## **Clustered Frontline Demonstration on Pulses (2016-17)**

*Kharif* Pulse: In CFLD on pulse crops during *kharif* 2016, pigeon pea, black gram, green gram and horse gram were taken up for demonstration as per the communication received from DAC&FW. Altogether 2130 ha was allotted for *kharif* pulses of which 1946 ha could be finally brought under demonstration programme. All the four crops except horse gram were demonstrated in Bihar, Jharkhand and West Bengal and horse gram was demonstrated only in Jharkhand. Performance analysis of individual pulse crop indicates that in pigeon pea, 40 to 44 percent increase in average yield under demonstration was recorded in the three states. In black gram, no demonstration was conducted in Bihar though the KVKs of Jharkhand and West Bengal brought 430 ha under CFLD programme. In respect of yield enhancement, the KVKs of Jharkhand reported as average increase of demonstration yield to the extent of 45.45 per cent whereas it was 41.27 per cent in respect of KVKs of West Bengal. In green gram, average increase in demonstration yield was highest in Bihar (57.97%) followed by Jharkhand (45.79%) and West Bengal (38.0%). In horse gram, an area of 90.0 ha was brought under the CFLD programme by the KVKs of Jharkhand. The increase in average demonstration yield over local check was 29.73 per cent. The details are given in Table 1.

| S1.<br>No | Crops             | State          | Target of<br>FLD<br>Approved |                    | Achievement of<br>FLD      |                                 | Average yield<br>(q/ha) |       | yield<br>increase | Differen<br>ce of<br>yield                |
|-----------|-------------------|----------------|------------------------------|--------------------|----------------------------|---------------------------------|-------------------------|-------|-------------------|---|
|           |                   |                | No of<br>Demonstrati<br>on   | Area<br>(in<br>ha) | No of<br>Demonstrat<br>ion | Achieveme<br>nt Area<br>(in ha) | Demo                    | Local | (%)               | between<br>demo<br>and<br>local<br>(q/ha) |
| 1         | Pigeo             | Bihar          | 1650                         | 660                | 1553                       | 621                             | 15.75                   | 11.15 | 41.26             | 4.60                                      |
|           | n pea             | Jharkhan<br>d  | 1400                         | 560                | 1388                       | 555                             | 12.80                   | 8.88  | 44.14             | 3.92                                      |
|           |                   | West<br>Bengal | 200                          | 80                 | 172                        | 80                              | 10.64                   | 7.60  | 40.00             | 3.04                                      |
| 2         | Blac<br>k<br>gram | Bihar          | 125                          | 50                 | 0                          | 0                               | 0                       | 0     | 0.00              | 0.00                                      |
|           |                   | Jharkhan<br>d  | 500                          | 200                | 500                        | 200                             | 9.92                    | 6.82  | 45.45             | 3.10                                      |
|           |                   | West<br>Bengal | 575                          | 230                | 611                        | 230                             | 8.66                    | 6.13  | 41.27             | 2.53                                      |
| 3         | Gree<br>n<br>gram | Bihar          | 125                          | 50                 | 25                         | 10                              | 10.90                   | 6.90  | 57.97             | 4.00                                      |
|           |                   | Jharkhan<br>d  | 275                          | 110                | 275                        | 110                             | 9.01                    | 6.18  | 45.79             | 2.83                                      |
|           |                   | West<br>Bengal | 200                          | 80                 | 128                        | 50                              | 6.06                    | 4.39  | 38.04             | 1.67                                      |
| 4         | Hors<br>e<br>gram | Jharkhan<br>d  | 275                          | 110                | 225                        | 90                              | 7.20                    | 5.55  | 29.73             | 1.65                                      |
| Total     |                   |                | 5325                         | 2130               | 4877                       | 1946                            |                         |       |                   |   |

## Table 1: Cluster Frontline Demonstration on kharif Pulses during 2016-17

**Rabi** Pulse: In *rabi* 2016-17, lentil, chick pea and field pea were brought under clustered demonstration programme by the KVKs of Bihar, Jharkhand and West Bengal to cover an area of 3150.0 ha. However, lentil was demonstrated in Bihar and West Bengal only. The performance of demonstration in lentil shows that 40.30 per cent average increase was recorded in Bihar whereas it was 29.60 per cent in West Bengal. In chick pea, the KVKs of West Bengal recorded an average

increase in yield to the extent of 45.99 per cent against 40.79 per cent in Jharkhand and 39.60 per cent in Bihar. Another pulse crop, field pea taken up for demonstration produced 37 to 41 per cent higher yield in all the three states. The details are given in Table 2.

| SI<br>N<br>o | Crops                | State                  | Target of FLD<br>Approved  |                    | Achievement of<br>FLD      |                                 | Average yield<br>(q/ha) |       | yield            | Difference<br>of yield                 |
|--------------|----------------------|------------------------|----------------------------|--------------------|----------------------------|---------------------------------|-------------------------|-------|------------------|--|
|              |                      |                        | No of<br>Demonstrati<br>on | Area<br>(in<br>ha) | No of<br>Demonstr<br>ation | Achievem<br>ent Area<br>(in ha) | Demo                    | Local | increa<br>se (%) | between<br>demo and<br>local<br>(q/ha) |
| 1            | Lenti<br>1           | Bihar                  | 2650                       | 1060               | 2974                       | 1189.75                         | 13.89                   | 9.90  | 40.30            | 3.99                                   |
|              |                      | Jharkh<br>and          | 0                          | 0                  | 0                          | 0                               | 0.00                    | 0.00  | 0.00             | 0.00                                   |
|              |                      | Wes<br>t<br>Beng<br>al | 875                        | 350                | 825                        | 330                             | 9.72                    | 7.50  | 29.60            | 2.22                                   |
| 2            | Chi<br>ck<br>pea     | Bihar                  | 1450                       | 580                | 1316                       | 526.25                          | 12.41                   | 8.89  | 39.60            | 3.52                                   |
|              |                      | Jharkh<br>and          | 1175                       | 470                | 1150                       | 460                             | 12.46                   | 8.85  | 40.79            | 3.61                                   |
|              |                      | Wes<br>t<br>Beng<br>al | 225                        | 90                 | 200                        | 80                              | 9.65                    | 6.61  | 45.99            | 3.04                                   |
| 3            | Fie<br>ld<br>pe<br>a | Bihar                  | 925                        | 370                | 626                        | 250.<br>25                      | 12.49                   | 9.02  | 38.47            | 3.47                                   |
|              |                      | Jharkh<br>and          | 225                        | 90                 | 200                        | 80                              | 13.29                   | 9.42  | 41.08            | 3.87                                   |
|              |                      | Wes<br>t<br>Beng<br>al | 350                        | 140                | 350                        | 140                             | 12.15                   | 8.88  | 36.82            | 3.27                                   |
| Total        |                      |                        | 7875                       | 3150               | 7641                       | 3056<br>.25                     |                         |       |                  |  |

*Summer* Pulse: Clustered frontline demonstration was also taken by the KVKs of Bihar, Jharkhand and West Bengal on green gram and black gram to cover an area of 1380.0 ha against the target of 1390.0 ha. In green gram, highest area was covered by KVKs of Bihar (460.0 ha) whereas in Jharkhand, 38.0 ha was brought under demonstration and 34.0 ha in West Bengal. In black gram, 200.0 ha was brought under demonstration programme in this zone of which 130.0 ha in Jharkhand, 40.0 ha in Bihar and 30.0 ha in West Bengal. The results of the demonstration are awaited till the compilation of report. However, the details of target and achievement in terms of area allotment and crop-wise/state-wise distribution of area are given at Table 3.

|                    |                | Target of I    | FLD approved | Achievement of FLD |              |  |
|--------------------|----------------|----------------|--------------|--------------------|--------------|--|
| Name of Crop       | State          | No. of<br>Demo | Area<br>(ha) | No. of<br>Demo     | Area<br>(ha) |  |
| Green Gram         | Bihar          | 1175           | 470          | 1150               | 460          |  |
|                    | Jharkhand      | 975            | 390          | 950                | 380          |  |
|                    | West<br>Bengal | 825            | 330          | 850                | 340          |  |
| Tot                | Total          |                | 1190         | 2950               | 1180         |  |
| Black Gram         | Bihar          | 100            | 40           | 100                | 40           |  |
|                    | Jharkhand      | 325            | 130          | 325                | 130          |  |
|                    | West<br>Bengal | 75             | 30           | 75                 | 30           |  |
| Tot                | al             | 500            | 200          | 500                | 200          |  |
| <b>Grand</b> Total |                | 3475           | 1390         | 3450               | 1380         |  |

## Table 3: Cluster Frontline Demonstration on summer Pulses during 2016-17

