KVK, GANJAM-1, ORISSA
NICRA Technology Demonstration Component (TDC)
Action Plan 2015-16

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

1.0

A. Basic information

S.No.	*Item*	*Detail*
1.1	Zone	VII
1.2	Name of KVK (district)	Ganjam-1
1.3	Name of Tehsil	Jagannath Prasad
1.4	Name of Village	Chopara
1.5	Climatic vulnerability	Drought, Dry spell & Terminal moisture stress

B. Module-wise existing practice and climate resilient practice/technology to be demonstrated for the year 2015-16

i) Natural resource management

Intervention	**Climatic constraint (general description of stress, occurrence period, its duration, crop stage affected in the village etc)**	**Details of existing practice of farmer in the village**	**Details of climate resilient practice / technology to be demonstrated**	**Measurable indicator (s)**
Check dam construction	**Delay in monsoon by 2 weeks, terminal moisture stress**	**delay in sowing**	**Different dates of sowing of Sahabhagidhan**	**Yield, Panicle/hill, no.of grains/Panicle**
Deep Summer Ploughing	**Less moisture content of soil**	**Summer ploughing by desi plough**	**Deep Summer Ploughing by mb lough**	**Moisture content at different growth stages**
Percolation tank	**Dry spell & No irrigation facility to 2 nd crop**	**Irrigation from canal having large distance**	**Percolation tank- 6m*3m* 1.5 m**	**Moisture content at different time, yield**
Farm Pond renovation	**Delay in monsson leads to late tgransplanting, no life saving irrigation in dry spell**	**Translanting delayed**	**Community nursery near farm pond area, life saving irrigation to**	**Irrigation area, no.of farmers benefitted**

			Paddy	
Raising of farm bund height	Loss of moisture & soil during runoff water	Bund ht. mostly less than 1 ft.	Raising of farm bund height by 2 ft.	Moisture content of soil at different stages
Renovation of open well	Water table is decreasing,No artificial irrigation to vegetables	Desilting not done	Desilting & renovation of open well	Water table at monthly interval
Green manuring	Acidic soil leads to poor crop growth	No green manuring	Green manuring with sunhemp	Biomass incorporated, change in moisture content, change in PH
Zero tillage-Black gram	Less Moisture in soil for rabi crop	Ploughing by desi plough	Tractor drawn seed cum fertilizer drill	Moisture content, yield

ii) Crop production system

Intervention	Climatic constraint (general description of stress, occurrence period, its duration, crop stage affected in the village etc)	Details of existing practice of farmer in the village	Details of climate resilient practice / technology to be demonstrated	Measurable indicator (s)
Drought resistant Paddy var. sahabhagi dhan	Delay in monsoon, Terminal stress	Delay in sowing	Different date of sowing	yield
Drought resistant Paddy var. satyabhama for medium land	Delay in monsoon, Terminal stress	Delay in sowing	Different date of sowing	yield
Flood tolerant var. swarna sub-1	Due to heavy rain water logging in low lands	Cultivating of long duration var.	Cultivation of Flood tolerant Paddy var. Swarna sub-1	Yield & Loss % in flood situation
Contigent crop	Occurance of cyclone	No alternate contigent crop	Pigeon pea as cyclone	Ralative yield index

			contingent crop & intercropping of pigeon pea with Paddy	
Crop diversification	**Late on set of monsoon**	**Paddy**	**Maize as contigent crop in ridge & furrow system**	**Moisture content, yield**

iii) Livestock and fisheries production systems

Intervention	**Climatic constraint (general description of stress, occurrence period, its duration, crop stage affected in the village etc)**	**Details of existing practice of farmer in the village**	**Details of climate resilient practice / technology to be demonstrated**	**Measurable indicator (s)**
Yearling cultivation	**Water table decreases in March**	**Growing of fingerlings**	**Releasing yearling & floating feed management**	**Fish growth, yield**
Preventive vaccination	**Occurance of different diseases**	**No vaccination**	**Vaccination in different seasons**	**Growth rate, mortality rate**
Mineral mixture feeding	**More estrous per conception**	**No supplementary feeding in late heat peiod**	**Mineral mixture feeding**	**No.of estrous/conception**
Housing of cattle & ruminants	**Unhygienic condition leads to diseases & mortality**	**Unhygienic shelter**	Concrete flooring& Roof thatching by straw for cattle & bamboo house for small ruminants	**Disease occurance**
fodder grass cultivation	**No fodder in summer season**	**Grazing in open field to a large distance**	**Cultivating hybrid napier in khaif season**	**Fresh biomass/ year**

iv) Institutional interventions

Intervention	Climatic constraint (general description of stress, occurrence period, its duration, crop stage affected in the village etc)	Details of existing practice of farmer in the village	Details of climate resilient practice / technology to be demonstrated	Measurable indicator (s)
Exposure visit	Unaware of new technology	No exposure to new technology	2 no. of exp. visit	Change in knowledge
Method demonstration	Unaware of new technology	Less knowledge about diff. new technologhy	Method demonstration for seed treatment, weedicide, biopesticide	Change in knowledge
Training programme	Unaware about about diff. pest & deseases in diff. seaqson	Less knowledge about diff. new technologhy	Training programme	Change in knowledge

Activities and costs

2.0 Non-recurring contingencies – Equipment

Procurement of farm machinery/ implements for Custom Hiring Centre (CHC)

S.No.	*Item*	*Unit cost* (Rs)*	*No. of units*	*Amount (Rs)*
1.	Power tiller	1,60,000	01	1,60,000
2.	Reaper	1,10,00	01	1,10,000
3.	Happy Seeder	4,50,000	01	4,50,000
	Total NRC 2.0			7,20,000

** 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, 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**	*Dimensions*	*No. of benefi-*	*Convergence value, if any*	*Value of farmers*	*Cost to project*

			ciaries	***(Rs)***	***share, if any(Rs)***	***(Rs)***
1	Check dam repairing	30m * 20 m	18			10,000
2	Repair of Defunct well	30 m3	6			9,000
	Sub-total 3.1		**24**			**19,000**

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

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

Item (specify)	***Unit cost Rs/acre***	***No. of demos***	***Coverage***		***Amount (Rs)***	***Remarks***
			Area (acres)	***No. of farmers***		
	A	**B**	**C**	**D**	**A x C**	
Summer deep ploughing-Paddy	1200	10	05	10	6000	Moisture conservation
vermicomposting	1600	05		05	8000	Resource conservation
Zero tillage-Black gram	1500	05	5	05	7500	Moisture conservation
Percolation tank	3000	04		04	12000	Moisture conservation
Sub-total 3.1		**20**	**10**	**24**	**33500**	

**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

Item*	***Description***		***Cost (Rs)/acre***	***No. of demos***	***Coverage***		***Amount (Rs)***
	Crop	***Variety (s)***			***Area (ac)***	***No. of farmers***	
			A	***B***	***C***	***D***	***A x C***
Drought	Paddy	Sahabhagidhan	900	15	15	15	13500
Flood	Paddy	Swarna sub-1	900	10	10	10	9000
High temperature stress							
Short duration varieties	Paddy	Satyabhama	800	05	05	05	4000

(specify)							
Any other stress (specify, add rows if required)							
Crop diversification (to other crops)	Maize	Hybrid super 36	800	05	05	05	4000
Agroforestry							
Seed for green / brown manuring	Sunhemp	Local	800	08	4	08	3200
Seed for legume catch crops (specify)	Green gram	TARM-1	900	10	10	10	9000
Intercropping systems (specify)	Paddy-Pigeon pea	Sahabhagidhan-Asha	3000	05	02	05	6000
Sub Total 3.2 A				63	56	63	48700

B) Improved agronomic practices and other crop interventions

Item*		***Cost (Rs)/ acre***	***No. of demos***	***Coverage***		***Amount (Rs)***
				Area (ac)	***No. of farmers***	
		A	***B***	***C***	***D***	***A x C***
Water saving paddy cultivation methods	DSR	***700***	***10***	***10***	***10***	***7000***
	Aerobic					
	SRI					
Community nursery		***1000***	***01***	***3***	***30***	***3000***
Critical inputs for Integrated crop management (specify crop)- Paddy- weedicide, Fungicide, insecticides		***600***	***15***	***15***	***15***	***9000***
Critical inputs for Integrated Farming systems (specify inputs and crops)						
Other inputs (soil		***400***	***10***	***10***	***10***	***4000***

amendments, soil test based nutrient management, bio-fertilizers, other soil and plant health related etc)					
Harvesting and post harvesting related interventions					
Facilitating insurance for crops (specify)					
Income generation activities (Mushroom etc)	***200/10 beds***	***10***	***10 units***	***10***	***2000***
Income generation activities (Vegetables etc.)- Brinjal , Tomato, Sunflower	***1200***	***30***	***08***	***30***	***9600***
Facilitation of marketing of farm produce					
Any other (specify), add rows if needed					
Sub-total 3.2 B		***76***	***46/10 units***	***105***	***34600***

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)***	**No. of demos**	**Amount (Rs)***	***Remarks (no. of farmers covered)***
Kharif	Hybrid napier		0.4	2000	04	8000	04
Rabi							
Summer							
	Sub-total 4.1		**0.4**	2000	04	8000	04

*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**	**Amount (Rs)**	***Remarks (no. of farmers***

	(Rs)			***covered)***
a) Silage demos				
b) Feed block demos				
c) Mineral mixture demos	7000	02	14000	20
d) Unconventional feed resources (eg., red gram stalks, cotton stalks etc) used in preparation of complete feed				
e) Any other (specify), add rows if needed				
f) Feeding management & disease control programme in livestock (Total Mixed Ration, Mineral block, medicines & disinfectant solution)	5000	03	15000	74 farmers/ 148 animals
Sub-total of 4.2		**05**	**29000**	**94**

**Specify fodder & animal type for demos; here indicate cost of demo, if any; cost of establishment of new units to be given in item 2.2 (other equipment), if any.*

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

Type of shelter improvement*	**Unit cost of demo (Rs)**	**No. of demos**	**Amount (Rs)**	***Remarks (no. of farmers covered)***
Cattle-Concrete flooring& Roof thatching by straw	4000	01	4000	01
Goat & sheep- bamboo house	5000	01	5000	01
Sub-total of 4.3		**02**	**9000**	**02**

**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**	**Cost to Project (D x E) (Rs)**	**Remarks on beneficiary category (SC/ST/BC/ Women etc)**
Poultry- Rainbow rooster	8000		8000	10	8000	Women-10
Pisciculture	6000		6000	02	12000	SC-2, gen.-03
Sub-total of 4.5				**12**	**20000**	**15**

** Stress tolerant breeds/piggery/goatery/duckery/backyard poultry/ fisheries/bee keeping etc.*

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 (No. of beneficiaries & Period of use)
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	**6**	**3600**	**01**	**3600**	**130/June-July**
Sub-total 5.2		**6**	**3600**	**01**	**3600**	

6.0. Capacity Building & Training Programmes

6.1 Training Courses

Theme	Title of training course	Proposed month	No. of participants	Cost to project (Rs.)
IPM	Management of Pest & diseases in paddy	August	25	3000
Income generation	Mushroom cultivation	June & OCT.	25	3000
Resource conservation	Vermicomposting	Nov.	25	2000
Feed management	Application of Floating feed in Pisciculture	Dec.	25	2000
INM	Micronutrient application in Paddy & vegetables	Sept.	25	2000
Sub-total 6.1	**05**		**125**	**12000**

6.2 Field Days

Theme	Title of training course	Proposed month	No. of participants	Cost to project (Rs.)
Variety-Paddy	Integrated crop managemennt	October	50	3000
Variety-Paddy	Integrated crop managemennt	**December**	50	3000
Crop diverfication	**ICM on Maize**	**September**	**50**	**3000**
Short duration – Green gram	**ICM on Green gram**	**February**	**50**	**3000**
Sub-total 6.2	**4**		**2000**	**12000**

6.3 Exposure Visits

Place of visit	Purpose of visit	Proposed month	No. of participants	Cost to project (Rs.)
CHES, BBSR & CRRI Cuttack	Awareness regarding improved method of cultivation.	August	15	10000
Centre of Excellence, Mendhasal, ICAR-IIWM Mendhasal	Awareness regarding proteced cultivation, Water saving methods	October	15	10000
Sub-total 6.3			**30**	**20000**

7.0 Up-scaling of Successful Interventions

Sl.No.	Name of technology	Unit cost/ha (Rs.)	No. of farmers covered	Cost to project (Rs.)	Remarks (justification)
1.	Use of Drought resistant Paddy var.	1600	15	8000	For poularization
2.	Use of weedicide in Paddy	900	15	5400	For poularization
3.					
4.					
Sub-total				**13400**	

7.0					

8.0 Contractual Manpower (SRFs)

Category	Rate/month (Rs.)	No. of positions	No. of months	Amount (Rs.)
SRF	16000	01	12	192000
Sub-total 8.0		**01**	**12**	**192000**

9.0 Media Products to be developed (brochure/bulletin)

Item description	No. of copies	Amount (Rs.)
Achievement of NICRA	500	12000
Sub-total 9.0	**500**	**12000**

Summary of budget Estimates for 2015-16 (Tentative)

Sub total	***Item***	***Amount (Rs)***
2.0	Procurement of farm machinery/implements for CHC	720000
3.1 A	Repair/ Renovation of existing water harvesting structures & drainage channels etc.	19000
3.1 B	*In situ* conservation – Resource Conservation Technologies (RCTs)	33500
3.2. A	Stress tolerant/ Improved varieties	48700
3.2. B	Improved agronomic practices and other crop interventions	34600
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	29000
4.3	Improved housing /shelter for protection against extreme weather	9000
4.4	Livestock/fisheries units	20000

5.1	Establishment of fodder banks (hay)	
5.2	Establishment of seed banks	3600
6.1	Training courses	12000
6.2	Field days	12000
6.3	Exposure visits	20000
7.0	Up-scaling of successful interventions	13400
8.0	Contractual manpower (SRFs)	192000
9.0	Media products to be developed	12000
10.0	Any other contingencies(POL & repairing-40000, TA-50000, Ext. Activities-30,000)	120000
	Grand total (Rupees Thirteen lakhs six thousand eight hundred only)	1306800

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

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