# Action Plan For 2018-19

**(Yearly plan prepared prior to start of *Kharif* season in April/May)**

**1.0 A. Basic information about NICRA cluster DISTRICT:GANJAM**

| ***S. No.*** | ***Item*** | ***Existing NICRA village*** | ***Additional villages selected in the programme**** | | |
|---|---|---|---|---|---|
| | | | ***Village 1*** | ***Village 2*** | ***Village 3*** |
| 1.1 | Village name | CHOPARA | | | |
| 1.2 | Name of mandal/Block | GP- Chhamunda, Block- jagannath Prasad | Lepa | Chikili | Dungapalli |
| 1.3 | Total area (ha) | 150 | 70 | 230 | 210 |
| 1.4 | No. of house holds | 315 | 125 | 370 | 215 |
| 1.5 | Extent of rainfed area (ha) | 45 | 28 | 60 | 35 |

*** Please add columns, if more villages are involved**

**B. Technologies proposed to be scaled up in the NICRA village during 2018**

| **Sl. No.** | **Name of technology** | **No. of farmers covered** | **Approx. area to be covered (ha)** | **Remarks** |
|---|---|---|---|---|
| 1. | Check dam for critical irrigation | 62 | 18 | Life saving irrigation |
| 2. | Raising of farm bund ht. by 1ft. | 08 | 0.8 | Moisture conservation |
| 3. | Drought tolerant short duration Paddy var. sahabhagidhan | 15 | 06 | To coop with Dry spell |
| 4. | Growing of Contigent crop-pigeonpea in Upland | 15 | 05 | Moisture stress tolerant |
| 5 | Maize in Ridge & Furrow method | 10 | 02 | Moisture conservation |
| 6 | Yearling rearing in seasonal farm pond | 04 | 0.8 | to coop with the decrease water table of seasonal farm pond |
| 7 | Summer tomato var.- Chiranjibi | 10 | 0.8 | Heat tolerant |
| 8 | Short duration YMV tolerant Greengram var.- IPM 02-14 | 25 | 10 | YMV tolerant |
| 9 | Poly mulching in vegetables | 04 | 0.2 | Moisture conservation & to suppress weed growth |

*** Simple and low cost resilient practices are to be scaled up so as to reach as many farmers as possible with minimal cost**

**C. Module-wise technologies proposed to be scaled up in the adjoining villages during 2018**

| Sl. No. | Name of technology | No. of farmers covered | Approx. area to be covered (ha) | Remarks |
|---|---|---|---|---|
| 1. | NRM- Raising of farm bund ht. by 1 ft. | 08 | 0.5 | Moisture conservation |
| 2. | Drought tolerant short duration Paddy var. sahabhagidhan | 15 | 06 | Moisture stress tolerant |
| 3. | Growing of Contigent crop- pigeonpea in Upland | 15 | 05 | Moisture stress tolerant |
| 4. | Summer tomato var.- Chiranjibi | 10 | 01 | Heat tolerant |
| 5 | Polymulching in vegetables | 06 | 0.2 | Moisture conservation |
| 6 | Short duration YMV tolerant Greengram var.- IPM 02-14 | 30 | 06 | YMV tolerant |
| 7 | Live stock-Yearling rearing in seasonal farm pond | 06 | 02 | Harvested in short period |
| | | | | |

*** Simple and low cost resilient practices are to be scaled up so as to reach as many farmers as possible with minimal cost**

**D. Module-wise resilient technologies proposed to be demonstrated for the year 2018-19**

| S. No. | Module | Climatic constraint addressed | Key intervention | No. of farmers proposed to be involved | Measurable indicator (s) |
|---|---|---|---|---|---|
| **1** | **Natural resource management** | | | | |
| | Check dam repairing | delay in monsoon by 2 weeks, terminal moisture stress | community nursery in check dam area | 62 | Irrigation area, no.of farmers benefitted |
| | Repair of Defunct well | Water table decreased | Desilting & renovation of open well | 16 | Water table at monthly interval |
| | Desilting of farm pond | Delay in monsoon leads to late | Community nursery near farm pond area, life saving irrigation | 18 | Irrigation area, no.of farmers benefitted |

| | | | | | |
|---|---|---|---|---|---|
| | | transplanting, no life saving irrigation in dry spell | to Paddy & rabi crop | | |
| | Raising of farm Bund height- Paddy | Loss of moisture & soil during runoff water | Raising of farm bund height by 1 ft. | 08 | Moisture content at different time, yield |
| | Ridge & furrow practices in Cowpea | To increase water use efficiency | Cowpea planted in Ridge | 08 | No. of Irrigation required, Moisture content of soil |
| | Ridge & furrow practices in Maize | To increase water use efficiency | Maize planted in Ridge | 10 | No. of Irrigation required, Moisture content of soil |
| | percolation tank | Dry spell & No irrigation facility to 2 nd crop | Percolation tank- 15m*10m* 1.5 m | 15 | Moisture content at different time, yield |
| | Poly mulching in Tomato, Brinjal | Moisture conservation & to suppress weed growth | 50 micron polythene is used in raised beds | 04 | Weeds/m2,moisture content, yield, no.of irrigation required |
| **2** | **Crop production** | | | | |
| | **Paddy-Sahabhagidhan** | Drought tolerant | Sahabhagidhan in upland | 15 | Yield, dry sell |
| | **Paddy-Swarnasub-1** | Flood tolerant | Water logging Low land situation | 10 | Yield, water logging period |
| | **Tomato-Chiranjibi** | Heat tolerant | Planted in Feb. | 10 | Yield, temp. |
| | **Paddy-DRR-42** | Drought tolerant | DRR-42 in upland | 10 | Yield, dry sell |
| | **Groundnut-Devi** | Moisture stress tolerant | Cash crop | 10 | No.of irrigation ,yield |
| | **Pigeonpea-PRG-176** | Short duration | Crop diversification in upland | 25 | Additional benefit |
| | **Maize-Hybrid super 36** | To increase water use efficiency in Ridge & furrow method | Crop diversification in upland | 10 | Additional benefit |
| | **Greengram IPM-02-14** | Short duration & YMV tolerant | Grown in residual soil moisture | 25 | Yield, moisture content |
| | **Blackgram-PU-31** | Short duration | Grown in residual soil moisture | 25 | Yield, moisture content |
| | **Intercropping-Maize + cowpea** | Better utilization of available resources | Maize + cowpea in 2:1 ratio. | 05 | Additional benefit |

| | | | | | |
|---|---|---|---|---|---|
| **3** | **Livestock & Fisheries** | | | | |
| | **Cattle-Concrete flooring& Roof thatching by straw** | To improve sanitation for better milk production | Concrete flooring with bamboo & straw thatching | 04 | Diseases incidence & milk yield |
| | **Low cost poultry house** | Improved housing for adverse climatic condition | Cement pillar with wire mesh | 02 | Avg. body wt, mortality %. |
| | **Poultry-Kadaknath** | Better adaptability to adverse climatic condition | Backyard poultry rearing | 05 | Avg. body wt, mortality %. |
| | **Pisciculture** | to coop with the decrease water table of seasonal farm pond | Yearling with floating fish feed management | 04 | Avg. body wt, survivility %. |
| **4** | **Institutional interventions** | | | | |
| | **Custom hiring** | To co op up for late agronomic operation | Use of farm implements | 64 | Efficiency, yield increase |

***add rows if required**

**ACTIVITIES AND COSTS**

**2.0 Non-recurring contingencies – Equipment**

**Proposal for Procurement of farm machinery/ implements for Custom Hiring entre**

| ***S. No.*** | ***Item*** | ***Unit cost* (Rs)*** | ***No. of units*** | ***Total amount (Rs)*** |
|---|---|---|---|---|
| **1.** | **Moisture meter** | 25000 | 01 | 25000 |
| **2.** | **Power weeder** | 90000 | 01 | 90000 |
| | | | | |
| | | | | |
| | Add rows if required | | | |
| | **Total NRC 2.0** | | 02 | 115000 |

** Wherever possible, subsidy extended by State Government for the machinery to be utilized and accordingly rate adjusted. Wherever required, include equipment for village level small weather station, GPS, rain gauge and any other critical equipment for community interventions.*

## 3.0 Contingencies

### 3.1 Module 1 – NRM interventions

***A) Repair / Renovation of existing water harvesting structures, drainage channels etc.***

| *S. No.* | *Intervention* and village* | *Dimensions* | *No. of units* | *No. of benefi-ciaries* | *Convergence value, if any (Rs)* | *Value of farmers share (Rs)* | *Cost to project (Rs)* |
|---|---|---|---|---|---|---|---|
| | Check dam repairing | 50m * 20 m | 01 | 62 | | | 25000 |
| | Repair of Defunct well | 30 m3 | 4 | 16 | | | 20000 |
| | Desilting of farm pond | 80m * 35 m | 02 | 18 | | | 14000 |
| | **Sub-total 3.1 A** | | | **96** | | | **59000** |

**De-silting, deepening & clearing of irrigation/drainage channels, repair of defunct wells etc.*

**B) *In situ* conservation – Resource Conservation Technologies (RCTs)**

| *Item (specify the interventions) and village* | *Unit cost Rs/acre* | *No. of demos* | *Coverage* | | *Total amount (Rs)* | *Remarks* |
|---|---|---|---|---|---|---|
| | | | *Area (acres)* | *No. of farmers* | | |
| | **A** | **B** | **C** | **D** | **A x C** | |
| Raising of farm Bund height- Paddy | 10000 | 08 | 2 | 08 | 20000 | Water conservation |
| Ridge & furrow practices in Cowpea | 5000 | 10 | 2 | 10 | 10000 | Water conservation |
| Ridge & furrow practices in Maize | 4000 | 15 | 05 | 15 | 20000 | Water conservation |
| percolation tank | 4000 | 04 | 0.03 | 04 | 16000 | Water conservation |
| Poly mulching in Tomato, Brinjal | 20000 | 04 | 0.5 | 04 | 10000 | To check weed population |
| **Sub total 3.1.B** | | 41 | 9.53 | 41 | 76000 | |

**Support for improved planting methods, in-situ conservation practices; Specify crops for planting methods and all practices*

## 3.2 Module II – Crop production interventions

### A) Stress tolerant / Improved varieties / Short duration / Legume crops

| ***Intervention and village*** | ***Description*** | | ***Cost (Rs/acre)*** | ***No. of demos*** | ***Coverage*** | | ***Total amount (Rs)*** | ***Remarks (purpose of intervention)*** |
|---|---|---|---|---|---|---|---|---|
| | ***Crop*** | ***Variety (s)*** | | | ***Area (ac)*** | ***No. of farmers*** | | |
| | | | ***A*** | ***B*** | ***C*** | ***D*** | ***A x C*** | |
| Drought | Paddy | Sahabhagidhan | 700 | 15 | 15 | 15 | 10500 | To coop with dry spell |
| Flood | Paddy | Swarnasub-1 | 1000 | 15 | 15 | 15 | 15000 | To coop with waterlogging |
| High temperature stress | Tomato | Chiranjibi | 10000 | 10 | 02 | 10 | 20000 | Better profit |
| Short duration varieties (specify) | Paddy | DRR-42 | 600 | 20 | 20 | 20 | 12000 | Water conservation |
| Any other stress (specify, add rows if required)- Moisture stress tolerant | Groundnut | Devi | 7000 | 10 | 05 | 10 | 35000 | Less water requirement |
| Crop diversification (to other crops) | Pigeonpea | PRG-176 | 1200 | 25 | 25 | 25 | 30000 | Better profit |
| | Maize | Hybrid super 36 | 2000 | 10 | 05 | 10 | 20000 | Better profit |
| Agroforestry | | | | | | | | |
| Seed for green / brown manuring | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Seed for legume catch crops (specify) | Greengram | IPM-02-14 | 2000 | 25 | 25 | 25 | 50000 | Residual soil moisture |
| | Blackgram | PU-31 | 2000 | 25 | 25 | 25 | 50000 | Residual soil moisture |
| Intercropping systems (specify) | Maize + cowpea | Hybrid, Utkal manika | 3000 | 05 | 02 | 05 | 6000 | Better profit |
| **Sub Total 3.2 A** | | | | 145 | 124 | 145 | 248500 | |

***Add rows for other interventions, if required**

**B) Improved agronomic practices and other crop interventions**

| ***Intervention*** | | ***Cost (Rs/ acre)*** | ***No. of demos*** | ***Coverage*** | | ***Amount (Rs)*** | ***Remarks (Purpose of intervention)*** |
|---|---|---|---|---|---|---|---|
| | | | | ***Area (ac)*** | ***No. of farmers*** | | |
| | | ***A*** | ***B*** | ***C*** | ***D*** | ***A x C*** | |
| Water saving paddy cultivation methods | DSR | 700 | 15 | 15 | 15 | 10500 | ***To decrease water use*** |
| | Aerobic | | | | | | |
| | SRI | | | | | | |
| Community nursery | | | | | | | |
| Critical inputs for Integrated crop management (specify crop)-vegetable | | **3000** | ***20*** | ***05*** | ***20*** | ***15000*** | ***Pest & disease management*** |
| Critical inputs for Integrated Farming systems (specify inputs and crops) Paddy-veg-poultry-mushroom | | ***4000*** | ***04*** | ***02*** | ***04*** | ***16000*** | ***Sustainable increase of income*** |
| Other inputs (soil amendments, soil test based nutrient management, bio-fertilizers, other soil and plant health related inputs etc) | | **400** | ***25*** | ***25*** | ***25*** | ***10000*** | ***Use of micronutrient*** |
| Harvesting and post harvesting related interventions | | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Facilitating insurance for crops (specify) | | | | | | |
| Income generation activities (Mushroom etc) | ***500/10 beds*** | ***20*** | ***20*** | ***20*** | ***10000*** | ***Higher Income*** |
| Income generation activities (Vegetables etc.)-Sweetcorn | ***15000*** | ***10*** | ***02*** | ***10*** | ***30000*** | ***Higher Income*** |
| Facilitation of marketing of farm produce | | | | | | |
| Any other (specify), add rows if needed- net house | ***5000*** | ***03*** | ***0.15*** | ***03*** | ***15000*** | ***Protected cultivation*** |
| **Sub-total 3.2 B** | | 97 | 69.15 | 97 | 106500 | |

## 4.0 Module 3 – Livestock & Fisheries interventions

### 4.1 Year round fodder production strategies (annual/perennial fodder) in the village

| **Season** | **Name of fodder** | **Variety** | **Area (ha)** | **Unit cost of demo (Rs/ha)*** | **No. of demos** | **Total amount (Rs/ha)*** | ***Remarks (purpose of intervention & No. of farmers covered)*** |
|---|---|---|---|---|---|---|---|
| *Kharif* | Hybrid napier | | 0.4 | 2000 | 04 | 8000 | Fodder availability in summer |
| | | | | | | | |
| *Rabi* | | | | | | | |
| | | | | | | | |
| Summer | | | | | | | |
| | | | | | | | |
| | **Sub-total 4.1** | | 0.4 | 2000 | 04 | 8000 | |

*if applicable

### 4.2 Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture (MM) blocks / feed enrichment

| **Details of feed demo*** | **Unit cost of demo** | **No. of demos** | **Total amount (Rs/ha)** | ***Remarks (purpose of*** |
|---|---|---|---|---|

| | **(Rs)** | | | ***intervention & No. of farmers covered)*** |
|---|---|---|---|---|
| a) Silage demos | 1000 | 10 | 10000 | To provide feed in stress period |
| b) Feed block demos | 800 | 10 | 8000 | To provide feed in stress period |
| c) Mineral mixture demos | 6000 | 02 | 12000 | To increase milk production |
| d) Unconventional feed resources (eg., red gram stalks, cotton stalks etc) used in preparation of complete feed | | | | |
| e) Feeding management & disease control programme in livestock (Total Mixed Ration, Mineral block, medicines & disinfectant solution) | | | | |
| f) Any other (specify), add rows if needed-Animal health camp | 12000 | 02 | 24000 | To increase immunity |
| **Sub-total of 4.2** | | **24** | **54000** | |

**Specify fodder & animal type for demos; here indicate cost of demo, if any; cost of establishment of new units to be given in item 2.0 (equipment), if any.*

### 4.3 Improved housing / shelter for protection of livestock against extreme weather

| **Type of shelter improvement *** | **Unit cost of demo (Rs)** | **Cost to project (Rs)** | **Farmer's share (Rs)** | **No. of demos** | **Total amount (Rs)** | **No. of farmers covered** | ***Remarks (purpose of intervention)*** |
|---|---|---|---|---|---|---|---|
| Cattle-Concrete flooring& Roof thatching by straw | 5000 | 8000 | 3000 | 04 | 20000 | 04 | Better hygienic condition |
| Low cost poultry house | 5000 | 7000 | 2000 | 02 | 10000 | 02 | Adverse climatic condition |
| **Sub-total of 4.3** | | **15000** | **5000** | **06** | **30000** | **06** | |

**Specify animal type and material used; Plan innovative demonstrations using locally available material*

### 4.4 Livestock / Fisheries units

| A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|
| **Enterprise/unit*** | **Unit cost (Rs)** | **Convergence share in unit cost, if any** (Rs)** | **Project share in unit cost (Rs)** | **No. of units/ farmers** | **Cost to Project (D x E) (Rs)** | ***Remarks (purpose of intervention& farmers covered)*** |
| Poultry- Kadaknath | 2000 | | | 05 | 10000 | Higher income |
| Pisciculture | 5000 | | | 04 | 20000 | Higher income |
| | | | | | | |
| | | | | | | |
| **Sub-total of 4.4** | | | | **09** | **30000** | |

** Stress tolerant breeds/piggery/goatery/duckery/backyard poultry/ fisheries/bee keeping etc. Also include livestock component of Integrated Farming Systems (IFSs)*

### 5.0 Module 4 – Community interventions

### 5.1 Establishment of fodder banks (hay)

| Name of the SHG | Fodder type | Quantity of storage (t) | Unit cost (Rs.) | No. of units | Amount (Rs.) | *Remarks (purpose of intervention& farmers covered)* |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| **Sub-total 5.1** | | | | | | |

### 5.2 Establishment of Seed banks

| Name of the SHG | Crop and variety | Quantity of storage (t) | Unit cost (Rs.) | No. of units | Amount (Rs.) | Remarks (No. of beneficiaries & Period of use) |
|---|---|---|---|---|---|---|
| | **Paddy- Sahabhagidhan** | **04** | **5000** | **01** | **5000** | **162/june-july** |
| | | | | | | |
| | | | | | | |
| **Sub-total 5.2** | | | | **01** | **5000** | |

## 6.0. Capacity Building & Training Programmes

### 6.1 Training Courses proposed

| Theme | Title of training course | Proposed month | No. of participants | Cost to project (Rs.) |
|---|---|---|---|---|
| IPM | Management of Pest & diseases in paddy | August | 25 | 5000 |
| IPM | Management of Pest & diseases in Pulses | Jan. | 25 | 5000 |
| Income generation | Paddy straw Mushroom cultivation | June | 25 | 3000 |
| Income generation | Oyster mushroom cultivation | Oct. | 25 | 3000 |
| Resource conservation | Vermicomposting | Nov. | 25 | 5000 |
| INM | Use of micronutrient in Paddy, vegetables | Aug. | 25 | 3000 |
| Feed management | Application of Floating feed in Pisciculture | Dec. | 25 | 5000 |
| Quality planting material | Nursery raising , Grafting techniques of veg. & fruits | Oct. | 25 | 5000 |
| **Sub-total 6.1** | | | **225** | **34000** |

### 6.2 Field Days proposed

| Theme | Title of training course | Proposed month | No. of participants | Cost to project (Rs.) |
|---|---|---|---|---|
| Field day . | Field day on short duration Paddy var.- DRR-42 | Oct. | 60 | 5000 |
| Field day . | Field day on drought tolerant Paddy var.- Sahabhagidhan | **Oct.** | **60** | **5000** |
| Field day . | Short duration Greengram var.IPM-02-14 | **Feb.** | **70** | **6000** |
| Field day . | Short duration Blackgram var. PU-31 | **Feb.** | **70** | **6000** |
| **Sub-total 6.2** | | | **260** | **22000** |

### 6.3 Exposure Visits proposed

| Place of visit | Purpose of visit | Proposed month | No. of participants | Cost to project (Rs.) |
|---|---|---|---|---|
| CHES, CTCRI, WTCER | Awareness on improved technology | Nov. & feb. | 40 | 20000 |
| | | | | |
| | | | | |

| | | | | |
|---|---|---|---|---|
| **Sub-total 6.3** | | | **40** | **20000** |

**7.0 Plan for contingency situations involving various crops during the cropping season 2018-19**

| **Sl. No** | **Possible contingency situation** | **Measures envisaged** | **Unit cost/ acre** | **No. of farmers to be covered** | **Cost to project (Rs.)** | **Remarks** |
|---|---|---|---|---|---|---|
| 1. | Late onset of monsoon | Crop diversification to maize | 1500 | 20 | 15000 | |
| 2. | Prolonged breaks during the season | Irrigation from check dam & farm ond | - | 80 | - | |
| 3. | Early withdrawal of monsoon | Short duration Black gram var. | 1000 | 40 | 10000 | |
| 4. | Intense storms | | | | | |
| 5. | Temporary flooding/ Water logging due to heavy rains | | | | | |
| 6. | Any other, .. | | | | | |
| **Sub-total 7.0** | | | | **140** | **25000** | |

**8.0 Contractual Manpower (SRFs/YPs)**

| **Category** | **Rate/month (Rs.)** | **No. of months** | **Amount (Rs.)** |
|---|---|---|---|
| SRF | 28000 | 12 | 336000 |
| | | | |
| | | | |
| **Sub-total 8.0** | **28000** | **12** | **336000** |

**9.0 Media Products to be developed (video films/brochures/bulletins proposed to be developed)**

| **Item description** | **No. of copies** | **Amount (Rs.)** |
|---|---|---|
| Bulletin on Impact of NICRA activities | 1000 | 10000 |
| Video CD on NICRA success stories | 100 | 8000 |
| | | |
| | | |
| **Sub-total 9.0** | **1100** | **18000** |

**Summary of budget Estimates for 2018-19 (Tentative)**

| ***Item number*** | ***Title of the Item*** | ***Amount (Rs.)*** |
|---|---|---|
| 2.0 | Procurement of farm machinery/implements for CHC | 115000 |
| 3.1 A | Repair/ Renovation of existing water harvesting structures & drainage channels etc. | 59000 |
| 3.1 B | *In situ* conservation – Resource Conservation Technologies (RCTs) | 76000 |
| 3.2 A | Stress tolerant/ Improved varieties | 248500 |
| 3.2 B | Improved agronomic practices and other crop interventions | 106500 |
| 4.1 | Year round fodder production strategies (annual/perennial fodder) in the village | 8000 |
| 4.2 | Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture blocks / feed enrichment | 54000 |
| 4.3 | Improved housing /shelter for protection against extreme weather | 30000 |
| 4.4 | Livestock/fisheries units | 30000 |
| 5.1 | Establishment of fodder banks (hay) | |
| 5.2 | Establishment of seed banks | 5000 |
| 6.1 | Training courses | 34000 |
| 6.2 | Field days | 22000 |
| 6.3 | Exposure visits | 20000 |
| 7.0 | Plan for contingency measures for various crops during the cropping season 2018-19 | 25000 |
| 8.0 | Contractual manpower (SRFs/YPs) | 336000 |
| 9.0 | Media products to be developed | 18000 |
| 10.0 | Any other contingencies (TA , Hiring of vehicle etc) | 100000 |
| | **Grand total (Rs.)** | **1287000** |

**Date:** **Signature of PC, KVK/ In-charge NICRA**

**Date:** **Signature of Nodal Officer, NICRA-ZPD Zone __**