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# AGRICULTURE OUTLOOK



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## **Executive Summary**

According to Pakistan Economic Survey 2017-18, major Kharif crops such as sugarcane and rice surpassed their production targets during 2017-18 by recording growth of 7.45 percent and 8.65 percent, respectively. Wheat and maize crop production remained subdued, as it witnessed decline of 4.43 percent and 7.04 percent, respectively. Sowing of cotton crop touched its target (2.31 million hectares) in Punjab however sowing in Sindh province badly affected and cannot achieved its target 2.95 million hectare in Sindh province due to shortage of irrigation water. Transplantation of the IRRI rice (coarse rice) is in progress in the country. Rice crop prospects are not very encouraging due to short irrigation water supplies in the range of 30 to 40 percent in Punjab and Sindh for current Kharif season. Sugarcane crop is progressing and is at vegetative stage and is also facing water stressed conditions.

Harvesting and marketing of minor crops including, vegetable and fruit crops are ongoing while rate of their remained high due to high demand. In some areas of sindh bunchy virus attack has been reported in Banana crop. Northern parts of the country received much rainfall which contributed towards water availability in reservoirs. Average Land Surface Temperature remained 40°C to 45°C in southern parts of the country while it remained 27°C-30 °C in northern parts due to continuous monsoon rains. Moderate drought conditions are prevailing in western parts of the country.

During June 2018, episode of stressed water supplies continued in river systems of Pakistan. Overall from April-June 2018, total irrigation water supply stood at 17.67 MAF against last year's supply of 27.75 MAF creating a deficit of 10.1 MAF and remained 32.57 to 42.30 percent less than the corresponding period of last year in Punjab and Sindh.

## **BRIEF OVERVIEW**

Pakistan's agriculture sector plays a central role in the economy as it contributes 18.9 percent to GDP and absorbs 42.3 percent of labor force. It is also an important source of foreign exchange earnings and stimulates growth in other sectors. According to Pakistan Economic Survey 2017-18, agriculture sector recorded a remarkable growth of 3.81 percent and surpassed its targeted growth of 3.5 percent and last year's growth of 2.07 percent. The crops sector performed well and witnessed a growth rate of 3.83 percent against the last year's growth of 0.91 percent. Major Kharif crops such as sugarcane and rice surpassed their production targets during 2017-18 by recording growth of 7.45 percent and 8.65 percent, respectively. Wheat and maize crops production remained subdued, as it witnessed decline of 4.43 percent and 7.04 percent, respectively. Other crops grew by 3.33 percent on the back of increase in the production of fodder, vegetables and fruits.

Livestock sector recorded a growth of 3.76 percent compared to 2.99 percent during corresponding period last year. The Fishing sector grew at 1.63 percent compared to growth of 1.23 percent in same period last year. Forestry sector posted a positive growth of 7.17 percent against the negative growth of 2.37 percent recorded in same period last year due to higher timber production reported by Khyber Pakhtunkhwa.

## **CURRENT CROP SITUATION**

The important crops (wheat, rice, sugarcane maize and cotton) account for 23.85 percent of the value added in overall agriculture and 4.66 percent of GDP. The other crops account for 11.03 percent of the value added in overall agriculture and 2.15 percent of GDP.

### **1. Cotton**

According to final report provided by Directorate General Agriculture (Extension) Punjab, the sowing of cotton crop in Punjab placed at 2.290 million hectares, showing 99.93 % achievement against the target of 2.31 million hectares. However, sowing of cotton crop in Sindh was badly affected owing to shortage of irrigation water. Only 66 % sowing has been reported against the target. Cotton sowing in lower Sindh has been stopped, but in upper Sindh, it is in progress. Recent spell of rain has reduced water stress in some districts of Sindh and beneficial for the crop. Total planted area of the country till 29<sup>th</sup> June, 2018 stood at 2.699 million hectares, indicating 91.5 % achievement against the target and 1.3 percent increase over the previous year.

**Table1 : SOWING POSITION OF COTTON CROP AS ON 29.6.2018**

(Million Hectares)

Province	Area Sown			% Change Over	
	Target 2018-19	2018-19	2017-18	Target	Last Year
Punjab	2.31	2.290 (Final)	2.053	99.3%	+11.5
Sindh	0.62	0.409	0.612	66.0%	- 33.2
<b>Pakistan</b>	<b>2.95</b>	<b>2.699</b>	<b>2.665</b>	<b>91.5%</b>	<b>+1.3</b>

Source: Provincial Crop Reporting Departments.

**TARGETS FOR AREA AND PRODUCTION OF COTTON CROP 2018 -19**

Area (Million Hectares)	Production (Million Bales)
<b>Pakistan</b>	<b>14.37</b>

Source: Federal Committee on Agriculture (FCA) meeting held on 10.4.2018

**Table-2: COTTON AREA & PRODUCTION TARGETS AND ACHIEVEMENTS**

Province	AREA ('000' hectares)			PRODUCTION (Million Bales)		
	2016-17 Actual	2017-18 Target	2017-18* Achievement	2016-17 Actual	2017-18 Target	2017-18* Achievement
<b>Punjab</b>	1815	2420	2161.0	6.98	10.00	8.12
<b>Sindh</b>	637	650	612.0	3.60	4.00	3.77
<b>KPK</b>	0.200	1.00	0.174	0.00059	0.002	0.0005
<b>Balochistan</b>	37.00	38.00	35.49	0.095	0.038	0.092
<b>Pakistan</b>	<b>2489.20</b>	<b>3109</b>	<b>2808.66</b>	<b>10.68</b>	<b>14.04</b>	<b>11.98</b>

Source:- Provincial Crop Reporting Service Departments. \* Provisional for Punjab only.

## 2. Rice

Transplantation of the IRRI rice (coarse rice) is in progress in the country. Transplantation of basmati rice remained continued in the last month especially in Kalar tract. Early sown IRRI rice is at vegetative growth stage after transplantation during mid-May and early June. In view of short irrigation water supplies in the range of 30 to 40 percent in Punjab and Sindh for current Kharif season, rice crop prospects are not very encouraging. Rice is mainly transplanted during July, good rains/irrigation water supplies can, however, help to achieve rice area target of 2,805 thousand hectare for this year. Rice average price per ton during 2017-18 was 60,590 PKR against the average price of 55,171 PKR during 2016-17 further enhancing more earnings (29 percent against quantity increase of 18 percent) for the country.

## 3. Sugarcane

Sugarcane crop is progressing and is at vegetative stage after its sowing during February / March. Short irrigation water supplies may stress sugarcane crop like other Kharif crops. A better



irrigation water supply and favorable weather conditions, however, can help to regain its optimum growth in coming months. Crop may be attacked by borers (stem borer, top borer, gurdaspur borer and root borers) at this stage in the month of August. If attack found then farmers should consult with agri. scientists of their respective zone. Crop condition is not good in Sindh due to water shortage and intercultural operations are also being done in Sindh.

#### **4. Minor Crops**

- Pulses including Mong and Mash beans are at growing stage. However, they may be attacked by insect or pest during the monsoon season.
- Cultivation of Bajra and Jawar Crop has been completed for fodder purpose in Sindh. However cultivation of Jawar is in progress in Punjab.

#### **5. Horticulture**

##### **Fruit Crop**

- Harvesting and marketing of mango fruit is in process in Southern Sindh and Punjab provinces with high demand and prices.
- Harvesting of Lemon is in progress in Punjab. Farmers are advised to apply 3<sup>rd</sup> installment of Nitrogen (N<sub>2</sub>) along with farm yard manure to maintain crop in good condition.
- Banana crop is at good position in Sindh. Harvesting and marketing is ongoing while prices are high as a result of high demand. In some areas of Sindh bunchy virus attack has been reported.

##### **Vegetable Crops**

- Nursery cultivation of tomato, cauliflower is in progress in Punjab. However, tomato's harvesting and marketing is ongoing in Sindh while its prices are high due to high demand.
- Nursery rising and transplantation of onion crop is in progress in the country.
- Brinjal Crop is at good condition with continuous supply in market. Prices are at normal rate due to normal demand.

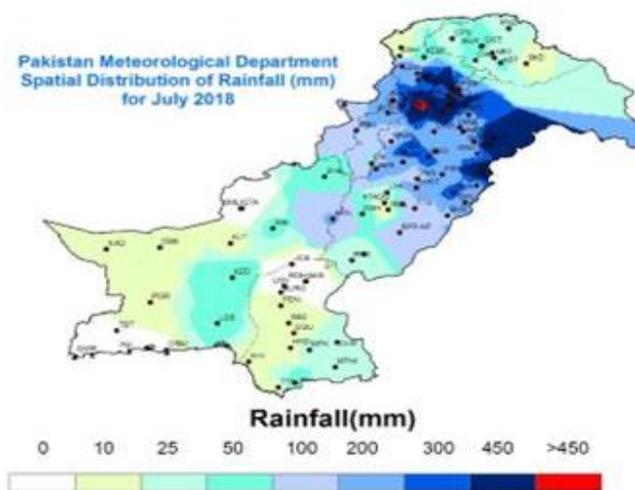
## WEATHER CONDITION AND OUTLOOK

### Weather Summary during the Month of July 2018

During the Month of July, 2018 rainfall received is shown in Fig 1, Heavy to Extremely heavy rainfall events were reported across Pakistan. Highest accumulated monthly rainfall was recorded at Lahore Shadara (559mm), Barakot (Kunhar River) = 537 mm, Kamra = 472 mm, Murree 455mm, Haraman (Neelum River) = 443 mm, Muzaffarabad= 388 mm, Islamabad Golara= 387 mm, Sialkot Cantt = 359 mm, Rawalakot =347 mm and Risalpur =301 mm. Southern parts of the country received very less rainfall. This trend of rainfall contributed much towards water availability in reservoirs. Therefore farmers are advised to keep themselves abreast of weather updates and plan field activities accordingly to minimize weather induced losses to matured/cultivated crops.

### Land Surface Temperature

In first half of the July average temperatures remained between 30° C to 40° C in central parts of the country, while in southern parts of the country i.e. Sindh and Balochistan average temperature remained from 40 ° C to 45 ° C. In second half of the month temperature remained 27 °C-30 °C due to cloudiness and decreasing trends of temperature have been observed in most parts of the country.



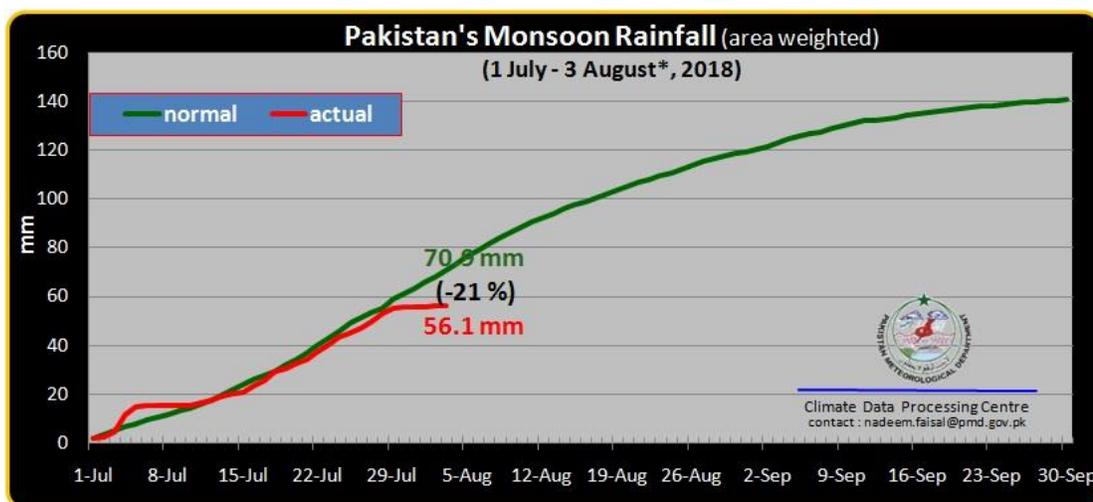
**Figure 1: Rainfall distribution for the month of July-2018**

### Weather Outlook for the month of August 2018

More rains are expected during the month of August. Heavy precipitation with maximum intensity is expected. These rains are of immense importance for the farmers in relation to present and future crop requirements. In absence of proper land management, the intense rains may erode the upper soil layers and fertility of the soil would be badly affected. If soil conservation and soil moisture conservation measures are exercised, the farmers of the area could be benefited through available moisture for sowing of early growth of rabi crops.

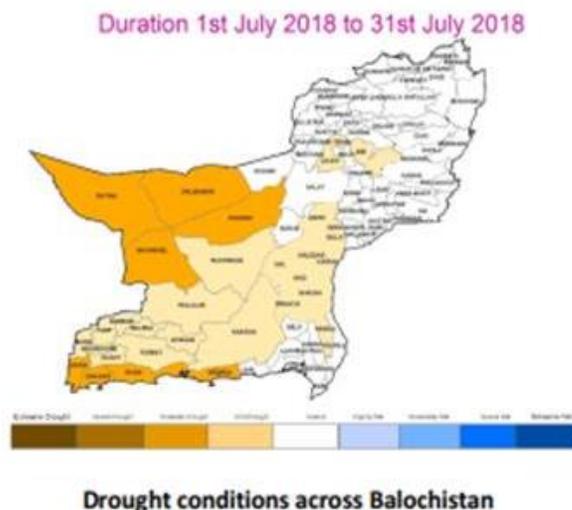
- In northern Pakistan, rainfall is expected to remain “normal to slightly above normal of long term average” during first half of the season, and below normal during second half.
- In southern Pakistan, rainfall is expected to remain “near normal of long term average” during first half of the season, and largely below normal during the second half.

- The prevailing temperatures trend in Pakistan indicates high probability of few “Extreme rainfall events” in Punjab, and “GLOF events” in Gilgit-Baltistan/Chitral regions during monsoon season.
- In the light of “Outlook of Summer Monsoon 2018” and already prevailing water shortage in the country, the water managers should take measures for water storages accordingly.
- Monsoon systems are likely to weaken gradually during August, producing less than average rainfall. It will exaggerate the prevailing drought conditions in parts of Sindh and Balochistan.
- Less than average rainfall is expected to occur in the catchment areas of the major rivers which may be a matter of great concern especially in Mangla Dam filling.
- Monsoon is most likely to decline further in September.



### Drought Outlook for August, 2018

The month of July was not good for drought prone areas of Sindh and Baluchistan. No appreciable rainfall is received across western parts of Baluchistan, as a result aggravating the drought conditions over there. Moderate drought conditions are prevailing in western parts. All stakeholders are requested to make their efforts to watch water availability situation across rainfed areas of Sindh and Baluchistan, especially in drought affected



areas, because high temperature would cause additional stress and increase water demand.

### Water Availability

In Pakistan, surface water supplies are major source for agriculture water requirement and are met by rainfall runoff and snow/ glaciers melt through three major rivers namely Indus, Jhelum and Chenab. During June 2018, episode of stressed water supplies continued in river systems of Pakistan. By 30<sup>th</sup> June 2018 reservoirs water storage levels were at lowest in Tarbela reservoir since 2013 and Mangla since 2009. Due to decreased winter snow cover and less rains water inflows at Tarbela and Mangla were also at lowest. This situation affected surface water supplies in all canal command areas. Overall from April-June 2018, total irrigation water supply was 17.67 MAF against the last year’s supply of 27.75 MAF creating a deficit of 10.1 MAF and remained 32.57 to 42.30 percent less than the corresponding period of last year in Punjab and Sindh.

The irrigation water supply during June 2018 was 9.06 MAF against the last year’s supply of 13.41 MAF, down by 4.35 MAF (32.42 percent). As compared to same time period of last year, during June 2018 the supply in Punjab was 4.86 MAF (down by 22.58 percent), Sindh was 3.77 MAF (down by 42.35 percent), Khyber Pakhtunkhwa received 0.18 MAF (down by 2.15 percent) while Baluchistan received 0.25 MAF (down by 38.31).

### FERTILIZER OFF-TAKE SITUATION

As per report by National Fertilizer Development Center (NDFC), the month of May 2018 started with opening inventory of 436 thousand tons of Urea. In May, domestic production was 389 thousand tons, with total availability of 825 thousand tons. Urea off-take during May was 494 thousand tons leaving behind closing balance of 329 thousand tons. The opening inventory of Di-Ammonium Phosphate (DAP) for May 2018 was 200 thousand tons. In May, domestic production of DAP was 62 thousand tons, with total availability of 445 thousand tons, which also includes 183 thousand tons of imported supplies. DAP off-take during May was 59 thousand tons leaving behind closing balance of 386 thousand tons. During May 2018, off take of Nitrogen, Phosphate and Potash in the country was less by 6.2, 12.8 and 36.3 percent respectively compared to the same period of last year.

Product	Opening Inventory	Domestic Production	Imports	Total Availability	Off take	Write On/Off	Closing Balance
	‘000’ Tons						
Urea	436	389	0	825	494	-2	329
DAP	200	62	183	445	59	0	386

## IMPORTS & EXPORTS SITUATION

- The imports of tea into the country witnessed growth of 5.36 percent during the fiscal year 2017-18 as compared to the last financial year (2016-17), according to Pakistan Bureau of Statistics (PBS). Pakistan imported tea worth \$551.881 million during the fiscal year under review. In terms of quantity, the tea imports into the country however decreased by 5.91 percent by declining from imports of 194,833 metric tons last year to 183,321 metric tons during the fiscal year 2017-18. On month-on-month basis, the tea imports into the country decreased by 10.17 percent during June 2018 when compared to the imports of \$31.036 million in May 2018.
- The overall food imports into the country during the period under review increased by 0.68 percent by going up from \$6143.435 million during 2016-17 to \$6185.369 in 2017-18. It is pertinent to mention here that the overall merchandise imports into the country during the fiscal year 2017-18 increased by 15.10 percent by going up from \$52.910 billion in FY 2016-17 to \$60.898 billion.
- Fruit and vegetables exports from the country during last financial year grew by 5.8 percent and 30.56 percent respectively as compared the corresponding period of last year. During the period from July-June, 2017-18, 710,221 metric tons of fruits worth US\$ 400.237 million were exported as compared the 645,661 metric tons valuing US\$ 380.904 million of same period of last year, according to the Pakistan Bureau of Statistics.
- The exports of pulses during the period under review witnessed negative growth.
- Country earned US\$ 2.073 billion by exporting about 4.106 million tons of rice during last financial year as compared with the exports of 3.523 million tons valuing US\$ 1.606 billion of the corresponding period of last years.
- During the period from July-June, 2017-18, about 520,759 metric tons of basmati rice worth US\$ 540.231 million was exported as against 496,263 metric tons valuing US\$ 453.441 million of same period of last year, showing an increase of 19.14 percent growth.
- The seafood exports during July-June (2017-18) were recorded at \$451.026 million against the exports of \$393.662 million in July-June (2016-17), showing growth of 14.57 percent, according to latest data of Pakistan Bureau of statistics (PBS).
- On month-on-month basis, the seafood exports decreased by 48.41 percent in July 2018 when compared to the exports of \$52.431 million in May 2018, the PBS data revealed.

- The exports of raw cotton from the country during 12 months of last financial year ended on June 30, 2018 had registered over 33.65 percent growth as compared the exports of the corresponding period of last year as about 35,347 metric tons of the above mentioned commodity worth US\$ 58.227 million exported, which stood at 25,462 metric tons valuing US\$ 43.567 million of same period last year.
- The trade deficit during FY 2017-18 was recorded at \$ 37.670 billion against the deficit of \$32.488 billion in FY 2016-17.

## NEWS & TRENDS

- **KfW Development Bank, PPAF inaugurated solar grid projects in Swabi, Karak**

KfW Development Bank, Germany and Pakistan Poverty Alleviation Fund (PPAF) inaugurated state of art Solar Energy Mini-Grids Projects completed recently in district Swabi and district Karak, Khyber Pakhtunkhwa respectively. PPAF is implementing hydropower & renewable energy (HRE) projects in Khyber Pakhtunkhwa with the financial support of the Government of Germany through the German Development Bank (KfW). The mini-grid solar systems, implemented in small villages of districts Swabi and Karak, have a total capacity of 196kW and 185kW and jointly provide electricity from indigenous and clean energy resource to about 434 households within these districts. It is pertinent to mention here that 24 solar mini-grid systems with total capacity of 119 kW in off-grid villages of Lakki Marwat have already been completed.

- **A MoU signed between China and Pakistan to impart training to Pakistani Scientists**

A MoU has been signed between Pakistan and China to impart training on promotion, development and production technology of Hybrid rice across the crop sowing areas of the country to boost local output. In context, a group of Chinese hybrid rice experts will reach in Pakistan in the next month (September) to impart training to rice growers. During the event Dr. Muhammad Yousaf, told that rice had been cultivated over approximately 2.8 million hectares of land to produce about 7.4 million tons. It is worth mentioning here that country earned US\$ 2.073 billion by exporting about 4.106 million tons of rice during 12 months of last financial year as compared with exports of 3.523 million tons valuing US\$ 1.606 billion of the corresponding period of last years.



- **Drip Irrigation System Beneficial For Farmers**

The Agriculture Department urged farmers to install drip irrigation system in their fields as it is cost-effective and offers handsome return. According to Agriculture expert, over 60 percent water can be saved through drip irrigation system than open water courses. Drip irrigation system is neat, clean and smooth in which farmers can save fertilizers, labor, water and timing up to 50 per cent. It is a beneficial for barren, sandy and any other sort of lands. In this regard, a comprehensive campaign has been launched under Punjab Irrigated-Agriculture Productivity Improvement Project (PIPIP) to overcome water scarcity in the province. Under this project, agriculture department is installing drip & sprinkler irrigation on subsidized rates.

- **Sindh Govt. Imposes Ban on Paddy/ Rice Cultivation**

The Government of Sindh has imposed ban on paddy/ rice cultivation within the jurisdiction of Khairpur Mir District for period of 60 days with immediate effect.

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## زرعی سفارشات برائے کسان

بارانی علاقوں میں مون سون کی بارشوں کے پانی کو محفوظ کرنا زراعت کی بنیادی ضرورت ہے آپاش علاقہ جات ہوں یا بارانی پانی کے بغیر کاشتکاری کا تصور ہی بعید از قیاس ہے۔ لہذا حالیہ بارشوں کے پانی کو محفوظ کرنے کے لیے ڈھلوان کی مخالف سمت گہراہل چلائیں اور کھیتوں کو ہموار رکھیں وٹ بندی مضبوط کریں اور جڑی بوٹیاں تلف کریں۔ دیسی کھاد یا سبز کھاد کا استعمال بڑھایا جائے جس سے وتر زیادہ دیر تک محفوظ رہتا ہے۔

### مکئی

- ☆ مکئی کی اگیتی اقسام کی کاشت 20 اگست تک مکمل کریں۔ جبکہ بارانی علاقوں میں مون سون کی بارشوں کے مطابق کاشت کریں یا درہے کہ موسم خزاں میں ہائبرڈ اقسام کا بہترین وقت کاشت وسط اگست ہے۔
- ☆ مکئی کی ڈرل سے کاشت کی صورت میں 12 سے 15 کلوگرام، کھیلویوں پر کاشت کی صورت میں 8 سے 10 کلوگرام اور بطور چارہ 40 سے 50 کلوگرام بیج فی ایکڑ استعمال کریں۔
- ☆ مکئی کی بہترین پیداوار کے لیے (10 سے 12 گڈے) 3 سے 4 ٹرائی گوبر کی گلی سڑی کھاد زمین کی تیاری کے وقت ضرورت ڈالیں۔

### کپاس

- ☆ حالیہ مون سون بارشوں کی وجہ سے جن کھیتوں میں پانی زیادہ کھڑا ہو جائے تو اس کے نکاس کا بروقت انتظام کریں۔ کھیت کے ایک طرف لمبائی کے رخ دو فٹ چوڑی اور چار فٹ گہری کھائی کھود کر پانی جمع کر لیں۔
- ☆ آپاشی واٹر سکاؤٹنگ کے بعد کریں یعنی پانی کی کمی کی علامات کھیت میں واضح ہونے سے پہلے آپاشی کریں۔ ان علامات میں پتوں کا نیلگوں ہونا، اوپر والی شاخوں کی درمیانی لمبائی میں کمی، سفید پھول کا چوٹی پر آنا، تنے کے اوپر کے حصے کا تیزی سے سرخ ہونا اور چوٹی کے پتوں کا کھر درا ہونا شامل ہیں۔
- ☆ نائٹروجنی کھاد کا استعمال زمین کی زرخیزی اور فصل کی حالت کو مد نظر رکھتے ہوئے ضرور کریں۔ بارش کے بعد کپاس کی فصل میں جڑی بوٹیاں بڑھ جاتی ہیں لہذا جڑی بوٹیاں ضرور تلف کریں۔
- ☆ زیادہ درجہ حرارت ہونے اور زیادہ ٹینڈے لگنے کی وجہ سے فصل کا پھل گرنا شروع ہو جاتا ہے۔ اس سے بچاؤ کے لیے نائٹروجنی کھادوں کے استعمال کے علاوہ زمین میں جہاں بعد بورون اور زنک کی کمی پائی گئی ہو وہاں بورون اور زنک کا استعمال بذریعہ سپرے کریں۔
- ☆ اگر زیادہ نائٹروجنی کھاد آپاشی یا بارشوں کی وجہ سے فصل کی بڑھوتری زیادہ ہو رہی ہو تو مہمی کوٹ کلو رائیڈ بحساب 140 ملی لٹر فی ایکڑ تین مرتبہ دس دن کے وقفہ سے سپرے کریں۔

☆ اگر کپاس پر علاقائی مناسبت اور بارشوں کی وجہ سے سفید مکھی سبز تیلہ، تھرپس اور ملی بگ کا حملہ ہو اور یہ حملہ نقصان کی معاشی حد سے بڑھ رہا ہو تو ہفتے میں دو بار پیسٹ سکاؤٹنگ کریں اور محکمہ زراعت کے مقامی عملہ کے سفارش کردہ زہروں کا سپرے کریں۔  
☆ سپرے صبح یا شام کے وقت کریں۔ دھوپ اور زیادہ گرمی میں سپرے کرنے سے زہر کی افادیت کم ہو جاتی ہے۔ اور پتوں کے جھلساؤ کا بھی خطرہ ہوتا ہے۔

## دھان

☆ دھان کی باسستی اقسام کی پیبری کی منتقلی جلد از جلد مکمل کریں۔  
☆ پیبری کی منتقلی کے وقت کھیت میں 2 سے 3 انچ سے زیادہ پانی کھڑا نہ ہو۔  
☆ جن کھیتوں میں جڑی بوٹیاں ظاہر ہو جائیں وہاں ان کی تلفی کا مناسب انتظام کریں۔  
☆ زنک کی زیادہ کمی کی صورت میں لاب لگانے کے 10 دن بعد تک زنک سلفیٹ 33 فیصد والا 6 کلوگرام یا زنک سلفیٹ 21 فیصد والا 10 کلوگرام فی ایکڑ چھٹے دیں۔  
☆ لاب کی منتقلی کے 35 دن بعد نائٹروجنی کھاد کا بقیہ حصہ ڈالنے سے پہلے 4 سے 5 دن کے لیے فصل کو ہلکا سا سوکا دیں اس کے بعد کھاد کا چھٹہ دیکر پانی لگا دیں۔  
☆ ناقص پانی سے سیراب ہونے والی زمینوں میں اچھے نتائج حاصل کرنے کے لیے جسم بحساب 5 بوری فی ایکڑ چھٹے دیں۔

## سبزیات و باغات

☆ ٹماٹر اور گوہی کی پیبری کی کاشت جاری رکھیں۔  
☆ ٹماٹر کی منظور شدہ اقسام روم، گمبہ، پاکٹ، نقیب اور دوغلی اقسام نادر اور سالار وغیرہ کاشت کریں۔  
☆ پھول گوہی کی منظور شدہ اقسام فیصل آباد نمبر 1، 2، 3 اور 4 وغیرہ کاشت کریں۔  
☆ آم کی برداشت صبح کے وقت کریں۔ اور باغ میں نائٹروجنی کھاد یوریا کی آخری قسط ڈالیں۔  
☆ ترشاوہ پھلوں کے پودوں کو نائٹروجن کی تیسری قسط ڈالیں۔ بہتر ہے کہ کھادوں کا استعمال تجزیہ زمین کے مطابق کریں۔

Source: Zarat nama, Government of Punjab (Farmers' Advisory)

Fauji Fertilizer Company Limited (Farmers' Advisory Service)

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