**CROP RELATED FARMER FIELD SCHOOL**

**COMPLETION REPORT**

**FY 2079/80**



**Food and Nutrition Security Enhancement Project**

**Dhanusha Cluster**

**Prepared By:**

**Ritesh Kumar Jha, Agriculture Officer, FANSEP Dhanusha.**

**Background**

Farmers Field Schools (FFS) is learning by doing approach for farmers group to adopt improved practices and technologies in crops. It is a learning site where farmers and facilitators observe, discuss, experience and document new knowledge for better management in location specific resource. In Dhanusa cluster, rice, wheat, potato and vegetables are considered in FFS to impart improved production practices such as IPM, high yielding variety, nutrient management, and intercultural operations (irrigation, top dressing). FFS are conducted on cauliflower, cabbage, brinjal, potato and wheat during this reporting period.

**Process of FFS**

1. **Selection of the groups**

The very first process of the FFS was the selection of the farmer groups to implement the FFS. Field staffs in consultation with the farmer's groups, FAO TA and PCU's agriculture officers have selected the farmer's group and selection of the crop was done. The FFS name list is attached in the annex.

1. **Selection and allocation of the Facilitators**

After the selection of the farmer groups and crop, crop facilitators were selected. One FFS facilitator and one assistant facilitator were selected for the FFS. The facilitators were selected based on their prior experience and those who have received the TOT on FFS from FANSEP Project. The table in the annex shows the FFS facilitators name list.

1. **Preparation Meeting**

Two preparation meetings were conducted in each FFS. One day on the overall process of the FFS conduction, sub groups formation, norms settings. On other day, layout of the field, process of the FFS were set. 2 Preparatory meetings were planned to conduct in each FFS.

1. **Conduction of FFS**

Based on the protocol design for the crop and season, facilitators conducted the sessions. Generally, FFS runs for 16 weeks of regular classes, additional of 2 weeks of the preparatory meetings. Agro-ecosystem analysis, weekly measurement of the plant growth, irrigation, fertilizer management based on the findings of the AESA. Comparative trail of farmer's practice Vs improved practice, fertilizer trials, varietal trials were conducted. IPM practices were followed mainly in the FFS.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Row Labels** | **Brinjal** | **Cabbage** | **Cauliflower** | **Okra** | **Potato** | **Spring Rice** | **Wheat** | **Grand Total** |
| **Dhanauji** |  |  | 4 |  | 2 | 2 | 4 | 12 |
| **Ekdara** |  | 2 | 2 |  | 1 | 2 | 5 | 12 |
| **Mukhiyapatti Musaharniya** |  |  | 4 | 1 | 1 | 1 | 5 | 12 |
| **Pipara** | 1 | 1 | 2 | 1 | 1 | 1 | 5 | 12 |
| **Grand Total** | 1 | 3 | 12 | 2 | 5 | 6 | 19 | 48 |

1. **Technical Monitoring and special classes**

Technical monitoring from FAO Technical team, PCU agriculture officers, cluster chief and technical experts from FAO TA and PMU has monitored the FFS activities regularly. Special classes on the current issues of agriculture production, crop related problems were conducted by the technical experts from PCU and FAO TA.

1. **Crop Cut and FFS Field Days**

At last of the FFS, one crop cut for the production estimation were carried out in each FFS. One day celebrations of the learnings from FFS were also organized called as Farmer's Field Day celebrations. Farmer's from other FFS, farmer's groups, representative from local palikas and technical team were called to celebrate the FFS. Learnings of the FFS and best practices were discussed and farmers present the data and best practices.

**Major Results of the FFS**

In comparison of the improved practice (4.80 Mt/ha) and traditional practice (3 Mt/ha) of Rice production, the productivity of Sworna Sub-1 variety was recorded. Likewise, Local (113.79 Kg/Kattha), Basmati (79 Kg/kattha), Bahuguni (110.51 Kg/Kattha), Sworna Sub-01 (159.3 Kg/kattha) of production was recorded in the varietal trial. Farmers have preferred the rice variety Sworna Sub-01 and Bahuguni.

Comparison of the varieties of Wheat, Productivity of Banganga (2.7 Mt/ha), Gautam-2.4 Mt/ha, Bijaya-2.3 Mt/ha, NL- 2.2 Mt/Ha, Bhrikuti-2 Mt/ha was achieved. Banganga has the higher productivity among other wheat varieties. Farmer's also prefer the Banganga and Gautam Varieties among other wheat varieties.

In this FY, FFS on Spring rice was introduced in the FANSEP Dhanusha Cluster and planned of 6 FFS. The comparative trail, varietal trail was conducted. The table below shows the protocol of the FFS.

FFS has empowered participants particularly women in the project area and were able to search new/better technologies and practices for higher production and/or income. Farmers are acquainted well with the critical growth stages of major crops and application of the practices such as fertilization, irrigation, earthing-up or weeding etc. as per the need of the crop. They are also aware about the use of chemical pesticides, its effects and waiting period for the harvesting of crop after the use of pesticides.

Wheat variety Banganga was the first choice of farmers due to its higher productivity and bigger size of grains owing to more 1000 grains weight than that of other varieties (Bijay and Tilottama) tested by the farmers,

The crop cut from the Chaite rice from 6 FFS from different project areas, the yield achieved is presented in the table below;

Table : Productivity of the Chaite Rice Varieties

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Program Areas** | **HH-1** | **Chaite-3** | **Chaite-05** | **Hardinath Hybrid-10** | **Farmer's Practice** | **Improved Practice** |
| **Dhanauji-01** | 4.3 | 3.6 | 3 | 3.4 | 3.1 | 4.3 |
| **Dhanauji-02** | 4 | 3 | 3.7 | 3.2 | 3.5 | 4 |
| **Mumu-01** | 3.8 | 3.8 | 4 | 3.5 | 2.6 | 3.9 |
| **Pipara-01** | 3.7 | 4 | 3.7 | 3.3 | 2.9 | 4.2 |
| **Ekdara-01** | 4 | 3.7 | 3.2 | 3.8 | 2 | 4.1 |
| **Ekdara-02** | 3.8 | 3.6 | 3.1 | 3.2 | 3 | 3.8 |
| **Average** | 3.93 | 3.62 | 3.45 | 3.40 | 2.85 | 4.05 |

Hardinath-01 is early maturing rice variety followed by Chaite 3, HH-10 and Chaite-05. The table shows the difference in the productivity of the spring rice was found to be higher in improved practice 4.05 Mt/ha as compared to 2.85 Mt/ha from traditional practice.

It was found that the HH-01 has the higher potential of 3.93 Mt/ha of productivity as compared to Chaite-03 ( 3.62 Mt/Ha), Chaite-05 (3.45 Mt/ha) and Hardinath Hybrid (3.40 Mt/ha).

Farmers preference of Hardinath 01 was high due to its early maturity, high yielding and appropriate height.

Figure : Disaggregated data of the participants of the FFS in program area (FY 2079/80)

The disaggregated data from the figure above shows the male female participants in the crop related FFS in the program areas. Where, 417 Male and 788 Female (65%) have taken participation in the FFS.

Annex: Table : Details of the FFS Conducted in FY 2079/80

| SN | Fiscal Year | Group Name | Name of FFS | Crop Name | District | Rural Municipality | Male(no) | Female(no) | Total | Start Date (DD/MM/YY) | End Date (DD/MM/YY) | Contact Number of Focal Person | Name of Head of FF |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2079/080 | Bhairab Vegetable Production Farmer Group (A) | Bhairab Cauliflower Production FFS | Cauliflower | Mahottari | Pipara | 25 | 0 | 25 | 7/4/2079 | 12/2/2079 | 9817864484 | Ramdinesh Das |
| 2 | 2079/080 | Chamaru Baba Vegetable Production Group | Chamaru Baba Cabbage Production FFS | Cabbage | Mahottari | Pipara | 16 | 8 | 24 | 7/9/2079 | 11/17/2079 | 9824816287 | kailash Shah |
| 3 | 2079/080 | Ram Janaki Vegetable Production Group | Ram Janaki Brinjal Production FFS | Brinjal | Mahottari | Pipara | 17 | 8 | 25 | 6/27/2079 | 12/23/2079 | 9807821632 | Dipak yadav |
| 4 | 2079/080 | Hira Annbali crop productionn group | Hira Cauliflower Production FFS | Cauliflower | Mahottari | Pipara | 0 | 25 | 25 | 6/29/2079 | 11/17/2079 | 9807660812 | Bina Devi Yadav |
| 5 | 2079/080 | Ma Baudhi Farmer Group | Ma Baudhi Cabbage Production FFS | Cabbage | Mahottari | Ekdara | 5 | 20 | 25 | 6/7/2079 | 9/14/2079 | 9816891806 | Sunil Yadav |
| 6 | 2079/080 | Soni Farmer Group | Soni Cauliflower Production FFS | Cauliflower | Mahottari | Ekdara | 0 | 25 | 25 | 6/29/2079 | 11/6/2079 | 9844260288 | Laxmi Mahato |
| 7 | 2079/080 | Gulab Farmer Group | Gulab Cauliflower Production FFS | Cauliflower | Mahottari | Ekdara | 0 | 25 | 25 | 6/29/2079 | 11/6/2079 | 9827610190 | Sunita Devi Mandal |
| 8 | 2079/080 | Jagdamba Crop Production Farmer Group | Jagdamba Cabbage Production FFS | Cabbage | Mahottari | Ekdara | 3 | 22 | 25 | 6/28/2079 | 11/6/2079 | 9819894620 | Nasira Khatun |
| 9 | 2079/080 | Jan Samuday Annbali crop production group | Jan Samudhya Potato Production FFS | Potato | Mahottari | Ekdara | 0 | 25 | 25 | 7/23/2079 | 10/26/2079 | 9827607010 | Shanti devi mandal |
| 10 | 2079/080 | Jhojhi Krishak Samuha | Jhojhi Cauliflower Production FFS | Cauliflower | Dhanusa | Dhanauji | 20 | 7 | 27 | 7/5/2079 | 11/29/2079 | 9807813451 | Ramnath Thakur |
| 11 | 2079/080 | Janaki Farmer Group | Janaki Cauliflower Production FFS | Cauliflower | Dhanusa | Dhanauji | 6 | 19 | 25 | 06/31/2079 | 12/28/2079 | 9818729535 | Shiva Kumar Ray |
| 12 | 2079/080 | Mahabir Farmer Group | Mahabir Cauliflower Production FFS | Cauliflower | Dhanusa | Dhanauji | 10 | 15 | 25 | 6/27/2079 | 11/29/2079 | 9807648993 | Jaynath Shah |
| 13 | 2079/080 | Janaki Krishak Samuha Dhanauji 1 | Janaki Cauliflower Production FFS | Cauliflower | Dhanusa | Dhanauji | 17 | 8 | 25 | 6/22/2079 | 11/29/2079 | 9804877840 | Kalicharan Shah |
| 14 | 2079/080 | Siddhartha Krishak Samuha | Siddhartha Cauliflower Production FFS | Cauliflower | Dhanusa | Mukhiyapatti Musaharmiya | 12 | 13 | 25 | 6/26/2079 | 10/10/2079 | 9814868841 | Parbati Yadav |
| 15 | 2079/080 | Khumal Farmer Group | Khumal Cauliflower Production FFS | Cauliflower | Dhanusa | Mukhiyapatti Musaharmiya | 0 | 25 | 25 | 6/27/2079 | 10/5/2079 | 9824801432 | Rina devi Raut |
| 16 | 2079/080 | Janak Krishak Samuha | Janak Cauliflower Production FFS | Cauliflower | Dhanusa | Mukhiyapatti Musaharmiya | 8 | 17 | 25 | 7/10/2079 | 11/23/2079 | 9826894322 | Ramratan Yadav |
| 17 | 2079/080 | Ganga Farmer Group | Ganga Cauliflower Production FFS | Cauliflower | Dhanusa | Mukhiyapatti Musaharmiya | 15 | 10 | 25 | 6/28/2079 | 9/29/2079 | 9809682315 | kamlesh yadav |
| 18 | 2079/080 | Shree Ma Janaki Farmer Group | Ma Janaki Potato Production FFS | Potato | Dhanusa | Mukhiyapatti Musaharmiya | 11 | 14 | 25 | 7/22/2079 | 10/19/2079 | 9816829951 | Santosh Yadav |
| 19 | 2079/080 | Kalika Vegetable Production Group | Kalika Potato Production FFS | Potato | Mahottari | Pipara | 0 | 25 | 25 | 7/25/2079 | 12/9/2079 | 9807642940 | Tetri Devi Shah |
| 20 | 2079/080 | Jay Durga Farmer Group | jay Durga Potato Production FFS | Potato | Dhanusa | Dhanauji | 18 | 7 | 25 | 8/10/2079 | 11/30/2079 | 9804821149 | Shivashankar Yadav |
| 21 | 2079/080 | Sayali Crop Production Farmer Group | Sayali Wheat Production FFS | Wheat | Mahottari | Ekdara | 3 | 22 | 25 | 8/9/2079 | 12/20/2079 | 9819666599 | Sunita Kumari Mandal |
| 22 | 2079/080 | Pragati Krishak Samuh | Pragati Wheat Production FFS | Wheat | Mahottari | Ekdara | 10 | 15 | 25 | 8/10/2079 | 12/20/2079 | 9822018111 | Somari Devi Shah |
| 23 | 2079/080 | Bishnu Farmer Group | Bishnu Wheat Production FFS | Wheat | Mahottari | Ekdara | 0 | 25 | 25 | 8/2/2079 | 12/25/2079 | 9804803303 | Lila Devi Mahara |
| 24 | 2079/080 | Mahila Krishak Samuh | Mahila Wheat Production FFS | Wheat | Mahottari | Ekdara | 0 | 25 | 25 | 7/25/2079 | 12/22/2079 | 9812069518 | Rinku devi mandal |
| 25 | 2079/080 | Ma Santoshi Crop Production Group | Ma Santoshi Wheat Production FFS | Wheat | Mahottari | Ekdara | 0 | 25 | 25 | 7/24/2079 | 12/22/2079 | 9828171993 | Pukari Devi Mahato |
| 26 | 2079/080 | Milijuli Crop Production Farmer Group | Milijuli Wheat Production FFS | Wheat | Mahottari | Pipara | 1 | 23 | 24 | 8/21/2079 | 12/23/2079 | 9824895678 | Jumeda Khatun |
| 27 | 2079/080 | Laxmi Crop Production Group | Laxmi Wheat Production FFS | Wheat | Mahottari | Pipara | 7 | 18 | 25 | 8/25/2079 | 12/13/2079 | 9819671345 | Ramsagar Mandal |
| 28 | 2079/080 | Rani Vegetable Production Group | Rani Wheat Production FFS | Wheat | Mahottari | Pipara | 0 | 25 | 25 | 8/23/2079 | 12/29/2079 | 9844553595 | Jyoti Devi Yadav |
| 29 | 2079/080 | Bikash Vegetable Production Farmer Group | Banganga Wheat Production FFS | Wheat | Mahottari | Pipara | 12 | 13 | 25 | 8/27/2079 | 12/28/2079 | 9804811738 | Suresh Thakur |
| 30 | 2079/080 | Shivashankar Farmer Group | Shiva Shankar Wheat Production FFS | Wheat | Dhanusa | Mukhiyapatti Musaharmiya | 13 | 12 | 25 | 8/26/2079 | 12/22/2079 | 9804875611 | Shivakumar Jha |
| 31 | 2079/080 | Durga Farmer Group | Durga Wheat Production FFS | Wheat | Dhanusa | Mukhiyapatti Musaharmiya | 15 | 10 | 25 | 8/20/2079 | 12/14/2079 | 980829214 | Khalil Seikh |
| 32 | 2079/080 | Hariyali Farmer Group (M) | Hariyali Wheat Production FFS | Wheat | Dhanusa | Mukhiyapatti Musaharmiya | 3 | 22 | 25 | 8/14/2079 | 12/23/2079 | 9824850187 | Babita Devi Raut |
| 33 | 2079/080 | Tarahi Aarohi Farmer Group | Terai Aarohi Wheat Production FFS | Wheat | Dhanusa | Mukhiyapatti Musaharmiya | 20 | 7 | 27 | 8/23/2079 | 12/28/2079 | 9804854065 | lalit yadav |
| 34 | 2079/080 | Aarohi Mithila Farmer Group | Aarohi Mithila Wheat production FFS | Wheat | Dhanusa | Mukhiyapatti Musaharmiya | 7 | 18 | 25 | 8/26/2079 | 12/23/2079 | 9807814077 | Jagarnath Yadav |
| 35 | 2079/080 | Shree Kishan Krishak Samuha | Krishna Potato Production FFS | Potato | Dhanusa | Dhanauji | 18 | 7 | 25 | 8/10/2079 | 11/30/2079 | 9807840667 | Ramdev Yadav |
| 36 | 2079/080 | Mithila Farmer Group | Mithila Wheat Production FFS | Wheat | Dhanusa | Dhanauji | 20 | 5 | 25 | 7/29/2079 | 11/25/2079 | 9804871537 | Mithila Prasad Thakur |
| 37 | 2079/080 | Bishwokarma Farmer Group | Bishwokarma Wheat Production FFS | Wheat | Dhanusa | Dhanauji | 8 | 17 | 25 | 7/29/2079 | 12/27/2079 | 9807688970 | Janakman Bajraycharya |
| 38 | 2079/080 | Jay Bhajrangbali Farmer Group | Bhajrangbali Wheat Production FFS | Wheat | Dhanusa | Dhanauji | 15 | 10 | 25 | 7/26/2079 | 12/24/2079 | 9814897333 | Suresh Prasad Mandal |
| 39 | 2079/080 | Shree Bhairab Krishak Samuha | Bhairab Wheat Production FFS | Wheat | Dhanusa | Dhanauji | 17 | 9 | 26 | 7/27/2079 | 12/25/2079 | 9804858219 | Makeshwor Thakur |
| 40 | 2079/080 | Unmukh Annbali Utpadan krishak Samuh | Unmukh Chaite Dhan Utpadan Krishak Pathshala | Spring Rice | Mahottari | Ekdara | 2 | 23 | 25 | 12/5/2079 | 3/20/2080 | 9819832856 | Bandana Kumari Mahato |
| 41 | 2079/080 | Ram kalyan Krishak Samuha | Ramkalyan Chaitedhan Krishak Pathshala | Spring Rice | Dhanusa | Dhanauji | 17 | 8 | 25 | 12/6/2079 | 3/15/2080 | 9804880787 | Mahendra Mahara |
| 42 | 2079/080 | Baudhi Mai Farmer Group | Buadhimai Chaite Dhan FFS | Spring Rice | Dhanusa | Dhanauji | 3 | 24 | 27 | 12/7/2079 | 3/13/2080 | 9809621765 | Rajkishor Mandal |
| 43 | 2079/080 | Karikbaba Farmer Group | Karikbaba Chaite Dhan bali Field School | Spring Rice | Dhanusa | Mukhiyapatti Musaharmiya | 9 | 16 | 25 | 12/8/2079 | 3/15/2080 | 9817873178 | Amrit Yadav |
| 44 | 2079/080 | Dihbar Farmer Group | Dihabar Bhindi Krishak Pathashala | Okra | Dhanusa | Mukhiyapatti Musaharmiya | 21 | 3 | 24 | 11/25/2079 | 3/14/2080 | 9807661223 | Binde Ram |
| 45 | 2079/080 | Chand Crop Production Group | Chad Chaite Dhanbali krishak Pathshala | Spring Rice | Mahottari | Ekdara | 0 | 25 | 25 | 11/27/2079 | 3/13/2080 | 98155881103 | Somintra devi mandal |
| 46 | 2079/080 | Prakash vegetable crop group | Prakash Okra FFS | Okra | Mahottari | Pipara | 0 | 25 | 25 | 12/4/2079 | 3/14/2080 | 9814828815 | Sangita Thakur |
| 47 | 2079/080 | Sita Vegetable Production Group | Sita Chaitedhan bali utpadan FFS | Spring Rice | Mahottari | Pipara | 13 | 14 | 27 | 12/2/2079 | 3/17/2080 | 982308553 | Ramnarayan Yadav |
| 48 | 2079/080 | Mahdev Annbali Krishak Samuh | Mahadev Wheat FFS | Wheat | Mahottari | Pipara | 0 | 24 | 24 | 8/8/2079 | 11/26/2079 | 9807853341 | Ramekwal Pandit |
|  |  |  |  |  |  | Total | 417 | 788 | 1205 |  |  |  |  |

Annex: Name of FFS and Total numbers of FFS crop Wise.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Row Labels** | **Brinjal** | **Cabbage** | **Cauliflower** | **Okra** | **Potato** | **Spring Rice** | **Wheat** | **Grand Total** |
| **Dhanauji** |  |  | **4** |  | **2** | **2** | **4** | **12** |
| Baudhi Mai Farmer Group |  |  |  |  |  | 1 |  | 1 |
| Bishwokarma Farmer Group |  |  |  |  |  |  | 1 | 1 |
| Janaki Farmer Group |  |  | 1 |  |  |  |  | 1 |
| Janaki Krishak Samuha Dhanauji 1 |  |  | 1 |  |  |  |  | 1 |
| Jay Bhajrangbali Farmer Group |  |  |  |  |  |  | 1 | 1 |
| Jay Durga Farmer Group |  |  |  |  | 1 |  |  | 1 |
| Jhojhi Krishak Samuha |  |  | 1 |  |  |  |  | 1 |
| Mahabir Farmer Group |  |  | 1 |  |  |  |  | 1 |
| Mithila Farmer Group |  |  |  |  |  |  | 1 | 1 |
| Ram kalyan Krishak Samuha |  |  |  |  |  | 1 |  | 1 |
| Shree Bhairab Krishak Samuha |  |  |  |  |  |  | 1 | 1 |
| Shree Kishan Krishak Samuha |  |  |  |  | 1 |  |  | 1 |
| **Ekdara** |  | **2** | **2** |  | **1** | **2** | **5** | **12** |
| Bishnu Farmer Group |  |  |  |  |  |  | 1 | 1 |
| Chand Crop Production Group |  |  |  |  |  | 1 |  | 1 |
| Gulab Farmer Group |  |  | 1 |  |  |  |  | 1 |
| Jagdamba Crop Production Farmer Group |  | 1 |  |  |  |  |  | 1 |
| Jan Samuday Annbali crop production group |  |  |  |  | 1 |  |  | 1 |
| Ma Baudhi Farmer Group |  | 1 |  |  |  |  |  | 1 |
| Ma Santoshi Crop Production Group |  |  |  |  |  |  | 1 | 1 |
| Mahila Krishak Samuh |  |  |  |  |  |  | 1 | 1 |
| Pragati Krishak Samuh |  |  |  |  |  |  | 1 | 1 |
| Sayali Crop Production Farmer Group |  |  |  |  |  |  | 1 | 1 |
| Soni Farmer Group |  |  | 1 |  |  |  |  | 1 |
| Unmukh Annbali Utpadan krishak Samuh |  |  |  |  |  | 1 |  | 1 |
| **Mukhiyapatti Musaharmiya** |  |  | **4** | **1** | **1** | **1** | **5** | **12** |
| Aarohi Mithila Farmer Group |  |  |  |  |  |  | 1 | 1 |
| Dihbar Farmer Group |  |  |  | 1 |  |  |  | 1 |
| Durga Farmer Group |  |  |  |  |  |  | 1 | 1 |
| Ganga Farmer Group |  |  | 1 |  |  |  |  | 1 |
| Hariyali Farmer Group (M) |  |  |  |  |  |  | 1 | 1 |
| Janak Krishak Samuha |  |  | 1 |  |  |  |  | 1 |
| Karikbaba Farmer Group |  |  |  |  |  | 1 |  | 1 |
| Khumal Farmer Group |  |  | 1 |  |  |  |  | 1 |
| Shivashankar Farmer Group |  |  |  |  |  |  | 1 | 1 |
| Shree Ma Janaki Farmer Group |  |  |  |  | 1 |  |  | 1 |
| Siddhartha Krishak Samuha |  |  | 1 |  |  |  |  | 1 |
| Tarahi Aarohi Farmer Group |  |  |  |  |  |  | 1 | 1 |
| **Pipara** | **1** | **1** | **2** | **1** | **1** | **1** | **5** | **12** |
| Banganga Vegetable Production Farmer Group |  |  |  |  |  |  | 1 | 1 |
| Bhairab Vegetable Production Farmer Group (A) |  |  | 1 |  |  |  |  | 1 |
| Chamaru Bab Vegetable Production Group |  | 1 |  |  |  |  |  | 1 |
| Hira Annbali crop productionn group |  |  | 1 |  |  |  |  | 1 |
| Kalika Vegetable Production Group |  |  |  |  | 1 |  |  | 1 |
| Laxmi Crop Production Group |  |  |  |  |  |  | 1 | 1 |
| Mahdev Annbali Krishak Samuh |  |  |  |  |  |  | 1 | 1 |
| Milijuli Crop Production Farmer Group |  |  |  |  |  |  | 1 | 1 |
| Prakash vegetable crop group |  |  |  | 1 |  |  |  | 1 |
| Ram Janaki Vegetable Production Group | 1 |  |  |  |  |  |  | 1 |
| Rani Vegetable Production Group |  |  |  |  |  |  | 1 | 1 |
| Sita Vegetable Production Group |  |  |  |  |  | 1 |  | 1 |
| **Grand Total** | **1** | **3** | **12** | **2** | **5** | **6** | **19** | **48** |

Annex: **भिंडीमा कृषक पाठशाला २०७९, धनुषा क्लस्टर**

**भिंडी उत्पादनको विद्यमान र सुधारिएको तरीका बिच तुलनात्मक अध्ययन परीक्षण**

|  |  |  |  |
| --- | --- | --- | --- |
| **क्र. स.** | **विवरण** | **सुधारिएको तरिका** | **विद्यमान तरिका** |
|  | जात | अर्का अनामिका | अर्का अनामिका |
| २. | क्षेत्रफल | २०० वर्ग मिटर | २०० वर्ग मिटर |
| ३. | बीउ दर | प्रति कट्ठा ६७० ग्राम, ३०\*३० से . मि लाइनमा छर्ने | किसान तरिका अनुसार |
| ४. | मलखाद र प्रयोग विधि | |  |  |  | | --- | --- | --- | | मलखाद | मात्रा प्रति कट्ठा | मात्रा प्रति बर्ग मि | | कम्पोस्ट/गोठे मल | ६६०-१००० के.जी | २ के.जी-४ के.जी | | यूरिया | ४.७ के.जी | १४ ग्राम | | डी.ए.पी. | ४ के.जी | १२ ग्राम | | पोटास | २ के.जी | ६ ग्राम | | |  |  | | --- | --- | | Fertilizers | Rate (Kg/Katha) | | कम्पोस्ट/गोठे मल |  | | यूरिया |  | | डी.ए.पी. |  | | पोटास |  | |
| * कम्पोस्ट मल सबै जग्गा तयारिको बेला, * सबै डी.ए.पी. र पोटास रोप्ने बेला, * ५०% यूरिया रोप्ने बेला ७ ग्राम, र बाकि ५०% बिउ रोपेको ३० दिनमा ३.५ ग्राम, ३.५ ग्राम बिउ रोपेको ६० दिनमा (प्रति बर्ग मि) | प्रयोग मात्रा र विधि |
| **५.** | रोप्ने तरिका | * ३०\*३० से.मि फरकमा प्रत्येक प्वालमा २ दाना कम्तिमा पर्ने गरेर | स्थानीय तरिका |
| **६.** | मल्च | * १-१ मिटरको ड्यान्ग बनाउने, प्रत्येक ड्यान्गमा ३ लाइन रोप्ने र पराल मल्च गर्ने | केहि नगर्ने, खुल्लामा गर्ने |
| ७. | सिंचाई | कृषि पर्यावरण प्रणाली बिश्लेष्णको आधारमा आवस्यकता अनुसार रेकर्ड राख्दै जाने | कती प्लट कुन कुन बेलाम्मा भयो? |
| ८. | गोडमेल तथा रोगकिरा ब्यबस्थापन | कृषि पर्यावरण प्रणाली बिश्लेष्णको आधारमा आवस्यकता अनुसार | कति प्लट भयो उल्लेख गर्ने ? |
| ९. | लाभ लागत बिस्लेषण | तथ्यांक विस्लेषण गर्ने | तथ्यांक विस्लेषण गर्ने |

**अध्ययन परिक्षण**

1. **छापोको प्रभावकारिता अध्ययन परिक्षण**

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|  | **T1** |  | **T2** |  | **T3** |  | **T4** |  | **T5** |  |
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|  | **T5** |  | **T4** |  | **T1** |  | **T2** |  | **T3** |  |
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|  | **T2** |  | **T1** |  | **T5** |  | **T3** |  | **T4** |  |
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| T1: कालो नर्मल प्लास्टिक मल्च | T2: परालको मल्च |
| T3: सेतो नर्मल प्लास्टिक मल्च | T4: खुल्ला केहि नराख्ने |
| T5: कालो मल्चिंग प्लास्टिकको छापो (सिल्भर माथि हुने गरि) |  |

**ध्यान दिनुपर्ने कुरा**

* प्रत्येक परिक्षण प्लटको क्षेत्रफल: ४.८ बर्ग मिटर ( ४ मिटर लम्बाई x १.२० मिटर चौडाई)
* एक प्लट देखि अर्को प्लटको फरक ५० से.मि
* बिउ छर्ने दुरी: लाइन देखि लाइन- ३० से.मी. र बोट देखि बोट-३० से.मी.
* प्रति प्लट जम्मा १ डयांग र एउटा डयांगमा ३ लाइनको तरिकाले छर्ने
* पहिला ले आउट गर्ने अनि मात्र छापो हालेर बिउ रोप्ने, परालको छापो चाही रोपीसकेर मात्र हाल्ने

1. बिउको लगाउने दुरीको प्रभावकारिता अध्ययन परिक्षण

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|  | **T1** |  | **T2** |  | **T3** |  | **T4** |  |
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| --- | --- |
| T1: 30\*30 सेमि फरकमा | T2: 45\*30 से.मि फरक |
| T3: 60\*30 से.मि फरकमा | T4: छर्ने बिधि |

अरु माथि जस्तै

राख्नु पर्ने रेकर्डहरू

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| उपचारहरू | बोटको औषत उचाई (से.मी.) | प्रति प्लट बोट संख्या | पहिलो पटक फल टिपेको दिन (रोपे देखि) | प्रति बोट औषत फल संख्या | फलको को औषत तौल (ग्राम) | फलको औषत लम्बाई (से.मी.) | औषत उत्पादन प्रति बोट (किलो) | उत्पादन प्रति प्लट (किलो) | उत्पादन प्रति कठ्ठा |
| १............................. |  |  |  |  |  |  |  |  |  |
| २............................. |  |  |  |  |  |  |  |  |  |
| ३............................. |  |  |  |  |  |  |  |  |  |
| ४............................. |  |  |  |  |  |  |  |  |  |

प्रबिधि: मलखाद, रोपाइँ दुरी, बेर्ना संख्या सबै माथि सुधारिएको तरिका अनुसार नै गर्ने ।

Annex:

**Protocol for चैते धानमा कृषक पाठशाला २०७९, धनुषा क्लस्टर**

**पालिका: समुहको नाम:**

**धान बिउ राखेको मिति: धान रोपेको मिति:**

1. **चैते धान उत्पादनको विद्यमान र सुधारिएको तरीका बिच तुलनात्मक अध्ययन परीक्षण**

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| --- | --- | --- | --- |
| **क्र. स.** | **विवरण** | **सुधारिएको तरिका** | **विद्यमान तरिका** |
|  | जात | चैते ५ | चैते ५ |
| **२.** | क्षेत्रफल | २०० वर्ग मिटर | २०० वर्ग मिटर |
| **३.** | बीउ दर | प्रति बर्ग मि ५ ग्राम (२.५ के.जी/ रोपनी) नर्सरी ब्याड तयार गरेर गर्ने | प्रति बर्ग मि ५ ग्राम (२.५ के.जी/ रोपनी) नर्सरी ब्याड तयार गरेर गर्ने |
| **४.** | मलखाद र प्रयोग विधि | |  |  |  | | --- | --- | --- | | मलखाद | मात्रा प्रति कट्ठा | प्रति बर्ग मि | | कम्पोस्ट/गोठे मल | २०० के.जी | 6 के.जी | | यूरिया | ६.४ के.जी | 19 ग्राम | | डी.ए.पी. | २.२ के.जी | 6.6 ग्राम | | पोटास | १.७ के.जी | 5.1 ग्राम | | |  |  | | --- | --- | | Fertilizers | Rate (Kg/Katha) | | कम्पोस्ट/गोठे मल |  | | यूरिया |  | | डी.ए.पी. |  | | पोटास |  | |
| * कम्पोस्ट मल सबै जग्गा तयारिको बेला, * सबै डी.ए.पी. रोप्ने बेला, * ५०% पोटास रोप्ने बेला र बाकि ५०% बाला आउने बेला, * ५०% यूरिया रोप्ने बेला, बाकि २५% गाज आउने बेला र बाकि २५% बाल आउने बेलामा छर्ने | प्रयोग मात्रा र विधि किसान तरिका अनुसार गर्ने |
| **५.** | रोप्ने तरिका | * ब्याडबाट बेर्ना राम्रो संग उखेलेर ल्याउने, २०\*२० से.मि फरकमा प्रतेक गाजमा कम्तिमा २-३ वटा बेर्ना पर्ने गरेर | स्थानीय तरिका अनुसार गर्ने |
| **६.** | सिंचाई | गाज हाल्ने बेला, अन्य बेलामा कृषि पर्यावरण प्रणाली बिश्लेष्णको आधारमा आवस्यकता अनुसार (रेकर्ड राख्दै जाने) | कती प्लटमा कुन कुन बेलामा भयो? स्थानीय तरिका अनुसार गर्ने, रेकर्ड राख्ने |
| **७.** | गोडमेल तथा रोगकिरा ब्यबस्थापन | कृषि पर्यावरण प्रणाली बिश्लेष्णको आधारमा आवस्यकता अनुसार | कृषि पर्यावरण प्रणालि अनुसार विश्लेषण गर्ने |
| **८.** | लाभ लागत बिस्लेषण | तथ्यांक विस्लेषण गर्ने | तथ्यांक विस्लेषण गर्ने |

**अध्ययन परिक्षण**

1. **जातीय परिक्षण**

रेप्लीकेसन ३

रेप्लीकेसन २

रेप्लीकेसन १

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|  | **T1** |  | **T2** |  | **T3** |  | **T4** |  |
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|  | **T4** |  | **T3** |  | **T2** |  | **T1** |  |
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|  | **T3** |  | **T1** |  | **T4** |  | **T2** |  |
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| --- | --- |
| T1: हर्दिनाथ १ | T2: चैते ५ |
| T3: चैते ३ | T4: हर्दिनाथ १० हाइब्रिड |

**ध्यान दिनु पर्ने कुरा**

-पहिला प्लटिंग गर्ने

- प्लटको क्षेत्रफल: १० बर्ग मिटर (५ मिटर लम्बाई \* २ मिटर चौडाई)

-प्लट बीचमा ४०-५० से.मि फरक गर्ने

- बेर्ना सार्ने दुरी: लाइन देखि लाइन - २० से.मी. र बोट देखि बोट - २० से.मी., २-३ वटा बेर्ना रोप्ने

1. मलखादको प्रभावकारिता अध्ययन परिक्षण

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|  | **T1** |  | **T2** |  | **T3** |  | **T4** |  |
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| --- | --- |
| T1: गोबर मल मात्र | T2: यूरिया+डी.ए.पी सिफारिस मात्रा |
| T3: केहि नहाल्ने | T4: गोबर मल+यूरिया+डी.ए.पी+पोटास सिफारिस मात्र |

प्लटको क्षेत्रफल: १० बर्ग मिटर (५ मिटर लम्बाई \* २ मिटर चौडाई) ।

बेर्ना सार्ने दुरी: लाइन देखि लाइन - २० से.मी. र बोट देखि बोट - २० से.मी., २-३ वटा बेर्ना रोप्ने ।

मलखाद परिक्षण भएकोले अनिबार्य ड्यानग बनाउने, एक प्लट बाट अर्को प्लट स्पष्ट छुट्टिएको हुनु पर्ने छ ।

**राख्नु पर्ने रेकर्डहरू**

बोटको औषत उचाई (से.मी.), गाज संख्या, रोगको किसिम र प्रकोप, शत्रुजिब र मित्र जीव प्रकार र संख्या, प्रति बोट बाला संख्या, बालाको लम्बाई, १००० दानाको तौल, रोग किरा सहन सक्ने क्षमता, पानी तथा सुक्खा सहन सक्ने, गाज आउने अवधि, बाला आउने अबधि, पोटाउने, पसाउने अबधी, दाना लाग्ने, पाक्ने आदि अवस्था हरु पनि टिपोट गर्दै जाने ।

**प्रबिधि:** मलखाद, रोपाइँ दुरी, बेर्ना संख्या सबै माथि सुधारिएको तरिका अनुसार नै गर्ने ।

आवस्यक बिउको हिसाब किताब

Table : Crop FFS Developed and trained for FFS Facilitators

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Name** | **Gender (M/F/O)** | **Address (RM & Ward No.)** | **Contact No.** | **Status** (active /inactive) |
| 1. | Babita Sah | F | Pipara-6, Mahottari | 9824865287 | Inactive |
| 2. | Rajdev Sah | M | Dhanauji-1, Dhanusha | 9818397775 | Active |
| 3. | Kali Charan Sah | M | Dhanuji-1, Dhanusha | 9804877840 | Active |
| 4. | Jitendra Prasad Raya | M | Ekdara-4, Mahottari | 9840350879 | Inactive |
| 5. | Santosh Kumar Yadav | M | Ekdara-4, Mahottari | 9846896196 | Active |
| 6. | Ashok Kumar Mandal | M | Dhanauji-4 Dhanusha | 9807838171 | Inactive |
| 7. | Sweta Chauhan | F | Dhanauji-4 Dhanusha | 9819864073 | Inactive |
| 8. | Ranjit Mahato | M | Ekdara-5, Mahottari | 9813709804 | Active |
| 9. | Ramnarayan Yadav | M | Pipara-1, Mahottari | 9809658112 | Active |
| 10. | Deepak Yadav | M | Pipara-2, Mahottari | 9844030509 | Active |
| 11. | Pradip Kumar Mandal | M | Dhanauji-3, Dhanusha | 9815818997 | Inactive |
| 12. | Om Prakash Yadav | M | Ekdara- 2, Mahottari | 9816800274 | Active |
| 13. | Ratish Kumar Yadav | M | Ekdara-2, Mahottari | 9817861122 | Active |
| 14. | Mina Kumari Sah | F | Mukhiyapatti Musarnia-3 | 9844164364 | Active |
| 15. | Chulhai Yadav | M | Mukhiyapatti Musarnia-4 | 9815807743 | Active |
| 16. | Dipendra K. Mahato | M | Mukhiyapatti Musarnia-5 | 9805455065 | Inactive |
| 17. | Anita Yadav | F | Dhanuji-5, Dhanusha | 9817822320 | Active |
| 18. | Sanju Kumari Yadav | F | Mukhiyapatti Musarnia-2 | 9815876624 | Inactive |
| 19 | Kapin Kumar Yadav | M | Ekdara- 4, Mahottari | 9863433508 | Inactive |
| 20. | Binod Yadav | M | Pipara-6, Mahottari | 9815868930 | Active |
| 21. | Dinesh Yadav | M | Pipara-6, Mahottari | 9819656184 | Inactive |
| 22 | Suresh Thakur | M | Pipara-6, Mahottari | 9804811738 | Active |
| 23 | Rekha Devi Sah | F | Mukhiyapatti Musarnia-3 | 9819657125 | Active |
| 242 | Usha Kumari | F | Pipara-3, Mahottari | 9815891424 | Active |
| 25 | Chandra Kala Yadav | F | Mukhiyapatti Musarnia-1 | 9826867022 | Inactive |
| 26 | Santosh Kumar Yadav | M | Mukhiyapatti Musarniya -5 | 9824841174 | Active |
| 27 | Madhu Kumari Mahato | F | Mukhiyapatti Musarniya-3 | 9812028918 | Active |
| 28 | Prem Yadav | M | Pipra-1 | 9823085539 | Active |
| 29 | Ram Ekbal Mandal | M | Pipra-2 | 9807671605 | Active |
| 30 | Rupesh Ray | M | Ekdhara-6 | 9814893163 | Active |
| 31 | Arun Kumar Yadav | M | Mukhiyapatti Musarniya-4 | 9815886304 | Active |

Table : Farmer Facilitators participated in the refresher training of Farmer ToF from PCU Dhanusa

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SN** | **Name** | **Gender (M/F/O)** | **Address (RM & Ward No.)** | **Contact No.** | **Status** (active /inactive) |
| 1. | Prameshwor Yadav | M | Janakpur -25 | 9844122669 | Active |
| 2. | Brij Kumar Yadav | M | Laxminarayan RM-1 | 9826892011 | Active |
| 3. | Ram Sharan Yadav | M | Loharpatti | 9807844603 | Active |
| 4. | Mahesh Ray Yadav | M | Parsa -6, Saralahi | 9814809495 | Active |
| 5. | Laxmi Mahato | M | Janakpur -25 | 9807634179 | Active |
| 6. | Urmila Yadav | F | Janakpur- 25 | 9844027885 | Inactive |
| 7. | Hridaya Narayan Thakur | M | Pipara RM-1 | 9845979737 | Active |