# Annual Report (NICRA-TDC) - 2018-19

## Name of the KVK and village:- Aurangabad, Harigoan

## Module-1: Natural Resource Management Interventions

|   | Tabaabaa   | Critical inputs<br>provided                        | No. of              | Area under p          | practice in the        | Mea<br>indica | surable<br>tors Crop | Economi    | ics of demons<br>(Averag | stration (Rs.<br>ge) | /ha) |
|---|--|--|---------------------|-----------------------|------------------------|---------------|----------------------|------------|--------------------------|----------------------|------|
| Interventions   | demonstrated along   | (Machinery,<br>cost for                            | farmers<br>involved | villag                | e (ha)                 | yield<br>(Av  | S* (q/ha)<br>(erage) |            | G                        | N. 4                 |      |
|   | variety*   | renovation,<br>irrigation<br>systems, seed<br>etc) | demonstr<br>ation   | After<br>intervention | Before<br>intervention | Demo          | Local<br>practice    | Gross Cost | Gross<br>Return          | Net<br>Return        | BCR  |
| In-situ moisture conservation<br>measures<br>(BBF/Ridge & furrow/contour<br>trenching/mulcing/conservation<br>furrow/bunding etc) |  |  |                     |                       |                        |               |                      |            |                          |                      |      |
| Water harvesting and recycling<br>for supplemental irrigation<br>(Community ponds/farm  | Water harvesting<br>through arha<br>Crop- paddy<br>Variety- R. Sweta                   | -  | 52                  | 62                    | 12                     | 51.23         | 42.46                | 27310      | 97337                    | 70027                | 3.56 |
| ponds/jalkunds/ check<br>dams/poly bag check<br>dams/wells etc)   | Water harvesting<br>through Check dam<br>Crop- paddy<br>Variety- R. Sweta              | -  | 21                  | 18                    | 0                      | 50.50         | 44.43                | 28750      | 95950                    | 67200                | 3.33 |
| Improved drainage in flood prone areas  |  |  |                     |                       |                        |               |                      |            |                          |                      |      |
| Conservation tillage where<br>appropriate like zero tillage/<br>minimum tillage etc   | One pass tillage<br>through rotavator<br>Crop- Wheat<br>Variety- HD- 2967              | Rotavator  | 18                  | 12                    | 2                      | 32.35         | 29.75                | 25280      | 58230                    | 32950                | 2.30 |
| Artificial ground water recharge measures   |  |  |                     |                       |                        |               |                      |            |                          |                      |      |
| Water saving irrigation   | Sprinkler irrigation in lentil   | Seed (HUL-<br>57)and seed<br>treatment             | 17                  | 21                    | 0                      | 13.25         | 7.75                 | 16855      | 66250                    | 49395                | 3.93 |
| gun etc)  | Sprinkler irrigation in chick pea  | Seed(PG-186)<br>and seed<br>treatment              | 22                  | 24                    | 0.5                    | 14.11         | 8.90                 | 23125      | 59262                    | 36137                | 2.56 |
| Crop residue incorporation<br>instead of burning  | Crop residue<br>incorporation through<br>rotavator<br>Crop- paddy<br>Variety- R. Sweta | Rotavator  | 6                   | 5                     | 0                      | 53.21         | 42.5                 | 29230      | 95778                    | 66548                | 3.27 |
| Any other (Pl. specify)   |  |  |                     |                       |                        |               |                      |            |                          |                      |      |

## **Module 2: Crop Production Interventions**

| Interventions   | Technology<br>demonstrated<br>along with crop | Critical input<br>(Variety,<br>Fertilizer/ | No. of<br>farmers<br>benefitte | Area<br>taken | Measu<br>indic<br>Crop | urable<br>ators<br>yield | %<br>increase<br>in vield | Ec            | conomics of<br>(R<br>(Av | f demonstratio<br>s./ha)<br>erage) | n    | Econ          | omics of L<br>(Avera | ocal (Rs./<br>age) | /ha) |
|---|---|--|--------------------------------|---------------|------------------------|--------------------------|---------------------------|---------------|--------------------------|------------------------------------|------|---------------|----------------------|--------------------|------|
|   | and variety*                                  | Machinery, etc)                            | d                              | (ha)          | Demo                   | Local                    | over local                | Gross<br>Cost | Gross<br>Return          | Net Return                         | BCR  | Gross<br>Cost | Gross<br>Return      | Net<br>Return      | BCR  |
| Short duration varieties demonstrated   | Crop-paddy,<br>variety-Sabour<br>ardhjal      | Seed and seed<br>treatment                 | 82                             | 20.5          | 43.36                  | 41.25                    | 5.11                      | 26890         | 65040                    | 38150                              | 2.41 | 27730         | 61875                | 34145              | 2.23 |
| Drought tolerant varieties<br>demonstrated  | Crop-paddy,<br>variety-sahbhagi               | Seed and seed treatment                    | 8                              | 2.25          | 44.22                  | 41.50                    | 6.55                      | 28125         | 66330                    | 38205                              | 2.35 | 27730         | 62250                | 34520              | 2.24 |
| Introducing flood tolerant varieties  | Crop-I, Variety-I                             |  |                                |               |                        |                          |                           |               |                          |                                    |      |               |                      |                    |      |
| Advancement of planting dates of <i>rabi</i> crops in areas with terminal heat stress | Crop-wheat,<br>variety-HD-2967                | Seed and seed<br>treatment                 | 26                             | 6.5           | 28.45                  | 21.15                    | 34.51                     | 26540         | 51210                    | 24670                              | 1.92 | 27935         | 38070                | 10135              | 1.36 |
| Water saving paddy cultivation<br>methods (SRI, aerobic, direct<br>seeding)           |   |  |                                |               |                        |                          |                           |               |                          |                                    |      |               |                      |                    |      |
| Frost management in horticultural crops through fumigation                            |   |  |                                |               |                        |                          |                           |               |                          |                                    |      |               |                      |                    |      |
| Community nurseries for delayed monsoon   |   |  |                                |               |                        |                          |                           |               |                          |                                    |      |               |                      |                    |      |
| Custom hiring centres for timely planting   |   |  |                                |               |                        |                          |                           |               |                          |                                    |      |               |                      |                    |      |
| Location specific intercropping<br>systems with high sustainable yield<br>index       |   |  |                                |               |                        |                          |                           |               |                          |                                    |      |               |                      |                    |      |
| Crpop diversification   |   |  |                                |               |                        |                          |                           |               |                          |                                    |      |               |                      |                    |      |
| Weed management in paddy  | Crop-Paddy,<br>variety- R. Sweta,             | Weedicide<br>(bispyriback<br>sodium)       | 10                             | 4.0           | 50.75                  | 47.43                    | 6.99                      | 27430         | 96425                    | 68995                              | 3.51 | 29840         | 90117                | 60277              | 3.02 |
| Sowing of moong for increasing<br>crop intensity                                      | Crop-Moong,<br>variety-IPM 2-03               | Seed and seed<br>treatment                 | 35                             | 12            | 12.35                  | 7.53                     | 64.01                     | 17500         | 64220                    | 46720                              | 3.66 | 15800         | 39156                | 23356              | 2.47 |
| Introducing of improved variety of lentil   | Crop-Lentil,<br>variety-HUL-57                | Seed and seed<br>treatment                 | 44                             | 11            | 12.65                  | 7.50                     | 68.6                      | 15850         | 63250                    | 47400                              | 3.99 | 16150         | 37500                | 21350              | 2.32 |
| Introducing of improved variety of chick pea  | Crop-Chick Pea,<br>variety-PG-186             | Seed and seed<br>treatment                 | 41                             | 10.25         | 13.75                  | 9.25                     | 48.6                      | 22930         | 57750                    | 34820                              | 2.51 | 23325         | 38850                | 15525              | 1.66 |

\*Make a separate row for each crop and variety demonstrated

### **Module-3: Livestock & Fisheries**

| Interventions  | Technology<br>demonstrated                  | Critical<br>input<br>(Variety,    | No. of<br>farmers | Unit/<br>No. /<br>Area | Measu<br>indica<br>outµ<br>(Ave | irable<br>tors of<br>out <sup>*</sup><br>rage) | %<br>increase<br>over | Econor        | nics of dem<br>(Ave | onstration (<br>rage) | Rs./ha) | Econon        | nics of demo<br>(Aver | onstration (I<br>cage) | Rs./ha) |
|--|---|-----------------------------------|-------------------|------------------------|---------------------------------|--|-----------------------|---------------|---------------------|-----------------------|---------|---------------|-----------------------|------------------------|---------|
|  | uenionstruceu                               | Breed, etc)                       | iui mero          | (ha)                   | Demo                            | Local  | local                 | Gross<br>Cost | Gross<br>Return     | Net<br>Return         | BCR     | Gross<br>Cost | Gross<br>Return       | Net<br>Return          | BCR     |
| Use of community lands for<br>fodder production during<br>droughts / floods                                      |   |                                   |                   |                        |                                 |  |                       |               |                     |                       |         |               |                       |                        |         |
| Introduction of new fodder crops<br>or new varieties   |   |                                   |                   |                        |                                 |  |                       |               |                     |                       |         |               |                       |                        |         |
| Improved fodder/feed storage methods   |   |                                   |                   |                        |                                 |  |                       |               |                     |                       |         |               |                       |                        |         |
| Preventive vaccination   |   |                                   |                   |                        |                                 |  |                       |               |                     |                       |         |               |                       |                        |         |
| Improved shelters for reducing<br>heat stress/ cold stress/ water<br>logging/ flood and diseases in<br>livestock |   |                                   |                   |                        |                                 |  |                       |               |                     |                       |         |               |                       |                        |         |
| Introduction of improved breeds  | Introducing of<br>improved breed<br>of goat | Black<br>Bengal and<br>jamunapari | 14                | 15                     | 30 kg<br>meat/y<br>ear          | 16 kg<br>meat/<br>year                         | 87.5                  | 6000          | 12000               | 6000                  | 2.0     | 4000          | 6400                  | 2400                   | 1.6     |
| Management of fish ponds /<br>tanks during water scarcity and<br>excess water                                    |   |                                   |                   |                        |                                 |  |                       |               |                     |                       |         |               |                       |                        |         |
| Improved feeding like location<br>specific mineral mixtures or<br>mineral bricks                                 | Mineral<br>mixture                          | Mineral<br>mixture                | 155               | 190                    | 5<br>lit/day                    | 4<br>lit/day                                   |                       |               |                     |                       |         |               |                       |                        |         |
| Improved feeding like location specific calcium  | Calcium                                     | Calcium                           | 200               | 212                    | 4.5<br>lit/day                  | 4<br>lit/day                                   |                       |               |                     |                       |         |               |                       |                        |         |

\* Output is in terms of litres (\*milk), number (eggs), kgs (meat), kg/ha (fodder yield)

## Module-4: Institutional Interventions

|  |  | Details of a                                  | etivity  |                                   | N C                           | Unit /                |
|--|--|---|--|-----------------------------------|-------------------------------|-----------------------|
| Interventions  | Name of crops /varieties<br>Commodity groups /<br>Implements | Quantity produced/<br>Number / Rent / Charges | Technology used in seed / fodder bank & function of groups     | Variety / Medicine<br>doses)      | No. of<br>farmers<br>involved | No. /<br>Area<br>(ha) |
| Seed bank  |  |   |  |                                   |                               |                       |
| Fodder bank  |  |   |  |                                   |                               |                       |
| Commodity groups   |  |   |  |                                   |                               |                       |
| Custom hiring centre                                     | Wheat, paddy, lentil, chickpea                               | -   | Use of farm Implement for minimized the cost of cultivation    | Implement                         | 31                            | 72                    |
| Collective marketing                                     |  |   |  |                                   |                               |                       |
| Climate literacy through a village level weather station | Weather station  | 1   | Data interspersion of the AWS and then<br>forecasting/advisory | Cost of SMS/Voice<br>SMS/Internet | 68                            | 68                    |
| Any other (Pl. specify)                                  |  |   |  |                                   |                               |                       |

## Module-5: Capacity Building taken up (HRD)

| SI. | Thomatic area      | Title of training                              | No. of Courses | No. of bene | eficiaries | Da         | ate        |
|-----|--------------------|--|----------------|-------------|------------|------------|------------|
| No. | Thematic area      | The of training                                | No. of Courses | Male        | Female     | from       | То         |
| 1   | Crop Production    | Scientific cultivation of Moong                | 1              | 19          | 5          | 07/04/2018 | 07/04/2018 |
| 2   | Nursery management | Nursery management in paddy                    | 1              | 24          | 13         | 07/06/2018 | 07/06/2018 |
| 3   | Crop Production    | Scientific cultivation of paddy                | 1              | 45          | 7          | 14/06/2018 | 14/06/2018 |
| 4   | Crop Production    | Scientific cultivation of paddy                | 1              | 15          | 3          | 15/06/2018 | 15/06/2018 |
| 5   | Weed management    | Weed management in paddy                       | 1              | 25          | 15         | 17/08/2018 | 17/08/2018 |
| 6   | Crop Production    | Scientific cultivation of chick pea and lentil | 1              | 12          | 6          | 10/11/2018 | 10/11/2018 |
| 7   | Crop Production    | Scientific cultivation of chick pea and lentil | 1              | 35          | 10         | 12/11/2018 | 12/11/2018 |
| 8   | Crop Production    | Scientific cultivation of wheat                | 1              | 33          | 9          | 13/11/2018 | 13/11/2018 |
| 9   | Crop Production    | Scientific cultivation of wheat                | 1              | 16          | 3          | 17/11/2018 | 17/11/2018 |
| 10  | Water management   | Water management in wheat                      | 1              | 30          | 0          | 26/02/2019 | 26/02/2019 |
| 11  | IDM                | disease management in wheat crop               | 1              | 30          | 0          | 2/03/2019  | 2/03/2019  |

### **Module-6: Extension Activities**

| Name of the activity      | Details about the activity        | Number of  | Time of the programme   | No. of be | eneficiaries | Remarks |
|---------------------------|-----------------------------------|------------|-------------------------|-----------|--------------|---------|
|                           |                                   | programmes | conducted (From to)     | Male      | Female       |         |
| Exposure visit of farmers | Kisan mela                        | 1          | From 23 to 25 Feb. 2019 | 50        | 0            |         |
| Strengthening SHGs        |                                   |            |                         |           |              |         |
| Strengthening kisan clubs |                                   |            |                         |           |              |         |
| Integrated farming system |                                   |            |                         |           |              |         |
| Field days                | Draught tolerant variety of wheat | 1          | 27/3/2019               | 86        | 15           |         |
| Method demonstrations     |                                   |            |                         |           |              |         |
| Awareness                 | Swacchta programme                | 1          | 28/11/20118             | 52        | 12           |         |
| Others (if any)           |                                   |            |                         |           |              |         |

Note: 1) Please don't change format heads. 2) All the required specific information should be given.

## 7. Rainfall characteristics for the year 2018-19

| Kharif 2018  |                | JUNE | JULY     | AUGUST | SEPTEMBER | OCTOBER | ANNUAL |
|--|----------------|------|----------|--------|-----------|---------|--------|
| Rainfall received in (n                                | ım)            | 61.7 | 163.6.20 | 397.10 | 147.2     | 4.4     | 873.00 |
| No. of due anolla due in a bharif accar                | >10days        | 1    | 1        |        |           | 1       |        |
| No. of dry spens during knarn season                   | >15days        |      |          |        |           | 1       |        |
| 2016   | >20days        |      |          |        |           |         |        |
| No. of intensive rain spells (2018)                    | >60 mm per day |      | 1        |        |           |         |        |
|  | Water logging  |      |          |        |           |         |        |
|  | observed(days) |      |          |        |           |         |        |
| Any other extreme events observed<br>during the season |                |      |          |        |           |         |        |

|          |           |     |     |      |      |     |      |     | Day  |      |      |      |      |     |     |      |
|----------|-----------|-----|-----|------|------|-----|------|-----|------|------|------|------|------|-----|-----|------|
|          |           | 1   | 2   | 3    | 4    | 5   | 6    | 7   | 8    | 9    | 10   | 11   | 12   | 13  | 14  | 15   |
| Rainfall | June      | 8.2 | 0.0 | 0.0  | 0.0  | 0.0 | 0.0  | 0.0 | 0.0  | 0.0  | 0.0  | 2.1  | 0.0  | 0.0 | 0.0 | 0.0  |
| (mm)     | July      | 0.0 | 4.6 | 4.4  | 1.0  | 8.0 | 8.6  | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0  |
|          | August    | 0.0 | 0.0 | 28.4 | 47.2 | 5.6 | 18.0 | 7.4 | 10.2 | 17.8 | 44.4 | 15.2 | 13.8 | 0.0 | 6.6 | 35.1 |
|          | September | 1.3 | 2.9 | 36.9 | 1.0  | 3.5 | 11.4 | 1.5 | 13.7 | 0.0  | 0.0  | 0.0  | 2.5  | 0.0 | 0.0 | 0.0  |
|          | October   | 0.0 | 0.0 | 0.0  | 0.0  | 0.0 | 0.0  | 0.0 | 0.0  | 0.0  | 0.0  | 2.6  | 1.8  | 0.0 | 0.0 | 0.0  |

7A. Day-wise rainfall distribution in the village during Kharif 2018

|                  |           |     |      |     |     |      |      |     | Day  | ý    |     |      |     |      |      |     |     |
|------------------|-----------|-----|------|-----|-----|------|------|-----|------|------|-----|------|-----|------|------|-----|-----|
|                  |           | 16  | 17   | 18  | 19  | 20   | 21   | 22  | 23   | 24   | 25  | 26   | 27  | 28   | 29   | 30  | 31  |
| Rainfall<br>(mm) | June      | 0.0 | 0.0  | 0.0 | 0.0 | 0.0  | 0.0  | 0.0 | 2.2  | 0.0  | 0.0 | 25.2 | 4.6 | 19.4 | 0.0  | 0.0 | 0.0 |
|                  | July      | 0.0 | 1.4  | 0.0 | 0.0 | 0.0  | 2.6  | 4.4 | 11.0 | 4.6  | 4.4 | 5.6  | 2.4 | 26.2 | 64.8 | 7.0 | 2.6 |
|                  | August    | 2.2 | 56.0 | 0.0 | 0.0 | 0.0  | 26.8 | 0.0 | 37.8 | 24.6 | 0.0 | 0.0  | 0.0 | 0.0  | 0.0  | 0.0 | 0.0 |
|                  | September | 0.0 | 0.0  | 0.0 | 0.0 | 10.4 | 0.0  | 0.0 | 0.0  | 49.9 | 0.1 | 9.8  | 2.3 | 0.0  | 0.0  | 0.0 | 0.0 |
|                  | October   | 0.0 | 0.0  | 0.0 | 0.0 | 0.0  | 0.0  | 0.0 | 0.0  | 0.0  | 0.0 | 0.0  | 0.0 | 0.0  | 0.0  | 0.0 | 0.0 |

|          |                             |                        |           |                        |                           |                      | Imp                  | oact on cro | p yields (q/ha)                    |
|----------|-----------------------------|------------------------|-----------|------------------------|---------------------------|----------------------|----------------------|-------------|------------------------------------|
| S.<br>No | Dry spell ( no. of<br>days) | Duration ( from<br>to) | Crop name | Crop stage<br>affected | Intervention<br>taken up* | Number of<br>farmers |                      |             |                                    |
|          |                             |                        |           |                        |                           | involved             | Farmers'<br>practice | Demo        | Increase over<br>farmers' practice |
|          |                             |                        |           |                        | Life saving               |                      |                      |             |                                    |
|          |                             |                        |           |                        | irrigation in             |                      |                      |             |                                    |
|          |                             |                        |           | Nursery                | seedling of               |                      |                      |             |                                    |
| 1        | 1(11days)                   | 12 – 22 june           | paddy     | preparation            | long and                  | 21                   |                      |             |                                    |
|          |                             |                        |           | affected               | medium                    | 21                   | 45.22                | 52.35       | 15.76%                             |
|          |                             |                        |           |                        | variety of                |                      |                      |             |                                    |
|          |                             |                        |           |                        | paddy                     |                      |                      |             |                                    |
|          |                             |                        |           |                        | Short duration            | l                    |                      |             |                                    |
|          | 11 (10.1 )                  | 7 16:1                 | D 11      |                        | of paddy and              | 16                   | 25.70                | 20.42       | 7 400/                             |
| 2        | 11 (10days)                 | 7 – 16 july            | Paddy     |                        | direct sowing             | 40                   | 35.78                | 38.43       | 7.40%                              |
|          |                             |                        |           |                        | of paddy                  |                      |                      |             |                                    |
| 2        | 1 (10days)                  | 1 - 10 Oct.            | noddy     | Croin filling          | Life saving               | 70                   | 21.20                | 24.00       | 6.010/                             |
| 3        | 1 (18days)                  | 13 – 31 Oct.           | paddy     | Grain ming             | irrigation                | /ð                   | 31.38                | 34.00       | 0.91%                              |

8. Impact of contingency measures taken up in the village (Relate the dry spells with crops and their growth stages)

\* List the interventions taken up for each crop

| Successful   |     |      |     | ł   | Extent of | f adoptio | n in the vi | llage in % | •   |     |      |     |
|--|-----|------|-----|-----|-----------|-----------|-------------|------------|-----|-----|------|-----|
| interventions<br>including crops<br>and varieties              | 2   | 2013 | 20  | )14 | 20        | )15       | 20          | 016        | 20  | 17  | 20   | )18 |
| Seed Treatment   | 71% | 11%  | 82% | 18% | 88%       | 25%       | 90%         | 36%        | 92% | 48% | 92%  | 55% |
| Chemical Weed<br>Management                                    | 42% | 20%  | 64% | 25% | 64%       | 30%       | 66%         | 36%        | 66% | 40% | 66%  | 42% |
| Sprinkler  | 78% | 2%   | 82% | 5%  | 85%       | 12%       | 86%         | 20%        | 86% | 25% | 86%  | 25% |
| Zero tillage in Wheat  | 35% | 12%  | 47% | 12% | 48%       | 15%       | 50%         | 15%        | 52% | 17% | 52%  | 20% |
| Zero tillage in Lentil   | 7%  | 2%   | 13% | 5%  | 15%       | 8%        | 18%         | 8%         | 18% | 10% | 120% | 10% |
| Direct Seeded Rice   | 5%  | 0%   | 8%  | 2%  | 8%        | 2%        | 8%          | 5%         | 10% | 5%  | 10%  | 8%  |
| Integrated nutrient<br>management/Balance<br>use of fertilizer | 52% | 30%  | 59% | 40% | 62%       | 55%       | 70%         | 60%        | 75% | 60% | 80%  | 65% |
| Summer crop  | 25% | 6%   | 31% | 10% | 35%       | 18%       | 38%         | 20%        | 40% | 25% | 45%  | 25% |
| Vaccination  | 59% | 10%  | 76% | 16% | 76%       | 22%       | 80%         | 25%        | 80% | 30% | 85%  | 40% |
| Mineral mixture  | 47% | 5%   | 65% | 10% | 65%       | 12%       | 70%         | 15%        | 70% | 25% | 75%  | 25% |
| Short duration<br>paddy variety                                | 7%  | 0%   | 10% | 2%  | 16%       | 5%        | 20%         | 8%         | 25% | 12% | 38%  | 15% |
| Drought tolerance<br>paddy variety                             | 5%  | 0%   | 8%  | 5%  | 8%        | 10%       | 10%         | 12%        | 15% | 15% | 20%  | 15% |
| Heat tolerance<br>Wheat variety                                | 4%  | 0%   | 7%  | 5%  | 10%       | 5%        | 15%         | 8%         | 25% | 12% | 30%  | 15% |

# 9. Adoption of successful interventions in the NICRA village & the adjoining villages

### **10.** Popularization of Climate Resilient Varieties

| Crop*     | Climate Resilient Varieties incorporated in the <i>Kharif</i><br>2018 plan of the State Department | Approx. area brought under the variety by the state department during the K <i>harif</i> 2018 (ha) |
|-----------|--|--|
| Paddy     | sahbhagi   | 17000  |
|           | Rajendra Sweta   | 52000  |
| Crop*     | Climate Resilient Varieties incorporated in the<br><i>Rabi2018</i> plan of the State Department    | Approx. area brought under the variety by the state department during the <i>Kharif</i> 2018 (ha)  |
| Wheat     | PBW-343  | 5000   |
|           | HD-2967  | 25000  |
| lentil    | HUL-57   | 5000   |
| Chick pea | PG-186   | 5200   |

#### 11. Awards Received during the year for the work related to NICRA

| Name of the award | Given by whom | When the award was given |
|-------------------|---------------|--------------------------|
|                   |               |                          |
|                   |               |                          |

#### 12. Distinguished visitors to the NICRA village during the year

| Name of the person                       | When the visit occurred | Significant comments/ suggestions             |
|--|-------------------------|---|
| District Agriculture officer, Aurangabad | 22.07.2018              | Increase the area of drought tolerant variety |
| ADH, Aurangabad                          | 12.08 2018              | Planted of orchard in upland area             |
| PD, ATMA, Aurangabad                     | 5.10 2018               | Exposure visit of farmers to another state    |

### 13. Amount (Rs.) mobilized through convergence from various departments

| S.  | Activity/ Intervention      | Coverage                   | Convergence established with                     | Approx. amount (Rs.) |
|-----|-----------------------------|----------------------------|--|----------------------|
| No. |                             | [No. of farmers/Area (ha)] | (Name of the programme or department)            | mobilized            |
| 1   | Sprinkler irrigation system | 52                         | National micro irrigation system project         | 10.052               |
| 2   | Chilling plant              | 80                         | Adrash Dairy gram yojna                          | 14.820               |
| 3   | Construction of road (4 km) | All villagers              | Pradhan mantri gram sadak yojna                  | 176.00               |
| 4   | PACS Godown                 | 500                        | IAP yojna  | 17.690               |
| 5   | PACS Godown                 | 500                        | Rastriya Krishi vikash yojna                     | 11.450               |
| 6   | Threshing floor             | 35                         | Rastriya Krishi vikash yojna                     | 0.780                |
| 7   | Veterinary Hospital         | 400                        | Animal Husbandry Department (Under construction) | 40.00                |
| 8   | Rice mil                    | 600                        | Rastriya Krishi vikash yojna (Under process)     | 34.400               |
|     |                             |                            | Total  | 305.192              |

14. Publications and other products developed during the year

| Sl.no | Author                            | Title                               |
|-------|-----------------------------------|-------------------------------------|
| 2     | Dr. Nityanand & Dr. Sunita Kumari | Techniques of Mushroom production   |
| 3     | Dr. Nityanand & Er. Rajeev Singh  | Scientific cultivation of chick pea |
| 4     | Dr. Nityanand & Praveen Kumar     | Vermin compost production technique |

15. Significant observations about the project/ the performance of interventions/ adoption of interventions/ livelihood improvement etc..

#### Water harvesting and recycling for supplemental irrigation through Arha:

- There was no facility of irrigation in NICRA village. Irrigation through water reservoir (Arha) is also present from long time, But it is fully damage and siltation caused mixed up with farmers field just look like plate. It can't contain enough water. Farmers were not irrigating rabi crop in time. In month of April to June many hand pumps, wells and bore well were dried due depletion of water table. Animals and few people are migrated due to insufficient drinking water. After the starting of this project 9 ponds, 4 wells and 2.2 km irrigated reservoir (Arha) were renovated. At present time reservoir (Arha) is useful in following aspect:-
- 1. Ground water is fully recharged and water level increase up to 2.0-3.0' during month of May & June. So water level is also maintained. No any claim or problem of drinking water as well as irrigation of crops.
- 2. Farmers are also happy because they apply 3 to 4 irrigation in wheat and 1 sprinkler irrigation apply in pulses. That causes increase the cultivated area and yield.
- 3. Before renovation of arha they can't cultivate moong but in this summer season they also cultivated moong in the month of April.
- 4. Arha water is used by animal, cultivation of fishes and other activities.
- 5. In Kharif-2015 farmers raised his paddy nursery in time. Before renovation of reservoir they raised his nursery in neighbour village.