

Subject: Cotton development programme in Punjab for Kharif 2020.

Cotton is the most important commercial crop and plays a vital role in agricultural, industrial, economic and social sectors of the country. It is the second largest crop among Kharif crops of the state. During *Kharif* 2015, due to attack of cotton whitefly the seed cotton yield reduces to 197 kg per hectare as compared to 544 kg per hectare during kharif-2014 and production reduces from 13.47 lakh bales to 3.86 lakh bales (170 Kg each) during kharif 2015. To revive the crop during kharif 2016, a cotton development programme was implemented jointly by the Department of Agriculture, Punjab (DoA) and Punjab Agricultural University, Ludhiana (PAU). For the implementation of this programme, the funds amounting to Rs. 3.50 crore were released by the State Govt, from Rural Development Fund (RDF). During the Kharif season-2016, the area under cotton crop was 2.85 lakh hectares. With the combined efforts of the DoA and PAU, the cotton crop was revived and the state gets bumper average yield with an all time record of 757 kg lint per ha.

Similarly, during Kharif 2017, 2018 and 2019 area under cotton crop was revived to 2.91 lakh, 2.68 lakh and 2.48 lakh ha. (estimated) respectively. With the combined efforts of the DoA and PAU, the state got the estimated average yield of 750 kg, 776 Kg and 827 Kg lint per ha respectively.

The area ('000' ha.), yield (kg lint per ha.) and production ('000' bales) of cotton for last five years (2015-16 to 2019-20) and targets for 2020-21 are as under:

Sr. No.	Year	Area	Average Yield	Production
1	2015-16	335	196	386
2	2016-17	285	757	1269
3	2017-18	291	750	1284
4	2018-19	268	776	1223
5	2019-20 (Estimated)	248	827	1203
6	2020-21 (Estimated)	481	750	2122

During 2020, DoA and PAU are making efforts to increase area and to enhance the productivity of cotton by adopting the following strategies in similarly way as cotton crop was revived during 2016, 2017, 2018 and 2019.

1. Weed control :

Regular campaign for the eradication of weeds in cotton growing areas is started as was done during 2019-20. 31 pest surveillance teams are constituted at block level by DoA to control/eradication of weeds(Host plants of cotton pests) at district/block level. For this purpose District Administrations, Municipal Corporations/Committees/Panchayats, Punjab Mandi Board, PWD (B&R), Forest, Irrigation and other concerned departments are involved. The Chief Agriculture Officers (Nodel officers) started the campaign in consultation with concerned district administration from last week of February till 21 March 2020. The monitoring of this campaign is going on regularly. Field staff educating farmers for effective management of cotton pests especially whitefly on alternate host plants from 1st week of March 2019. The department will issue advisory in Punjabi newspapers for the development of the cotton crop on important points from time to time depending upon the availability of funds. Department of agriculture organised village level camps from the last week of February till 20 March 2020.

2. Pest surveillance teams :

The weekly monitoring of whitefly and other insect pests incidence during the season will be done by Regional Research Stations/KVKs, state department of Horticulture and state DoA jointly at district level. For this purpose, 8 teams at district level and 31 teams at block level were constituted in eight cotton growing districts. The Chief Agriculture Officer of the respective district will be the in-charge of the team at district level whereas Deputy Director Agri. (Cotton Extension), SAS Nagar will be the coordinator at the State level. They will arrange the meeting in field and also visit the fields regularly along with other scientists. The Chief Agriculture Officer will submit the weekly compiled surveillance report to PAU and copy to DDA (Cotton Extension) on every Friday. For regular monitoring and scouting, Department of Agriculture will also engage farmers friends for the survey of the crop at village level.

3. Revised packages of practices (Literature)

- (a) **Brochure:** Punjab Agricultural University will prepare brochure of the revised package of practices for cotton cultivation for distribution to Chief Agriculture Officers and extension officials of Department of Agriculture.
- (b) **One Page Pamphlet:** PAU will also prepare one page pamphlet giving important hints for the successful cultivation of the cotton which will be distributed to the farmers during training camps and kisan-melas etc.
- (d) **Charts For Dealers:** PAU will print charts giving information on varieties and pest control for displaying at every pesticide and seed shop in cotton growing areas for the information of the farmers. In addition to it, Charts for identification of natural enemies will be printed.

4. Farmer Trainings Camps : (Depending upon the prevailing condition due to Covid-19)

Department agriculture started organising training programmes/camps for educating the farmers at district, and village level. Village level training camps regarding weed eradication, cotton production and plant protection technologies are started from last week of February and continued till 20 March 2020. Similarly, during the season, regular training camps regarding identification of useful and harmful insects, IPM/INM and proper spray technology will be organized during May-June, July-August and September. Total 3 training camps will be organized at village level in the three rounds during the season in each cotton village. The training of pesticides dealers of eight cotton districts on cotton IPM will also be arranged by Chief Agriculture Officers in each districts. For this purpose an amount of Rs. 10.00 lakhs will be fixed. In case of non prevailing condition for training camps same will be used for newspaper advertisement.

5. Crop monitoring : (Depending upon the prevailing condition due to Covid-19)

For monitoring the crop pests, regular meetings will be held in the field along with scientists from PAU.

6. Availability of Irrigation water :

For timely availability of Irrigation water, the department has already written to the department of irrigation which will ensure timely release of canal water. PAU has recommended first irrigation to cotton after 4-6 weeks of sowing and subsequent irrigations at 15 days interval. Therefore, regular supply of canal water from April to end June be ensured.

7. Good quality seed :

Bt. Seed of good quality will be provided timely to the farmers. For this purpose PAU has already recommended about 86 suitable Bt. varieties of cotton for the state.
