

Vol. 3, Issue II

AGRICULTURE OUTLOOK



PLANNING & RESEARCH DEPARTMENT
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HEAD OFFICE, ISLAMABAD.

Contents

EXECUTIVE SUMMARY -----	01
CURRENT CROP SITUATION-----	02
• <i>Wheat</i> -----	02
• <i>Cotton</i> -----	03
• <i>Sugarcane</i> -----	05
• <i>Horticulture</i> -----	06
IMPORT & EXPORT SITUATION-----	07
WEATHER OUTLOOK-----	08
DROUGHT SITUATION -----	08
WATER SITUATION-----	08
FERTILIZER OFF TAKE SITUATION-----	09
LATEST NEWS & TRENDS-----	10
ROLE OF ZTBL-----	11
FARMER’S ADVISORY-----	12



EXECUTIVE SUMMARY

In the agriculture sector, enhanced yields, better output prices, and government support helped in augmenting the performance of the crop sector. All the major kharif crops (except cotton) either achieved or surpassed the target for FY18. Although the expected water shortages during the rabi season would have some unfavorable impact on wheat production, coupled with government support measures would help the crop sector post a healthy growth during FY18.

. In irrigated areas of the country, wheat crop condition was generally satisfactory with some delay in sowing due to extended number of pickings for better net gains from cotton crop. Cotton picking has been completed. Crop condition generally remained normal during the season. In local markets of Pakistan, cotton prices remained attractive, showing increase in seed cotton prices from the last month. Seed cotton prices in local markets were generally in the range of Rs. 3000 to 3350 per 40 kg. Harvesting of sugarcane has got momentum after start of crushing operations by sugar mills in the country. Farmers are facing difficulties in disposal of cane due to less prices in the market by the mills.

Three to four spells of rainfall are expected during February and amount of precipitation would be less during the first half as compared to second half. Moderate drought conditions may prevail over the southern half of the country due to deficient rainfall.



Latest estimates on the major kharif crops show significant improvement on last year's performance: not only that all the major crops (except cotton) surpassed their targets, a number of crops (e.g., sugarcane, rice and maize) posted record production level. Higher fertilizer offtake and sufficient water availability contributed towards this performance.

Similarly, agricultural credit disbursement has shown an impressive YoY increase of 50.1 percent in Q1-FY18 (6.6 percent in Q1-FY17) , which is encouraging, as the central bank has set a higher target of Rs 1 trillion for FY18 compared to Rs 700 billion for FY17. Encouragingly, in addition to traditional formal channels, disbursements through microfinance banks and institutions are also picking up pace, as these witnessed a YoY increase of Rs 14.5 billion. An encouraging development this year is the increase in yields of a number of crops. However, these yields are still low mainly due to lack of growers' knowledge on best farming practices, usage of low quality seeds, and incurrence of significant post-harvest losses. While the use of machinery and tools can be useful in addressing such concerns, the application of simple tele-communication technology has a potential to bring about a transformation in the agriculture sector.

CURRENT CROP SITUATION

1. Wheat

In February, wheat crop has entered to its Heading or Flowering stage. This month is very important for wheat crop because the water requirement exceeds than the previous month. The water requirement continues to increase up to wax maturity; if stress observed during this month then yield of crop may suffer. In most parts of Balochistan, water stress observed due to which wheat crop suffer while some regions like Quetta, Kalat and Zhob conditions remain favorable during this month.

This Rabi season, farmers have to face shortage of irrigation water supply. As per IRSA report, irrigation water supply was short by 19.65 and 29.20 percent in Punjab and Sindh, respectively. This has increased farmers' dependency on sub surface irrigation water, increasing cost of production. Huge stocks of wheat are another issue that needs government attention. Less availability of storage place can affect government's wheat procurement program. If it happens, wheat support price will not be available to the farmers at the end of crop season.

Federal government is planning to rationalize the area of wheat, rice and sugarcane to keep the production as per country's requirement. The available area from these crops will be used for promotion of pulses and oilseed crops to reduce edible oil import bill of the country.



Wheat crop targets fixed by the Federal Committee on Agriculture are given below:

Wheat Targets (2017-18) fixed by FCA			
Province	Area	Production	Yield
	million ha	million tons	kg/ha
Punjab	6.637	20.000	3013.4
Sindh	1.150	4.200	3652.2
Khyber Pakhtunkhwa	0.758	1.364	1800.0
Balochistan	0.400	0.900	2250.0
Pakistan	8.945	26.464	2958.6

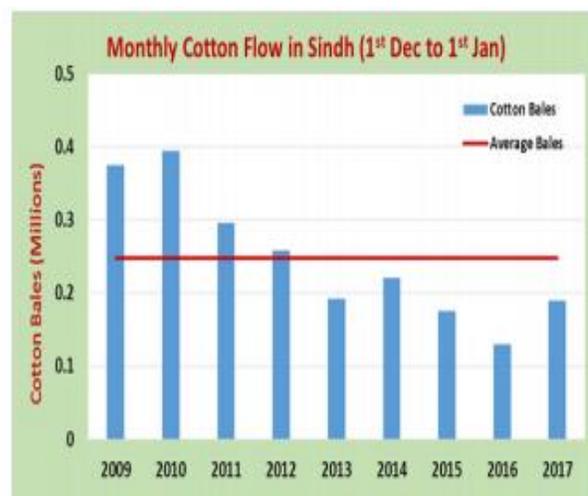
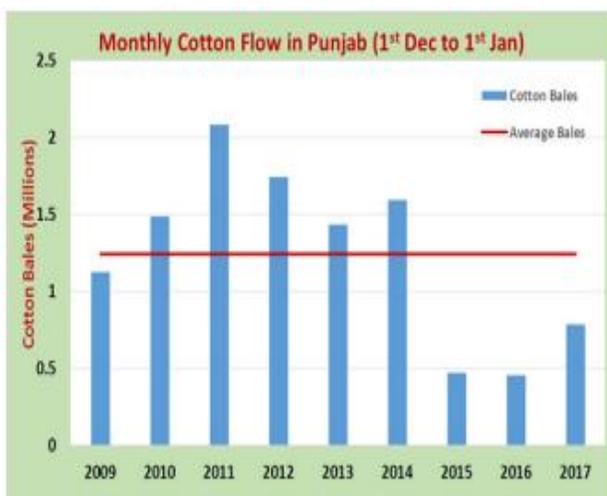
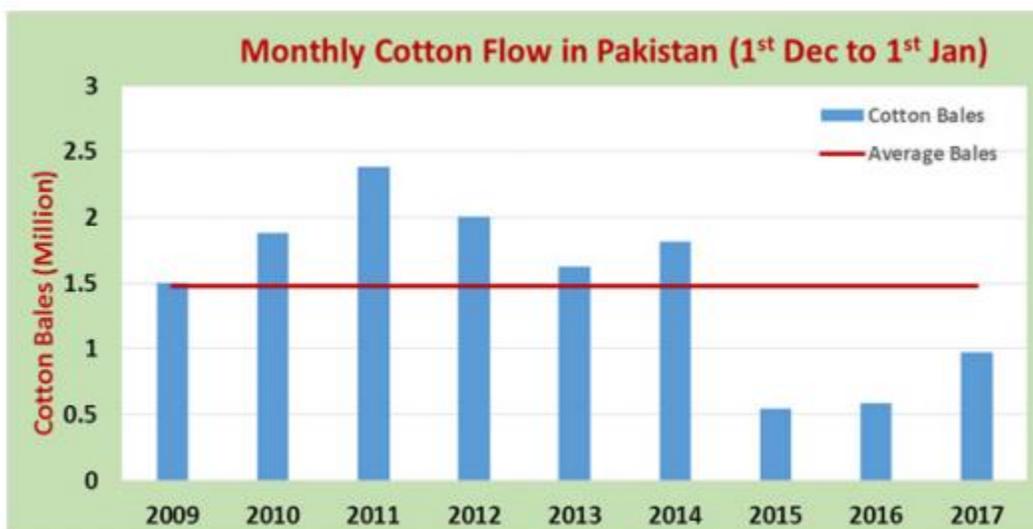
2. Cotton

Crop condition generally remained normal during the season. However, some stress factors like increased pest infestation and short term price fall were observed during August and September. Farmers were mostly satisfied for the current season in terms of crop production and net profitability from the crop. It can, therefore, be expected that cotton area will be increased in coming season.

According to PCGA report of 1st January 2018, cotton arrivals in the ginning factories of Pakistan showed an increase of 7.16 percent as compared to the same period of last year. Cotton arrivals remained higher by 4.20 and 12.38 percent in Punjab and Sindh, respectively. The details of the cotton arrivals are given below:

Cotton Bales Arrival				
Province	2017	2016	Difference	
	000 bales			(%)
Punjab	6895.457	6617.646	277.811	4.20
Sindh	4213.262	3749.057	464.205	12.38
Pakistan	11108.719	10366.703	742.016	7.16

As per PCGA reports of 1st January, 9 years comparison of cotton arrivals shows revival of cotton inflows during December 2017 against the short supply during November 2017. Cotton inflows during December, 2017 were 0.977 million bales in the country against the inflows of 0.547 and 0.588 million bales during December 2015 and December 2016, respectively. Cotton inflows, however, were less than the average inflow of 1.480 million bales in December during last 9 years. Graphs showing cotton inflows in Pakistan, Punjab and Sindh from 1st Dec to 1st Jan during 9 years in comparison to the average inflows are given below:



In local markets of Pakistan, cotton prices remained attractive, showing increase in seed cotton prices from the last month. Seed cotton prices in local markets were generally in the range of Rs. 3000 to 3350 per 40 kg.

SOWING POSITION OF COTTON CROP 2017-18 (Final)

(Million Hectares)

Province	Target 2017-18	Area Sown		% Change Over	
		2017-18	2016-17	Target	Last Year
Punjab	2.42	2.161	1.780	89.30%	+21.40
Sindh	0.65	0.612	0.636	94.15%	-3.77
Pakistan	3.11	2.773	2.416	89.16%	+14.78

Source: Provincial Crop Reporting Service Departments (2nd estimates).



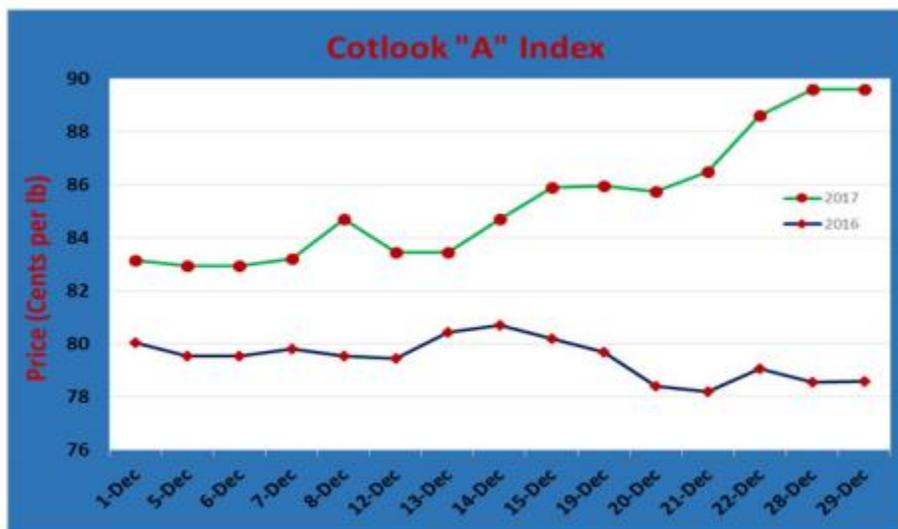
SEED COTTON ARRIVALS AS ON 1st FEBRUARY, 2018

Heads	2017-18			2016-17		
	Punjab	Sindh	Total	Punjab	Sindh	Total
Arrivals	7,181,153	4,251,721	11,432,874	6,849,887	3,784,740	10,634,627
Sales to Exporters	25,850	190,765	216,615	56,100	146,256	202,356
Sales to Textile Mills	6,444,656	3,773,666	10,218,322	6,073,721	3,441,757	9,515,478
Sales to T.C.P	-	-	-	-	-	-
Unsold Stock	675,681	274,217	949,898	688,997	191,837	880,834
Un-ginned Stock	34,966	13,073	48,039	31,069	4,890	35,959

Source: Pakistan Cotton Ginners Association.

International Cotton Situation 2017-18:

In the international market, cotton prices showed an increasing trend during December 2017. Average cotton price during this month was 85.4 cents per lb against the average price of 79.5 cents during December 2016. This showed an increase of 7.4 percent (5.9 cents per lb) this year.



3. Sugarcane

Harvesting of sugarcane has got momentum after start of crushing operations by maximum sugar mills in the country. Sugarcane crushing was delayed by most of the sugar mills in South Punjab and Sindh Farmers are facing difficulties in disposal of cane due to less prices in the market by the mills.



Despite the notified sugarcane support price Rs. 180 per 40 kg for Punjab and Rs. 182 per 40 kg for Sindh, sugarcane prices being offered to the farmers were generally in the range of Rs. 140-160 per 40 kg. Provincial governments are taking necessary actions to facilitate farmers to get notified support prices by eliminating role of middle man and providing subsidies for sugar exports.

Economic Coordination Committee (ECC) of the cabinet has approved a subsidy of Rs 10.70 per Kg for export of sugar against the subsidy demand of Rs. 20 per kg by All Pakistan Sugar Mills Association (APSMA). Sindh government has also approved additional subsidy of Rs. 9.30 per kg for export of sugar to meet the demands of sugar mills. This will help farmers to sell their cane as per notified prices.

In the international market, sugar prices have been showing a decreasing trend since second fortnight of September 2016. Maximum average fortnightly sugar price of 596 US \$ per ton was observed in first fortnight of October 2016 while the minimum value of 368.4 US \$ per ton was observed in second fortnight of September 2017. After September 2017, sugar prices increased in the international market. Average Sugar price during 2nd fortnight of December 2017 was 383 US \$ per ton. Fortnightly average sugar prices from May 2016 to December 2017 are given in the graph below:



4. Horticulture

- Sowing of lentil crop has been completed and recent rains may improve crop early growth.
- Growth of oilseed crop is reported satisfactory and crop is at flowering/ pod stage
- Sowing of gram has been completed.
- Harvesting of Onion crop continued in Sindh during January.
- Picking of green chili has been started in Sindh. Crop condition is good.



- Cleaning of soil and inter- culturing of date palm has started in Sindh. Date Palm harvesting has ended in Punjab.
- Harvesting of tobacco has ended in Punjab.

IMPORT & EXPORT SITUATION

The exports of fish and fish preparations from the country during first half of current financial year increased by 9.08 percent as compared the corresponding period of last year. During the period from July-December 2017-18, the country earned \$200.97 million by exporting about 76,098 metric tons of fish and fish preparations as compared the exports of 56,833 metric tons valuing of \$ 83,446 million of same period last year, according the data of Pakistan Bureau of Statistics.

Overall food group exports from the country during the period under review witnessed growth of 16.81 as food commodities worth \$.932 billion were exported during July-December (2017-18) against the exports of \$1.654 billion during July-December (2016-17), the data revealed. The commodities that contributed in overall food trade from the country included rice exports of which grew by 18.32 percent from \$712.832 million last year to \$843.388 million during the current year. Among rice commodities, the exports of basmati rice increased by 4.52 percent while that of other rice commodities increased by 22.88 percent.

During the period under review the exports of vegetables increased by 6.52 percent as different vegetables worth \$62.709 million exported as compared the exports of \$ 58.871 million of same period last year, it added. During the period under review, the tobacco exports of the country increased from \$3,991 thousand to \$ 20.625 million, showing growth of 416.79 percent while the wheat exports witnessed increase of 100 percent by going up from zero to \$0.045 millions export.

Meanwhile, exports of oil, seeds, nuts and kernals increased by 10.35 percent from \$20.243 million to \$22.339 million while sugar exports also increased from zero exports last year to \$181.209 million, showing 100 percent growth. The food products that witnessed negative growth in trade included fruits, exports of which declined from \$198.143 million to \$ 180.288 million, showing 9.01 decline while the exports of leguminous vegetable (pulses) decreased by 100 percent.

Exports of spices also decreased from \$ 37.478 million to \$ 36.421 million, showing decrease of 2.82 million while the exports of meat and meat preparations decreased by 6.21 percent, from \$104.401 million to \$ 97.915 million in the month of December 2017 compared to the same month of last year. The food exports during the month of December 2017 were recorded at \$439.285 million against the exports of \$334.860 million last December, according to the PBS data.

On month-on-month basis, the food exports from the country also witnessed increase of 4.92 percent in December 2017 when compared to the exports of \$418,697 million in November 2017.



WEATHER OUTLOOK

Global Climate Models show that the prevailing weak La-Nina conditions are likely to continue during the month and be in transition towards El Niño–Southern Oscillation (ENSO) neutral during the spring season. North Atlantic Oscillation (NAO) is in positive phase and Indian Ocean Dipole (IOD) is expected to remain neutral. These forcES play an important role in modification of regional weather pattern including Pakistan. Based upon these conditions weather outlook for February, 2018 is as follows;

- Precipitation throughout the country is expected to be near Normal. However the hilly areas of KPK and Gilgit-Baltistan (GB) may receive slightly above normal snowfall / rain fall during the month.
- Three to four spells of rainfall are expected during February and amount of precipitation would be less during the first half as compared to second half.
- Day and night time temperatures will gradually increase in February. The average temperatures over the country are likely to be above normal during the month.
- Moderate drought conditions may prevail over the southern half of the country due to deficient rainfall.

DROUGHT SITUATION

The month of January was not good for drought prone areas of Balochistan. Deficiency of water is observed across western parts of Balochistan aggravating drought conditions.

During the month of February, no significant rainfall is expected in drought affected areas of Balochistan. Therefore, mild to moderate drought conditions are likely to prevail over most parts of western Balochistan.

WATER SITUATION

According to river flows data 3,878 cusecs water is flowing in Mangla dam on river Jhelum against last year's availability of 12,643 cusecs. In the other big river Chenab only 4306 cusecs is entering Marala headworks near Sialkot from India as compared to last year's flow of 9,781 cusecs of water. Another dependable river Kabul is contributing only 6,630 cusecs at Nowshera against its normal supply of 15,000 cusecs of water to the national water availability when the Rabi crops including staple food of the nation wheat are in a critical stage of their growth/ maturity.

According to Punjab Irrigation engineer, the Indus River System Authority is releasing 50,000 cusecs of water against the iflow of 32,000 in accordance with the water distribution formula among the four provinces for irrigating the Rabi crops across the country.



Thus the provinces are facing about 40 percent shortage of irrigation water for the strategic winter crops which are under stress as the Meteorological department has already forecast that moderate drought like conditions may prevail over the southern half of the country due to deficient rainfall and amount of precipitation would be less during the first half as compared to second half of this month.

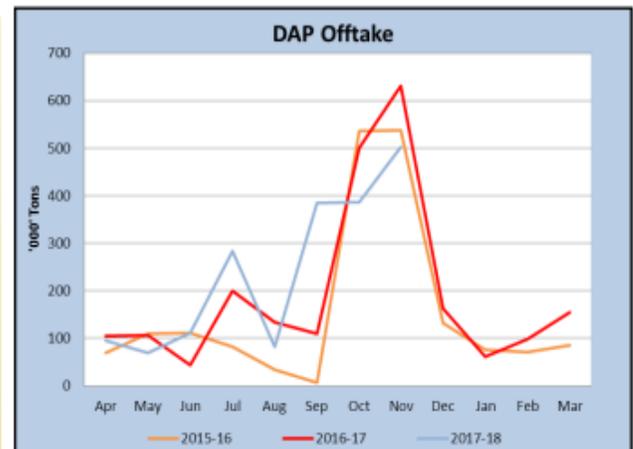
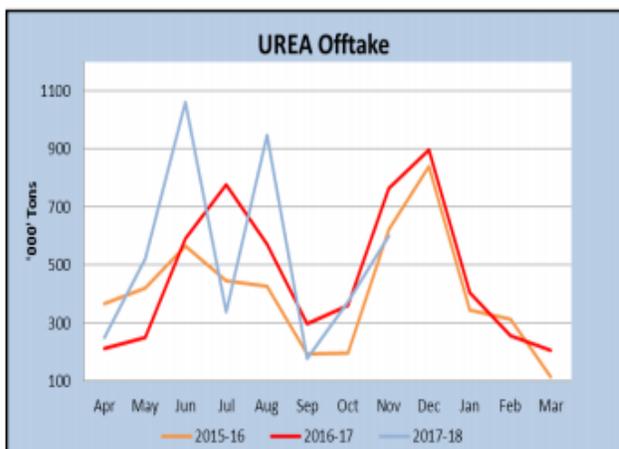
FERTILIZER OFFTAKE SITUATION

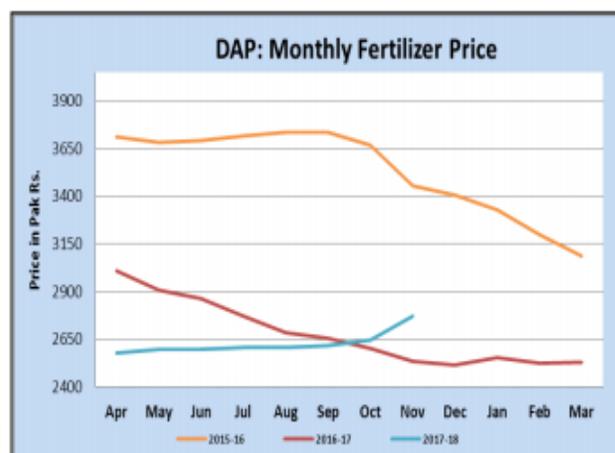
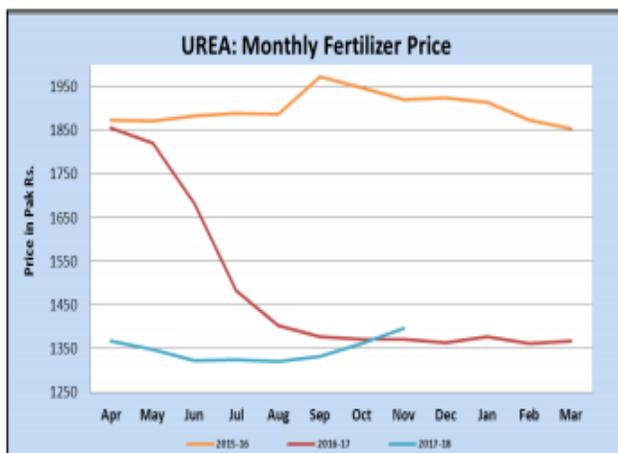
A total of Rs 230.51 billion have been provided as subsidy on fertilizer products in the last nine years, from 2008-09 to 2016-17, while price of urea and DAP fertilizers have increased recently due to price hike in international market. Urea and DAP are major fertilizers used by the farming community while urea is locally manufactured, whereas 60 percent of DAP requirement is imported by the private sector. In case of urea, a slight price increase has been reported but that increase is within the level allowed by the government ie Rs 1400 per bag, An increase in DAP price has been observed because of price hike in the international market from \$370 per ton as on 01 December 2017 to \$409 per ton on 01 January 2018.

Fertilizer Offtake (000 tonnes) during Rabi 2017-18 (Estimated):

Province	UREA	DAP	SOP/MOP	Total
Punjab	2,100	1,200	20	3,340
Sindh	800	300	5	1,105
NWFP	200	60	0.7	261
Balochistan	100	30	0.6	131
Pakistan	3,200	1,610	26	4,836
Rabi 2016-17	2,892	1,608	32	4,532
%age change over Rabi 2016-17	10.7	0.1	-18.0	6.7

The fertilizer statistics and prices are depicted in the graphs below:





NEWS & TRENDS

- The Punjab government has planned to establish a research institute in Lahore and set up a hatchery in Muzaffargarh to carry out research on 'Tilapia' fish and increase fish production in the province. Secretary Forests, Wildlife and Fisheries said that cage-culture is also being promoted in Potohar region to increase Tilapia fish production. He said total projects worth Rs 780 million would be carried out in the province while seven new projects worth Rs 820 million have also been prepared and sent to the planning and development department for approval which are aimed at bringing barren land under fish production.
- For distribution of free-of-cost high value varieties of date plants and seedless Kinnow on subsidized rates in the province, the Punjab Agriculture Department has launched a five-year project worth Rs 780 million. According to implementation status of this program, Agriculture Department will provide free of cost high value varieties of Date plants (Ajwa, Barhee, Amber, Khulas and Midjaul) to the farmers belonging to 9 districts of South Punjab i.e. Bahawalpur, Multan, Jhang, Rahim Yar Khan, DG Khan, Layyah, Muzaffargarh, Bhakkar, and Rajanpur whereas seedless Kinnow plants will be provided in 6 districts on subsidized rates to farmers belonging to district Sargodha, Toba Tek Singh, Mandi Bahauddin, Sahiwal, Vehari and Layyah can apply for this subsidy scheme. Interested farmers can get application forms free of cost from office of Deputy Director Agriculture (Ext) of their districts or can download it from official website of Agriculture Department. An interested person for this subsidy scheme has to abide all the conditions written on application form in this regard.
- The Sindh government has planned to launch Warehouse Receipt Based Financing model as pilot project for agro-based commodities during the 7th edition of Livestock, Dairy, Fisheries and Agriculture (LDFA) exhibition 2018 to be held on February 10-11 at Larkana. The pilot project of Warehouse Receipt Based Financing model for agro-based commodities would revamp agriculture financing as being done in the developed world.
- The Punjab Agriculture Department (PAD) has launched energy audit of tube wells spreading across the province to curtail unnecessary usage of energy. Over one million tube



wells have been installed in the Punjab province out of which 120,000 run on electricity. These tube wells help meet the water requirement of different crops by pumping out underground water due to shortage of canal water or rainwater. Nevertheless, growers still face 30 percent of water shortage despite using all these available water resources including canal system, rain and tube wells.

ROLE OF ZTBL

ZTBL Team headed by Mr. Farhat Karim Hashmi(Executive Vice President, P&RD/ATD) and Mr. Muhammad Ikram Ul Haq (Senior Vice President, ATD) along with four Subject Specialists visited Sultan Bhatti Farm near Sukhekhee owned by Mr. Sultan Bhatti. Basic purpose of the visit was to attain briefing about sowing of 4Kg and 10Kg wheat seed/acre as Research Scientists and Extension Departments recommends 40-50 Kg seed/acre but Mr. Sultan is practicing only 4 kg seed/acre and claimed 52 maunds/acre of yield. The best practices adopted by the progressive farmers would be disseminated among other farmers for their benefits.

In 2017 almost 25000-28000 PKR was cost for one acre of wheat and 50,000 PKR return was received by farmer ultimately 15,000-20,000 PKR Profit for one acre but in Raised Bed Technology almost 60 to 70 % cost is saved and approximately 10,000-150000 PKR is used for one acre with maximum tiller and ultimately gives better yield.

زرعی سفارشات برائے کسان

کماؤ

- ☆ کماؤ کی کاشت کا موزوں وقت فروری کے پہلے ہفتے سے مارچ کے وسط تک ہے۔
- ☆ کماؤ کی اچھی پیداوار کے لیے اچھے نکاس کے لیے بھاری میراژ مین نہایت موزوں ہے۔ کاشت کھیلپوں پر کریں۔
- ☆ ہمیشہ صحت مند بیماریوں اور کیڑوں سے پاک مندرج ذیل بیج استعمال کریں:
- ☆ ترقی دادہ اقسام: سی پی ایف 400-77، سی پی ایف 237، ایچ ایف 240 اور ایچ ایف 242۔
- ☆ درمیانی اقسام: ایس پی ایف 213، ایس پی ایف 234، سی پی ایف 246، سی پی ایف 247، سی پی ایف 248 اور سی

پی ایف 249

- ☆ بروقت کاشت اور دیگر موزوں حالات میں فی ایکڑ دو آنکھوں والے 30 ہزار سے یا تین آنکھوں والے 20 ہزار سے ڈالنے چاہئیں۔
- ☆ مکمل کھادیں کمزور زمینوں میں 3 بوری ڈی اے پی اور 2 بوری ایس او پی اے پی اور 2 بوری ایم او پی درمیانی زمین میں 2 بوری ڈی اے پی اور 2 بوری ایس او پی اے پی اور 1 بوری ایم او پی اور 1 بوری ایم او پی اے پی فی ایکڑ بوائی کے وقت ڈالیں۔

مکئی

- ☆ بہاریہ مکئی کی کاشت تمام میدانی علاقوں میں فروری کے آخر تک مکمل کر لیں۔ موزوں ترین وقت آخر فروری ہے۔
- ☆ بہاریہ مکئی کی کاشت کے لیے قطاروں کا درمیانی فاصلہ سوادنا اڑھائی فٹ رکھیں۔ ڈرل کاشت کی صورت میں شرح مکئی کے لیے بیج 12 تا 15 کلوگرام فی ایکڑ استعمال کریں۔ وٹوں پر کاشت کے لیے 8 سے 10 کلوگرام بیج فی ایکڑ استعمال کریں۔
- ☆ دوغلی اقسام کے لیے کمزور زمینوں میں 3 بوری ڈی اے پی اور 2 بوری پونٹاشیم سلفیٹ، درمیانی زمینوں میں اڑھائی بوری ڈی اے پی، ڈیڑھ بوری پونٹاشیم سلفیٹ اور زرخیز زمینوں کے لیے 2 بوری ڈی اے پی اور 1 بوری پونٹاشیم سلفیٹ فی ایکڑ استعمال کریں۔
- ☆ عام اقسام کے لیے آبپاش علاقوں کی درمیانی زمینوں میں 2 بوری ڈی اے پی، ڈیڑھ بوری پونٹاشیم سلفیٹ، جبکہ کمزور زمینوں میں اڑھائی بوری ڈی اے پی + ڈیڑھ بوری پونٹاشیم سلفیٹ فی ایکڑ بوائی کے وقت استعمال کریں۔

سورج مکھی

- ☆ شمالی اور وسط پنجاب میں سورج مکھی کی کاشت کا وقت فروری کے آخر تک ہے۔ جبکہ جنوبی پنجاب میں 10 فروری تک کاشت مکمل کر لیں۔
- ☆ ترقی دادہ اقسام میں ہائی سن 33، ٹی 40318، گورا 4، ایس ایف 0046، ایس 278، این کے ارمونی اور کوئڈی کاشت کریں۔

☆ اچھا گاؤ کے لیے 2 تا 2.5 کلوگرام بیج فی ایکڑ استعمال کریں۔ فصل تظاروں میں کاشت کریں۔ تظاروں کا درمیانی فاصلہ سواد و فٹ سے اڑھائی فٹ رکھیں اور پودوں کا درمیانی فاصلہ آپاش علاقوں میں 9 انچ اور بارانی علاقوں میں ایک فٹ رکھیں۔
☆ 1.75 بوری ڈی اے پی اور ایک بوری پوٹاشیم سلفیٹ فی ایکڑ کاشت کے وقت استعمال کریں۔

سبزیات و باغات

☆ موسم گرما میں اگائی جانے والی سبزیوں میں کریلہ، گھیا کدو، گھیا توری، جھنڈی توری، پیٹنگن، ٹماٹر، سبز مرچ، شملہ مرچ، تر اور کھیرا کی کاشت کا وقت فروری تا مارچ ہے۔
☆ سبزیوں کی کاشت کے لیے اچھی نکاس اور نامیاتی مادے والی زرخیز میرا زمین ہونی چاہیے۔
☆ ٹماٹر اور مرچ کی کاشت بذریعہ پیڑی کریں۔ جب پیڑی کی عمر 30 تا 35 دن ہو جائے تو اس پیڑی کو پٹر یوں پر سفارش کردہ فاصلے کے مطابق منتقل کریں۔
☆ سپرے اور کھاد ڈالنے کے بعد ٹٹل کا منہ بند نہ کریں تاکہ گیس پیدا ہو کر فصل کو نقصان نہ پہنچ سکے۔
☆ آم کے پودوں میں نائٹروجن، فاسفورس، پوٹاش اور جینسم کی کھاد ڈالیں اور بعد میں آپاشی کریں۔
☆ ترشاہ باغات میں تیار پھل کی برداشت جاری رکھیں۔ پھل سے خالی ہونے والے پودوں کی شاخ تراشی جاری رکھیں۔ اور وسط فروری کے بعد پودے لگائیں۔

آلو

☆ آلو کی بہاریہ فصل کی کاشت فروری کے آخر تک مکمل کر لیں۔ بیج کی شرح 500 تا 600 کلوگرام فی ایکڑ استعمال کریں۔
☆ کیماٹی کھادوں کا استعمال زمین کے تجزیے کے مطابق کریں۔ درمیانی زرخیز زمین کے لیے 2.25 بوری ایف ایف سی ایس او پی یا 1.75 بوری ایف ایف سی ایم او پی اور 1.5 بوری سونا پوریا اور گاؤ مکمل ہونے کے بعد ایک بوری سونا پوریا یا 45 سے 50 دن کے دوران بذریعہ آپاشی استعمال کریں۔

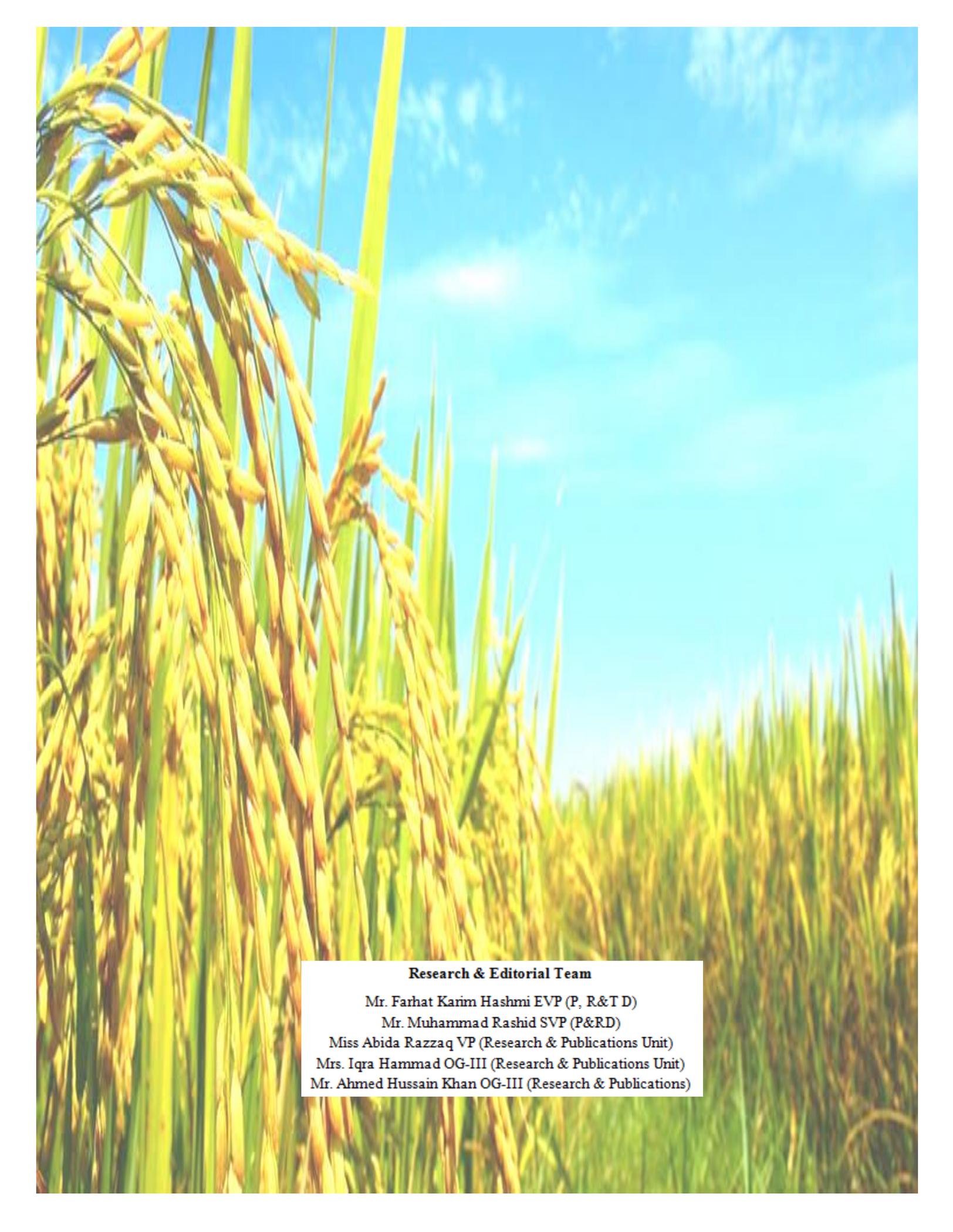
Source: Zarat nama, Government of Punjab (Farmers' Advisory)

Fauji Fertilizer Company Limited (Farmers' Advisory Services)

پلاننگ اینڈ ریسرچ ڈیپارٹمنٹ

ہیڈ آفس، زرعی ترقیاتی بینک لمیٹڈ،

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