasonal Weather Outlook Summary (Jun- Sep-2013)

Synthesis of the latest model forecasts for Jun- Sep2013 (MJJS), current synoptic situation and regional weather expert's judgment indicates that normal rainfall is expected all over the country with less than normal during July. However, normal rainfall is expected during August and above normal during September. Slightly warmer-than-normal conditions may occur in the all over the country with extreme higher over extreme northern parts. Neutral-ENSO condition is expected to persist throughout the predicted period.

Weather outlook

Normal precipitation is expected during June, below normal during July.

I. Average (± 10 %) rainfall is expected during monsoon season 2013.
II. Synoptic situation favours for advance onset of monsoon in Pakistan. Expected tentative date of monsoon in Pakistan region is in between 29 june-1 July, 2013.
III. Above normal pre-monsoon rain is expected over Sindh
IV. Intensity and frequency of monsoon will be less during July. It will increase gradually during August over central parts of the country. However, during last phase of the monsoonal rainfall (September) more than normal rainfall will be occurred over plan monsoonal areas of Punjab and Sindh.
V. Influence of western disturbances over extreme northern parts and Baluchistan will dominate during whole monsoon season
VI. Expected Maximum day temperature will be on higher side during June and July over northern sides causes more than normal melting of snow. Discharge water in the Indus basin might be on higher side during these months.
VI. Reverie flooding in Indus basin during July and August cannot be ruled out
VII. Flash flooding over foot hills of the Sulaiman Ranges cannot be ignored during last phase (September) of monsoon
VIII. No thread of meteorological drought over Baluchistan during current season
IX. Maximum day temperature will be on higher side during summer season throughout the country

Monthly Quantitative Weather Forecast

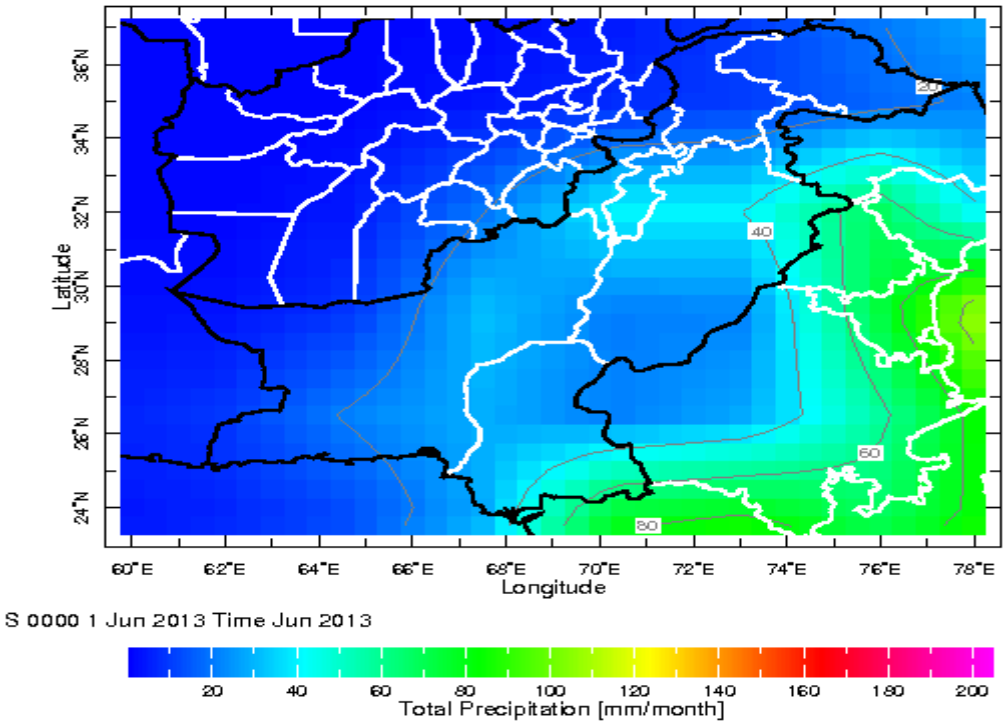
Precipitation is in mm/month

June-2013		
Province/Region	**Average**	**Expected**
GB	19.0	**Blw.Ave**
KP	40.8	**Blw.Ave**
AJK	76.8	**Blw.Ave**
FATA	28.3	**Blw.Ave**
PUNJAB	36.5	**Blw.Ave**
BALUCHISTAN	13.4	**Abv.Ave**
SIND	10.8	**Abv.Ave**
Pakistan	22.5	**Ave**

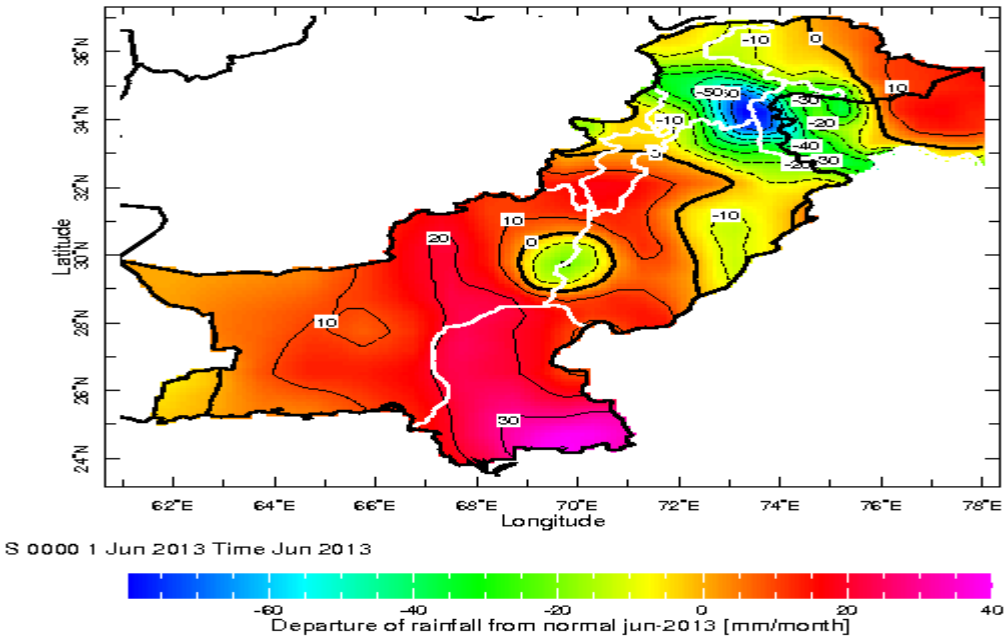
Below Average (Blw. Ave) < -10 %, Average precipitation range (Ave) = -10 to +10 %, Above Average (Abv.Ave) > +10 %

Note: Average precipitation is computed by using Global Precipitation Climatology Centre (GPCC) gridded data by resolution (0.5x0.5^{o}) latitude by longitude. Ensembles of different climate models are used for computation of expected precipitation over the region.

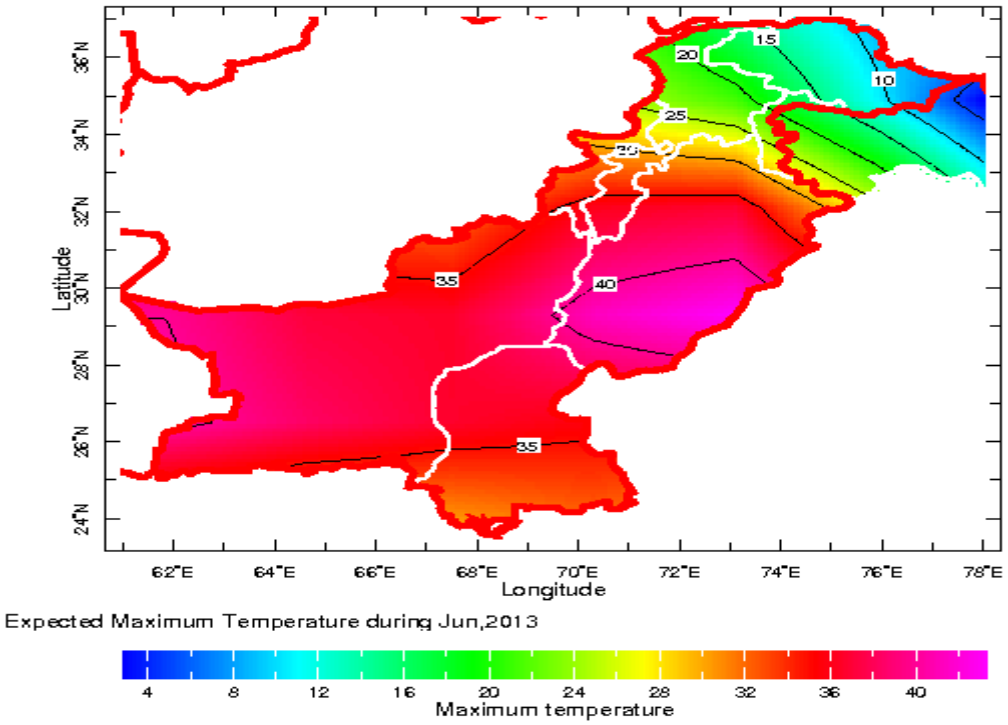
1. *Spatial distribution of expected rainfall during Jun, 2013 (GCM-ECHAM)*



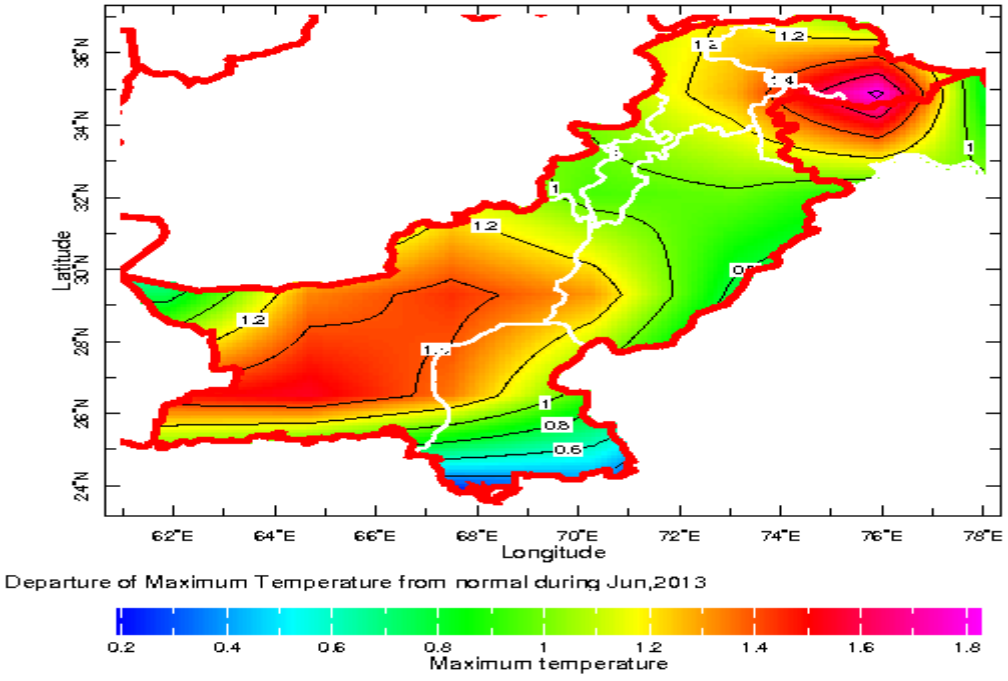
2. *Monthly departure from normal (rainfall) during Jun, 2013*



3. *Spatial distribution of expected maximum temperature during Jun, 2013*



4. *Departure of expected maximum temperature during Jun, 2013*



جون 2013ء میں کاشتکاروں کے لئے زرعی موسمیاتی مشورے

جون سال کا گرم ترین مہینہ ہوتا ہے۔اس ماہ میں بارشیں دوسرے مہینوں کی نسبت کم ہوتی ہیں اس لحاظ سے یہ مہینہ کسان حضرات کیلئے دشوار ترین مہینہ ہوتا ہے۔دوران ماہ میدانی علاقوں میں لُو کا چلنا معمول ہوتا ہے۔کئی کئی دن گرمی کی شدت سے کھڑی فصلیں مرجھا جاتی ہے۔آبپاشی والے علاقوں میں نہری پانی کی قلت بھی واقع ہوجاتی ہے۔اس ماہ کے دوران زیر زمین پانی مزید کم ہوسکتا ہے جس سے ٹیوب ویل اور کاریز کی کارگردگی متاثر ہونے کے امکانات بڑھ جاتے ہیں درجہ حرارت بڑھنے سے کھڑی فصلوں کی پانی کی ضروریات میں حد درجہ اضافہ ہوسکتا ہے۔اس سال رواں ماہ کے وسط میں پری مون سون کی بارشوں کا امکان ہے اور باقاعدہ مون سون بارشوں کا آغاز اگلے ماہ کے پہلے ہفتے میں ہونے کا امکان ہے۔

گندم کی کٹائی اور گہائی میدانی علاقوں میں مکمل ہو چکی ہے جبکہ بلندی پر واقع زرعی میدانوں میں اس مہینے میں یہ عمل شروع ہوگا۔اس صورت حال کو مدنظر رکھتے ہوئے مندرجہ ذیل تجاویز کاشتکار بھائیوں کیلئے پیش خدمت ہیں۔

۱۔ شدید گرمی اور ہوا میں نمی کی کمی مقدار میں کمی کی وجہ سے زمین اور پودوں کی سطح سے بخارات کے زریعے پانی کا ضیاع بہت زیادہ ہوتا ہے۔اس لئے تھوڑے تھوڑے وقفے کے بعد فصل کو پانی ملتا رہے تو پیداوار متاثر نہیں ہوتی۔

۲۔ گندم کی کٹائی اور گہائی کے عمل میں زیادہ وقفہ نہیں ہونا چاہئے کیونکہ غیر متوقع موسمی حالات کے پیش نظر نقصان کا اندیشہ ہے۔جن علاقوں میں کٹائی اور گہائی مکمل ہو چکی ہے وہاں اناج اور بھوسے کو محفوظ کرنے کو اہمیت دی جانی چاہیے۔بھوسے کو محفوظ کرنے کیلئے تعمیر شدہ کمرہ زیادہ موزوں ہے۔اناج کو ذخیرہ کرنے کیلئے مربع یا مستطیل شکل کا اسٹور ہونا چاہیے۔جس کو اندر اور باہر سیمنٹ سے پلستر کر دینا چاہیئے تا کہ کوئی سوراخ نہ رہے۔اس میں اناج ذخیرہ کرنے سے پہلے محکمہ زراعت کی سفارش کردہ دوائی اسپرے کر لینی چاہیے۔اس عمل سے پہلے ضروری ہے کہ اناج کو اچھی طرح خشک کر لیا جائے ورنہ کیڑا لگنے کا اندیشہ رہے گا۔

۳۔ فصل خریف کی کاشت سے پہلے ہل چلا کر اپنے کھیت کو اچھی طرح ہموار کر لیں ورنہ موسم برسات میں تیز بارش کی وجہ سے اپ کے کھیت کی زرخیز مٹی بہہ کر دوسرے کھیتوں میں چلی جائے گی کیونکہ ڈھلوان سطح پر بارش کی وجہ سے مٹی کا کٹاؤ بہت تیزی سے ہوتا ہے۔اسی طرح آپ کی سال کی محنت عدم احتیاط کی وجہ سے رائیگاں چلی جائے گی۔

۴۔ گندم سے فارغ ہونے والے کھیتوں میں ہل چلا کر انہیں کھلا چھوڑ دیا جائے تا کہ بارش ہونے پر زیادہ پانی کھیتوں میں جذب ہو سکے اور بارش کے آنے پر سہاگہ دے کر نمی کو محفوظ کر لیا جائے۔پھر ایک دو دن وقفے کے بعد کم سے کم ہل چلا کر اس کھیت میں فصل کاشت کر دی جائے۔

۵۔ اپنی تمام تر کھیتی باڑی موسمی پیشگوئیوں کے مطابق کریں۔موسمی پیشگوئیوں کے سلسلے میں اخبار، ریڈیو، ٹیلیویژن سے مربوط رہیں اور اگر کوئی زرعی موسمیاتی مسئلہ درپیش ہو تو ہمارے مندرجہ ذیل دفاتر سے آپ بخوبی مدد حاصل کر سکتے ہیں۔

۱۔ محکمہ موسمیات، نیشنل ایگرومیٹ سینٹر، پی۔او۔بکس نمبر 1214، بلکثر ایچ ایٹ ٹو، اسلام آباد۔فون نمبر:-051-9250299

۲۔ محکمہ موسمیات، نیشنل فورکاسٹنگ سینٹر برائے زراعت، پی۔او۔بکس، 1214، بلکثر ایچ ایٹ ٹو، اسلاآباد۔فون نمبر:051-9250364

۳۔ محکمہ موسمیات، ریجنل ایگرومیٹ سینٹر، بزدبارانی یونیورسٹی، مری روڈ، راولپنڈی۔فون نمبر:-051-9290635

۴۔ محکمہ موسمیات، ریجنل ایگرومیٹ سینٹر، ایوب ریسرچ انسٹیٹیوٹ، جھنگ روڈ، فیصل آباد۔فون نمبر:-041-2657047

۵۔ محکمہ موسمیات، ریجنل ایگرومیٹ سینٹر، ایگریکلچر ریسرچ انسٹیٹیوٹ، ٹنڈوجام۔فون نمبر:-0222-766583

۶۔ محکمہ موسمیات، ریجنل ایگرومیٹ سینٹر، ایگریکلچر ریسرچ انسٹیٹیوٹ، سریاب روڈ، کوئٹہ۔فون نمبر:-081-9211211

تفصیلی موسمی معلومات کیلئے محکمہ موسمیات کی ویب سائٹ www.pmd.gov.pk ملاحظہ فرمائیں۔

کماد کی بہتر پیداوار کیلئے موسم کیمطابق مشورے

کماد پاکستان کی اہم ترین فصل ہے۔ پاکستان زیرِ کاشت رقبہ کے لحاظ سے دُنیا میں پانچویں نمبر پر کُل پیداوار کے لحاظ سے گیارویں نمبر پر اور فی ایکڑ پیداوار کے لحاظ سے 60ویں نمبر پر ہے۔ کماد سفید چینی اور گُڑ بنانے کا اہم زریعہ ہے۔ اس کے علاوہ بقریباً 100 کے قریب دوسری کارآمد اشیاء بھی اس سے بنتے ہیں۔ پاکستان میں کماد پنجاب، سندھ اور خیبر پختونخواہ میں خریف کے فصل کے طور پر کاشت ہوتا ہے۔ کماد کی فی ایکڑ پیداوار ملک میں 480 من کے لگ بھگ ہے۔ جبکہ ہمارے ملک کے ترقی پسند کاشتکار گنے کی فی ایکڑ پیداوار میں کمی بیشی کے بنیادی وجوہات میں مناسب زمین کا انتخاب اور تیاری، مناسب بیج اور شرح بیج، مناسب اور بروقت طریقہ کاشت، بروقت اور مناسب کھاد کا استعمال، مناسب مقدار اور گنے کے اوپر حملہ آور ہونے والے کیڑوں اور دوسرے بیماریوں کا بروقت تدارک، نئی فصل اور موڑی فصل (ratoun crop) کے مختلف ضروریات کیمطابق نگہداشت بروقت کٹائی اور مل تک ترسیل، نہری پانی کیساتھ مناسب وقفوں کیساتھ بارشیں، طوفانی ہوائیں، خشک سالی وغیرہ شامل ہیں۔

1۔ کماد کے پودے میں 73-75 فیصد پانی ہوتا ہے۔ اس لئے پودے کو پانی کی ضرورت بہت زیادہ ہے۔ کماد کی فصل کو 1500 سے 2000 mm پانی کی ضرورت ہوتی ہے۔ جو کہ 15 سے 20 دفعہ پانی دینے سے پوری ہوتی ہے۔ فصل کو پانی کی سب سے زیادہ ضرورت مون سون سے پہلے مئی اور جون کے مہینے میں ہوتی ہے۔ پانی کے کمی کیوجہ سے کماد کے پودے کا سائز کم رہ جاتا ہے اور پودا وقت سے پہلے پختگی (mature stage) کے مراحل طے کرلیتا ہے۔ عام طور پر مارچ / اپریل میں 10-12 دن کے بعد، مئی / جون میں 9/8 دن کے بعد جولائی / اگست میں (اگر بارشیں ہوں) 12-14 دن کے بعد، ستمبر / اکتوبر میں 13-20 دن کے بعد اور نومبر / دسمبر میں 25-30 دن کے بعد پانی دینا چاہیئے۔ فصل کے کٹائی سے تقریباً ایک مہینہ پہلے پانی دینا بند کرنا چاہیئے لیکن فصل کے جس حصے کو آئندہ بیج کیلئے رکھنا ہو اُنھیں پانی دینا چاہیئے تاکہ دسمبر میں (Frost) کورے سے نقصان نہ پہنچے۔

2۔ دوسری فصلوں کیطرح کماد کے پیداوار میں بھی 25 فیصد تک کمی زائد جڑی بوٹیوں کیطرح سے واقع ہوتی ہے۔ اسلئے کیمیائی غیر کیمیائی طریقوں سے جڑی بوٹیوں کو بروقت تلف کیا جائے۔ تاکہ فصل سے پانی اور دوسرے غذائی اجزاء کا زیاں ختم ہو۔ خصوصاً مون سون کی بارشیں اگر زیادہ ہو جائیں تو فصل میں زائد جڑی بوٹیوں کی بہتات ہو جاتی ہے اور نقصان دہ کیڑوں کے حملوں کا خدشہ بھی بڑھ جاتا ہے

3۔ مون سون کے درمیان بہت صحت مند فصل کو پانی دینے میں احتیاط سے کام لیں تاکہ فصل گرنے (Lodging) سے محفوظ ہو۔

4۔ فصل کی کٹائی کاشت کے حساب سے ہونی چاہیئے۔ اگیتی فصل (Early Sown) اور موڑی فصل کی کٹائی نومبر، درمیانی فصل کی کٹائی دسمبر اور پچھیتی فصل کی کٹائی جنوری میں شروع کردیں۔ فروری / مارچ میں کاٹی گئی موڑی فصل (Ratoon Crop) کیلئے سب سے زیادہ موزوں ہے۔

فصل کی کاشت کیمیائی کھادوں، آبپاشی اور ہر قسم کیمیائی اسپرے سے مثبت نتائج حاصل کرنے کیلئے موسمی معلومات انتہائی ضروری ہے ورنہ فصل کی کاشت، کیمیائی کھادوں کے استعمال، آبپاشی اور اسپرے وغیرہ کے فوراً بعد بارش نقصان کا باعث بنتی ہے۔ اس لئے کسان بھائیوں سے گزارش ہے کہ ہر وقت موسم سے باخبر رہے۔ مندرجہ ذیل فون نمبر پر آپ کو مفت موسمی مشورے مل سکتے ہیں۔

۱۔ محکمہ موسمیات، نیشنل اگرومیٹ سینٹر پی۔او۔ بکس نمبر 1214، بیکٹر ایچ ایٹ ٹو، اسلام آباد۔ فون نمبر:۔ 051-9250299

۲۔ محکمہ موسمیات، نیشنل فورکاسٹنگ سینٹر برائے زراعت پی۔او۔ بکس نمبر 1214، بیکٹر ایچ ایٹ ٹو، اسلام آباد۔

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