

# Implementable Work Plan: Doubling Farmers' Income in Odisha



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ICAR

ICAR- Agricultural Technology Application Research Institute Kolkata  
Indian Council of Agricultural Research  
Bhumi Vihar Complex, Salt Lake  
Kolkata – 700097

# Implementable Work Plan: Doubling Farmers' Income in Odisha



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35. Krishi Vigyan Kendra, Sonapur
36. Krishi Vigyan Kendra, Sundargarh-I
37. Krishi Vigyan Kendra, Sundargarh-II



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# Message



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Agriculture is one of the main pillars of national economy which provides livelihood support to large section of the society. Agricultural sector in India, as a whole, has continued to strive for improving food security. This has led to self-sufficiency in food grain production and emergence of our nation as a net food exporting country. Now, it has become imperative that the farmers get enhanced income from farming. In this endeavour, the Government has taken steps for implementing a time-bound programme on doubling farmers' income by 2022.

In order to pursue this initiative, bringing out a document on **Implementable Work Plan: Doubling Farmers' Income in Odisha** is a welcome initiative. The document describes the feasible action points to be implemented by KVKs across all the agro-ecological zones of Odisha in consonance with previously outlined strategy. ICAR-ATARI, Kolkata in collaboration with State Agricultural University and ICAR Institutes has prepared this document including both on- and off-farm activities.

I appreciate the Director, ICAR-ATARI Kolkata and his team for their efforts in bringing out a useful publication by summarizing the actionable points for increasing the farmers' income in Odisha by 2022. I hope that this document will be helpful for achieving the national goal within the stipulated time.

Dated : 24.04.2019

**Dr. A.K. Singh**



## Preface

A paradigm shift in agricultural research and extension system in our country is accentuating towards the farmer-centricity as well as maintenance of productivity at the possible highest level. Given the solidarity to the first of the two, the focus on farmer, the key player in agricultural development, has been enhanced with the implementation of important projects of ICAR like Farmer FIRST and ARYA. A further reinforcement in this has been effected with launching of the Flagship Programme of the national Government, i.e., “Doubling Farmers’ Income by 2022”.

Since then, the highly focussed agenda for promoting farmers’ welfare in India has been identification and formulation of strategic planning for increasing the farmers’ income within a stipulated period of time. There have been detailed discussions, deliberations in this aspect at several counts and state-specific strategy documents have been prepared by so many agencies entrusted with the mammoth work. These strategy documents have basically embodied various planned and systemic approaches to be followed in order to achieve the goal of increasing farmers’ income around the country.

One step forward, there was a felt need of all concerned that the strategic planning is to be put into action. In this respect, we have come out with a very important document on the implementation of already chalked-out plan having the potential for enhancing the income of the farmers of Odisha from their farm and non-farm activities. This is an attempt to document agro-ecological situations of the state of Odisha, specific actionable points for the state’s overall development of agriculture and allied sectors as well as the Krishi Vigyan Kendras’ work plan in selected villages for augmenting the income of farmers.

We sincerely hope that this document will be helpful for all the stakeholders involved in overall development of agriculture and allied sectors in the state of Odisha with a special emphasis on the doubling farmers’ income. Every care has been taken for including the latest data and related information on the implementable technologies in the document, yet the suggestions for improvement are always welcome.

Date: 24.04.2019  
Place: Kolkata

(S.S. Singh)

## INTRODUCTION

India has made a commendable progress in agriculture and allied sectors through scientific research, extension and pragmatic government policies since the time it achieved independence. Today India is the world's largest producer of vegetables, many fresh fruits, milk, fish, spices and fiber crops. Agriculture contributes 13.7% to the GDP and engages 50 percent of the total workforce. It plays a significant role in the socio-economic fabric of the country though it has progressed a lot in IT, service and manufacturing sectors. The average income per agricultural household from various sources is estimated at Rs. 6,426/- per month during the reference period of the agricultural year July 2012 to June 2013 which is very low to maintain a comfortable life by farmers of the country. Due to this reason, many farmers are leaving their primary occupation and going outside the village in search of job. Many farmers also commit suicide as they are not able to manage their family with less income.

Realizing this, Hon'ble Prime Minister of India announced to make a road map for Doubling the Farmers' Income by 2022, which would take the average income to approximately Rs 12,800. The same situation is prevailing in Odisha and the farmers are getting low income from farming by which they are leading a very miserable life.

In this context, efforts are being taken at various levels from Center to State for making strategic plans for Doubling the Farmers' Income. Niti Aayog, ICAR and State Agricultural Universities have been given the responsibility for preparation of road map by taking State Government into confidence.

For this purpose, the ICAR-ATARI Kolkata in collaboration with the Orissa University of Agriculture and Technology, ICAR-CIFA, ICAR-NRRI and the 33 KVKs of Odisha has prepared road map for doubling the farmers' income for its fruitful implementation. This document is meant for outlining these district specific implementable work plans to achieve the national goal.

## CONCEPT

There are several points which are required to follow to doubling the income of farmers, which may outlines as follows:

1. Specifically required timeframe needs to be indicated to double the farmer's income.
2. Whether all farmers average income or particular nominal income is to be doubled.
3. The required factor is to be focused whether it should be from agricultural activities or farmers other sources of income like marketing of crops, supply of crops, processing foods etc.
4. If it is possible to produce different types of crops in the same cultivated land simultaneously then due to the doubling crop production at lower cost some specified farmers income can be doubled.

The major sources of growth operating within agriculture sector include improvement in productivity, resources use efficiency or saving in cost of production, increase in cropping intensity and diversification towards high value crops. The sources outside agriculture include shifting cultivators from farm to non-farm occupations, and Improvement in terms of trade for farmers or real prices received by farmers.

## SOURCES OF GROWTH IN FARMERS' INCOME

Doubling real income of farmers till 2022-23 over the base year of 2015-16, requires annual growth of 10.41 per cent in farmers income. This implies that the on-going and previously achieved rate of growth in farm income has to be sharply accelerated. Therefore, strong measures will be needed to harness all possible sources of growth in farmers' income within as well as outside agriculture sector.

The major sources of growth operating within agriculture sector are:

1. improvement in productivity
2. resource use efficiency or saving in cost of production

3. increase in cropping intensity
4. diversification towards high value crops

The sources outside agriculture include:

1. shifting cultivators from farm to non-farm occupations, and
2. Improvement in terms of trade for farmers or real prices received by farmers.

## STRATEGY FOR IMPROVING FARMERS' INCOME

The sources of growth in output and income can be put in four categories.

1. Development initiatives including infrastructure
2. Technology
3. Policies and
4. Institutional mechanisms

## ROADMAP AND ACTION PLAN

The quantitative framework for doubling farmers' income has identified seven sources of growth. These are:

1. Increase in productivity of crops
2. Increase in production of livestock
3. Improvement in efficiency of input use (cost saving)
4. Increase in crop intensity
5. Diversification towards high value crops
6. Improved price realization by farmers
7. Shift of cultivators to non-farm jobs

## AGRICULTURAL SCENARIO OF ODISHA

The State of Odisha has a geographical area of 1,55,707 sq. Kms with a population of 4.19 crores. Agriculture is the main stay of State's economy and providing livelihood support to a large section of rural population. The total cultivated land of the State is 61.80 lakh ha out of which 29.14 lakh ha (47%) is high land 17.55 lakh ha (28%) medium land and 15.11 lakh ha (25%) low land. About 84 per cent of the farmers are small and marginal and have limited access to resources. Literacy too is a concern for this vulnerable group of farming community. As per Agricultural Census-2010-11, the number of operational holdings of the State is 46.67 lakh with operational area 48.52 lakh ha. The State witnessed a decline in operational area due to urbanization and more of land put to non-agricultural use. Agriculture in the state is characterized by low productivity due to traditional agriculture practices by poor people, inadequate irrigation infrastructure, skewed land distribution, small size holding, low investment and capital formation and natural calamities occurring in quick succession.

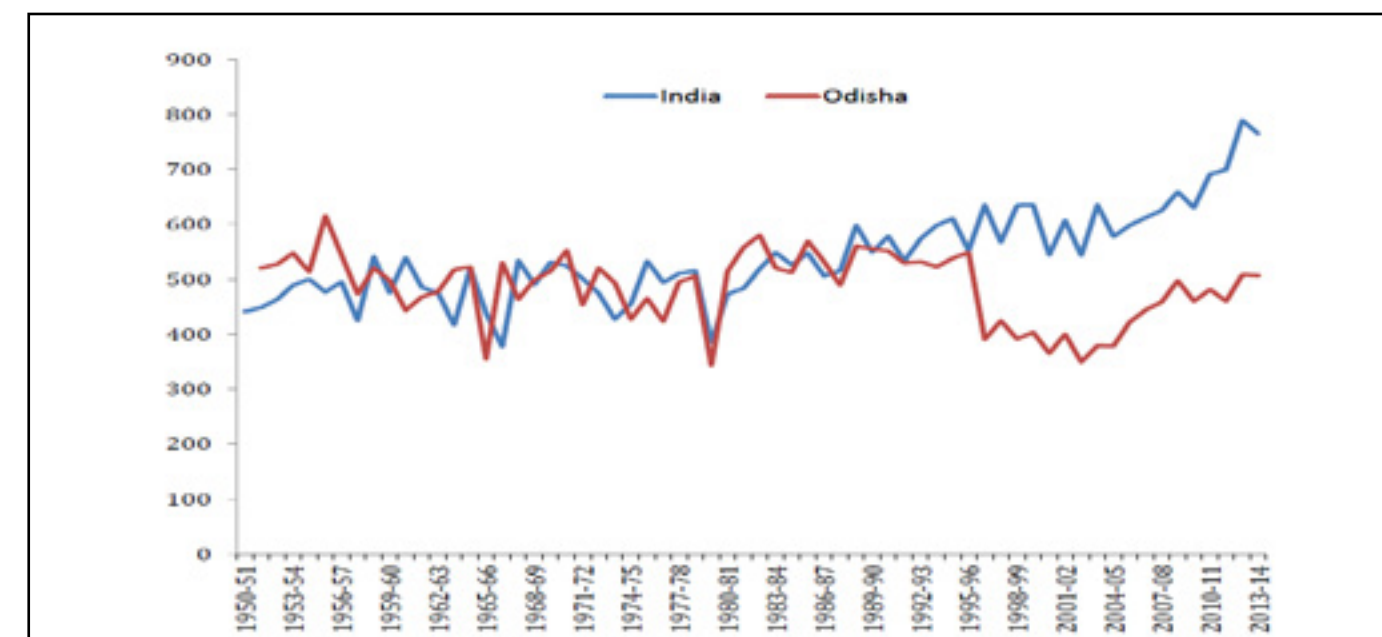
The climate of Odisha is tropical, characterised by high temperature, high humidity, medium to high rainfall, short and mild winter. The normal rainfall in the State is 1451 mm, of which about 80% is confined to monsoon months (June-September).

The State of Odisha is divided into 10 agro-climatic zones, viz., North-western plateau, North-central Plateau, North-Eastern coastal plain, East and South-Eastern coastal plain, North-Eastern Ghat, Eastern Ghat high land,

South-Eastern Ghat, Western undulating zone, West Central table land and Mid-Central table land. Soil types range from fertile alluvial deltaic soils in coastal plains, mixed red and black soils in Central tableland, red and yellow soils with low fertility in Northern Plateau to red, black & brown forest soils in Eastern Ghat region. They differ widely from highly acidic to slightly alkaline and from light sandy to stiff clays. Soils are mainly acidic with the degree of acidity varying widely. Further, about 4 lakh ha is exposed to saline inundation, 3.54 lakh ha to flooding and 0.75 lakh ha to water-logging in the deltaic areas. These are low in water holding capacity, fertility and having various production constraints. Agriculture sector in the State has an impeccable track record of meeting the challenges of food demand due to rapid growth of population. This can be construed to have been achieved through a favourable interplay of infrastructure, technology, extension and policy support.

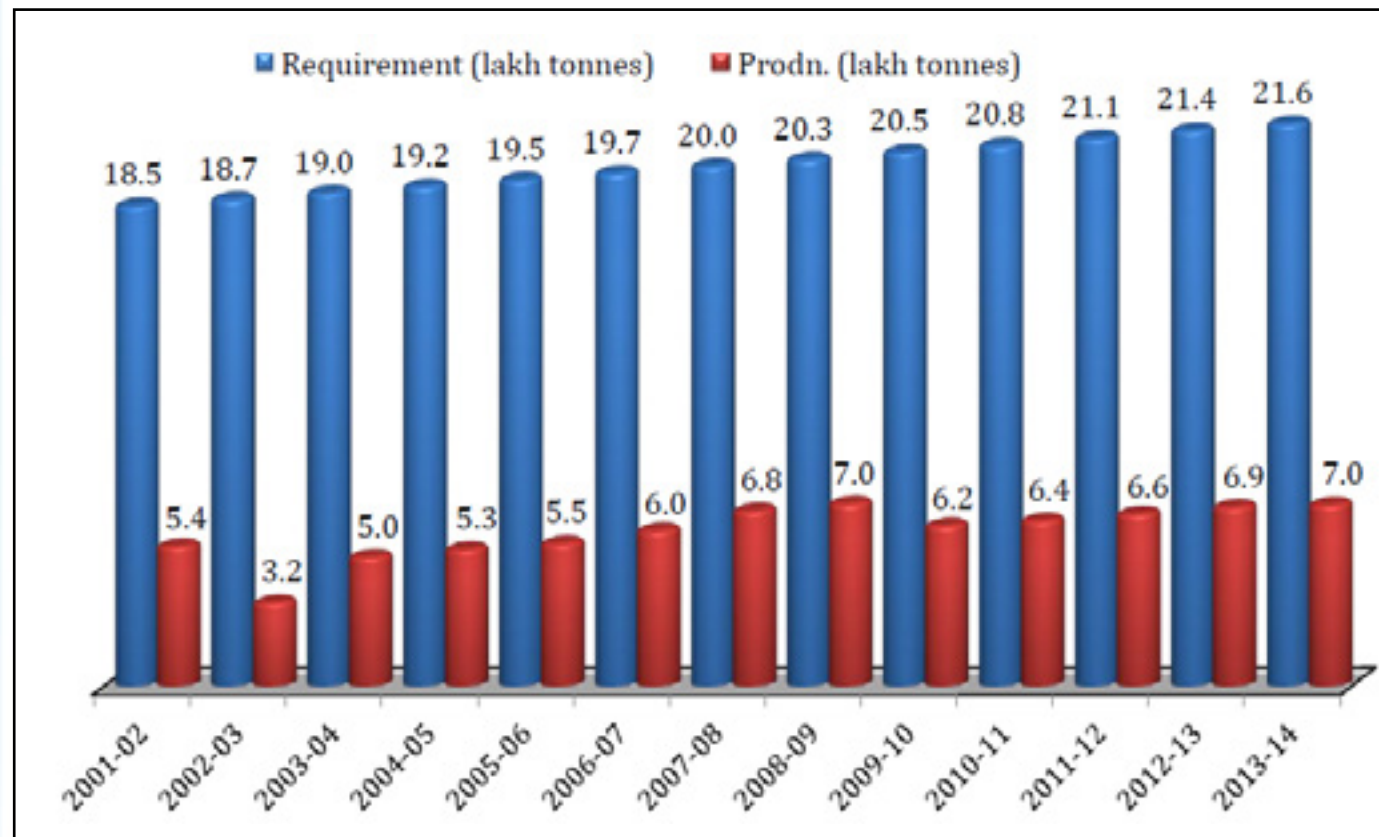
Net area sown and gross cropped area during the year 2013-14 were 54.24 lakh ha and 90.54 lakh ha, respectively. The cropping intensity for the year was 167 per cent. Rice was the major crop in kharif season, so were pulses and oilseeds in Rabi season. The gross irrigation potential created till 2013-14 from all sources was 50.05 lakh ha (33.53 lakh ha during kharif and 16.52 lakh ha during rabi) and gross irrigated area during the year was 35.21 lakh ha (22.54 lakh ha during kharif and 12.67 lakh ha during rabi) which is 70.35% of the irrigation potential created.

Rice is the most important food crop of Odisha. Nearly 70% of the state's population directly or indirectly depends upon rice cultivation. It is grown in an area of 41.8 lakh ha with productivity of 1821 kg/ha (rice) during 2013-14. Pulses are the second most important group of crops next to cereals in Odisha. The state grows ten important pulse crops namely, greengram, blackgram, pigeonpea, horsegram, lentil, gram, cowpea, rajmash, *Lathyrus* and ricebean. During 2013-14, in Odisha, pulse crops were grown in about 20.88 lakh ha with production of 10.58 lakh tonnes and average productivity of 507 kg/ha. The yield of pulse crop both in India and Odisha maintains a plateau since last six decades. Breaking of this plateau is very much necessary to fulfil the protein requirement of vast population of the country.



Groundnut, sesame, castor, mustard, niger, sunflower, safflower, soybean and linseed are the major oilseed crops grown in the State. Of these, groundnut, sesame, mustard and niger are the major ones. Now, sunflower is gaining popularity in the state. The oilseed situation demands to enhance the production to meet the domestic demand. Requirement and production of oilseed in Odisha is given in following diagram.





Among the fiber crops jute and mesta are the most important. Jute is mainly cultivated in the coastal districts of undivided Balasore, Cuttack and Anandpur subdivision of Keonjhar and Mesta in the interior districts of Mayurbhanj, Keonjhar and Koraput. The area under jute & mesta is shrinking fast, mainly due to invasion of polythene and synthetic fibers as a cheaper and convenient substitute in addition to the inadequate marketing support.

The agro-climatic condition of the state is favourable for production of brinjal, chilli, tomato, okra, cucurbits, greens and bean, peas. Odisha is the second largest producer of vegetables in the country next to West Bengal. The major vegetables having commercial significance grown in the states are solanaceous vegetables (brinjal, tomato, chili), cole crops (cauliflower, cabbage, knolkhol), cucurbits, okra, legumes, greens and tropical tuber crops (sweet potato, dioscorea, amorphophalus, colocasia). The vegetable growers of the state are now taking much interest in cultivation of hybrid vegetables and high value exotics vegetables like broccoli, red cabbage, lettuce and chinese cabbage.

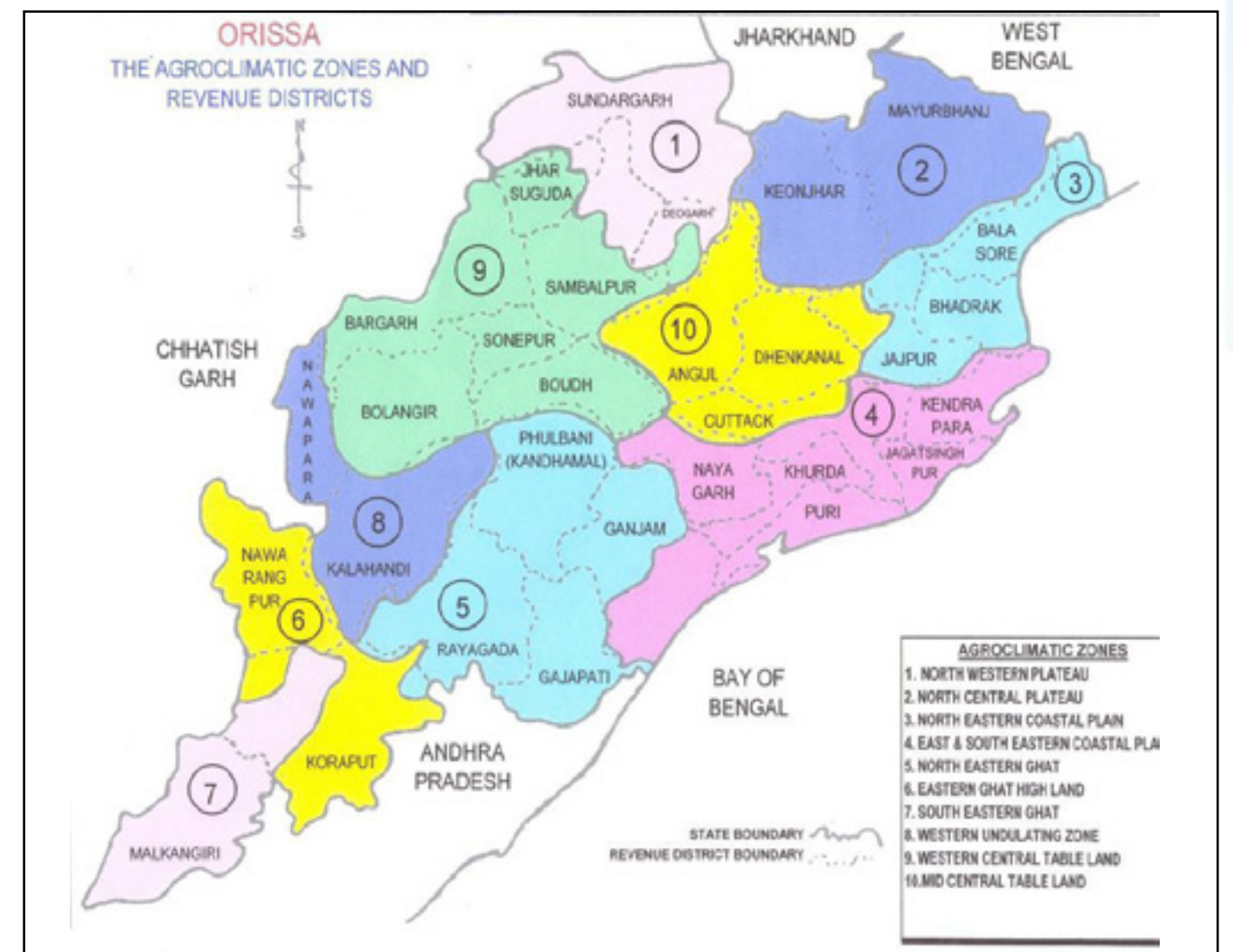
Major fruits grown in the state are mango, guava, citrus, banana, litchi, papaya etc. Commercial floriculture has been identified as a profitable venture which can open up great opportunities to the farmers. Besides, there is vast scope for promotion of allied sectors such as dairy, poultry, pisciculture, mushroom cultivation, bee keeping, value addition of agricultural produce etc.

Adoption of various vocations with entrepreneurship mode will enhance income in farm sector and make agriculture more attractive for the younger generations. There is strong need for motivation of rural youth to be involved in agriculture sector by adopting modern technology. It is now necessary to design suitable action plan for increasing profit in agriculture sector by utilizing the potential resources available in the state. In this context, the technological modules compiled here will certainly pave the way towards enhancing farmers' income over the years after their proper implementation.

## DISTRICT SPECIFIC IMPLEMENTABLE WORK PLANS

Agro-Ecological Zoning (AEZ) refers to the division of an area of land into smaller units, which have similar characteristics related to land suitability, potential production and environmental impact. Alternatively, an Agro-ecological Zone is a land resource mapping unit, defined in terms of climate, landform and soils, and/or land cover, and having a specific range of potentials and constraints for land use. India is divided into 15 major Agro Climatic Regions/Zones. Odisha falls under Agro-Climatic Zone VII. Further, the state of Odisha has been divided into 10 Agro-Climatic Zones based on the basis of soil structure, humidity, elevation, topography, vegetation, rainfall and other Agro- Climatic factors. These zones have their particular characteristics in respect of the parameters mentioned before. Out of the 10 ACZs, ACZ- 9 encompass maximum area, i.e., 16% of the total area of the state, followed by ACZ-5, which covers 15 % of the total area. ACZ- 7 covers only 4.50 % of the area of the state. ACZ – 1, 2, 5, 6, 7, 8, 9 & 10 Comprising about 81 % of the Area of the State are known as Highland regions.

The action plan specific to the districts in a particular agro-climatic zone has been outlined by the respective district Krishi Vigyan Kendra. The same is being presented below:



## 1. North-Western Plateau

The districts of this Agro-Climatic Zone are Sundargarh, Parts of Deogarh, Sambalpur and Jharsuguda. Total area of this zone is 15570 sq. km. which is 10% of total area covered.

### 1.1 Krishi Vigyan Kendra, Sundargarh-I

1. Name of KVK/ district: Sundargarh

2. Name of villages adopted:

Village Name	Lahandabud	Birjaberna	Talimunda	Khamarbahal	Ranibandha	Masabira
Block	Sadar	sadar	Badagaon	Tangarpalli	Rajangapur	Lephrpada

3. Number of farmers targeted:

Village Name	Lahandabud	Birjaberna	Talimunda	Khamarbahal	Ranibandha
No of Farmers	20	20	20	20	20

4. Compiled baseline survey report (point wise) of the villages:

Particulars	Lahandabud	Birjaberna	Talimunda	Khamarbahal	Ranibandha	Masabira
Area of agriculture land (ha)	120	172	214	326	212	155
Area of irrigated land (ha)	20	21	68	27	96	8
Number of water body	Pond – 2nos Bandh-2nos Tubewell-22nos Borewell-3nos Dugwell-12nos	Pond – 4nos Bandh-2nos Tubewell-8nos Borewell-4nos Dugwell-12nos Canal -	Pond – 6 Bandh – 2 Canal – 2 Tube well-2 Borewell – 4 Dug well-13	Pond -2 Minor Lift – 4 Canal – 1 Tube well – 6 Borewell -1 Dugwell - 66	Pond 4 Bandh -1 Canal – 1 Tube well – 3 Borewell – 1 Dugwell - 14	Pond – 4nos Bandh-1nos Tubewell-12nos Borewell-1nos Dugwell-10nos
Area of water body (ha)	4	6.2	26	7	11	7
Number of different livestock animals	Cow-325 pair Goat-415 Poultry-255	Cow – 4 Goat – 34 Poultry – 346 Fish pond- 2	Cow – 274 Bullocks 124 pair Goat – 245 Poultry – 426 Fish pond - 3	Cow – 78 Bullocks 54 pair Goat – 346 Poultry – 517 Fish pond -2	Cow – 76 Bullock 86 pair Goat – 46 Pig – 28 Poultry - 312	Cow-400 pair Goat-1200 Poultry-960
Average yield of different crops, livestock and fisheries	Paddy – 28q/ha Blackgram-2.6q/ha Greengram-2.5q/ha Horsegram-2.1q/ha Poultry-1 to 1.5kg/bird Cow-Milk 1.3lit	Paddy – 22.0 Blackgram – 2.4 Greengram – 2.2 Toria – 4.7 Groundnut - 8 Sesamum – 4 Goat – 12.5q Poultry – 1.5kg NTFP – Fish – 12q/ha	Paddy – 19.2 Blackgram – 2.2 Greengram – 2.4 Horsegram-1.9 Sesamum – 2.1 Goat – 13kg Poultry – 1.5 NTFP – Fish - 12q/ha	Paddy – 24.8 Blackgram – 1.9 Greengram – 2.0 Horsegram – 1.8 Sesamum – 4q Goat – 13kg Poultry – NTFP – Fish - 12q/ha	Paddy– 21.4 Arhar – 8.6 Blackgram – 2.2 Greengram – 2.3 Horsegram – 2.0 Mustard – 4.1 Chilli – 90q Tomato–170q/ha Cauliflower – 210q/ha Cabbage – 180q/ha Brinjal – 145q/ha	Paddy – 18q/ha Blackgram -2.5 Greengram – 2.6q/ha Horsegram – 2.0 q/ha Poultry – 1-1.5 kg/bird Spine gourd – 20q/ha Pointed gourd – 85q/ha Chilli -

Particulars	Lahandabud	Birjaberna	Talimunda	Khamarbahal	Ranibandha	Masabira
Soil status	N- L P – M K – M S- L Zn – L Bo - L	N – Low P- Low K – M S – L Zn – L B – Very L	N – Low P- Low K – M S – L Zn – L B – Very L	N – Low P- Low K – M S – L Zn – L B – Very L	N – Low P- Low K – M S – L Zn – L B – Very L	N – Low P- Low K – M S – L Zn – L B – Very Low
Average nutrients (nitrogen, phosphorous, potash, etc) used (fertiliser)	DAP – 32kg MOP – 8kg Urea – 22kg	DAP – 32kg MOP – 8kg Urea – 22kg	DAP – 32kg MOP – 16kg Urea – 22kg	DAP – 32kg MOP – 8kg Urea – 18kg Zn – 5kg Boron – 2kg	DAP – 32kg MOP – 10kg Urea – 20kg Zn – 5kg Boron-2kg	DAP – 32kg MOP – Nil Urea – 20kg Zn - Boron
Major pest and diseases occurred in crops	Paddy-Stem borer Sheath blight/blight, Mahisa Greengram- YVM	YSB, BPH, Rice hispa, LF, G Bug BLB, Sheath Rot, SB, YMV	YSB, BPH, Rice hispa, LF, G Bug BLB, Sheath Rot, SB, YMV	YSB, BPH, Rice hispa, LF, G Bug BLB, Sheath Rot, SB, YMV	YSB, BPH, Rice hispa, LF, G Bug BLB, Sheath Rot, YMV	Paddy-Stem borer Sheath blight/ blight YSB, Rice hispa, LF, G Bug BLB, Sheath Rot, YMV
Major diseases occurred in livestock	Cow - FMD, sahana HS, Anthrax. Theileria, brucella, mastitis Poultry – RD, Fowl pox, CRD, IBD	Cow - FMD, BQuarter, HS, Anthrax. Theileria, Poultry – RD, Fowl pox,	Cow - FMD, BQuarter, Anthrax. Theileria, mastitis Poultry – RD, Fowl pox, IBD	Cow - FMD, sahana HS, Anthrax. brucella, mastitis Poultry – RD, Fowl pox, IBD	Cow - FMD, BQuarter, HS, Theileria, Poultry – RD, Fowl pox,	Cow - FMD, BQuarter, sahana HS, Anthrax. brucella, mastitis Theileria, Poultry – RD, Fowl pox, CRD
Post-harvest management/ value addition followed, if any	Sorting of cereal crops and vegetables No value addition But preparation of rice flake and rice puff	Sorting of cereal crops and vegetables No value addition, Pickles of Tomato, mango, Bamboo shoots, for household consumption	Sorting of cereal crops and vegetables, preparation of rice flake and rice puff Pickles of mango, Bamboo for household consumption	Sorting of cereal crops and vegetables No value addition, But preparation of rice flake and rice puff Pickles from T mango and ber for household consumption	Sorting of cereal crops and vegetables No value addition, But preparation of rice flake and rice puff Pickles of Tomato, mango, Bamboo for household consumption	Sorting of cereal crops and vegetables No value addition,
Marketing channels of products	Selling their produce by self and sometimes by Local vendors	Direct selling to consumer in local haats/ markets. Middlemen	Direct selling to consumer in local haats/ markets. Middlemen	Direct selling to consumer in local haats/ markets. Middlemen	Direct selling to consumer in local haats/ markets. Middlemen	Direct selling to consumer in local haats/ markets. Middlemen
Agro-based industries, if any	No		Rice Mill	No	No	No
Average income of farmers	Rs 48,000/- per year	52,000	62,000	82,500	98,000	1,21,000

5. Possibility of involvement of ICAR Institutes: Yes (Intervention of IIWM in Birjaberna village of Sadar Block)

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Dalmia Group CSR in Ranibandh, Jhagarpur villages

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Dept/Central Dept(IIWM)/NGO and Private org

8. FPO formed or not? – Yes (at Village Masabira of Lephripara Block)

9. Major interventions planned:

1. Varietal substitution in paddy, oilseeds and pulses
2. STBR fertiliser application.
3. Increase in production through herbicide application.
4. Bio-fertiliser application of N:P:K consortia.
5. IPM in paddy, vegetables, oilseeds and pulses.
6. Additional income in homestead through mushroom cultivation, poultry rearing, vermicomposting and value addition.
7. Marketing through FPOs CIGs and SHGs.

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Village	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
				2018- 19	2019- 20	2020- 21	2021- 22
1	Lahandabud , Sadar block	<p><b>Promotion of improved rice cultivation in Medium upland Paddy –</b></p> <p>1..Line transplanting and Brown manuring of Paddy (Sowing of paddy and Dhanicha seed together, application of post emergence herbicide 2-4, D sodium salt after 28 DAS , for knocking-down the dhanicha)</p> <p>2. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>)</p> <p>3. IPM in Stem borer management</p> <p><b>Improved Ragi cultivation in rainfed upland-</b></p> <p>1. Line transplanting with Ragivar. <i>Bhairavi</i> with STB fertiliser management practices</p> <p>2. Ragi Producer Groups – Marketing of Ragi based malt Products</p> <p><b>Additional income from Home stead</b></p> <p><b>Mushroom</b> – Paddy straw and Oyster mushroom production(Training &amp; Demonstration )</p> <p><b>Poultry</b> –1. Introduction of Banraja and Kadaknath poultry</p> <p>Rearing practices and brooding management</p> <p>Marketing- CIGs , SHGs and FPO ( formation)</p> <p>Value addition of cereal/ Pulses , vegetables and Mushroom</p>	<p>Paddy increase in yield from 28q/ha to 35 q/ha</p> <p>Increase in Ragi yield from 8q/ha to 10 q/ha with added income from value added ragi products.</p> <p>Supply of malt – ragi based products for the mid-day meal.</p> <p>Increase in homestead income by 30% from mushroom cultivation, value addition of cereal pulses, vegetables and better marketing of agricultural produce.</p>	0.7	0.9	0.6	0.7
2	Talimunda, Badagaon	<p><b>Promotion of improved rice cultivation in Irrigated upland/ medium land</b></p> <p>1.Early transplanting -July 3rd week with var <i>Pratikshya</i></p> <p>2.STBF application</p> <p>4 Line Transplanting</p> <p>5. IPM for Stem borer</p>	<p>Paddy increase in yield from 28q/ha to 35 q/ha</p> <p>Increase in greengram yield from 2.5q/ha to 4a/ha</p>	0.60	0.80	0.80	0.70

Sl. No.	Village	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
				2018- 19	2019- 20	2020- 21	2021- 22
		<p>5. Chemical weed management (<i>Londax power</i>) followed by one hand weeding at 21DAT</p> <p>8. Mechanical transplanting, weeding and threshing</p> <p><b>Promotion of improved Greengram cultivation during rabi –</b></p> <p>1. Varietal replacement with TARM-1</p> <p>2. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>)</p> <p>3.Soil test based Nutrient application of var. TARM-1</p> <p>5.Application of Post emergence herbicide <i>Imazethapyr</i>10% SL @ 250 ml per acre at 4 leave stage (10-12 DAS)</p> <p>6. Line sowing with seed cum fertilizer drill, (Var. TARM-1 )</p> <p><b>Additional income in Home stead</b></p> <p><b>Mushroom</b> – Paddy straw and Oyster mushroom production(Training &amp; Demonstration )</p> <p><b>Poultry</b> –1. Introduction of Banraja and Kadaknath poultry</p> <p>Rearing practices abd brooding management</p> <p><b>Vermicompost</b> production</p> <p>Marketing- CIGs , SHGs and FPO ( formation)</p> <p>Value addition of cereal/ Pulses , vegetables and Mushroom</p>	<p>Increase in homestead income by 30% from mushroom cultivation, value addition of cereal pulses, vegetables and better marketing of agricultural produce.</p>				
3	Kharmarbahal	<p><b>Promotion of improved Paddy cultivation in irrigated medium land -</b> 1.Early transplanting -July 3rd week 2.STBF application</p> <p>3.Early transplanting with STBF, July 3<sup>rd</sup>wek Varietal replacement with var <i>Pratikshya</i></p> <p>4.Varietal Replacement var <i>Tejaswini/ Hiranmayee</i></p> <p>4 Line Transplanting IPM for Stem borer</p> <p>5. Early transplanting with STBF var<i>Pratikshay</i>, (July 3<sup>rd</sup>wek)</p> <p>6. Chemical weed management (<i>Londax power</i>) followed by one hand weeding at 21DAT</p> <p>7.<i>VarTejaswini/ Hiranmayee</i> Rice</p> <p>8.Mechanical Transplanting weeding and threshing</p> <p>9Line transplanting (Mechanical) with STBF var <i>Pratikshay</i>, (July 3<sup>rd</sup>wek)</p> <p>10Chemical weed management (<i>Londax power</i>) followed by need based post emergence herbicide</p> <p><b>Promotion of improved Greengram cultivation</b> – 1. Varietal replacement with TARM-1</p> <p>2. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>)</p> <p>3.Soil test based Nutrient application of var. TARM-1</p> <p>4.Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>)</p>	<p>Paddy increase in yield from 28q/ha to 35 q/ha</p> <p>Increase in greengram yield from 2.5q/ha to 4a/ha</p> <p>Increase in homestead income by 30% from mushroom cultivation, value addition of cereal pulses, vegetables and better marketing of agricultural produce.</p>	0.60	0.70	0.80	0.70

Sl. No.	Village	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
				2018- 19	2019- 20	2020- 21	2021- 22
		<p>5.Application of Post emergence herbicide <i>Imazethapyr</i> 10% SL @ 250 ml per acre at 4 leave stage (10-12 DAS)</p> <p>6Line sowing with seed cum fertilizer drill, (Var. TARM-1 )</p> <p>7Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>)</p> <p>8Foliar spray of WSF</p> <p>9Application of Post emergence herbicide <i>Imazethapyr</i> at 4 leave stage (10-12 DAS)</p> <p><b>Additional income in Home stead</b></p> <p><b>Mushroom</b> – Paddy straw and Oyster mushroom production(Training &amp; Demonstration )</p> <p><b>Poultry</b> –1. Introduction of Banraja and Kadaknath poultry</p> <p>Rearing practices abd brooding management</p> <p><b>Vermicompost</b> production</p> <p>Marketing- CIGs , SHGs and FPO ( formation)</p> <p>Value addition of cereal/ Pulses , vegetables and Mushroom</p>					
4	Ranibandha, Rajagangpur	<p><b>Promotion of improved Paddy cultivation in irrigated medium land</b></p> <p>Cultivation of Paddy var. Pratikshaya</p> <p>Line transplanting with STBR, weed management by application of herbicide (<i>Londax power @10kg/ha</i>)</p> <p>Line transplanting using mechanical transplanter of paddy, weed management by application of herbicide (<i>Londax power @10kg/ha</i>)</p> <p><b>Promotion of off-season vegetable cultivation</b></p> <p>Chilli – <i>Dudi Local</i>, Cabbage – <i>Sakata 10</i></p> <p>Brinjal –<i>Swarna Shyamali</i></p> <p>Crop substitution to capsicum, Cabbage and Brinjal.</p> <p>Shoot and Fruit borer control in Brinjal</p> <p>Nutrient management in Vegetable (STBF appl.)</p> <p><b>Additional income in Home stead</b></p> <p><b>Mushroom</b> – Paddy straw and Oyster mushroom production(Training &amp; Demonstration )</p> <p><b>Poultry</b> –1. Introduction of Banraja and Kadaknath poultry</p> <p>Rearing practices abd brooding management</p> <p>Feed management &amp; vaccination of local poultry</p> <p>Apiary - Apiary (5 bee boxes, cost-Rs.1200/-)</p> <p>Training on packaging of honey</p> <p><b>Vermicompost</b> production</p> <p>Marketing- CIGs , SHGs and FPO ( formation)</p> <p>Value addition of cereal/ Pulses , vegetables and Mushroom</p>	<p>Paddy increase in yield from 28q/ha to 35 q/ha</p> <p>Increase in vegetable production by more than 30 % by adopting improved cultivation practices.</p> <p>Increase in homestead income by 30% from mushroom cultivation, value addition of cereal pulses, vegetables and better marketing of agricultural produce.</p>	0.70	1.0	0.70	0.80

Sl. No.	Village	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
				2018- 19	2019- 20	2020- 21	2021- 22
5	Birjaberna	<p><b>Promotion of improved rice cultivation in Medium upland Paddy –</b></p> <p>1..Line transplanting and Brown manuring of Paddy (Sowing of paddy and Dhanicha seed together, application of post emergence herbicide 2-4, D sodium salt after 28 DAS , for knocking-down the dhanicha)</p> <p>2. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>)</p> <p>3. IPM in Stem borer management</p> <p><b>Promotion of improved cultivation in oilseeds and pulses</b></p> <p><b>Greengram</b> – 1. Varietal replacement with TARM-1</p> <p>2. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>)</p> <p>3. Soil test based Nutrient application of var. TARM-1</p> <p>4.Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>)</p> <p>5.Application of Post emergence herbicide <i>Imazethapyr</i> 10% SL @ 250 ml per acre at 4 leave stage (10-12 DAS)</p> <p>6. Line sowing with seed cum fertilizer drill, (Var. TARM-1 )</p> <p>7. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>)</p> <p>8. Foliar spray of WSF</p> <p>9. Application of Post emergence herbicide <i>Imazethapyr</i> at 4 leave stage (10-12 DAS)</p> <p><b>Toria</b></p> <p>1. Varietal replacement with new short duration varieties</p> <p>2. Soil test based Nutrient application of var. TARM-1</p> <p>3. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>)</p> <p>4. Application of Post emergence herbicide</p> <p><b>Groundnut</b></p> <p>1. Varietal replacement with improved varieties</p> <p>2. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>)</p> <p>3. Soil test based Nutrient application</p> <p>4. Application of Post emergence herbicide</p> <p>6. Line sowing with seed cum fertilizer drill</p> <p><b>Additional income from Home stead</b></p> <p><b>Mushroom</b> – Paddy straw and Oyster mushroom production (Training &amp; Demonstration)</p> <p><b>Poultry</b> –1. Introduction of Banraja and Kadaknath poultry</p> <p>Groundnut – PHT sorting grading and threshing of G Nut through Ground nut decorticator</p> <p>Rearing practices and brooding management</p> <p>Marketing- CIGs , SHGs and FPO ( formation)</p> <p>Value addition of cereal/ Pulses , vegetables and Mushroom</p>	<p>Paddy increase in yield from 28q/ha to 35 q/ha</p> <p>Increase in greengram yield from 2.5q/ha to 4a/ha</p> <p>Increase in toria yield from 4.5/ha to 7q/ha</p> <p>Increase in homestead income by 30% from mushroom cultivation, value addition of cereal pulses, vegetables and better marketing of agricultural produce.</p>	0.80	1.0	0.80	0.80

Sl. No.	Village	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
				2018- 19	2019- 20	2020- 21	2021- 22
6.	Masabira	<p><b>Promotion of improved rice cultivation in Medium upland Paddy –</b></p> <p>1. Varietal replacement with Sahbhagidhan 2. Line transplanting and Brown manuring of Paddy (Sowing of paddy and Dhanicha seed together, application of post emergence herbicide 2-4, D sodium salt after 28 DAS , for knocking-down the dhanicha) 3. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>) 4. IPM in Stem borer management</p> <p><b>Improved Ragi cultivation in rainfed upland-</b></p> <p>1. Line transplanting with Ragi var. <i>Bhairavi</i> with STB fertiliser management practices 2. Ragi Producer Groups – Marketing of Ragi based malt Products</p> <p><b>Promotion of improved cultivation in oilseeds and pulses</b></p> <p><b>Greengram –</b> 1. Varietal replacement with TARM-1 2. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>) 3. Soil test based Nutrient application of var. TARM-1 4. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>) 5. Application of Post emergence herbicide <i>Imazethapyr 10% SL @ 250 ml per acre at 4 leave stage (10-12 DAS)</i> 6. Line sowing with seed cum fertilizer drill, (Var. TARM-1 ) 7. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>) 8. Foliar spray of WSF 9. Application of Post emergence herbicide <i>Imazethapyr</i> at 4 leave stage (10-12 DAS)</p> <p><b>Toria</b></p> <p>1. Varietal replacement with new short duration varieties 2. Soil test based Nutrient application of var. TARM-1 3. Bio fertilizer inoculation (<i>NPK consortia &amp; PSB</i>) 4. Application of Post emergence herbicide</p> <p><b>Additional income from Home stead</b></p> <p><b>Mushroom –</b> Paddy straw and Oyster mushroom production (Training &amp; Demonstration) <b>Poultry –</b> 1. Introduction of Banraja and Kadaknath poultry Groundnut – PHT sorting grading and threshing of G Nut through Ground nut decorticator Rearing practices and brooding management Marketing- CIGs , SHGs and FPO ( formation) Value addition of cereal/ Pulses , vegetables and Mushroom</p>	<p>Paddy increase in yield from 22q/ha to 28 q/ha Increase in Ragi yield from 8q/ha to 10 q/ha with added income from value added ragi products. Supply of malt – ragi based products for the mid-day meal. Increase in greengram yield from 2.5q/ha to 4a/ha Increase in toria yield from 4.5/ha to 7q/ha Increase in homestead income by 30% from mushroom cultivation, value addition of cereal pulses, vegetables and better marketing of agricultural produce.</p>	0.70	0.70	0.80	0.70
				4.1	5.1	4.5	4.4

## 1.2 Krishi Vigyan Kendra, Sundargarh-II

### Village-1

1. Name of KVK/ district: Sundargarh

2. Name of villages adopted: Guduguda

3. Number of farmers targeted: 05

#### 4. Compiled baseline survey report (point wise) of the villages:

- Area of agriculture land (ha): 85 Ha
- Area of irrigated land (ha): 30 Ha
- Number of water body: 2
- Area of water body (ha): 1 Ha
- Number of different livestock animals: 1085
- Average yield of different crops, livestock and fisheries: Paddy- 30qt/ha, Vegetable-150 qt/ha
- Soil status: - Red & Black Soil
- Average nutrients (nitrogen, phosphorous, potash, etc) used: 60-50-30 kg/ha
- Major diseases occurred in crops: Blast in Paddy, Blight, Wilt, leaf curl in vegetable
- Major diseases occurred in livestock: Foot & Mouth disease, Ringworm etc
- Post-harvest management/ value addition followed, if any: Grading of vegetables
- Marketing channels of products: Through middlemen, Direct marketing
- Agro-based industries, if any: No
- Average income of the farmer: Rs 50,000/ year

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State department

8. FPO formed or not? No

#### 9. Major interventions planned:

- Nutrition, Weed, Pest & disease management in Sahabhangi dhan
- Demonstration of Maize – Cowpea intercropping,
- Demonstration of Cow pea with INM, IPM, IDM, IWM practices
- Demonstration of Late kharif tomato with staking & INM, IPM, IDM practices
- Feed & Disease, Housing management of Poultry
- Mushroom

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Nutrition, weed, pest, disease management in Sahabhagi dhan	30,000	0.15	0.17	0.19	0.21
2	Demonstration of Maize – Cowpea intercropping,	10,000	0.035	0.045	0.050	0.055
3	Demonstration of Cowpea with INM, IPM, IDM practices	20,000	0.08	0.095	0.100	0.105
4	Demonstration of Late kharif tomato with staking & INM, IPM, IDM practices.	20000	0.075	0.085	0.90	0.95
5	Feed & Disease & Housing management of Poultry	5000	0.012	0.018	0.022	0.026
6	Mushroom	3000	0.010	0.012	0.014	0.016

**Village-2**

- Name of KVK/ district:** Sundargarh
- Name of villages adopted:** Khatankudar
- Number of farmers targeted:** 5
- Compiled baseline survey report (point wise) of the villages:**
  - Area of agriculture land (ha): 310 Ha
  - Area of irrigated land (ha): 130 Ha
  - Number of water body: 4
  - Area of water body (ha): 1.5 Ha
  - Number of different livestock animals: 840
  - Average yield of different crops, livestock and fisheries: paddy-37 q/Ha, Vegetables-170 qt/ha
  - Soil status: Black Brown Forest soil
  - Average nutrients (nitrogen, phosphorous, potash, etc) used: 75-55-40 kg/ha
  - Major diseases occurred in crops: Blast in Paddy, Blight, Wilt, leaf curl in vegetable
  - Major diseases occurred in livestock: Foot & Mouth disease, Ringworm etc
  - Post-harvest management/ value addition followed, if any: Grading of vegetables
  - Marketing channels of products: Through middlemen, Direct marketing
  - Agro-based industries, if any: No
  - Average income of the farmer: Rs 84000/ year
- Possibility of involvement of ICAR Institutes:** Yes
- Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** No
- Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State department
- FPO formed or not?** No
- Major interventions planned:**
  - Nutrient & Weed, Pest & disease management in Hybrid paddy
  - Nutrient ,Pest, weed & disease management in Okra

- Nutrient , weed & pest management in Onion
- Value addition in Tamarind & Jackfruit
- Feed, Disease, Housing management in poultry
- Kitchen gardening
- Mushroom
- Demonstration of Sweet corn with INM IPM, IDM & weed management

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Nutrient & Weed, Pest & disease management in Hybrid paddy	65,000	0.20	0.22	0.24	0.26
2	Nutrient ,Pest, weed & disease management in Okra	22,000	0.10	0.11	0.12	0.13
3	Nutrient & weed & pest management in onion	13,000	0.05	0.057	0.064	0.07
4	Value addition in Tamarind & Jackfruit	4,000	0.02	0.024	0.027	0.03
5	Feed, Disease, Housing management to poultry	7,000	0.03	0.036	0.044	0.05
6	Mushroom	5,000	0.02	0.024	0.027	0.03
7	Kitchen gardening	6,000	0.003	0.035	0.037	0.04
8	Demonstration of Sweet corn with INM IPM, IDM & weed management	25,000	0.12	0.125	0.130	0.14

**Village-3**

- Name of KVK/ district:** Sundargarh
- Name of villages adopted:** Ranto
- Number of farmers targeted:** 5
- Compiled baseline survey report (point wise) of the villages:**
  - Area of agriculture land (ha): 362 Ha
  - Area of irrigated land (ha): 40 Ha
  - Number of water body: 1
  - Area of water body (ha): 0.5 Ha
  - Number of different livestock animals: 1532
  - Average yield of different crops, livestock and fisheries: Paddy-32 qt/ha, Vegetable-155 qt/ha
  - Soil status: Black Brown Forest soil
  - Average nutrients (nitrogen, phosphorous, potash, etc) used: 60-50-30 kg/Ha
  - Major diseases occurred in crops: Blast in Paddy, Blight, Wilt, leaf curl in vegetable, Leaf spot in Mustard
  - Major diseases occurred in livestock: Foot & Mouth disease, Ringworm etc
  - Post-harvest management/ value addition followed, if any: Grading of vegetables
  - Marketing channels of products: Through middlemen, Direct marketing
  - Agro-based industries, if any: No
  - Average income of the farmer: Rs 37000/year
- Possibility of involvement of ICAR Institutes:** Yes

6. **Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** No
7. **Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State department
8. **FPO formed or not?** No
9. **Major interventions planned:**
  - Demonstration of Naveen paddy with INM practices
  - Demonstration of Mustard with INM,IPM practices
  - Demonstration of Bottle gourd with INM practices
  - Feed management to poultry
  - Mushroom
  - Kitchen gardening

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Demonstration of Naveen paddy with INM practice	25000	0.14	0.155	0.17	0.18
2	Demonstration of Mustard with IPM practices	12000	0.03	0.04	0.05	0.06
3	Demonstration of Bottle gourd with INM practices	12000	0.025	0.030	0.035	0.04
4	Feed management to poultry	7,000	0.03	0.033	0.037	0.04
5	Mushroom	5,000	0.02	0.024	0.027	0.03
6	Kitchen gardening	6,000	0.003	0.035	0.037	0.04

**Village-4**

1. **Name of KVK/ district:** Sundargarh
2. **Name of villages adopted:** Nuniapali
3. **Number of farmers targeted:** 5
4. **Compiled baseline survey report (point wise) of the villages:**
  - (i) Area of agriculture land (ha): 110 Ha
  - (ii) Area of irrigated land (ha): 20 Ha
  - (iii) Number of water body: 1
  - (iv) Area of water body (ha): 0.5 Ha
  - (v) Number of different livestock animals: 1250
  - (vi) Average yield of different crops, livestock and fisheries: Paddy-32 qt/Ha, Vegetable- 140 qt/Ha
  - (vii) Soil status: Black Brown Forest soil
  - (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 55-40-25 kg NPK/ha
  - (ix) Major diseases occurred in crops: Blast in Paddy, Blight, Wilt, leaf curl in vegetable, Leaf spot in Mustard
  - (x) Major diseases occurred in livestock: Foot & Mouth disease, Ringworm etc
  - (xi) Post-harvest management/ value addition followed, if any: Grading of vegetables
  - (xii) Marketing channels of products: Through middlemen, Direct marketing

- (xiii) Agro-based industries, if any: No
- (xiv) Average income of the farmer: Rs 36,000/year

5. **Possibility of involvement of ICAR Institutes:** Yes
6. **Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** No
7. **Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State department
8. **FPO formed or not?** No
9. **Major interventions planned:**
  - Demonstration of Naveen paddy with INM practices
  - Demonstration of Mustard with IPM practices
  - Demonstration of Bottle gourd with INM practices
  - Feed management to poultry
  - Mushroom
  - Kitchen gardening

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Demonstration of Naveen paddy with INM practices	24000	0.135	0.150	0.165	0.175
2	Demonstration of Mustard with IPM practices	11000	0.03	0.04	0.05	0.06
3	Demonstration of Bottle gourd with INM practices	11000	0.025	0.030	0.035	0.04
4	Feed management to poultry	7,000	0.03	0.034	0.037	0.04
5	Mushroom	5,000	0.02	0.024	0.027	0.03
6	Kitchen gardening	6,000	0.003	0.035	0.037	0.04

**1.3 Krishi Vigyan Kendra, Deogarh**

**Village-1**

1. **Name of KVK/ district:** Deogarh
2. **Name of villages adopted:** Chakrapalli 1
3. **Number of farmers targeted:** 20
4. **Compiled baseline survey report (point wise) of the villages:**
  - (i) Area of agriculture land (ha): 230ha
  - (ii) Area of irrigated land (ha): 42ha
  - (iii) Number of water body: 9
  - (iv) Area of water body (ha): 15ha
  - (v) Number of different livestock animals:

Sl. No.	Livestock	Number
1.	Cattles	125
2.	Buffalo	--
3.	Goat	746
4.	Poultry birds	210

(vi) Average yield of different crops, livestock and fisheries:

Sl. No.	Crop	Average yield
1.	Rice	2.1 t/ha
2.	Sesamum	3.4 q/ha
3.	Mustard	8.4 q/ha
4.	Greengram	3.7 q/ha
5.	Blackgram	4.1 q/ha

(vii) Soil status:

Sl. No	Status	
1.	Texture	Sandy Loam
2.	Type	Red soil
3.	Nitrogen	287 Kg/ha
4.	Phosphorus	22 Kg/ha
5.	Potash	220 Kg/ha

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

1.	Average nutrients used	
2.	Nitrogen	85 Kg/ha
3.	Phosphorus	23 Kg/ha
4.	Potash	18 Kg/ha

(ix) Major diseases occurred in crops:

Sl. No.	Crop	Major diseases
1.	Rice	Blast, BLB
2.	Sesamum	Phyllody, Powdery mildew
3.	Mustard	Rust, Powdery mildew
4.	Greengram	YMV, Rust
5.	Blackgram	YMV, Rust

(x) Major diseases occurred in livestock: Foot and mouth disease, Mumps

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Village and nearby hat.

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 55,000/-

5. Possibility of involvement of ICAR Institutes: ICAR-NRRI, ICAR-CHES, ICAR-CTCRI, ICAR-CIWA

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.) : State Deptt, Private org., Bank

8. FPO formed or not? No

9. Major interventions planned:

i. Upland-crop substitution from rice to offseason tomato/Pulses/Oilseed, Medium land- paira cropping (Blackgram), Backyard - poultry, goatery and mushroom cultivation.

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Upland-crop substitution from rice to off-season(Kharif) tomato/ Radish/Cauliflower Medium land- paira cropping (Pulses), crop intensification of seasonal vegetables in irrigated area and pulses/ orchard. Backyard - poultry, goatery and mushroom cultivation	14 Lakhs	20 Lakhs	10 Lakhs	5 Lakhs	2.5 Lakhs

**Village-2**

1. Name of KVK/ district: Deogarh

2. Name of villages adopted: Balirui

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 220ha

(ii) Area of irrigated land (ha): 32ha

(iii) Number of water body: 8

(iv) Area of water body (ha): 15ha

(v) Number of different livestock animals:

Sl. No.	Livestock	Number
1.	Cattles	114
2.	Buffalo	--
3.	Goat	854
4.	Poultry birds	232

(vi) Average yield of different crops, livestock and fisheries:

Sl. No.	Crop	Average yield
1.	Rice	2.2 t/ha
2.	Sesamum	3.5 q/ha
3.	Mustard	8.5 q/ha
4.	Greengram	3.5 q/ha
5.	Blackgram	4.0 q/ha

(vii) Soil status:

Sl. No	Status	
1.	Texture	Sandy Loam
2.	Type	Red soil
3.	Nitrogen	282 Kg/ha
4.	Phosphorus	21 Kg/ha
5.	Potash	214 Kg/ha

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

1.	Average nutrients used	
2.	Nitrogen	85 Kg/ha
3.	Phosphorus	23 Kg/ha
4.	Potash	18 Kg/ha



(ix) Major diseases occurred in crops:

Sl. No.	Crop	Major diseases
1.	Rice	Blast,BLB
2.	Sesamum	Phyllody, Powdery mildew
3.	Mustard	Rust,Powdery mildew
4.	Greengram	YMV, Rust
5.	Blackgram	YMV, Rust

(x) Major diseases occurred in livestock: Foot and mouth disease, Mumps

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Village and nearby hat.

(xiii) Agro-based industries, if any:No

(xiv) Average income of the farmer: 55,000/-

**5. Possibility of involvement of ICAR Institutes:** ICAR-NRRI, ICAR-CHES, ICAR-CTCRI, ICAR-CIWA

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** No

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State Deptt, Private org., Bank

**8. FPO formed or not?** No

**9. Major interventions planned:**

i. Upland-crop substitution from rice to offseason tomato/Pulses/Oilseed, Medium land- paira cropping (Blackgram), Backyard - poultry, goatery and mushroom cultivation.

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Upland-crop substitution from rice to offseason(Kharif) tomato/Radish/Cauliflower Medium land- paira cropping (Pulses),crop intensification of seasonal vegetables in irrigated area and pulses/orchard. Backyard - poultry, goatery and mushroom cultivation	14 Lakhs	20 Lakhs	10 Lakhs	5 Lakhs	2.5 Lakhs

### Village-3

**1. Name of KVK/ district:** Deogarh

**2. Name of villages adopted:** Kirtanpali

**3. Number of farmers targeted:** 20

**4. Compiled baseline survey report (point wise) of the villages:**

(i) Area of agriculture land (ha): 265ha

(ii) Area of irrigated land (ha): 40ha

(iii) Number of water body: 7

(iv) Area of water body (ha): 16ha

(v) Number of different livestock animals:

Sl. No.	Livestock	Number
1.	Cattles	101

Sl. No.	Livestock	Number
2.	Buffalo	--
3.	Goat	741
4.	Poultry birds	198

(vi) Average yield of different crops, livestock and fisheries:

Sl. No.	Crop	Average yield
1.	Rice	2.3 t/ha
2.	Sesamum	3.2 q/ha
3.	Mustard	8.1 q/ha
4.	Greengram	3.2 q/ha
5.	Blackgram	4.0 q/ha

(vii) Soil status:

Sl. No	Status	
1.	Texture	Sandy Loam
2.	Type	Red soil
3.	Nitrogen	221 Kg/ha
4.	Phosphorus	19 Kg/ha
5.	Potash	209 Kg/ha

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

1.	Average nutrients used	
2.	Nitrogen	82 Kg/ha
3.	Phosphorus	22 Kg/ha
4.	Potash	17 Kg/ha

(ix) Major diseases occurred in crops:

Sl. No.	Crop	Major diseases
1.	Rice	Blast,BLB
2.	Sesamum	Phyllody, Powdery mildew
3.	Mustard	Rust,Powdery mildew
4.	Greengram	YMV, Rust
5.	Blackgram	YMV, Rust

(x) Major diseases occurred in livestock: Foot and mouth disease, Mumps

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Village and nearby hat.

(xiii) Agro-based industries, if any:No

(xiv) Average income of the farmer: 52,000/-

**5. Possibility of involvement of ICAR Institutes:** ICAR-NRRI, ICAR-CHES, ICAR-CTCRI, ICAR-CIWA

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** No

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.) :** State Deptt, Private org., Bank

**8. FPO formed or not?** No

### 9. Major interventions planned:

- i. Upland-crop substitution from rice to offseason tomato/Pulses/Oilseed, Medium land- paira cropping (Blackgram), Backyard - poultry, goatery and mushroom cultivation.

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Upland-crop substitution from rice to offseason(Kharif) tomato/Radish/ Cauliflower Medium land- paira cropping (Pulses),crop intensification of seasonal vegetables in irrigated area and pulses/orchard. Backyard - poultry, goatery and mushroom cultivation	14 Lakhs	20 Lakhs	10 Lakhs	5 Lakhs	2.5 Lakhs

#### Village-4

1. Name of KVK/ district: Deogarh

2. Name of villages adopted: Suringipali

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 212ha

(ii) Area of irrigated land (ha): 50ha

(iii) Number of water body: 12

(iv) Area of water body (ha): 13ha

(v) Number of different livestock animals:

Sl. No.	Livestock	Number
1.	Cattles	123
2.	Buffalo	--
3.	Goat	841
4.	Poultry birds	212

(vi) Average yield of different crops, livestock and fisheries:

Sl. No.	Crop	Average yield
1.	Rice	2.4 t/ha
2.	Sesamum	3.3 q/ha
3.	Mustard	8.0 q/ha
4.	Greengram	3.1 q/ha
5.	Blackgram	4.2 q/ha

(vii) Soil status:

Sl. No	Status
1.	Texture Sandy Loam
2.	Type Yellow soil
3.	Nitrogen 221 Kg/ha
4.	Phosphorus 19 Kg/ha
5.	Potash 209 Kg/ha

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

1.	Average nutrients used	
2.	Nitrogen	74 Kg/ha
3.	Phosphorus	23 Kg/ha
4.	Potash	27 Kg/ha

(ix) Major diseases occurred in crops:

Sl. No.	Crop	Major diseases
1.	Rice	Blast,BLB
2.	Sesamum	Phyllody, Powdery mildew
3.	Mustard	Rust,Powdery mildew
4.	Greengram	YMV, Rust
5.	Blackgram	YMV, Rust

(x) Major diseases occurred in livestock: Foot and mouth disease, Mumps

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Village and nearby hat.

(xiii) Agro-based industries, if any:No

(xiv) Average income of the farmer: 52,000/-

5. Possibility of involvement of ICAR Institutes: ICAR-NRRI, ICAR-CHES, ICAR-CTCRI, ICAR-CIWA

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.) : State Deptt, Private org., Bank

8. FPO formed or not? No

9. Major interventions planned:

- i. Upland-crop substitution from rice to offseason tomato/Pulses/Oilseed, Medium land- paira cropping (Blackgram), Backyard - poultry, goatery and mushroom cultivation.

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Upland-crop substitution from rice to off-season(Kharif) tomato/Radish/ Cauliflower Medium land- paira cropping (Pulses),crop intensification of seasonal vegetables in irrigated area and pulses/orchard. Backyard - poultry, goatery and mushroom cultivation	14 Lakhs	20 Lakhs	10 Lakhs	5 Lakhs	2.5 Lakhs

#### Village-5

1. Name of KVK/ district: Deogarh

2. Name of villages adopted: Dhobakota

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 245ha

(ii) Area of irrigated land (ha): 51ha

(iii) Number of water body: 14

(iv) Area of water body (ha): 15ha

(v) Number of different livestock animals:

Sl. No.	Livestock	Number
1.	Cattles	136
2.	Buffalo	--
3.	Goat	912
4.	Poultry birds	214

(vi) Average yield of different crops, livestock and fisheries:

Sl. No.	Crop	Average yield
1.	Rice	2.1 t/ha
2.	Sesamum	3.1 q/ha
3.	Mustard	8.2 q/ha
4.	Greengram	3.3 q/ha
5.	Blackgram	4.3 q/ha

(vii) Soil status:

Sl. No	Status
1.	Texture Sandy Loam
2.	Type Yellow soil
3.	Nitrogen 231 Kg/ha
4.	Phosphorus 14 Kg/ha
5.	Potash 224 Kg/ha

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

1.	Average nutrients used	
2.	Nitrogen	84 Kg/ha
3.	Phosphorus	22 Kg/ha
4.	Potash	26 Kg/ha

(ix) Major diseases occurred in crops:

Sl. No.	Crop	Major diseases
1.	Rice	Blast, BLB
2.	Sesamum	Phyllody, Powdery mildew
3.	Mustard	Rust, Powdery mildew
4.	Green-gram	YMV, Rust
5.	Blackgram	YMV, Rust

(x) Major diseases occurred in livestock: Foot and mouth disease, Mumps

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Village and nearby hat.

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 51,000/-

5. Possibility of involvement of ICAR Institutes: ICAR-NRRI, ICAR-CHES, ICAR-CTCRI, ICAR-CIWA

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.) : State Deptt, Private org., Bank

8. FPO formed or not? No

9. Major interventions planned:

- Upland-crop substitution from rice to offseason tomato/Pulses/Oilseed, Medium land- paira cropping (Blackgram), Backyard - poultry, goatery and mushroom cultivation.

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Upland-crop substitution from rice to offseason(Kharif) tomato/Radish/ Cauliflower Medium land- paira cropping (Pulses),crop intensification of seasonal vegetables in irrigated area and pulses/orchard. Backyard - poultry, goatery and mushroom cultivation	14 Lakhs	20 Lakhs	10 Lakhs	5 Lakhs	2.5 Lakhs

#### 1.4 Krishi Vigyan Kendra, Sambalpur

##### Village-1

1. Name of KVK/ district: Sambalpur

2. Name of villages adopted: Kusuli

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 147 ha

(ii) Area of irrigated land (ha): 8 ha

(iii) Number of water body: 24

(iv) Area of water body (ha): 3 ha

(v) Number of different livestock animals: 500

(vi) Average yield of different crops, livestock and fisheries: Rice- 20.5 q/ha, Cow-8lit/cow

(vii) Soil status: N-High. P-Medium, K-Low

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: NPK (505,12,135)Kg/ha

(ix) Major diseases occurred in crops: Bacterial Leaf Blight, Sheath Blight, BPH

(x) Major diseases occurred in livestock: Foot and Mouth disease

(xi) Post-harvest management/ value addition followed, if any: Chhatua Preparation

(xii) Marketing channels of products: Kusuli Mandi, Padiabahal market, Society

(xiii) Agro-based industries, if any: Rice Mill

(xiv) Average income of the farmer: 32000/ year

5. Possibility of involvement of ICAR Institutes: KVK

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Less Possibility

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): Agriculture, Horticulture, Veterinary, Omfed

8. FPO formed or not? No

9. Major interventions planned: FLD, OFT

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	FLD, OFT, Training		1	1.2	1.4	1.6

**Village-2**

1. Name of KVK/ district: Sambalpur

2. Name of villages adopted: Kadalimunda

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

- (i) Area of agriculture land (ha): 100
- (ii) Area of irrigated land (ha): 20
- (iii) Number of water body: 10
- (iv) Area of water body (ha): 9.2
- (v) Number of different livestock animals: 200
- (vi) Average yield of different crops, livestock and fisheries: Rice: 19 qtl/ha
- (vii) Soil status: N-High, P-Medium, K-Low
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: NPK (510,11,128)Kg/ha
- (ix) Major diseases occurred in crops: Sheath Blight
- (x) Major diseases occurred in livestock: Foot and Mouth disease
- (xi) Post-harvest management/ value addition followed, if any: No
- (xii) Marketing channels of products: Mandi
- (xiii) Agro-based industries, if any: No
- (xiv) Average income of the farmer: 20000 to 30000 /annum

5. Possibility of involvement of ICAR Institutes: KVK

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Less Possibilities

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): Agriculture, Horticulture, Veterinary, Omfed

8. FPO formed or not? Farmer Group

9. Major interventions planned: FLD, OFT

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	FLD, OFT, Training		1.2	1.4	1.6	1.8

**Village-3**

1. Name of KVK/ district: Sambalpur

2. Name of villages adopted: Haldi

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

- (i) Area of agriculture land (ha): 170
- (ii) Area of irrigated land (ha): 167
- (iii) Number of water body: 25
- (iv) Area of water body (ha): 42.8
- (v) Number of different livestock animals: 150
- (vi) Average yield of different crops, livestock and fisheries: Rice 18q/ha, G.nut-8q/ha, Cow- 3lit/day
- (vii) Soil status: N- High, P- Medium, K-Low
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: NPK (512,15,130) Kg/ha
- (ix) Major diseases occurred in crops: Bacterial leaf blight, Sheath Blight
- (x) Major diseases occurred in livestock: Foot and Mouth disease
- (xi) Post-harvest management/ value addition followed, if any: No
- (xii) Marketing channels of products: Mandi, Badgaon Society
- (xiii) Agro-based industries, if any: Rice Haller
- (xiv) Average income of the farmer: 30000/annum

5. Possibility of involvement of ICAR Institutes: KVK

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Less possibility

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): Agriculture, Horticulture, Veterinary, Omfed

8. FPO formed or not? No

9. Major interventions planned: FLD

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	FLD, OFT, Training		1.3	1.5	1.7	1.9



Demonstration on vermicompost production technology



Demonstration of control of endo-parasitic infestations in small ruminants

### 1.5 Krishi Vigyan Kendra, Jharsuguda

Name of villages adopted	Plan of action for DFI	Present status of implementation of planned work	Major interventions undertaken	Market linkage established	FPO formed or not?	Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.
Ghantamal,	Plan has been developed for 3 years (2016-17-2018-19) on Reducing the cost of cultivation Soil health management Promotion of IFS Emphasis on resource conservation practices Animal resource management Fishery development Promotion of income generation activities Improved method of cultivation and varietal replacement of o crops like Rice, Greengram, cow pea, Pomegranate, Potato, Onion for different farming situation	Varietal replacement, integrated weed management and nutrient management in crops , improved poultry breed, feeding management in dairy	Intercropping of Cow pea, var-KasiKanchan INM in Greengram IPM-02-14 INM in paddy INM in potato Dairy farming Intensification of hybrid Napier Vanaraja Bird rearing	Co-operative society	No	Dept. of Agriculture, Dept. of Horticulture, Animal Resource Department, PD Water shed, NGOs
Durlaga	Plan has been developed for 3 years (2016-17-2018-19) on Reducing the cost of cultivation Soil health management Promotion of IFS Emphasis on resource conservation practices Animal resource management Fishery development Promotion of income generation activities Improved method of cultivation and varietal replacement of o crops like Rice, Greengram, cow pea, Pomegranate, Potato, Onion for different farming situation	Varietal replacement, integrated weed management and nutrient management in crops , improved poultry breed, feeding management in dairy and mushroom cultivation	Weed management in paddy INM in potato INM in Onion IMC + Chinese carp Vanaraja Bird rearing Mushroom cultivation	Co-operative society	No	Dept. of Agriculture, Dept. of Horticulture, Animal Resource Department, PD Water shed, Dept. Of Fishery NGOs
Kureimal,	Plan has been developed for 3 years (2017-18-2019-20) on Reducing the cost of cultivation Soil health management Promotion of IFS Emphasis on resource conservation practices Animal resource management Fishery development Promotion of income generation activities Improved method of cultivation and varietal replacement of o crops like Rice, Greengram, cow pea, Pomegranate, Potato, Onion for different farming situation	Varietal replacement, integrated weed management and nutrient management in crops , improved poultry breed, feeding management in dairy	Cultivation of Banana INM in Paddy INM in Pointed gourd INM in potato Dairy farming Vanaraja Bird rearing	Co-operative society	No	Dept. of Agriculture, Dept. of Horticulture, Animal Resource Department, PD Water shed, NGOs

Name of villages adopted	Plan of action for DFI	Present status of implementation of planned work	Major interventions undertaken	Market linkage established	FPO formed or not?	Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.
Patrapalli	Plan has been developed for 3 years (2017-18-2019-20) on Reducing the cost of cultivation Soil health management Promotion of IFS Emphasis on resource conservation practices Animal resource management Fishery development Promotion of income generation activities Improved method of cultivation and varietal replacement of o crops like Rice, Greengram, cow pea, Pomegranate, Potato, Onion for different farming situation	Varietal replacement, integrated weed management and nutrient management in crops , improved poultry breed, breed up gradation in goat and mushroom cultivation	Weed management in paddy INM in potato INM in Onion Breed up gradation of goat. Vanaraja Bird rearing Mushroom cultivation	Co-operative society	No	Dept. of Agriculture, Dept. of Horticulture, Animal Resource Department, PD Water shed, NGOs
Kadabahal	Plan has been developed for 3 years (2017-18-2019-20) on Reducing the cost of cultivation Soil health management Promotion of IFS Emphasis on resource conservation practices Animal resource management Fishery development Promotion of income generation activities Improved method of cultivation and varietal replacement of o crops like Rice, Greengram, cow pea, Pomegranate, Potato, Onion for different farming situation	Varietal replacement, integrated weed management and nutrient management in crops , improved poultry breed, feeding management in dairy and mushroom cultivation	Weed management in paddy INM in potato INM in Onion IMC + Chinese carp Vanaraja Bird rearing Mushroom cultivation	Co-operative society	No	Dept. of Agriculture, Dept. of Horticulture, Animal Resource Department, PD Water shed, Dept. of Fishery, NGOs



Demonstration on vermicompost production technology

## 2. North Central Plateau:

The districts of this Agro-Climatic Zone are Mayurbhanj, major part of Keonjhar (except Anandapur sub-division). Total area of this zone is 17906 sq. km. which is 11.50% of total area covered.

### 2.1 Krishi Vigyan Kendra, Mayurbhanj-I

#### 1. Name of KVK/ district: Mayurbhanj

#### 2. Name of villages adopted: Jambani, Julairama, Chandanpur, Orachandabila, Kanchanpal

#### 3. Number of farmers targeted: 100

#### 4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 101.17

(ii) Area of irrigated land (ha): 41.27

(iii) Number of water body:

(iv) Area of water body (ha):

(v) Number of different livestock animals: Cow:- 42 Buffalo:-16 Poultry:- 689 Goat:- 482 Sheep:-84

(vi) Average yield of different crops, livestock and fisheries:

(vii) Soil status:

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

(ix) Major diseases occurred in crops: Bacterial leaf blight, Brown spot and Blast in Rice, Anthracnose and Cercospora leaf spot in Green gram, Leaf spot in Ground nut, Bacterial wilt and Leaf spot in brinjal, Powdery mildew in cauliflower.

(x) Major diseases occurred in livestock:

(xi) Post-harvest management/ value addition followed, if any: Nil

(xii) Marketing channels of products:

(xiii) Agro-based industries, if any:

(xiv) Average income of the farmer: Rs. 35,000- 50,000/-

#### 5. Possibility of involvement of ICAR Institutes:

#### 6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):

#### 7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Department of Agriculture

#### 8. FPO formed or not?

#### 9. Major interventions planned:

#### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
	<b>Village:- Jambani G.P:- Sindurgoura Block- Shamakhunta</b>					
1.	Crop diversification from Paddy to Green gram during Rabi season.	Increase in Income	1,80,000	2,00,000	2,10,000	2,10,000
2.	Training on Packages and practices of Green gram cultivation	Yield through the minimised cost.	20,000	25,000	30,000	30,000

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
3.	Training on Fishery	Small and Marginal farmers will be benefited through backyard pond fish farming	20,000	25,000	30,000	30,000
4.	Supply of inputs in fish farming	Increase in Yield	40,000	50,000	60,000	80,000
5.	Training on Paddy straw mushroom cultivation	Increase in Income	15,000	25,000	30,000	30,000
6.	Improved Vegetable Cultivation (varietal substitution), Value addition of tomato & fruit crops	Increase in Yield	1,30,000	1,45,000	1,60,000	1,60,000
7.	INM of Vegetable crops	Increase in Yield	15,000	25,000	30,000	30,000
8.	Mushroom cultivation throughout the year and value addition of mushroom	Additional source of Income	12,000	20,000	30,000	40,000
9.	Poultry chicks Development of semi intensive poultry unit	Upscaling of poultry	30,000	40,000	60,000	60,000
10.	Animal health camp (Awareness prog.)	Vaccination for ranikhet	10,000	15,000	30,000	30,000
11.	Training on Farmers club	Capacity Building	10,000	15,000	20,000	20,000
12.	Training to different SHG group	Capacity Building	5,000	8,000	10,000	10,000
13.	Integrated approach of disease management in Rice	Enhancement in yield.	10,000	15,000	20,000	20,000
	<b>Total</b>		4,97,000	6,08,000	7,20,000	7,50,000
	<b>Village:- Julairama G.P:- Bhaluki Block- Shamakhunta</b>					
1.	Mushroom cultivation throughout the year and value addition of mushroom	Additional source of Income	30,000	40,000	50,000	60,000
2.	Poultry chicks Development of semi intensive poultry unit	Upscaling of poultry	20,000	40,000	45,000	50,000
3.	Breed replacement Training on brooder house & chick management & Input.	Upscaling of poultry	10,000	15,000	25,000	30,000
4.	GOATERY Feed management -Nutrition management		10,000	15,000	30,000	30,000
5.	GOATERY- Vaccination and feed management		15,000	20,000	25,000	25,000
6.	Animal health camp (Awareness prog.)	Vaccination for ranikhet	10,000	15,000	20,000	20,000
7.	Varietal improvement in vegetables Capacity building of farmers for insect-disease pest management in vegetables	Increase in yield	1,00,000	1,20,000	1,50,000	1,50,000
8.	Training on fish seed production (Training)	Capacity Building	10,000	10,000	15,000	15,000
9.	Crop management interventions in Paddy through IPM, IWM and IDM	Increase in yield	20,000	25,000	30,000	30,000
10.	Cultivation of ground nut and green gram		2,20,000	2,50,000	3,10,000	3,50,000
	<b>Total</b>		4,45,000	5,50,000	7,00,000	7,60,000
	<b>Village:- Chandanpur G.P:- Gundhuhudi Block- Shamakhunta</b>					
1.	Training on fish seed production (Training)	Capacity Building	10,000	10,000	10,000	10,000
2.	Supply of inputs in fish farming	Increase in Yield	35,000	45,000	50,000	60,000
3.	Animal health camp (Awareness prog.)	Vaccination for ranikhet	10,000	15,000	20,000	20,000
4.	Cultivation of ground nut and green gram	Crop diversification	2,40,000	2,50,000	2,70,000	3,20,000
5.	Paddy straw mushroom cultivation and Training on package of practice of paddy straw mushroom cultivation	Capacity Building	10,000	15,000	20,000	20,000
6.	Management of Stem borer & BPH in Paddy& YMV management in Greengram	Capacity Building	15,000	20,000	25,000	30,000

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
7.	Weed & Diamond back moth management in Cauliflower Shoot & fruit borer management in Brinjal	Capacity Building	20,000	20,000	30,000	30,000
8.	Weed & Blast disease management in Paddy		15,000	20,000	25,000	30,000
9.	INM in paddy ,weed management in G.nut		10,000	15,000	20,000	25,000
10.	Varietal improvement in vegetables		90,000	1,00,000	1,20,000	1,50,000
	<b>Total</b>		4,55,000	5,10,000	5,90,000	6,85,000
	<b>Village:- Orachandabila</b> <b>G.P:- B C Pur</b> <b>Block- Baripada</b>					
1.	Crop diversification from Paddy to Green gram during Rabi season.	Increase in Income	90,000	1,20,000	1,50,000	1,80,000
2.	Training on Packages and practices of Green gram cultivation	Better yield through less input	10,000	10,000	15,000	20,000
3.	Integrated Pest Management (BPH & Leaf folder) in Rice	Capacity building	10,000	13,500	17,000	22,000
4.	Backyard Poultry rearing	Additional income	10,000	15,000	25,000	30,000
5.	Breed replacement with poultry breed in backyard (Training & Input)		25,000	35,000	50,000	60,000
6.	Supply of inputs in fish farming	Increase in Yield	40,000	50,000	60,000	60,000
7.	Varietal improvement in vegetables	Capacity Building	1,00,000	1,20,000	1,50,000	1,80,000
8.	Nutrient management in rice and oilseed crops		35,000	50,000	60,000	80,000
9.	Mushroom cultivation in small scale	Additional income	20,000	30,000	40,000	50,000
	<b>Total</b>		3,40,000	4,43,500	5,67,000	6,82,000
	<b>Village:- Kanchanpal</b> <b>G.P:- Hatikot</b> <b>Block- Baripada</b>					
1.	Cultivation of paddy straw mushroom and Oyster mushroom	Additional income	20,000	40,000	60,000	60,000
2.	Animal health camp (Awareness prog.)		10,000	20,000	30,000	30,000
3.	High yielding pulse variety with bio agent treatment and IPM/IDM practices	Capacity Building	10,000	15,000	20,000	30,000
4.	IPM and IDM in Ground nut		20,000	30,000	40,000	50,000
5.	GOATERY Feed management -Nutrition management		10,000	15,000	25,000	25,000
6.	GOATERY- Vaccination and feed management		20,000	30,000	50,000	60,000
7.	Supply of inputs in fish farming	Increase in Yield	40,000	50,000	60,000	60,000
8.	Varietal improvement in vegetables		60,000	80,000	1,00,000	1,20,000
9.	Supply of inputs in fish farming	Increase in Yield	20,000	30,000	45,000	50,000
10.	Training to different SHG group	Capacity Building	10,000	10,000	15,000	20,000
11.	Crop diversification from Paddy to Green gram during Rabi season.	Increase in Income	1,80,000	2,00,000	2,10,000	2,10,000
	<b>Total</b>		4,00,000	5,20,000	6,05,000	6,85,000

## 2.2 Krishi Vigyan Kendra, Mayurbhanj-II

### Village-1

1. Name of KVK/ district : Mayurbhanj-II, Jashipur
2. Name of villages adopted : Chadripahadi
3. Number of farmers targeted : 20
4. Compiled baseline survey report (point wise) of the villages:
  - (i) Area of agriculture land (ha) : 195.6
  - (ii) Area of irrigated land (ha) : 80
  - (iii) Number of water body : 12
  - (iv) Area of water body (ha) : 68.77
  - (v) Number of different livestock animals : Bullock-57 , Goats-155, Sheep-08
  - (vi) Average yield of different crops, livestock and fisheries : Paddy- 25 q/ha, Chick pea- 6.2 q/ha
  - (vii) Soil status : Black clay soil, N-Low, P- Very low, K- Medium, pH- Highly acidic
  - (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used : Urea-40 kg/ha , Phosphorous- 30 kg/ha , Potash- 10 kg/ha
  - (ix) Major diseases occurred in crops : Yellow Stem Borer, Gandhi Bug, Wilting, Leaf folder
  - (x) Major diseases occurred in livestock : Phatua, Bajabajia , Sursa
  - (xi) Post-harvest management/ value addition followed, if any : Nil
  - (xii) Marketing channels of products : Local market (Hata)
  - (xiii) Agro-based industries, if any : Nil
  - (xiv) Average income of the farmer : Rs. 60,000/ per year
5. Possibility of involvement of ICAR Institutes : Yes
6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.) : Yes
7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.) : State Agriculture Dept. , SAMBANDH NGO
8. FPO formed or not : Not formed
9. Major interventions planned : IPM and INM in paddy and Chick pea, Mechanization, Value addition, Mushroom cultivation, Post harvest management, Free range poultry, De-worming and vaccination, Off season vegetable cultivation etc.

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	IPM, INM and IWM in Paddy	Yield may be enhanced	--	0.5	0.2	0.2
2.	IPM, INM and IWM in Chick pea	Yield may be enhanced	0.2	0.2	0.2	0.2
3.	Line sowing by seed cum fertilizer drill	Cost of cultivation may be reduced	1.0	0.2	0.2	0.2
4.	Mushroom cultivation	Additional income	1.5	0.1	0.1	0.1
5.	Free range poultry rearing	Additional income	1.5	0.2	0.2	0.2
6.	Value addition of pulses by mini dal mill	Additional income	1.2	0.2	0.1	0.1
7.	De-worming and vaccination of livestock	Yield may be enhanced	0.1	0.1	0.1	0.1
8.	High yielding and hybrid vegetable cultivation	Additional income	2.0	0.2	0.2	0.2
Total			7.5	1.7	1.3	1.3

#### Village-2

1. Name of KVK/ district : Mayurbhanj
2. Name of villages adopted : Jamunalia
3. Number of farmers targeted : 20
4. Compiled baseline survey report (point wise) of the villages:
  - (i) Area of agriculture land (ha) : 80
  - (ii) Area of irrigated land (ha) : 50
  - (iii) Number of water body : 08
  - (iv) Area of water body (ha) : 1.6
  - (v) Number of different livestock animals : Cow & Calf – 75, Bullock-70, Goats-250, Poultry-500
  - (vi) Average yield of different crops, livestock and fisheries : Paddy- 27.29 q/ha (Rabi), Kharif- 26.37 q/ha, Mustard- 4 q/ha
  - (vii) Soil status : N- Low, P- Low, K- Medium, pH- Highly acidic
  - (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used : Urea-80 kg/ha , Phosphorous- 80 kg/ha , Potash- 15 kg/ha
  - (ix) Major diseases occurred in crops : Blast, Sheath Blight
  - (x) Major diseases occurred in livestock : Ranikhet, Phatua, HSV , FMD, Bajabajia, Black quater, Bekafula
  - (xi) Post-harvest management/ value addition followed, if any : Nil
  - (xii) Marketing channels of products : Local market (Hata)
  - (xiii) Agro-based industries, if any : Nil
  - (xiv) Average income of the farmer : Rs. 50-60,000/ per year
5. Possibility of involvement of ICAR Institutes : Yes
6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.) : Yes
7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.) : State Agriculture Deptt. , SAMBANDH NGO
8. FPO formed or not : Not formed

### 9. Major interventions planned

: IPM and INM in paddy and Mustard, Mechanization, Value addition, Mushroom cultivation, Post harvest management, Free range poultry, De-worming and vaccination, Off season vegetable cultivation etc.

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	IPM, INM and IWM in Paddy	Yield may be enhanced	--	0.5	0.2	0.2
2.	Mechanized rice transplanting	Cost of cultivation may be reduced	2.0	0.5	0.3	0.3
3.	IPM, INM and IWM in Mustard	Yield may be enhanced	0.2	0.2	0.2	0.2
4.	IPM and INM in vegetables	Yield may be enhanced	0.3	0.2	0.2	0.2
5.	Line sowing by seed cum fertilizer drill	Cost of cultivation may be reduced	1.0	0.2	0.2	0.2
6.	Mushroom cultivation	Additional income	1.5	0.1	0.1	0.1
7.	Free range poultry rearing	Additional income	1.5	0.2	0.2	0.2
8.	De-worming and vaccination of livestock	Yield may be enhanced	0.1	0.1	0.1	0.1
9.	High yielding and hybrid vegetable cultivation	Additional income	2.0	0.2	0.2	0.2
Total			8.6	2.2	1.7	1.7

#### Village-3

1. Name of KVK/ district : Mayurbhanj
2. Name of villages adopted : Jhumkakudar
3. Number of farmers targeted : 20
4. Compiled baseline survey report (point wise) of the villages:
  - (i) Area of agriculture land (ha) : 402
  - (ii) Area of irrigated land (ha) : 25
  - (iii) Number of water body : 33
  - (iv) Area of water body (ha) : 8
  - (v) Number of different livestock animals : Bullock-200, Goats-1100, Poultry- 800
  - (vi) Average yield of different crops, livestock and fisheries : Paddy- 32q/ha, Chick pea- 6.5 q/ha
  - (vii) Soil status : Clay soil, N- Low, P- Very low, K- Medium, pH- Moderately acidic
  - (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used : Urea-75 kg/ha , Phosphorous- 70 kg/ha , Potash- 20 kg/ha
  - (ix) Major diseases occurred in crops : Gandhi Bug, Gall midge, Wilting, Case Worm
  - (x) Major diseases occurred in livestock : Ranikhet, Phatua, Skin disease, Tantia, Basanta
  - (xi) Post-harvest management/ value addition followed, if any : Nil
  - (xii) Marketing channels of products : Local market (hata)
  - (xiii) Agro-based industries, if any : Nil
  - (xiv) Average income of the farmer : Rs. 45,000/ per year
5. Possibility of involvement of ICAR Institutes : Yes



6. Possibility of involving private sectors for CSR funds : Yes  
(TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.)
7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.) : State Agriculture Deptt. , SAMBANDH NGO
8. FPO formed or not : Not formed
9. Major interventions planned : IPM and INM in paddy and Chick pea, Mechanization, Value addition, Mushroom cultivation, Post harvest management, Free range poultry, De-worming and vaccination, Off season vegetable cultivation etc.

#### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	IPM, INM and IWM in Paddy	Yield may be enhanced	--	0.5	0.2	0.2
2.	IPM, INM and IWM in Chick pea	Yield may be enhanced	0.2	0.2	0.2	0.2
3.	Mechanized rice transplanting	Cost of cultivation may be reduced	2.0	0.5	0.3	0.3
4.	Line sowing by seed cum fertilizer drill	Cost of cultivation may be reduced	1.0	0.2	0.2	0.2
5.	Mushroom cultivation	Additional income	1.5	0.1	0.1	0.1
6.	Free range poultry rearing	Additional income	1.5	0.2	0.2	0.2
7.	Value addition of pulses by mini dal mill	Additional income	1.2	0.2	0.1	0.1
8.	De-worming and vaccination of livestock	Yield may be enhanced	0.1	0.1	0.1	0.1
9.	High yielding and hybrid vegetable cultivation	Additional income	2.0	0.2	0.2	0.2
		<b>Total</b>	<b>9.5</b>	<b>2.2</b>	<b>1.5</b>	<b>1.4</b>

#### Village-4

1. Name of KVK/ district : Mayurbhanj
2. Name of villages adopted : Kasipal
3. Number of farmers targeted : 20
4. Compiled baseline survey report (point wise) of the villages:
- (i) Area of agriculture land (ha) : 271
- (ii) Area of irrigated land (ha) : 20
- (iii) Number of water body : 30 (Farm pond-30 nos., Farm Pit- 64 nos., WHS- 2 nos.)
- (iv) Area of water body (ha) : 24
- (v) Number of different livestock animals : Bullock-250, Goats-500, Duck-100, Poultry-800, Sheep-30
- (vi) Average yield of different crops, livestock and fisheries : Paddy- 30 q/ha, Maize- 20 q/ha, Chick pea- 5.5 q/ha, Pigeon pea- 2.8 q/ha
- (vii) Soil status : Black clay soil, N-Low, P-Very low, K- Medium, pH- Highly acidic

- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used : Urea-35-40 kg/ha , Phosphorous- 30 kg/ha, Potash- 10-15 kg/ha)
- (ix) Major diseases occurred in crops : Stem Borer, Gandhi Bug, Gall midge, Wilting, Case Worm
- (x) Major diseases occurred in livestock : Ranikhet, Phatua, Skin Disease, Tantia
- (xi) Post-harvest management/ value addition followed, if any : Nil
- (xii) Marketing channels of products : Local market (Hata)
- (xiii) Agro-based industries, if any : Nil
- (xiv) Average income of the farmer : Rs. 40,000/ per year

5. Possibility of involvement of ICAR Institutes : Yes
6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.) : Yes
7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.) : State Agriculture Deptt. , SAMBANDH NGO
8. FPO formed or not : Not formed
9. Major interventions planned : IPM and INM in paddy, maize, Pigeon pea and Chick pea, Mechanization, Value addition, Mushroom cultivation, Post harvest management, Free range poultry, De-worming and vaccination, Off season vegetable cultivation etc.

#### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	IPM, INM and IWM in Paddy	Yield may be enhanced	--	0.5	0.2	0.2
2.	IPM, INM and IWM in Chick pea	Yield may be enhanced	0.2	0.2	0.2	0.2
3.	IPM, INM and IWM in Pigeon pea	Yield may be enhanced	0.2	0.2	0.2	0.2
4.	IPM, INM and IWM in Maize	Yield may be enhanced	0.2	0.2	0.2	0.2
5.	Post harvest management in maize (maize sheller)	Additional income	1.0	0.2	0.2	0.2
6.	Line sowing by seed cum fertilizer drill	Cost of cultivation may be reduced	1.0	0.2	0.2	0.2
7.	Mushroom cultivation	Additional income	1.5	0.1	0.1	0.1
8.	Free range poultry rearing	Additional income	1.5	0.2	0.2	0.2
9.	Value addition of pulses by mini dal mill	Additional income	1.2	0.2	0.1	0.1
10.	Value addition of maize	Additional income	2.0	0.2	0.2	0.2
10.	De-worming and vaccination of livestock	Yield may be enhanced	0.1	0.1	0.1	0.1
11.	High yielding and hybrid vegetable cultivation	Additional income	2.0	0.2	0.2	0.2
		<b>Total</b>	<b>10.9</b>	<b>2.5</b>	<b>2.1</b>	<b>2.1</b>

### Village-5

1. Name of KVK/ district : Mayurbhanj
2. Name of villages adopted : Khandiadhar
3. Number of farmers targeted : 20
4. Compiled baseline survey report (point wise) of the villages:
  - (i) Area of agriculture land (ha) : 40
  - (ii) Area of irrigated land (ha) : 30
  - (iii) Number of water body : 7
  - (iv) Area of water body (ha) : 0.29
  - (v) Number of different livestock animals : Cow-75, Bullock- 60, Goats-120, Poultry- 350
  - (vi) Average yield of different crops, livestock and fisheries : Paddy- 32 q/ha, Maize- 25 q/ha, Mustard- 3.5 q/ha
  - (vii) Soil status : Sandy loam, N- Low, P- Very low, K- Low, pH- Highly acidic
  - (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used : Urea-80 kg/ha , Phosphorous- 60 kg/ha , Potash- 30 kg/ha)
  - (ix) Major diseases occurred in crops : Stem Borer, Blast, Pod Borer
  - (x) Major diseases occurred in livestock : Khura, Basanta, Pati ghaa
  - (xi) Post-harvest management/ value addition followed, if any : Nil
  - (xii) Marketing channels of products : Local market (Hata)
  - (xiii) Agro-based industries, if any : Nil
  - (xiv) Average income of the farmer : Rs. 30,000/ per year
5. Possibility of involvement of ICAR Institutes : Yes
6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.) : Yes
7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.) : State Agriculture Deptt. , SAMBANDH NGO
8. FPO formed or not : Not formed
9. Major interventions planned : IPM and INM in paddy, maize and Mustard, Mechanization, Value addition, Mushroom cultivation, Post harvest management, Free range poultry, De-worming and vaccination, Off season vegetable cultivation etc.

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	IPM, INM and IWM in Paddy	Yield may be enhanced	--	0.5	0.2	0.2
2.	Mechanized rice transplanting	Cost of cultivation may be reduced	2.0	0.5	0.3	0.3
3.	IPM, INM and IWM in Mustard	Yield may be enhanced	0.2	0.2	0.2	0.2

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
4.	IPM, INM and IWM in Maize	Yield may be enhanced	0.2	0.2	0.2	0.2
5.	Post harvest management in maize (maize sheller)	Additional income	1.0	0.2	0.2	0.2
6.	Line sowing by seed cum fertilizer drill	Cost of cultivation may be reduced	1.0	0.2	0.2	0.2
7.	Value addition of maize	Additional income	2.0	0.2	0.2	0.2
8.	Mushroom cultivation	Additional income	1.5	0.1	0.1	0.1
9.	Free range poultry rearing	Additional income	1.5	0.2	0.2	0.2
10.	De-worming and vaccination of livestock	Yield may be enhanced	0.1	0.1	0.1	0.1
11.	High yielding and hybrid vegetable cultivation	Additional income	2.0	0.2	0.2	0.2
		<b>Total</b>	<b>12.5</b>	<b>2.6</b>	<b>2.1</b>	<b>2.1</b>



Oyster Mushroom

### 2.3 Krishi Vigyan Kendra, Keonjhar

1. Name of KVK/ district: Keonjhar
2. Name of villages adopted: Sirishpal, Jodichater, Rangamatia, Sabakdhayrajpur and Mathuramandali
3. Number of farmers targeted: 100
4. Compiled baseline survey report (point wise) of the villages:

Name of villages adopted	Plan of action for DFI	Present status of implementation of planned work	Major interventions undertaken	Market linkage established	FPO formed or not?	Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.)
Kundhei	*IPM against podborer complex in Pigeonpea Line sowing *STB fert application in Maize *IPDM practices against blast, stem borer *Shed management and sanitation *Shed management and additional feeding *Marketing strategies for commercialisation	*Line sowing of Pigeonpea, crop is in growth stage * STB fert application in Maize *Transplanting of paddy completed *Marketing of mushroom through SHGs	*Line sowing of Pigeonpea *Fertilizers applied by farmers as per soil testing *Seed treatment of paddy *Marketing of mushroom through SHGs	-	No	Agril. Dept, Veterinary Dept, Hort. Dept

Name of villages adopted	Plan of action for DFI	Present status of implementation of planned work	Major interventions undertaken	Market linkage established	FPO formed or not?	Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.)
Kusapada Basudevapur	* Mgt of Fruit rot and Staking in tomato * Control measures against stem borer and blast in Paddy * Grading, packing, post harvest mgt practices with marketing strategies in brinjal * Shed mgt and sanitation in goats * Shed management and additional feeding in poultry * Marketing strategies in mushroom	*Planting of tomato going on * Fertilizers applied as per soil testing report *Seed treatment done in paddy *Marketing of mushroom through SHGs	*Demonstration of staking in tomato *Fertilizers applied by farmers as per soil testing *Seed treatment of paddy *Marketing of mushroom through SHGs	-	No	Agril. Dept, Veterinary Dept, Hort. Dept,
Khuntapingu	* Post harvest management and storage, group marketing in ginger * STB fertiliser application in paddy * IPDM modules (stem borer and blast) in paddy * Shed management and sanitation in goats	* OFT on storage of ginger completed last year *Fertilizers applied as per soil testing report *Seed treatment done in paddy	*Fertilizers applied by farmers as per soil testing *Seed treatment of paddy *Marketing of mushroom through SHGs	-	No	Agril. Dept, Veterinary Dept, Hort. Dept, IWM
	* Brooding management (Shed management and additional feeding) in poultry * Marketing strategies in mushroom		*Marketing of mushroom through SHGs			
Maheswarpur Panposi	* STB fertiliser application in paddy * IPDM modules (stem borer and blast) in paddy * Shed mgt and sanitation in goats * Shed management and additional feeding in poultry * Marketing strategies in mushroom	*Fertilizers applied as per soil testing report *Seed treatment done in paddy *Marketing of mushroom through SHGs	* Fertilizers applied by farmers as per soil testing *Seed treatment of paddy *Marketing of mushroom through SHGs	-	No	Agril. Dept, Veterinary Dept, Hort. Dept,



Integrated Crop Mangement

### 3. North Eastern Coastal Plain

The districts of this Agro-Climatic Zone are Balasore, Bhadrak, Parts of Jajpur and Anandapur sub division of Keonjhar. Total area of this zone is 9342 sq. km. which is 6% of total area covered.

#### 3.1 Krishi Vigyan Kendra, Balasore

##### Village-1

1. Name of KVK/ district: Balasore

2. Name of villages adopted: Tirubatpur

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 125

(ii) Area of irrigated land (ha): 80

(iii) Number of water body: 30

(iv) Area of water body (ha): 3.2

(v) Number of different livestock animals: 565

(vi) Average yield of different crops, livestock and fisheries: Paddy-38q/ha, Greengram-4q/ha, Blackgram-3.8 q/ha, Groundnut-10q/ha

(vii) Soil status: Alluvial

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

N-70Kg, P-35Kg, K-40Kg (in ha)

(ix) Major diseases occurred in crops: Paddy - BPH, BLB, Blast,

Greengram/ Blackgram -YMV, Powdery mildew

Tomato/Brinjal - Wilting, Anthracnose

Groundnut - Tikka

(x) Major diseases occurred in livestock: FMD, PPR, Goat Pox, Anthrax, Black quarter

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Farmers-Retailer-Consumer

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 18,000

5. Possibility of involvement of ICAR Institutes:

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):

8. FPO formed or not?

9. Major interventions planned:

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	OFT, FLD, Training	Increase in income	0.50	2.00	1.75	1.50

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Dept.,NGO

8. FPO formed or not? No

9. Major interventions planned:

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Varietal substitution of swarnna with Swarna sub-1 , INM & IWM in Groundnut, Introduction of new poultry breed rainbow roster	44,152	0.56	0.65	0.74	0.79

#### Village-2

1. Name of KVK/ district: Balasore

2. Name of villages adopted: Nikhira

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 180

(ii) Area of irrigated land (ha): 110

(iii) Number of water body: 35

(iv) Area of water body (ha): 8

(v) Number of different livestock animals: 710

(vi) Average yield of different crops, livestock and fisheries: Paddy-38q/ha, Greengram-4.2q/ha, Blackgram-3.7 q/ha. Groundnut-12q/ha

(vii) Soil status: Alluvial

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

N-80Kg,P-39Kg,K-40Kg(in ha)

(ix) Major diseases occurred in crops: Paddy-BPH, BLB, Blast, Stem borer

Greengram/Blackgram-YMV, Powdery mildew

Tomato/Brinjal-Wilting, Anthracnose, Fruitrot

Groundnut-Tikka

(x) Major diseases occurred in livestock: PPR, Goat Pox, Anthrax, Black quarter

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Farmers-Retailer-Consumer

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 11,000

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Dept., NGO

8. FPO formed or not? No

9. Major interventions planned:

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Varietal substitution of medi with luna sampad, Introduction of toria var. Anuradha , feed management for dairy	35,425	0.52	0.57	0.62	0.67

#### Village-3

1. Name of KVK/ district: Balasore

2. Name of villages adopted: Nuagaon

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 150

(ii) Area of irrigated land (ha): 70

(iii) Number of water body: 18

(iv) Area of water body (ha): 3

(v) Number of different livestock animals: 685

(vi) Average yield of different crops, livestock and fisheries: Paddy-32q/ha, Greengram-4.2q/ha, Blackgram-3.7 q/ha.

(vii) Soil status: Alluvial, Sandy loam

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

N-65Kg,P-38Kg,K-40Kg(in ha)

(ix) Major diseases occurred in crops: Paddy-BPH, BLB, Blast,

Greengram/Blackgram-YMV, Powdery mildew

Tomato/Brinjal-Wilting, Anthracnose

Groundnut-Tikka

(x) Major diseases occurred in livestock: PPR, Goat Pox, Anthrax, Black quarter

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Farmers-Retailer-Consumer

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 11,000

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Dept., NGO

8. FPO formed or not? No

9. Major interventions planned:

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Varietal substitution of Mandakini , INM in Toria, Introduction of new poultry breed rainbow roster	40,125	0.58	0.65	0.70	0.74

#### Village-4

1. Name of KVK/ district: Balasore

2. Name of villages adopted: Rasalpur

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 200

(ii) Area of irrigated land (ha): 120

(iii) Number of water body: 5

(iv) Area of water body (ha): 2

(v) Number of different livestock animals: 645

(vi) Average yield of different crops, livestock and fisheries: Paddy-34q/ha, Greengram-4.2q/ha, Blackgram-3.7 q/ha, Groundnut-11q/ha

(vii) Soil status: Alluvial, Sandy loam

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

(ix) Major diseases occurred in crops: Paddy-BPH, BLB, Blast,

Greengram/Blackgram-YMV, Powdery mildew

Tomato/Brinjal-Wilting, Anthracnose

Groundnut-Tikka

(x) Major diseases occurred in livestock: PPR, Goat Pox, Anthrax, Black quarter

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Farmers-Retailer-Consumer

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 16,000

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Dept., NGO

8. FPO formed or not? No

9. Major interventions planned:

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
	Varietal substitution of swarnna with Swarna sub-1 , INM & IWM in Groundnut, Introduction of new poultry breed rainbow roster	44,152				

#### 3.2 Krishi Vigyan Kendra, Bhadrak

##### Village-1

1. Name of KVK/ district: Bhadrak

2. Name of village adopted: Jaykrushnapur

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 50

(ii) Area of irrigated land (ha): 50 in kharif(canal)

(iii) Number of water body: 1

(iv) Area of water body (ha): 0.4

(v) Number of different livestock animals: 200cow, 100goat, 6000poultry

(vi) Average yield of different crops, livestock and fisheries: rice- 48q/ha, black and green gram- 5 q/ha, sunflower- 8 q/ha

(vii) Soil status: Soil texture: loam soil, black soil

(viii) Average nutrients (nitrogen, phosphorous, potash etc.) used: 92kg N, 48kg P<sub>2</sub>O<sub>5</sub>, 30 kg K<sub>2</sub>O per ha.

(ix) Major diseases occurred in crops: rice- blast, BPH, sheath blight

(x) Major diseases occurred in livestock: Nil

(xi) Post-harvest management/ value addition followed, if any: Nil

(xii) Marketing channels of product: society

(xiii) Agro-based industries, if any: poultry farm

(xiv) Average income of the farmer: 35000

5. Possibility of involvement of ICAR Institutes: NRRI

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): Agriculture and allied department of Odisha, NGOs, CSISA

8. FPO formed or not? Not yet

9. Major interventions planned:

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018-19	2019-20	2020-21	2021-22
1	Mechanical transplanting, mechanized direct seeded rice, soil test based fertilizer recommendation	10-15 % increase in income from rice	0.24	0.30	0.13	0.15
2	Rice fallow demonstration of pulses	Additional income of Rs 4000	0.34	0.20	0.20	0.20
3	Dairy: 1 cross bred cow + fodder-azolla and farm made feed	Increase in net income by 5000 per year	0.40	0.10	0.10	0.10
4	Backyard poultry, Rainbow Rooster with vaccination	Additional income of 4000 per year	0.50	0.15	0.15	0.15
5	Mushroom production	Additional income of 5000 per annum	0.50	0.60	0.15	0.15
6	Capacity building of SHG in processing and value addition; processing equipments	Additional income of 2000 per family	0.75	0.15		
7	Irrigation development and capacity building on crop planning. Irrigation infrastructure development through Govt schemes	Increase in cropping area in rabi	0.10	0.80	0.80	0.80
Total			2.83	2.30	1.53	1.55

### Village-2

- Name of KVK/ district:** Bhadrak
- Name of village adopted:** Kandagaradi
- Number of farmers targeted:** 20
- Compiled baseline survey report (point wise) of the villages:**
  - Area of agriculture land (ha): 405
  - Area of irrigated land (ha): 405 in kharif
  - Number of water body: 12 big 55small
  - Area of water body (ha):12
  - Number of different livestock animals: 600cow, 150goat, 200poultry, 50duck
  - Average yield of different crops, livestock and fisheries: rice- 45q/ha, fish- 26q/ha
  - Soil status: Soil Texture:heavy clay
  - Average nutrients (nitrogen, phosphorous, potash etc.) used:100kg N, 53kg P<sub>2</sub>O<sub>5</sub>, 37 kg K<sub>2</sub>O per ha
  - Major diseasesoccurred in crops:stem borer, BPH
  - Major diseases occurred in livestock: FMD
  - Post-harvest management/ value addition followed, if any:Nil
  - Marketing channels of product:Society, middle men, nearby market
  - Agro-based industries, if any: 2rice huller
  - Average income of the farmer:Rs.40000/ annum
- Possibility of involvement of ICAR Institutes:** NRRI, CIFA
- Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill &Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** Adani Group
- Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** Agriculture and allied department of Odisha, NGOs, CSISA

### 8. FPO formed or not? Not yet

9. **Major interventions planned:** Cost saving technology in kharif rice, Pulses in Rice fallow, enhancing income from dairy, poultry and fishery, promoting vegetable cultivation

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018-19	2019-20	2020-21	2021-22
1	Mechanical transplanting, mechanized direct seeded rice, soil test based fertilizer recommendation	10-15 % increase in income from rice	0.24	0.30	0.13	0.15
2	Rice fallow demonstration of pulses	Additional income of Rs 4000	0.34	0.20	0.20	0.20
3	Fry + SFL & SYL production in small ponds	100% increase in net profit over existing income from fish	2.25	1.5	1.0	0.4
4	Remunerative horticultural crops on the pond dyke	Additional net profit of 2000 per year	0.80	0.40	0.15	0.15
5	Dairy: 1 cross bred cow + fodder-azolla and farm made feed	Increase in net income by 5000 per year	0.40	0.10	0.10	0.10
6	Backyard poultry, Rainbow Rooster with vaccination	Additional income of 4000 per year	0.50	0.15	0.15	0.15
7	Capacity building of SHG in processing and value addition; processing equipments	Additional income of 2000 per family	0.75	0.15		
Total			5.28	2.8	1.73	1.15

### Village-3

- Name of KVK/ district:** Bhadrak
- Name of village adopted:** Kanthisahi
- Number of farmers targeted:** 20
- Compiled baseline survey report (point wise) of the villages:**
  - Area of agriculture land (ha): 202
  - Area of irrigated land (ha): 202 (canal, LI, bore well)
  - Number of water body: 125
  - Area of water body (ha):60
  - Number of different livestock animals: 250cow, 150goat, poultry- 550
  - Average yield of different crops, livestock and fisheries: rice- 54q/ha, green gram and black gram – 8 q/ha, mustard- 8 q/ha, fish- 37q/ha, brinjal, tomato, okra, pumpkin
  - Soil status:Soil texture: Silt clay loam
  - Average nutrients (nitrogen, phosphorous, potash etc.) used:90 kg N, 54 kg P<sub>2</sub>O<sub>5</sub>, 33 kg K<sub>2</sub>O per ha
  - Major diseasesoccurred in crops:rice- plant hoppers, stemborer, blast, sheath blight; fruit and shoot borer in brinjal, YMV of greengram
  - Major diseases occurred in livestock: Nil
  - Post-harvest management/ value addition followed, if any:Nil
  - Marketing channels of product:society, middle men
  - Agro-based industries, if any:1poultry farm
  - Average income of the farmer: Rs.55000/ annum
- Possibility of involvement of ICAR Institutes:**NRRI, CIFA

6. **Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):**Adani Group
7. **Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):**Agri-culture and allied department of Odisha, NGOs, CSISA
8. **FPO formed or not?**Not yet
9. **Major interventions planned:**Cost saving technology in kharif rice, agronomic management for improving pulse productivity, species diversity and feed management in pisciculture, enhancing income from dairy, poultry, oilseeds, vegetables, promoting azolla and fodder crops.
10. **Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018-19	2019-20	2020-21	2021-22
1	Direct seeded rice, soil test based fertilizer recommendation	10-15 % increase in income from rice	0.24	0.30	0.13	0.15
2	HYV, fertilizer and pest management of pulse crops	Additional income of Rs 4000	0.34	0.20	0.20	0.20
3	Agronomic and pest management in vegetable crops	Net profit enhancement by 15%	1.2	1.0	1.0	0.5
4	Feed and disease management in IMC	Increase in net income by 20%	2.0	1.50	0.50	0.50
5	Dairy: 1 cross bred cow + fodder-azolla and farm made feed	Increase in net income by 5000 per year	0.40	0.10	0.10	0.10
6	Backyard poultry, Rainbow Rooster with vaccination	Additional income of 4000 per year	0.50	0.15	0.15	0.15
7	Capacity building of SHG in processing and value addition; processing equipments	Additional income of 2000 per family	0.75	0.15		
8	Vermicomposting	Productivity improvement	1.5	0.20	0.20	
<b>Total</b>			<b>6.93</b>	<b>3.60</b>	<b>2.28</b>	<b>1.60</b>

#### Village-4

1. **Name of KVK/ district:** Bhadrak
2. **Name of village adopted:** Khandatara
3. **Number of farmers targeted:** 20
4. **Compiled baseline survey report (point wise) of the villages:**
  - (i) Area of agriculture land (ha): 70ac
  - (ii) Area of irrigated land (ha): 30ac(LI)
  - (iii) Number of water body: 15
  - (iv) Area of water body (ha):3ac
  - (v) Number of different livestock animals: 100cow, 100goat,
  - (vi) Average yield of different crops, livestock and fisheries: rice- 25q/ac, green gram and black gram – 2q/ac,
  - (vii) Soil status:sandy loam
  - (viii) Average nutrients (nitrogen, phosphorous, potash etc.) used:
  - (ix) Major diseasesoccurred in crops:rice- leaf blight, green and black gram- YMV
  - (x) Major diseases occurred in livestock: no
  - (xi) Post-harvest management/ value addition followed, if any:
  - (xii) Marketing channels of product:society, middle men
  - (xiii) Agro-based industries, if any:no

(xiv) Average income of the farmer: Rs.20000/ annum

5. **Possibility of involvement of ICAR Institutes:**
6. **Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):**
7. **Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):**
8. **FPO formed or not?**
9. **Major interventions planned:**
10. **Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018-19	2019-20	2020-21	2021-22
1	OFT, FLD, Training	Increase in income	0.50	1.50	2.50	1.00

#### Village-5

1. **Name of KVK/ district:** Bhadrak
2. **Name of village adopted:** Sanahatuari
3. **Number of farmers targeted:** 20
4. **Compiled baseline survey report (point wise) of the villages:**
  - (i) Area of agriculture land (ha): 203
  - (ii) Area of irrigated land (ha): 203 in kharif
  - (iii) Number of water body: 2
  - (iv) Area of water body (ha):1.1ac
  - (v) Number of different livestock animals: 150cow, 100goat, 500poultry
  - (vi) Average yield of different crops, livestock and fisheries: Rice- 50q/ha
  - (vii) Soil status:Soil texture: loam andsilty clay
  - (viii) Average nutrients (nitrogen, phosphorous, potash etc.) used:95 kg N, 50 kg P<sub>2</sub>O<sub>5</sub>, 30 kg K<sub>2</sub>O per ha
  - (ix) Major diseasesoccurred in crops:Rice- BPH, sheath blight, brinjal- fruit and shoot borer
  - (x) Major diseases occurred in livestock: Nil
  - (xi) Post-harvest management/ value addition followed, if any:Nil
  - (xii) Marketing channels of product: Cooperative Society, middle men
  - (xiii) Agro-based industries, if any:Poultry farm, Rice huller
  - (xiv) Average income of the farmer: Rs.42000/- per annum
5. **Possibility of involvement of ICAR Institutes:**NRRI
6. **Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):**Adani Group
7. **Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):**Agri-culture and allied department of Odisha, NGOs, CSISA
8. **FPO formed or not?**Not yet
9. **Major interventions planned:** Cost saving technology in kharif rice, Pulses in Rice fallow, enhancing income from dairy and poultry, promoting fishery, irrigation development.

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018-19	2019-20	2020-21	2021-22
1	Mechanical transplanting, mechanized direct seeded rice, soil test based fertilizer recommendation	10-15 % increase in income from rice	0.24	0.30	0.13	0.15
2	Rice fallow demonstration of pulses	Additional income of Rs 4000	0.34	0.20	0.20	0.20
3	Dairy: 1 cross bred cow + fodder-azolla and farm made feed	Increase in net income by 5000 per year	0.40	0.10	0.10	0.10
3	Dairy: 1 cross bred cow + fodder-azolla and farm made feed	Increase in net income by 5000 per year	0.40	0.10	0.10	0.10
4	Backyard poultry, Rainbow Rooster with vaccination	Additional income of 4000 per year	0.50	0.15	0.15	0.15
5	Capacity building of SHG in processing and value addition; processing equipments	Additional income of 2000 per family	0.75	0.15		
6	Irrigation development and capacity building on crop planning. Irrigation infrastructure development through Govt schemes	Increase in cropping area in rabi	0.10	0.80	0.80	0.80
<b>Total</b>			<b>2.33</b>	<b>1.70</b>	<b>1.38</b>	<b>1.40</b>

**3.3 Krishi Vigyan Kendra, Jajpur**

**1. Name of KVK/ district:** Jajpur

- 2. Name of villages adopted:**
1. Dihakuransa, Block- Rasulpur
  2. Choromuha, Block- Dhramasala
  3. Khadipada, Block- Jajpur
  4. Sansilo, Block- Sukinda
  5. Jari, Block- Binjharpur

**3. Number of farmers targeted:** 25

**4. Compiled baseline survey report (point wise) of the villages:**

SL. No.	Parameters/ Village	Dihakuransa	Choromuha	Khadipada	Sansilo	Jari
(i)	Area of agriculture land (ha)	450 Ac.	150 Ac.	190 Ac.	300 Ac.	300 Ac.
(ii)	Area of irrigated land (ha)	30 Ac.	25 Ac.	30 Ac.	5 Ac	10 Ac
(iii)	Number of water body	2	4	1	1	3
(iv)	Area of water body (ha)	2 Ac.	2 Ac.	1 Ac.	0.5 Ac	2.5 Ac.
(v)	Number of different livestock animals	Cow- 400 no, Goat-100 no, Sheep -200 no, Poultry-50 no	Cow- 450 no, Goat- 50 no, Poultry-1000 no	Cow- 250 no, Goat- 50 no, Poultry-1000 no	Cow- 300 no, Goat- 150 no, Poultry-80 no	Cow- 2300 no, Goat- 200 no, Poultry-180 no

SL. No.	Parameters/ Village	Dihakuransa	Choromuha	Khadipada	Sansilo	Jari
(vi)	Average yield of different crops, livestock and fisheries	Rice- 23.5 q/ha, Greengram- 4q/ha, Potato-208.5 q/ha, poultry-1.2 kg/bird Mushroom (paddy straw)- 1 kg/bed Oyster mushroom- 1.2 kg/bed	Rice- 40 q/ha, Greengram- 4.3q/ha, Tomato-257.8 q/ha, poultry-1.2 kg/bird Mushroom (paddy straw)- 1 kg/bed Oyster mushroom- 1.2 kg/bed	Rice- 36.5 q/ha, Pointed gourd-178.2 q/ha poultry-1.2 kg/bird	Rice- 35.9 q/ha, Mushroom (paddy straw)- 1 kg/bed Oyster mushroom- 1.2 kg/bed	Rice- 25.32 q/ha, poultry-1.2 kg/bird
(vii)	Soil status	PH- 5.51 – 6.19 EC- 0.102 – 0.104 O.C%- 0.53 – 0.71	PH- 5.51- 5.58 EC- 0.107 – 0.138 O.C%- 0.46 – 0.62	PH- 5.25 – 6.32 EC- 0.102- 0.148 O.C%- 0.53 – 0.73	PH- 4.92 – 5.71 EC- 0.102 – 0.138 O.C%- 0.45 – 0.57	PH- 5.07- 5.74 EC- 0.114 – 0.159 O.C%- 0.49 – 0.69
(viii)	Average nutrients (nitrogen, phosphorous, potash, etc) used	N- 256 – 264 kg/ha P- 16-24 kg/ha K- 114 – 131 kg/ha	N- 245- 264 kg/ha P- 14-18 kg/ha K- 119 - 128 kg/ha	N- 250- 272 kg/ha P- 15-24 kg/ha K- 117 - 132 kg/ha	N- 238- 274 kg/ha P- 11- 16 kg/ha K- 98-124 kg/ha	N- 250-287 kg/ha P- 12-18 kg/ha K- 112 - 122 kg/ha
(ix)	Major diseases occurred in crops	Rice-Blast disease, root rot, Greengram-YMV, pod borer	Rice-Blast disease,, root rot, Greengram-YMV, pod borer	Rice-Blast disease,, root rot, Greengram-YMV, pod borer	Rice-Blast disease, root rot, Greengram-YMV, pod borer	Rice-Blast disease,, root rot, Greengram-YMV, pod borer
(x)	Major diseases occurred in livestock	Cattle-FMD, Goat-PPR, poultry- Ranikhet	Cattle-FMD, Goat-PPR, Poultry- Ranikhet	Cattle-FMD, Goat-PPR, Poultry- Ranikhet	Cattle-FMD, Goat-PPR	Cattle-FMD, Goat-PPR, Poultry- Ranikhet
(xi)	Post-harvest management / value addition followed, if any	No	No	No	No	No
(xii)	Marketing channels of products	Grower-Whole seller, Grower-Hat	Grower-Whole seller, Grower-Hat	Grower-Whole seller, Grower-Hat	Grower-Whole seller, Grower-Hat	Grower-Whole seller, Grower-Hat
(xiii)	Agro-based industries, if any	No	No	No	No	No
(xiv)	Average income of the farmer	Rs. 1,19,000/-	Rs. 1,40,000/-	Rs. 1,07,000/-	Rs. 40,000/-	Rs. 35,000/-

**5. Possibility of involvement of ICAR Institutes:** Yes

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** TCS, IFFCO

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State Deptt.(Deptt. of Agriculture, Deptt. of Horticulture, Deptt of Animal Husbandry, Govt. of Odisha)

**8. FPO formed or not?**

**9. Major interventions planned:**

**10. Action Plan (including interventions made) for each village and Budget requirement:**



Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
<b>(Module-I Dihakuransa)</b>						
2016-17	1. HYV rice Sahabhazi dhan 2. Seed treatment	32.4 qtl. Rs.19,148				
	1. Potato var- Kufri Surya (75days)	238.2 qtl. Rs.76,300				
	1.poultry rearing with pallishree 2. Vaccination with RD 3. Feeding(Home scarping+ Agril. by-product)	chicken -2.15kg/bird 62 egg/bird/Yr				
	1. Mushroom Strain-OSM-11 2. Maintenance of temperature	1.2 kg/bed				
	1.Oyster mushroom <i>Hypsizygous ulmarius</i>	2.2 kg/bed				
2017-18	1.HYV Sahabhazi dhan 2.Line sowing 3. STBF 4.Pre-emergence herbicide pendimethalin @ 1.25 lit/ha	34.2 qtl				
	1. Potato var Kufri surya with Tuber treatment Dithane M-45 @3gm/lit	239.4 qtl				
	1.Poultry rearing pallishree with Home scarping and floating hydrophytes, waste of vegetable crops etc	Chicken 2.2 kg/ bird 65 eggs/Bird/yr				
	1.Mushroom strain OSM-11 Disinfection of mushroom room with formalin 1ml/lit	1.3 kg/bed				
	1.Improved management practices	2.35 kg/bed				
2018-19	1.Application of ZnSO4 @25kg/ha 2. Rice seed Sahabhazi dhan 3. Line sowing	38 qtl	8750			
	2.STBF	255 qtl	3000			
	1. Multimineral & vitamin liquid (5ml/100 birds 21-60 days duration for poultry chicks 2.Storage & packaging of egg for selling 3.Market linkage	Chicken 2.5 kg/bird	5000			
	1.packaging in plastic punnets for market linkage	1.3 kg/bed	2000			
	1.Value addition (pickle,Mushroom soup powder) 2.Market linkage	94 kg ( 40 bed ) 60kg mushroom pickle 3.4kg mushroom soup powder out of 34kg mushroom	3000			
<b>Module-II Choromuha</b>						
2016-17	1.Paddy var. Swarna along with Seed treatment with Vitavax power 2. Line transplanting	42 q/ha				
	Greengram- Var. TARM-1	5.2 q/ha				
	1.Hybrid tomato var. Swarna Vijay	311.8				

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
	1.Mushroom Strain-OSM-11 2.Maintenance of temperature	1.2 kg/bed				
	1.Oyster Mushroom Var. <i>Hypsizygo ulmarius</i> 2.Improved management practices	2.1 kg/bed				
	1.Poultry rearing with pallishree 2.Vaccination with RD 3.Feeding (Home scarping+ Agril bio product)	Chicken 1.6kg /bird				
2017-18	1.Paddy var. Swarna with 2.STBF 3.Herbicide Pretilachlor 1lit/ha at 2-4 DAT	46.2 qtl/ha				
	1.Greengram- Var. IPM 02-14 2.Line sowing 3.Seed treatment with Vitavax power,	7.0 qtl/ha				
	1.Hybrid tomato var. BT-136 (bacterial Wilt resistant) 2.STBF (100-70-60 kg NPK/ha.)	315.2 qtl/ha				
	1. Disinfection of mushroom room with formalin 1ml/lit.	1.27 kg/bed				
	1. Improved management practices	2.3 kg/bed				
	1.Home scarping & organic waste like floating hydrophytes, waste of vegetables crops	Chicken.- 2.1 kg/ /bird				
2018-19	Application of ZnSO4 @25kg/ha	48 qtl/ha	3750			
	1.STBF 2.Herbicide application with quizalfop-p- ethyl 1lit/ha	7.0 qtl/ha	5000			
	1.Spraying of ridomil MZ 20gm+ streptocycline 1gm/10 lit water	335 qtl/ha	2000			
	2.packaging in plastic punnets for market linkage	1.3 kg/bed	2000			
	1.Value addition (pickle,Mushroom soup powder) 2. Market linkage	92 kg ( 40 bed ) 60kg mushroom used pickle 3.2 kg as mushroom soup powder	5000			
	1.Multimineral & vitamin liquid (5ml/100 birds 21-60 days duration 2.Storage packaging of egg for selling 3.Market linkage	Chicken-2.5kg/bird;	5000			

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
Module-III Khadipada						
2016-17	1.Variety Swarna Sub-1 2.Seed treatment with Vitavax power	40.5 qtl/ha				
	1.Pointed gourd var. Swarna Alaukik 2.Maintenance of Male: Female ratio (1:9)	208 .4 qtl/ha				
	1.Improved breed pallishree 2.Vaccination with RD 3.Feeding (Home scarping+ Agril bio product	chicken 1.8 kg /bird;				
2017-18	1.Paddy Var- Swarna Sub-1 STBF 2.Pretilachlor 1lit/ha at 2-4 DAT	38.5 qtl/ha				
	1.Pointed gourd Var- Swarna Alaukik Cultivation in triangular stacking system 2.STBF	220.2 qtl/ha				
	1.Home scarping organic waste like floating hydrophytes, waste of vegetables crops etc.	Chicken 2.0 kg/ bird				
2018-19	1.Application of ZnSO4 @25kg/ha 2. Rice seed Swarna Sub-1	45.0 qtl/ha	6750			
	2. Spraying of Ridomil- MZ 20gm +streptocycline 1gm/10 lit water	226q/ha	2000			
	1.Multimineral &vitamin liquid (5ml/100 birds 21-60 day s duration for poultry chicks 2.Storage packaging of egg for selling 3.Market linkage	Chicken 2.5kg/bird	5000			
<b>Module-IV Sansilo</b>						
2017-18	1.Rice var- Swarna Seed treatment with Vitavax power @2.5 gm/kg seed 2.FYM 5t/ha	40.8 qtl/ha				
	1.Mushroom Strain-OSM-11 2.Maintenance of temperature	1.22 kg/bed				
	1.Oyster mushroom <i>Hypsizygous ulmarius</i>	2.1 kg/bag				
2018-19	1.Seed treatment with Vitavax power @2.5 gm/kg seed 2.FYM 5t/ha 3. Green manuring 4.Cono weeder 5. Fertilizer cost	42.0 qtl/ha	7550			
	1.Disinfection of mushroom room with formalin 1ml/lit.	1.3 kg/bed	1000			

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
	2.Improved management practices	2.3 kg/bag	5000			
2019-20	1.Neem based pesticide 2.FYM 5t/ha 3.Bio-fertilizer 5kg/ha	45 qtl/ha		5000		
	1.packaging in plastic punnets for market linkage	1.3 kg/bed		2000		
	1.Value addition (pickle, Mushroom soup powder) 2. Market linkage	92 kg (40 bed) 60 kg mushroom pickle 3.2kg mushroom soup powder				
<b>Module- V Jari</b>						
2017-18	1.Paddy var. Luna barial 2.Seed treatment with vitavax power	35.0 qtl/ha				
	1. poultry rearing with pallishree 2.Vaccination with RD 3.Feeding (Home scarping+ Agril. by-product)	Chicken 2.38 kg/ bird				
2018-19	1.Paddy Var. Luna barial 2. STBF 3. Pre-emergence herbicide pendimethalin @1.25lit/ha 4. Fertilizer cost	32 qtl/ha	5500			
	1.Home scarping organic waste like floating hydrophytes, waste of vegetables crops etc.	Chicken 2.5 kg/ bird	5000			
2019-20	1.Line sowing 2.Application of ZnSO4 @25kg/ha	34 qtl/ha		5750		
	1.Multimineral &vitamin liquid (5ml/100 birds 21-60 day s duration 2.Storage packaging of egg for selling 3.Market linkage	Chicken.2.5kg/bird		5000		
2020-21 2021-22 ( For 5 villages)	1.Formation of Farmers Producer Group 2.Marketing & Awareness camp 3.Training on improved technologies & market linkage		50,000	1,00,000	1,00,000	1,00,000
2020-21 2021-22 ( For 5 villages)	POL/Vehicle		25,000	50,000	50,000	50,000
	Total		1,57,300	167750	1,50,000	1,50,000



Demonstration of lime and Rhizobium application in groundnut

#### 4. East and South Eastern Coastal Plain

The districts of this Agro-Climatic Zone are Kendrapara, Khurda, Jagatsinghpur, part of Cuttack, Puri, Nayagarh and part of Ganjam. Total area of this zone is 20241 sq. km. which is 13% of total area covered.

##### 4.1 Krishi Vigyan Kendra, Kendrapara

1. Name of KVK/ district: Kendrapara

2. Name of villages adopted: Babakarpur, Badabaranga, Gandakul, Karndiapatana, Vandilo

3. Number of farmers targeted: 100

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 720

(ii) Area of irrigated land (ha): 152

(iii) Number of water body: 58

(iv) Area of water body (ha): 14.5

(v) Number of different livestock animals: Cow – 232, Poultry – 312, Sheep – 62, Goat - 172

(vi) Average yield of different crops, livestock and fisheries: Rice – 30 qt./ha, Milk – 1 lit./day, Brinjal – 142 qt./ha, Tomato – 280 qt./ha, chilli – 37 qt./ha, IMC – 5 qt./ha

(vii) Soil status: Sandy loam, Clay loam

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N-Low, P – Medium, Potash - low

(ix) Major diseases occurred in crops: Rice- YSB, Leaf folder, BPH, BLB, Blast, Pulses – YMV, pod borer, Brinjal- Fruit & shoot borer, wilting, Tomato – fruit borer, wilting, Chilli – Sucking pest,

(x) Major diseases occurred in livestock: Cattle - FMD, HS, BQ, Goat – PPR, Poultry - RD

(xi) Post-harvest management/ value addition followed, if any: Nil

(xii) Marketing channels of products: Nil

(xiii) Agro-based industries, if any: Nil

(xiv) Average income of the farmer: Rs. 6000/- per month

5. Possibility of involvement of ICAR Institutes: ICAR- CTCRI, ICAR-CHES, ICAR-NRRI, ICAR-WTCER

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): -

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Govt. Department, Central Govt. Department, NGOs etc.

8. FPO formed or not? No

9. Major interventions planned: Crop diversification, IPM & INM, Introduction of new breed, Breed up gradation, introduction of improved varieties etc.

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
01	Promotion of aromatic rice cultivation	Better market price than ruling variety	-	100000	50000	50000
02	IPM & INM in rice	Decrease the cost of production and increase the yield	-	200000	100000	100000
03	Crop diversification (Rice to pulses/ oil seed/ sweet corn)	Easy to market and increase in income than rice	-	200000	100000	88000
04	Market demand/high value vegetable cultivation	Better market price and easy to sale	-	400000	250000	130000
05	IPM & INM in vegetable	Decrease the cost of production and increase the yield	-	200000	100000	100000
06	Rice fallow to rice pulses	Increasing the cropping intensity	-	50000	20000	10000
07	Sugarcane cultivation	High return and less risk	-	60000	30000	20000
08	Banana cultivation	Early return than the other fruit crops	-	200000	62000	50000
09	Tuber crop cultivation (Yam, EFY, Sweet potato, Colocasia)	Low cost of production, less pest attack, no problem from monkeys, proper utilization of land resources	-	500000	500000	114000
10	Ginger cultivation	Easy to market, proper utilization of unutilized land	-	100000	100000	28000
11	Mushroom cultivation	High return within very short period time, low investment, easy to market	-	70000	20000	24000
12	Multiple harvesting and multiple stocking of IMC	Proper utilization of unutilized seasonal and perennial water bodies	-	200000	100000	70000
13	Promotion backyard poultry	High return than local variety and easy to market	-	200000	100000	0
14	Introduction of cross breed cow	Increase the milk production	-	300000	200000	100000
15	Improved duck farming	High return than local variety and easy to market	-	60000	40000	20000
16	Introduction of buck for breed up gradation	Gain higher body weight	-	200000	0	0
17	Sheep farming	High return and easy to market	-	600000	200000	200000
18	Goat farming	High return and easy to market	-	600000	40000	280000
19	Fodder cultivation	Increase the milk production	-	50000	30000	20000
20	Bee keeping	Additional income form home stead area	-	200000	180000	0
				<b>44,90,000</b>	<b>22,22,000</b>	<b>14,04,000</b>

## 4.2 Krishi Vigyan Kendra, Khordha

1. Name of KVK/ district: Khordha

2. Name of villages adopted: Haladi Basanti, Basudevpur, Mundila, Chandeswar, Kaijanga

3. Number of farmers targeted: 100

4. Compiled baseline survey report (point wise) of the villages:

Particulars	Haladi Basanti	Basudevpur	Mundila	Chandeswar	Kaijanga
Area of agriculture land (ha)	400	180	120	70	100
Area of irrigated land (ha)	400	60	25	25	24
Number of water body	0	5	4	2	6
Area of water body (ha)	0	10	0.6	1.0	1.6
Number of different livestock animals	Cow-300 Goat-400 Sheeps-100 Poultry-3300	Cow-500 Goat-800 Sheeps-52 Poultry-500	Cow-150 Goat-32 Poultry-165	Cow-27 Goat-18 Poultry-35	Cow-280 Goat-135 Poultry-3150
Average yield of different crops, livestock and fisheries	3.7 t/ha paddy 0.48 t/ha- Pulses Pumpkin-1.8t/ha Pointed gourd – 1.42 t/ha	3.2 t/ha paddy 0.5 t/ha- Pulses Cowpea 7.5t/ha Brinjal- 22.3t/ha	3.1 t/ha paddy	3.6 t/ha paddy	3.8 t/ha paddy
Soil status	Soil type-Sandy loam, Acidic soil	Soil type-Sandy loam, Acidic soil	Sandy loam to loam Acidic	Sandy loam to loam Acidic	Sandy loam to loam Acidic
Average nutrients (nitrogen, phosphorous, potash, etc) used	0.25-0.4%- organic carbon 10.0-12.50 kg/ha - P 335-440 kg/ha -K	0.23-0.3%- organic carbon 7.5-10.00 kg/ha - P 330-650 kg/ha -K	0.2-0.3%- organic carbon 6.0-7.0 kg/ha - P 25-35 kg/ha -K	0.23-0.35%- organic carbon 8.5-12.00 kg/ha - P 330-550 kg/ha -K	0.25-0.45%- organic carbon 11.0-13.50 kg/ha - P 335-440 kg/ha -K
Major diseases occurred in crops	Rice blast, Sheath blight, BLB, Phytophthora blight in Pumpkin and Pointed gourd, YMV in Pumpkin Collar rot in Groundnut	Sheath blight ,Blast, BLB in rice,Wilting in Brinjal and Tomato,YMV in Cow pea and Okra	Rice blast, BLB ,Sheath Blight, YMV in Cow pea	Sheath blight ,Blast, BLB in Rice , YMV in Green gram, Leaf Spot in Water Melon	Sheath blight ,Blast, BLB in rice, Wilting in Brinjal, Potato and Tomato, Leaf curling in Tomato and Potato, Leaf Spot in Colocasia
Major diseases occurred in livestock	Foot and Mouth Disease, CE-Contagious Ecthyma,, Ranikhet Disease	Foot and Mouth Disease, Ranikhet Disease	Foot and Mouth Disease, Ranikhet Disease	Foot and Mouth Disease, Ranikhet Disease	Foot and Mouth Disease, Ranikhet Disease
Post-harvest management/ value addition followed, if any	Cheese from milk	Nil	Nil	Nil	Nil
Marketing channels of products	Weekly Markets at Banmalipur, Balipatna and Daily Market at Bhubaneswar	Daily Market at Begunia, Banki	Daily Market at Kunjuri and Chandapur	Daily Market at Chandapur and Balagoan	Weekly Markets at Sisilo, Balakati, Balipatna and Daily Market at Bhubaneswar
Agro-based industries, if any	Nil	Nil	Nil	Nil	Nil
Average income of the farmer	1,12,000	85,000	72,500	76,500	1,02,000

5. Possibility of involvement of ICAR Institutes: All the ICAR institutes around Bhubaneswar will be involved. Specifically, ICAR-CIFA, ICAR-NRRI, ICAR-IIWM, ICAR-CARI, ICAR-CIWA, ICAR-CHES based on their specialisation

6. Possibility of involving private sectors for CSR funds: Paradeep Phosphates Ltd, IFFCO, Reliance Foundation, Krishi Jagran, Mahindra and Mahindra

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): Agriculture and allied sector line department at block level, ATMA at the district level, National Fisheries Development Board, CARD- NGO, Coconut Development Board, Regional Centre for Organic Farming. Viswa Jeevan Seva Sangh- NGO

(NFDB has provided Rs. 3.0 lakhs for stocking community ponds in the selected villages whichever water bodies), All the other institutions have committed to fund KVK in kind or cash to work jointly in the above mentioned five villages.)

8. FPO formed or not? Not formed

9. Major interventions planned:

- Crop diversification
- Improvement in crop management practices
- Profitable enterprises
- Improved storage practices
- Value addition and processing

Activities: Through demonstration and Training

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
I	Village: Haladi Basant					
	INM in improved varieties of Groundnut	The productivity of Groundnut will be boost up to 2.6 t/ha and additional income will be increase up to 25000/ha	0.95	1.0	1.2	1.5
	Introduction of Sweet corn	Yield increase to 1.10 t/ha Increase in production up to 10.tl/ha(Average) Additional income will be increases about 28 % over Farmers Practice	0.8	0.8	0.9	0.9
	Introduction of HYV Paddy Maudamani	Increase in yield up to 7.0t/ha About 40% more than existing paddy variety	-	0.48	0.44	0.52
	Introduction of Scented Rice	Increase in production up to 4.5t/ha (Average) and value addition of the scented rice and the additional income will be enhanced than local variety	-	0.15	0.25	0.3
	Introduction of Pointed Gourd var. Swarna Alaukik	Increase in production up to 24.5t/ha (Average) Pointed gourd production increases about 60% over Local variety	0.12	0.25	0.3	0.32
	Hybrid Watermelon intercropping with Maize	Watermelon production up to 55.0 t/ha(Average) along with additional return from maize Watermelon production increases about 65% over Local(Open-pollinated variety)	0.58	0.61	0.68	0.7
	High Density planting of Tissue Culture Banana var. Bantal	Banana production up to 57.4 t/ha (Average)	0.35	0.50	0.55	0.65

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
	Demonstration on Panchagavya and Organic Pest control in vegetables	Reduction in use of chemical plant growth regulators, micronutrients, pesticides. Natural resource management with saving in cost of production.	0.20	0.30	0.40	0.50
	INM in Yard long Bean Cultivation	Increase in production up to 12 t/ha (Average) Yard Long Bean production increases about 48% over Farmers Practice	-	0.38	0.43	0.48
	Vermicompost Production	Enriched compost production. 0.7-0.8 t vermicompost/bed/cycle. Contribute about Rs2800-3200 to the farmer/bed/cycle	0.40	0.40	0.40	0.40
	Honey bee rearing	Additional income of about Rs7000-8500/ year	0.70	0.70	0.70	0.70
	Vaccination against infectious diseases in ruminants	Better health	0.15	0.15	0.15	0.15
	Supplementation of Azolla for cows	Increase in milk production from 5.6 litre to 8.0 litre/day /cow	0.05	0.07	0.07	0.07
	Supplementation of feed to pre-weaned kids in goats	Better health and Increase in body weight of kids from 9.2 kg to 12.6 kg/year	-	0.05	0.06	0.08
	Cow urine based eco phenyl preparation	Additional income from natural resources. income /litre will be Rs15	0.08	0.1	0.12	0.14
	Using pro super grain bag for storage of paddy	100% reduction in damage during storing	0.16	0.18	0.20	0.22
	Value addition in vegetables / Cereal / Pulses	Group activity, more return from value addition	0.2	0.25	0.30	0.35
II	Village: Basudevpur					
	Introduction Upland paddy variety Sahabhagi	Upland paddy yield can be enhance up to 3.8 t/ha with additional income 26.6% more than local variety	-	0.18	0.2	0.25
	Introduction of Sweet corn	Increase in production up to 10.tl/ha (Average) Additional income will be increases about 28 % over Farmers Practice	0.8	0.8	0.9	0.9
	Introduction of Paddy variety Maudamani	Increase in yield up to 7.0t/ha About 40% more than existing paddy variety	-	0.33	0.37	0.52
	Cultivation of improved variety IPM-02-03	Production will enhance upto 0.65tones /ha additional income will be enhance Rs 10500/ha	.0.2	0.25	0.3	0.5
	Introduction of Pointed Gourd var. Swarna Alaukik	Increase in production up to 2.4 t/ha(Average) Pointed gourd production increases about 60% over Local variety	0.12	0.25	0.3	0.32
	Hybrid Watermelon intercropping with Maize	Watermelon production up to 5.50 t/ha(Average) along with additional return from maize Watermelon production increases about 65% over Local(Open-pollinated variety)	0.58	0.61	0.68	0.7
	Introduction of Spine Gourd	Ave. per plant production is about 2kg.High market price. Additional return from field bunds and backyards	-	0.20	0.25	0.32
	Demonstration on Panchagavya and Organic Pest control in vegetables	Reduction in use of chemical plant growth regulators, micronutrients, pesticides. Natural resource management with saving in cost of production.	0.20	0.30	0.40	0.50
	INM in Yard long Bean Cultivation	Increase in production up to 120t/ha(Average) Yard Long Bean production increases about 48% over Farmers Practice	-	0.38	0.43	0.48
	Vermicompost Production	Enriched compost production. 7-8 quintal vermicompost/bed/cycle. Contribute about Rs2800-3200 to the farmer/bed/cycle	0.40	0.40	0.40	0.40
	Honey bee rearing	Additional income of about Rs7000-8500 per year	0.70	0.70	0.70	0.70
	Vaccination of ruminants	Better health	0.15	0.15	0.15	0.15
	Supplementation of Azolla for cows	Increase in milk production from 5.75 litre to 8.5 litre/day /cow (Approx.)	0.05	0.07	0.07	0.07

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
	Supplementation of feed to pre-weaned kids in goats	Better health and Increase in body weight of kids from 10 kg to 13.2 kg/year	-	0.05	0.06	0.08
	Rearing of dual type improved ducks	Increase in meat (2.5-4.0 kg) & egg (180-300 nos.) per duck per year	-	0.10	0.10	0.10
	Fry to fingerling production in seasonal pond	An additional income of Rs 80,000/ha is expected.	0.2	0.3	0.35	0.4
	Cow urine based eco phenyl preparation	Additional income from natural resources. Income /Litre is Rs15	0.08	0.1	0.12	0.14
	Using pro super grain bag for storage of paddy	100% reduction in damage during storing	0.16	0.18	0.20	0.22
	Value addition in vegetables / Cereal / Pulses	Group activity, More return from value addition	0.2	0.25	0.30	0.35
III	Village: Mundila Tangi					
	Introduction Up land paddy variety Sahabhagi	Up land paddy yield can be enhance up to 3.8 t/ha With additional income 28% more than local variety	0	0.18	0.2	0.25
	Cultivation of Sweet corn variety	Increase in production up to 10.5tl/ha(Average) Additional income will be increases about 30 % over Farmers Practice	0.8	0.8	0.9	0.9
	Introduction of Paddy variety Maudamani	Increase in yield up to 7.0t/ha About 40% more than existing paddy variety	-	0.48	0.0.58	0.67
	Cultivation of Spine Gourd	Ave. per plant production is about 2Kg.High market price. Additional return from field bunds and backyards	-	0.20	0.25	0.32
	Demonstration on Panchagavya and Organic Pest control in vegetables	Reduction in use of chemical plant growth regulators, micronutrients, pesticides. Natural resource management with saving in cost of production.	0.20	0.30	0.40	0.50
	INM in Yard long Bean Cultivation	Increase in production up to 120t/ha(Average) Yard Long Bean production increases about 48% over Farmers Practice	-	0.38	0.43	0.48
	Vermicompost Production	Enriched compost production. 7-8 quintal vermicompost/bed/cycle. Contribute about Rs2800-3200 to the farmer/bed/cycle	0.40	0.40	0.40	0.40
	Honey bee rearing	Additional income of about Rs7000-8500 per year	0.70	0.70	0.70	0.70
	Rearing of dual type improved ducks	Increase in meat (2.5-4.0 kg) & egg (180-300 nos.) per duck per year	-	0.10	0.10	0.10
	Introduction of Jayanti rohu in Composite carp culture	An average production of 3.0ton/ha is expected with reduced cost of production.	0.5	0.7	0.8	0.9
	Fry to fingerling production in seasonal pond	An additional income of Rs 80,000/ha is expected.	0.2	0.3	0.35	0.4
	Cow urine based eco phenyl preparation	Additional income from natural resources. Income /Litre is Rs15	0.08	0.1	0.12	0.14
	Using pro super grain bag for storage of paddy	100% reduction in damage during storing	0.16	0.18	0.20	0.22
	Value addition in vegetables / Cereal / Pulses	Group activity, More return from value addition	0.2	0.25	0.30	0.35

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
<b>IV</b>	<b>Village:Chandeswar Chilika Block</b>					
	Introduction of Sweet corn	Increase in production up to 11.t/ha (Average) Additional income will be increases about 30 % over Farmers Practice	0.8	0.8	0.9	0.9
	Introduction of Paddy improved variety Maudamani	Increase in yield up to 7.0 t/ha About 40% more than existing paddy variety	-	0.18	0.27	0.35
	Cultivation of improved green gram variety IPM-02-03	Production will enhance up to 0.66 t /ha additional yield can be enhanced up to 160kg/ha	.0.2	0.25	0.3	0.5
	Hybrid Watermelon intercropping with Maize	Watermelon production up to 550t/ha(Average) along with additional return from maize Watermelon production increases about 65% over Local(Open-pollinated variety)	0.58	0.61	0.68	0.7
	Demonstration on Panchagavya and Organic Pest control in vegetables	Reduction in use of chemical plant growth regulators, micronutrients, pesticides. Natural resource management with saving in cost of production.	0.20	0.30	0.40	0.50
	INM in Yard long Bean Cultivation	Increase in production up to 120t/ha(Average) Yard Long Bean production increases about 48% over Farmers Practice	-	0.38	0.43	0.48
	Vermicompost Production	Enriched compost production. 7-8 quintal vermicompost/bed/cycle. Contribute about Rs2800-3200 to the farmer/bed/cycle	0.40	0.40	0.40	0.40
	Honey bee rearing	Additional income of about Rs7000-8500 per year	0.70	0.70	0.70	0.70
	Introduction of Jayanti rohu in Composite carp culture	An average production of 3.0ton/ha is expected with reduced cost of production.	0.5	0.7	0.8	0.9
	Introduction of freshwater prawn in Polyculture of IMC	An additional income of Rs 30,000-40,000/ha is expected.	0.3	0.4	0.45	0.5
	Cow urine based eco phenyl preparation	Additional income from natural resources. Income /Litre is Rs15	0.08	0.1	0.12	0.14
	Using pro super grain bag for storage of paddy	100% reduction in damage during storing	0.16	0.18	0.20	0.22
	Value addition in vegetables / Cereal / Pulses	Group activity, More return from value addition	0.2	0.25	0.30	0.35
<b>V</b>	<b>Village: Kajjanga</b>					
	Introduction of Paddy variety Maudamani	6.5 tones/ha Increase in yield up to 7.0 t/ha About 40% more than existing paddy variety	-	0.18	0.27	0.32
	Introduction of Scented rice	Increase in additional net return upto Rs 56,500/ha	-	0.15	0.25	0.3
	Cultivation of improved green gram variety IPM-02-03	Production will enhance up to 0.65tones /ha additional income will be enhance Rs 10500/ha	.0.2	0.25	0.3	0.5
	Introduction of Pointed Gourd var. Swarna Alaukik	Increase in production up to 245t/ha(Average) Pointed gourd production increases about 60% over Local variety	0.12	0.25	0.3	0.32
	High Density planting of Tissue Culture Banana	Banana production up to 57.4 t/ha (Average)	0.35	0.50	0.55	0.65
	Demonstration on Panchagavya and Organic Pest control in vegetables	Reduction in use of chemical plant growth regulators, micronutrients, pesticides. Natural resource management with saving in cost of production	0.20	0.30	0.40	0.50
	Vermicompost Production	Enriched compost production. 0.7-0.8 t vermicompost/bed/cycle. Contribute about Rs2800-3200 to the farmer/bed/cycle	0.40	0.40	0.40	0.40
	Honey bee rearing	Additional income of about Rs7000-8500 per year	0.70	0.70	0.70	0.70
	Supplementation of Azolla for Cows	Increase in milk production from 5.75 litre to 8.5 litre/day /cow (Approx.)	0.05	0.07	0.07	0.07
	Introduction of Jayanti rohu in Composite carp culture	An average production of 3.0ton/ha is expected with reduced cost of production.	0.5	0.7	0.8	0.9

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
	Fry to fingerling production in seasonal pond	An additional income of Rs 80,000/ha is expected.	0.2	0.3	0.35	0.4
	Cow urine based eco phenyl preparation	Additional income from natural resources. Income /Litre is Rs15	0.08	0.1	0.12	0.14
	Using pro super grain bag for storage of paddy	100% reduction in damage during storing	0.16	0.18	0.20	0.22
	Value addition in field, vegetable and other crops	Group activity, More return from value addition	0.2	0.25	0.30	0.35

#### 4.3 Krishi Vigyan Kendra, Jagatsinghpur

##### Village-1

1. Name of KVK/ district: Jagatsinghpur

2. Name of villages adopted: Kanimula

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 16.98

(ii) Area of irrigated land (ha): 9.4

(iii) Number of water body: 06

(iv) Area of water body (ha): 1.438

(v) Number of different livestock animals: Cow -20, Calf-8, Goat -7

(vi) Average yield of different crops, livestock and fisheries: Paddy – 30.1qtl/ha, Greengram – 3qtl/ha, Blackgram – 1.5qtl/ha, Brinjal – 232qtl/ha, Tomato – 280qtl/ha, Potato – 145qtl/ha, Cattle – 7.0lit/day

(vii) Soil status: sandy loam, N – 184.4 kg/ha, P- 47kg/ha, K- 703Kg/ha

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:N:P:K – Paddy – 80:40:40, No fertilizer application in Greengram / Blackgram, N:P:K in Vegetables – 160:80:80

(ix) Major diseases occurred in crops: Paddy - Blast, BLB, Greengram –YVMV

(x) Major diseases occurred in livestock: Cattle – Foot & mouth disease, Worm, Thileria, Mastitis

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Paddy – Co-operative society / Mandi / Rice mill, Milk – OMFED, Greengram – Co-operative society / Local market

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: Rs.6050 per month

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt

8. FPO formed or not? No

9. Major interventions planned:

(i) Varietal substitution,

(ii) Integrated Nutrient management

- (iii) Integrated Pest & Disease management
- (iv) Farm mechanization
- (v) Value addition
- (vi) Livestock production & management

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	1.Paddy – Demonstration of long term submergence Paddy variety Swarna Sub – I 2.Mechanized Transplanting & IPDM measures 3.Herbicide application	Rs 5.12 lakh	0.3	0.4	1.67	0.15
2.	1.Greengram – Demonstration of YVMV resistant variety – IPM02-14 2. IPDM measures 3.Mechanized Line sowing with N, P, K application 4. Use of Biofertilizers	Rs 3.4 lakh	0.3	0.5	0.8	0.1
3.	1. Blackgram – Demonstration of HYV T-9 2. IPDM measures 3.Mechanized Line sowing with N, P, K application 4. Use of Biofertilizers	Rs.0.8 lakh	0.07	0.12	0.15	0.03
4.	1. Brinjal – Demonstration of HYV “ Arka Kesab” 2. Integrated Nutrient Management 3. IPDM measures	Rs.1.35 lakhs	0.15	0.15	0.14	0.1
5.	1. Tomato - Demonstration of HYV “ ArkaRakshak” 2. Integrated Nutrient Management 3. IPDM measures	Rs.1.6 lakhs	0.13	0.13	0.14	0.1
6.	1. Potato - Demonstration of HYV “Kufri Surya” 2. Integrated Nutrient Management 3. IPDM measures	Rs.3.0 lakhs	1.20	0.03	0.15	0.15
7.	1. Livestock - Health camp, vaccination and deworming 2. Fodder cultivation CO-5 3. Breed upgradation 4. Feed management 5. Ration Balancing	Rs.3.5 lakhs	0.81	1.25	0.20	0.20
8.	1. Poultry – Introduction of improved Breed Pallishree, Kadaknath, rainbow Rooster 2. Feed management 3. Disease management	Rs.1.6 lakhs	0.1	0.1	0.15	0.15
9.	Pisciculture	Rs.2.4 lakhs	0.2	0.2	0.15	0.15

**Village-2**

1. Name of KVK/ district: Jagatsinghpur
2. Name of villages adopted: Achyutadaspur
3. Number of farmers targeted: 20

**4. Compiled baseline survey report (point wise) of the villages:**

- (i) Area of agriculture land (ha): 15.2
- (ii) Area of irrigated land (ha): nil
- (iii) Number of water body: 09
- (iv) Area of water body (ha): 3.73
- (v) Number of different livestock animals: cattle -21, calf- 10
- (vi) Average yield of different crops, livestock and fisheries: Paddy -25.5qtl/ha, Greengram -4.2qtl/ha, Cow – 4lit/day
- (vii) Soil status: clay loam, loam N – 135.3Kg/ha, P- 30.4Kg/ha, K- 420.6Kg/ha
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 80:40:40 in Paddy, No fertilizer application in Greengram
- (ix) Major diseases occurred in crops: Paddy – BLB, Blast, sheath blight Greengram – YVMV, Leaf curl
- (x) Major diseases occurred in livestock: Cattle – Foot & mouth disease, Worm, Theileria, Mastitis
- (xi) Post-harvest management/ value addition followed, if any: Nil
- (xii) Marketing channels of products: Paddy - Co-operative society / Mandi, Milk – OMFED, Greengram – Local market / Door step sale
- (xiii) Agro-based industries, if any: Nil
- (xiv) Average income of the farmer: Rs.4400 per month

**5. Possibility of involvement of ICAR Institutes: Yes**

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes**

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt.**

**8. FPO formed or not? No**

**9. Major interventions planned:**

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	1.Paddy – Demonstration of Salt tolerant Paddy variety “ Luna Subarna” 2.Mechanized Transplanting & IPDM measures 3.Herbicide application	Rs 4.18 lakh	0.3	0.3	1.71	0.15
2.	1.Greengram – Demonstration of YVMV resistant variety – IPM02-14 2. IPDM measures 3.Mechanized Line sowing with N, P, K application 4. Use of Biofertilizers	Rs 3.2 lakh	0.25	0.46	0.72	0.1

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
3.	1. Livestock - Health camp, vaccination and deworming 2. Fodder cultivation CO-5 3. Breed upgradation 4. Feed management 5. Ration Balancing	Rs.3.2 lakhs	0.75	1.20	0.15	0.18
4.	1. Poultry – Introduction of improved Breed Pallishree, Kadaknath, rainbow Rooster 2. Feed management 3. Disease management	Rs.1.6 lakhs	0.1	0.1	0.15	0.15
5.	Pisciculture	Rs.2.4 lakhs	0.2	0.2	0.15	0.15

### Village-3

1. Name of KVK/ district: Jagatsinghpur

2. Name of villages adopted: Arakhia

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 23.6

(ii) Area of irrigated land (ha): 22.4

(iii) Number of water body: 4

(iv) Area of water body (ha): 12.76

(v) Number of different livestock animals: Cows – 33

(vi) Average yield of different crops, livestock and fisheries: paddy – 32qtl/ha, greengram -2.0qtl /ha, Blackgram – 1qtl/ha, Brinjal – 226qtl /ha, Tomato – 275qtl/ha, Potato – 125qtl/ha, Venami prawn – 40qtl /ha, Cattle – 8lit/day

(vii) Soil status: clay loam, loam N – 125.3Kg/ha, P- 5.74Kg/ha, K- 450.3Kg/ha

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 80:40:40 in Paddy, No fertilizer application in Greengram, N:P:K in Vegetables – 100:80:100

(ix) Major diseases occurred in crops: BLB, Blast, sheath blight Greengram – YVMV, Leaf curl

(x) Major diseases occurred in livestock: Foot & mouth disease, Worm, Theileria, Mastitis

(xi) Post-harvest management/ value addition followed, if any: Nil

(xii) Marketing channels of products: Paddy – Co-operative society / Mandi / Rice mill, Milk – OMFED, Greengram – Co-operative society / Local market

(xiii) Agro-based industries, if any: Nil

(xiv) Average income of the farmer: Rs.6200/month

5. Possibility of involvement of ICAR Institutes:

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):

8. FPO formed or not?

### 9. Major interventions planned:

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	1.Paddy – Demonstration of Paddy variety Barsha Dhan 2.Mechanized Transplanting & IPDM measures 3.Herbicide application	Rs 7.1 lakh	0.6	0.6	1.89	0.45
2.	1.Greengram – Demonstration of YVMV resistant variety – IPM02-14 2. IPDM measures 3.Mechanized Line sowing with N, P, K application 4. Use of Biofertilizers	Rs 5.8 lakh	0.45	0.45	2.0	0.15
3.	1. Blackgram – Demonstration of HYV T-9 2. IPDM measures 3.Mechanized Line sowing with N, P, K application 4. Use of Biofertilizers	Rs.8 lakh	0.07	0.12	0.15	0.03
4.	1. Brinjal – Demonstration of HYV “ Arka Kesab” 2. Integrated Nutrient Management 3. IPDM measures	Rs.1.45 lakhs	0.18	0.16	0.15	0.12
5.	1. Tomato - Demonstration of HYV “ ArkaRakshak” 2. Integrated Nutrient Management 3. IPDM measures	Rs.1.8 lakhs	0.15	0.15	0.16	0.12
6.	1. Potato - Demonstration of HYV “Kufri Surya” 2. Integrated Nutrient Management 3. IPDM measures	Rs.3.5 lakhs	1.20	0.03	0.16	0.16
7.	1. Livestock - Health camp, vaccination and deworming 2. Fodder cultivation CO-5 3. Breed upgradation 4. Feed management 5. Ration Balancing	Rs.3.7 lakhs	0.86	1.23	0.25	0.25
8.	1. Poultry – Introduction of improved Breed Pallishree, Kadaknath, rainbow Rooster 2. Feed management 3. Disease management	Rs.1.6 lakhs	0.1	0.1	0.15	0.15

### Village-4

1. Name of KVK/ district: Jagatsinghpur

2. Name of villages adopted: Sankharisahi

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 10.25

(ii) Area of irrigated land (ha): 5.5

(iii) Number of water body: 04

(iv) Area of water body (ha): 1.2



- (v) Number of different livestock animals: Cow – 20, Goat - 05
- (vi) Average yield of different crops, livestock and fisheries: Paddy – 35qtl/ha, Greengram – 3.4qtl/ha, Cow – 5lit/day
- (vii) Soil status: Clay loam, sandy loam N – 177.4Kg/ha, P- 38.3Kg/ha, K- 445.1Kg/ha
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 80:40:40 in Paddy, No fertilizer application in Greengram
- (ix) Major diseases occurred in crops: Paddy – Blast, Sheath blight, BLB, Greengram – YVMV
- (x) Major diseases occurred in livestock: Cow – Mastitis
- (xi) Post-harvest management/ value addition followed, if any: Value addition to milk
- (xii) Marketing channels of products: Paddy – Co-operative society / Dealer / Mandi, Greengram – Local market, Milk - OMFED
- (xiii) Agro-based industries, if any: Nil
- (xiv) Average income of the farmer: Rs.3800/ month

**5. Possibility of involvement of ICAR Institutes:** Yes

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** Yes

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State Deptt.

**8. FPO formed or not?** No

**9. Major interventions planned:**

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	1.Paddy – Demonstration of Paddy variety “Hasanth” 2.Mechanized Transplanting & IPDM measures 3.Herbicide application	Rs 3.56 lakh	0.15	0.2	1.37	0.10
2.	1.Greengram – Demonstration of YVMV resistant variety – IPM02-14 2. IPDM measures 3.Mechanized Line sowing with N, P. K application 4. Use of Biofertilizers	Rs2.6 lakh	0.15	0.25	0.4	0.6
3.	1. Livestock - Health camp, vaccination and deworming 2. Fodder cultivation CO-5 3. Breed upgradation 4. Feed management 5. Ration Balancing	Rs.4.2 lakhs	0.61	1.15	0.10	0.10
4.	1. Poultry – Introduction of improved Breed Pallishree, Kadaknath, rainbow Rooster 2. Feed management 3. Disease management	Rs.1.6 lakhs	0.1	0.1	0.15	0.15

#### Village-5

**1. Name of KVK/ district:** Jagatsinghpur

**2. Name of villages adopted:** Ramachandrapur

**3. Number of farmers targeted:** 20

**4. Compiled baseline survey report (point wise) of the villages:**

- (i) Area of agriculture land (ha): 19.2
- (ii) Area of irrigated land (ha): 14.5
- (iii) Number of water body: 03
- (iv) Area of water body (ha): 1.4
- (v) Number of different livestock animals: Cow – 25, Goat -50, Sheep -10
- (vi) Average yield of different crops, livestock and fisheries: Paddy – 30.2qtl/ha, Greengram – 2.5qtl/ha
- (vii) Soil status: clay loam, Sandy loam, loam N – 194.1Kg/ha, P- 43.1Kg/ha, K- 468.2Kg/ha
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 80:40:40 in Paddy, No fertilizer application in Greengram
- (ix) Major diseases occurred in crops: Paddy – BLB, False smut, Blast
- (x) Major diseases occurred in livestock: FMD, Mastitis, Worm, Surra
- (xi) Post-harvest management/ value addition followed, if any: Nil
- (xii) Marketing channels of products: Paddy – Co-operative society / Dealer / Mandi, Greengram – Local market, Milk – OMFED / Door step Delivery
- (xiii) Agro-based industries, if any: Nil
- (xiv) Average income of the farmer: Rs.5500/month

**5. Possibility of involvement of ICAR Institutes:** Yes

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** Yes

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State Deptt.

**8. FPO formed or not?** No

**9. Major interventions planned:**

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	1.Paddy – Demonstration of Paddy variety Hemanth 2.Mechanized Transplanting & IPDM measures 3.Herbicide application	Rs 5.65 lakh	0.45	0.42	1.69	0.25
2.	1.Greengram – Demonstration of YVMV resistant variety – IPM02-14 2. IPDM measures 3.Mechanized Line sowing with N, P. K application 4. Use of Biofertilizers	Rs 4.7 lakh	0.5	0.7	1.0	0.2
3.	1. Brinjal – Demonstration of HYV “Arka Kesab” 2. Integrated Nutrient Management 3. IPDM measures	Rs.2.35 lakhs	0.30	0.30	0.28	0.2

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
4.	1. Tomato - Demonstration of HYV “ ArkaRakshak” 2. Integrated Nutrient Management 3. IPDM measures	Rs.2.8 lakhs	0.26	0.26	0.28	0.2
5.	Livestock - Health camp, vaccination and deworming 2. Fodder cultivation CO-5 3. Breed upgradation 4. Feed management 5. Ration Balancing	Rs.7.3 lakhs	1.62	2.5	0.40	0.40
6.	1. Poultry – Introduction of improved Breed Pallishree, Kadaknath, rainbow Rooster 2. Feed management 3. Disease management	Rs.1.8 lakhs	0.15	0.15	0.25	0.25
7.	Pisciculture	Rs.2.4 lakhs	0.2	0.2	0.15	0.15



Stocking density in Farm pond

#### 4.4 Krishi Vigyan Kendra, Cuttack

1. Name of KVK/ district: Cuttack

2. Name of villages adopted:

◆ Mangarajpur, Gobardhanpur, Biswanathapur; Badamba block

◆ Sundarda & Juanga, Niali block

3. Number of farmers targeted: 125

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 1240

(ii) Area of irrigated land (ha): 480

(iii) Number of water body: 8

(iv) Area of water body (ha): 6

(v) Number of different livestock animals: Cow, Goat, Sheep, Poultry and Duck

(vi) Average yield of different crops, livestock and fisheries:

Rice-38.5 q/ha, Green Gram-2.75 q/ha, Blackgram-2.47 q/ha,

Milk-1.7 L/day

(vii) Soil status: Red lateritic soil, alluvial soil

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: for both seasons  
nitrogen: 100 kg/ha, phosphorous: 40 kg/ha, potash: 30 kg/ha

(ix) Major diseases occurred in crops:

Sheath Blight, False Smut, Yellow Vein mosaic, Leaf folder, White Fly, Brinjal fruit and shoot borer, Gundhi Bug, BPH

(x) Major diseases occurred in livestock:

Mastitis, Tick and worm infestation, Theileria, Trypanosoma, FMD, Enterotoxaemia, PPR, Salmonellosis, MD etc.

(xi) Post-harvest management/ value addition followed, if any: Nil

(xii) Marketing channels of products:

Local market, milk co-operative and middle man

(xiii) Agro-based industries, if any: Rice mill and Oil mill

(xiv) Average income of the farmer: Rs 52,730/-

#### 5. Possibility of involvement of ICAR Institutes:

Sl. No.	Institute	Involvement
1	ICAR-National Rice Research Institute, Cuttack	Quality Paddy Seed, technological support, Package of practices
2	Regional Centre of ICAR-Central Avian Research Institute, Bhubaneswar	Quality ducklings, technological support
3	ICAR- Central Horticultural Experiment Station, Aiginia, Bhubaneswar	Quality planting material, technological support
4	ICAR-Central Institute for Women in Agriculture, Bhubaneswar	Gender based information and technologies
5	ICAR-Central Tuber Crops Research Institute, Bhubaneswar	Quality planting material, technological support

#### 6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):

-Possibility for jointly organising events or support in extension activities like training, training material, planting material, need based support for plants and livestock activities etc.

#### 7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):

- ◆ Orissa Livelihood Mission
- ◆ Pachayatiraj System
- ◆ ATMA, Cuttack
- ◆ OMFED
- ◆ OUAT, Bhubaneswar
- ◆ State Agriculture Department
- ◆ State Horticulture Department
- ◆ State Dept of Animal Husbandry, Dairying and Fisheries
- ◆ Center for Integrated Pest Management, Bhubaneswar
- ◆ Directorate of Extension Education, OUAT, Bhubaneswar
- ◆ Animal Disease Research Institute, Phulnakhra
- ◆ Soil Testing Laboratory, Jagatpur
- ◆ Central Poultry Development Organisation, Bhubaneswar

- ◆ National Horticulture Mission
- ◆ Orissa State Seed Corporation, Bhubaneswar
- ◆ IFFCO, Cuttack
- ◆ All India Radio, Cuttack
- ◆ Doordarshan

#### 8. FPO formed or not?

Will be formed after successful technological intervention

#### 9. Major interventions planned:

Capacity building of farmers and ground level extension workers

Cluster demonstrations of various technologies

Awareness camps on soil health, animal health and seed treatment etc.

Routine field visit, monitoring and surveillance

Providing critical inputs for optimization of plant and livestock health & production Formation of Farmers club and FPO

Value addition

Exposure visit

Development of Agripreneurs

Establishment of market linkage

Farmer Field School

#### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Animal Health-cum-Infertility Camps	Improvement of livestock health and fertility	1.5	1.5	1.5	1.5
2	Soil Health Card	Enhancing yield with lower input cost	0.3	0.3	0.3	0.3
3	Seed treatment campaigns	Enhance seedling protection	0.2	0.2	0.2	0.2
4	FLDs on rice varieties	Sustainable & enhanced yield	0.5	0.5	0.5	0.5
5	FLDs on Horticultural Crops including nursery management, protected cultivation, crop substitution, nutrient management etc.	Enhance Yield and income	1.5	1.5	1.5	1.5
6	FLDs on integrated nutrient management including green manuring, brown manuring, SHC based fertilizer use etc.	Enhancing yield with lower input cost	0.5	0.5	0.5	0.5
7	FLDs on integrated pest management including need based pest management	Enhance Yield and income	0.5	0.5	0.5	0.5
8	FLDs on livestock including balanced feeding, clean milk production, management & prevention of diseases, fodder production	Enhance Yield and income	1.5	1.5	1.5	1.5
9	FLDs on poultry and duckery	Enhance yield, income and nutritional security	1.0	1.0	1.0	1.0

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
10	FLDs on nutritional security	Enhance yield, income and nutritional security	0.5	0.5	0.5	0.5
11	FLDs on value addition in livestock sector	Enhance income & profit	0.5	0.5	0.5	0.5
12	FLDs on value addition	Enhance income & profit	0.5	0.5	0.5	0.5
13	FLDs on women empowerment	Drudgery reduction and better health	0	0.5	0.5	0.5
14	Promotion of ITKs, organic pesticides and herbal products for livestock	Enhance income & profit with sustainable income	0.2	0.2	0.2	0.2
15	FLDs on Farm mechanisation	Enhance income	0.2	0.2	0.2	0.2
16	FLDs on Fishery	Enhance income	0.5	0.5	0.5	0.5
17	Capacity Building	Knowledge & skill upgradation	1.0	1.5	1.5	1.5
18	Exposure visit	Seeing is believing	0.5	0.5	0	0
19	Documentation		0.2	0.2	0.2	0.4
20	Office expenses		0.25	0.25	0.25	0.25
	<b>Total</b>	<b>Enhance Income</b>	<b>11.85</b>	<b>12.85</b>	<b>12.35</b>	<b>12.55</b>

#### 4.5 Krishi Vigyan Kendra, Puri

##### Village-1

1. Name of KVK/ district: Puri

2. Name of villages adopted: Kunjara

3. Number of farmers targeted: 20 Farm family (122 farmers)

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha) : 40 ha

(ii) Area of irrigated land (ha) : 30 ha

(iii) Number of water body : 7 nos.

(iv) Area of water body (ha) : 3 ha

(v) Number of different livestock animals : Dairy-55 nos, Goatary-180 nos, Poultry-25,000

(vi) Average yield of different crops, livestock and fisheries:

Paddy – 22q/ha, Greengram – 3.8q /ha, Blackgram-3q/ha, Fish yield – 2q/ha/year, Marigold -60 q/ha flowers, Vegetable – Brinjal – 200q/ha, Coconut – 100 nos./plant/year

Milk-7lit/day/cow, Avg.wt-15kg/meat/goat, Broiler – 45 days/2kg/bird

(vii) Soil status : Sandy Loam

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 80:40:40

(ix) Major diseases occurred in crops : Paddy – Sheath blight, BPH, WBPH, Leaf folder, Greengram, Blackgram – YMV Stem borer

(x) Major diseases occurred in livestock : Cow – BQ, FMD, Goat - PPR

(xi) Post-harvest management/ value addition followed, if any: Milk products(Ghee, Paneer)

(xii) Marketing channels of products: Marketing through middle man & local vender, Hata

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: Rs 12,000/month

5. Possibility of involvement of ICAR Institutes: Yes, (NRRI, CHES, CIWA)

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Reliance Industries

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt. & KVK

8. FPO formed or not? Not

9. Major interventions planned:

- Introduction of Var – Swarna Sub-1, CR-1009 Sub-1
- Relay farming system with multiple stocking
- Awareness on INM & IPM in coconut
- Awareness on deworming & supplement feeding bypass protein
- Seed treatment in greengram and blackgram
- Apiary in coconut orchard
- Varietal evaluation in floriculture

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Introduction of Var – Swarna Sub-1, CR-1009 Sub-1. INM, IPM for leaf folder	Yield - 47 q/ha Net Income-25,000/-	0.58	0.65	0.76	0.8
2	Relay farming system with multiple stocking genetically improved rohu “Jayanti”, feeding in pond management to increase production	Production – 38 q/ha Net income – 1,80,000/-	0.6	0.7	0.8	0.8
3	Awareness on INM & IPM in coconut, introduction of hybrid variety with mulching, IPM for blackheaded caterpillar, eriophidemite	Coconut -150-200 nuts/plant	0.3	0.35	0.43	0.54
4	Awareness on deworming & supplement feeding bypass protein to cows. Vaccination, Azolla cultivation	12 lit/day/cow Net income- 77,400/-/year	0.2	0.32	0.38	0.45
5	Seed treatment in greengram and blackgram, seed treatment by <i>T. Viride</i> , seed inoculation by Rhizobium culture, INM, IPM	Yield – 4q/ha Net Income- 10,000/-	0.3	0.38	0.42	0.42
6	Apiary in coconut orchard	Yield – 5 box/20 kg honey, Net income – 6,000/-/year	0.4	0.48	0.55	0.67
7	Varietal evaluation in floriculture Var.- Seracole	Yield – 90q/ha Net Income – 50,000/ha	0.2	0.22	0.28	0.35

#### Village-2

1. Name of KVK/ district: Puri

2. Name of villages adopted: Benipur

3. Number of farmers targeted: 20 Farm family; member – 115

4. Compiled baseline survey report (point wise) of the villages:

- Area of agriculture land (ha) : 20 ha
- Area of irrigated land (ha) : 20 ha

(iii) Number of water body : 08 nos.

(iv) Area of water body (ha) : 3 ha

(v) Number of different livestock animals : Dairy-60 nos, Goatary-40 nos, Poultry-20,000

(vi) Average yield of different crops, livestock and fisheries:

Paddy – 36 q/ha, Greengram – 3 q /ha, Blackgram-2.9 q/ha, Fish yield – 4q/ha/year, Milk-4 lit/day/cow, Avg.wt-10kg/meat/goat, Broiler – 45 days/2kg/bird, Mushroom -0.8kg/bed

(vii) Soil status : Sandy Loam

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 80:40:40

(ix) Major diseases occurred in crops : Paddy – Sheath blight, BPH, WBPH, Leaf folder, Greengram, Blackgram – YMV Stem borer

(x) Major diseases occurred in livestock : Cow – BQ, FMD, Goat - PPR

(xi) Post-harvest management/ value addition followed, if any:

(xii) Marketing channels of products : Marketing through middle man & local vender

(xiii) Agro-based industries, if any : No

(xiv) Average income of the farmer : Rs.8,000/month

5. Possibility of involvement of ICAR Institutes: Yes, (NRRI, CHES, CIWA)

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Reliance Industries

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt. & KVK

8. FPO formed or not? Not

9. Major interventions planned:

- Introduction of Var – Swarna Sub-1, CR-1009 Sub-1
- Biological management of aquatic weeds
- Awareness on deworming & supplement feeding bypass protein
- Seed treatment in greengram and blackgram
- Cultivation of mushroom in agroschednet
- Goat farming
- Varietal evaluation of Vegetables

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Introduction of Var – Swarna Sub-1, CR-1009 Sub-1. INM, IPM for leaf folder	Yield - 47 q/ha Net Income-22,000/-	0.6	0.65	0.78	0.85
2	Biological management of aquatic weeds, awareness programme for pond management, introduction of improved variety – Jayanti Rohu	Production - 37.25q/ha Net income – 1,72,000/-	0.4	0.56	0.62	0.8
3	Awareness on deworming & supplement feeding bypass protein to cows. Vaccination, Azolla cultivation	12 lit/day/cow Net income- 77,400/-/year	0.2	0.34	0.38	0.42

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
4	Seed treatment in greengram and blackgram, seed treatment by <i>T. Viride</i> , seed inoculation by Rhizobium culture, INM, IPM	Yield – 4.5q/ha Net Income- 10,000/-	0.3	0.35	0.42	0.45
5	Cultivation of mushroom in agroschednet, training on hygienic mushroom cultivation, introduction of new variety OSM-11, 12	Yield – 1.2kg/bed Net Income- Rs.65/-/bed	0.42	0.46	0.58	0.78
6	Goat farming, vaccination, deworming	Weight – 6kg/kid Net Income- Rs.92,500/-/50 kids	0.3	0.35	0.42	0.45
7	Varietal evaluation of Vegetables, pointed gourd cultivation in trailing system, Var – Swarna Aloukik	Yield – 250 q/ha Net Income -	0.4	0.42	0.5	0.56

### Village-3

1. Name of KVK/ district: Puri

2. Name of villages adopted: Basudeipur

3. Number of farmers targeted: 20 Farm family; member – 110

4. Compiled baseline survey report (point wise) of the villages:

- (i) Area of agriculture land (ha) : 154 ha
- (ii) Area of irrigated land (ha) : 138 ha
- (iii) Number of water body : 14 nos.
- (iv) Area of water body (ha) : 2.8 ha
- (v) Number of different livestock animals : Dairy-180 nos, Goatary-30 nos
- (vi) Average yield of different crops, livestock and fisheries:  
Paddy – 40 q/ha, Greengram – 6 q /ha, Blackgram-5.8 q/ha, Fish yield – 13q/ha/year,  
Milk-2.5 lit/day/cow
- (vii) Soil status : Alluvial soil
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 5.1:2.7:1.0
- (ix) Major diseases occurred in crops : Paddy – Sheath blight, BPH, WBPH, Leaf folder, Greengram, Blackgram – YMV Stem borer
- (x) Major diseases occurred in livestock : Cow – BQ, FMD, Goat - PPR
- (xi) Post-harvest management/ value addition followed, if any:
- (xii) Marketing channels of products : Co-operative society & local haat
- (xiii) Agro-based industries, if any : No
- (xiv) Average income of the farmer : 98000/ year

5. Possibility of involvement of ICAR Institutes: Yes, (NRRI, CHES)

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt. & KVK

8. FPO formed or not? Not

9. Major interventions planned:

- a. Introduction of Var – Swarna Sub-1, CR-1009 Sub-1
- b. Introduction of Jayanti Rohu to substitute traditional Rohu in composite carp culture
- c. Demonstration of Java Punt (P. gonionotus) within 3-species IMC culture
- d. Awareness on deworming & supplement feeding bypass protein
- e. Seed treatment in greengram and blackgram
- f. Cultivation of mushroom in agroschednet
- g. Varietal evaluation of Vegetables

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Introduction of Var – Swarna Sub-1, CR-1009 Sub-1. INM, IPM for leaf folder	Yield - 44 q/ha Net Income-21,000/-	0.45	0.56	0.62	0.75
2	Introduction of Jayanti Rohu in place of traditional Rohu with proper feeding and scientific pond management practices, Demonstration of Java Punt (P. gonionotus) within 3-species IMC culture	Production - 38.5q/ha Net income – 1,82,000/-	0.6	0.68	0.75	0.8
3	Awareness on deworming & supplement feeding bypass protein to cows. Vaccination, Azolla cultivation	11 lit/day/cow Net income- 75,500/-/year	0.35	0.38	0.45	0.56
4	Seed treatment in greengram and blackgram, seed treatment by <i>T. Viride</i> , seed inoculation by Rhizobium culture, INM, IPM	Yield – 5.5q/ha Net Income- 12,000/-	0.45	0.56	0.62	0.7
5	Cultivation of mushroom in agroschednet, training on hygienic mushroom cultivation, introduction of new variety OSM-11, 12	Yield – 1.2kg/bed Net Income- Rs.65/-/bed	0.4	0.45	0.56	0.62
7	Varietal evaluation of Vegetables, pointed gourd cultivation in trailing system, Var – Swarna Aloukik	Yield – 250 q/ha	0.35	0.4	0.48	0.5

### Village-4

1. Name of KVK/ district: Puri

2. Name of villages adopted: Singhabrahmapur (East)

3. Number of farmers targeted: 20 Farm family - 128

4. Compiled baseline survey report (point wise) of the villages:

- (i) Area of agriculture land (ha) : 130 ha
- (ii) Area of irrigated land (ha) : 95 ha
- (iii) Number of water body : 47 nos.
- (iv) Area of water body (ha) : 3 ha
- (v) Number of different livestock animals : Cow and Buffalo- 260 nos
- (vi) Average yield of different crops, livestock and fisheries:  
Paddy – 45q/ha, Greengram – 6.5 q /ha, Blackgram-6.0 q/ha, Fish yield – 16 q/ha/year, Coconut – 35 nos./plant/year, Milk-3.5 lit/day/cow

- (vii) Soil status : Alluvial soil
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 5:2.6:1.0
- (ix) Major diseases occurred in crops : Paddy – Sheath blight, BPH, WBPH, Leaf folder, Greengram, Blackgram – YMV Stem borer
- (x) Major diseases occurred in livestock : Cow – BQ, FMD, Goat - PPR
- (xi) Post-harvest management/ value addition followed, if any: -
- (xii) Marketing channels of products : Cooperative society, middle man & local vender
- (xiii) Agro-based industries, if any: No
- (xiv) Average income of the farmer :1,40,000/year

**5. Possibility of involvement of ICAR Institutes:** Yes, (NRRI, CHES, CIFA)

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** Reliance Industries

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State Deptt. & KVK

**8. FPO formed or not?** Not

**9. Major interventions planned:**

- Introduction of Var – Swarna Sub-1, CR-1009 Sub-1
- Introduction of Amur carp in composite carp culture
- Demonstration of Floating fish feed for growth enhancement
- Awareness on INM & IPM in coconut
- Awareness on deworming & supplement feeding bypass protein
- Seed treatment in greengram and blackgram

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Introduction of Var – Swarna Sub-1, CR-1009 Sub-1. INM, IPM for leaf folder	Yield - 44 q/ha Net Income-23,000/-	0.42	0.56	0.65	0.7
2	Introduction of Amur carp in composite carp culture with scientific pond management practices	Production – 38.5 q/ha Net income – 1,85,000/-	0.5	0.65	0.72	0.8
3	Demonstration of floating fish feed by stocking yearlings of IMC and exotic carps	Production – 41 q/ha Net income – 2,10,000/-	0.35	0.45	0.56	0.6
4	Awareness on INM & IPM in coconut, introduction of hybrid variety with mulching, IPM for blackheaded caterpillar, eriophidemite	Coconut -120-170 nuts/plant	0.2	0.38	0.54	0.65
5	Awareness on deworming & supplement feeding bypass protein to cows. Vaccination, Azolla cultivation	8 lit/day/cow Net income- 65000/-year	0.3	0.35	0.5	0.58
6	Seed treatment in greengram and blackgram, seed treatment by <i>T. Viride</i> , seed inoculation by Rhizobium culture, INM, IPM	Yield – 6.5q/ha Net Income- 12,000/-	0.4	0.45	0.5	0.6

### Village-5

**1. Name of KVK/ district:** Puri

**2. Name of villages adopted:** Kantamala

**3. Number of farmers targeted:** 20 Farm family - 120

**4. Compiled baseline survey report (point wise) of the villages:**

- (i) Area of agriculture land (ha) : 80 ha
- (ii) Area of irrigated land (ha) : 20 ha
- (iii) Number of water body : 7 nos.
- (iv) Area of water body (ha) : 2 ha
- (v) Number of different livestock animals : Dairy-45 nos, Goatary-30 nos
- (vi) Average yield of different crops, livestock and fisheries:  
Paddy – 24q/ha, Greengram – 2.5q /ha, Blackgram-2.5q/ha, Coconut – 100 nos./plant/year  
Milk-7lit/day/cow, Avg.wt-15kg/meat/goat
- (vii) Soil status : Clayey Loam
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 90:45:45
- (ix) Major diseases occurred in crops : Paddy – BPH, BLB, Sheath blight, WBPH, Leaf folder, Greengram, Blackgram – YMV Stem borer, leaf eating caterpillar
- (x) Major diseases occurred in livestock : Cow – BQ, FMD, Goat - PPR
- (xi) Post-harvest management/ value addition followed, if any:
- (xii) Marketing channels of products : Marketing through middle man & local vender, Hata
- (xiii) Agro-based industries, if any: No
- (xiv) Average income of the farmer : Rs.5,600/Month

**5. Possibility of involvement of ICAR Institutes:** Yes, (NRRI, CHES, CIWA)

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** Mahindra & Mahindra

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State Deptt. & KVK

**8. FPO formed or not?** Not

**9. Major interventions planned:**

- INM & IPM in Paddy
- Relay farming system with multiple stocking
- Awareness on INM & IPM in coconut
- Awareness on deworming & supplement feeding bypass protein
- Training on scientific production of greengram and blackgram
- Value addition in milk, greengram and blackgram
- Varietal evaluation in vegetables
- Awareness on Mushroom production

#### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	INM & IPM in Paddy	Yield-44q/ha Net Income-Rs20,000/ha	0.6	0.68	0.72	0.95
2	Relay farming system with multiple stocking genetically improved rohu "Jayanti", feeding in pond management to increase production	Production – 38 q/ha Net income – 1,80,000/-	0.7	0.9	1.1	1.15
3	Awareness on INM & IPM in coconut, introduction of hybrid variety with mulching, IPM for blackheaded caterpillar, eriophidemite	Coconut -150-200 nuts/plant	0.5	0.6	0.75	0.8
4	Supplement feeding bypass protein to cows. Vaccination, Azolla cultivation	8 lit/day/cow Net income- 56,000/-/year	0.2	0.35	0.4	0.4
5	Training on scientific production of greengram and blackgram , Value addition in milk, Post harvest management in greengram and blackgram	Yield – 4q/ha Net income – 15,000/-/year	0.4	0.58	0.6	0.65
6	Commercial vegetable cultivation with varietal evaluation of Brinjal,Okra & pointed gourd	Yield-200q/ha Net Income – 1,50,000/ha	0.6	0.75	0.8	1.0
7	Awareness on Mushroom production throughout the year, value addition in oyster mushroom, vermicomposting from spent mushroom substrate	Net income- Rs.80/-/Bed	0.4	0.7	0.9	0.9

#### 4.6 Krishi Vigyan Kendra, Nayagarh

##### Village-1

1. Name of KVK/ district: Nayagarh
2. Name of villages adopted: Nachhipur
3. Number of farmers targeted: 20
4. Compiled baseline survey report (point wise) of the villages:
  - (i) Area of agriculture land (ha): 32ha
  - (ii) Area of irrigated land (ha): 32ha
  - (iii) Number of water body: 5
  - (iv) Area of water body (ha): 0.68
  - (v) Number of different livestock animals: 60
  - (vi) Average yield of different crops, livestock and fisheries:

Sl No.	Crop/Livestock	Average Yield
1	Paddy	45q/ha
2	Greengram	2.5q/ha
3	Blackgram	2.2q/ha
4	Sugarcane	50t/ha
5	Cabbage	300q/ha
6	Cauliflower	225q/ha
7	Brinjal	215q/ha
8	Tomato	250q/ha
9	Cucumber	100q/ha

Sl No.	Crop/Livestock	Average Yield
10	Bitter Gourd	112q/ha
11	Okra	90q/ha
12	Runner Bean	31.25q/ha
13	Pointed Gourd	105q/ha
14	Cow	60lt/month
15	Poultry	1.5Kg/3 Month/poultry bird

(vii) Soil status: N: Low, P: Medium, K: Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N: 160 Kg/ha, P: 18Kg/ha, K: 123Kg/ha

(ix) Major diseases occurred in crops:

Sl No.	Crop	Disease
1	Paddy	BLB, Blast, Sheathrot, Sheath blight
2	Greengram	Root rot , YMV, Powdery Mildew
3	Blackgram	Root rot and YMV, Powdery Mildew
4	Sugarcane	Red rot
5	Cabbage	Bacterial Rot, Damping off
6	Cauliflower	Bacterial rot, Damping off
7	Brinjal	Bacterial Wilt, Phomopsis blight
8	Tomato	Wilt, Leaf curl
9	Cucumber	Powdery mildew, Leaf Spot
10	Bitter Gourd	Downy mildew
11	Okra	Powdery Mildew and YMV
12	Runner Bean	Powdery Mildew
13	Pointed Gourd	Leaf Blight, Wilt, Root Knot nematode

(x) Major diseases occurred in livestock:

Cow: Foot and mouth Disease (FMD), Black quator

Poultry: Infectious Bursal, Ranikheta

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Farmers----Retailer----Consumer

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 65,000 per Annum

5. Possibility of involvement of ICAR Institutes: CIFA, NRRI

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt.

8. FPO formed or not? Not

9. Major interventions planned: No

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. In Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	INM in cole crops/ cabbage/ cauliflower.	320q/ha		0.04	-	-
2	Micro-nutrient Application in cabbage/cauliflower.	314q/ha	-	-	0.05	-
3	Ipm for control of stem boarer and BPH in paddy.	52q/ha	-	0.08	-	-
4	IDM for control of sheath blight in paddy.	51q/ha	-	0.07	-	-
5.	IDM for control of BLB and sheathrot in paddy.	59q/ha	-	-	0.06	-
6.	IDM for control wilting in brinjal.	300q/ha	-	-	-	0.04
7.	IDM for control wilting in ponted gourd	145q/ha	-	0.05	-	-
8.	Nematode management in ponted gourd	150q/ha	-	0.05	-	-
9.	IDM for control of powdery mildew in okra.	78q/ha	-	-	0.04	-
8.	IPM for control of thrips in onion.	52q/ha	-	-	-	0.03
9.	IPM for control fruit fly in Bitter gourd.	185q/ha	-	0.04	-	-
9.	CFLD on Greengram	5q/ha	-	1.0	-	-
10	Varietal Intervention in paddy	54q/ha	-	-	-	0.03
11	Paddy Transplanting using transplanters.	54q/ha	-	-	0.03	0.03
12	Weed management in paddy by using power weeder.	58q/ha	-	-	0.04	-
13	Demonstration on paddy straw mushroom cultivation.	1.2kg/bed	-	0.05	-	-
14	Demonstration on oyster mushroom cultivation	2.5 kg/bed	-	0.04	-	-
15	Weed management in brinjal	300q/ha	-	0.06	-	-
16	IPM for control of fruit and shootboarer in brinjal	300q/ha	-	0.1	-	-
17	Varietal evaluation in sugarcane	65t/ha	-	-	0.15	-
18	Demonstration on BeeKeeping	-	-	0.15	-	-
19	Weed management in paddy	52q/ha	-	-	0.05	-
20	Farmers Fair	-	-	-	1.5	-
21	Other extension activity	-	-	0.5	0.5	0.5
22	Trainings	-	-	0.4	0.4	0.4
23	Exposure visit	-	-	0.4	-	-

#### Village-2

1. Name of KVK/ district: Nayagarh
2. Name of villages adopted: Baradakhmana
3. Number of farmers targeted: 20
4. Compiled baseline survey report (point wise) of the villages:
  - (i) Area of agriculture land (ha): 48ha
  - (ii) Area of irrigated land (ha): 32ha
  - (iii) Number of water body: 1 no.of pond
  - (iv) Area of water body (ha): 3acre
  - (v) Number of different livestock animals: 75
  - (vi) Average yield of different crops, livestock and fisheries:

Sl No.	Crop/Livestock	Average Yield
1	Paddy	47q/ha
2	Greengram	3.12q/ha

Sl No.	Crop/Livestock	Average Yield
3	Blackgram	2.54q/ha
4.	onion	200q/ha
5	Cabbage	300q/ha
6	Cauliflower	225q/ha
7	Brinjal	200q/ha
8	Tomato	230q/ha
9	Cucumber	97q/ha
10	Bitter Gourd	75q/ha
11	Okra	70q/ha
12	Cow	65lt/month

(vii) Soil status: N: Low, P: Medium, K: Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

N: 167Kg/ha, P: 22Kg/ha, K: 138Kg/ha

(ix) Major diseases occurred in crops:

Sl No.	Crop	Disease
1	Paddy	BLB, Blast, Sheathrot, Sheath blight
2	Greengram	Root rot , YMV, Powdery Mildew
3	Blackgram	Root rot and YMV, Powdery Mildew
4.	pumpkin	Red rot
5	Cabbage	Bacterial Rot, Damping off
6	Cauliflower	Bacterial rot, Damping off
7	Brinjal	Bacterial Wilt, Phomopsis blight
8	Tomato	Wilt, Leaf curl, Foot rot
9	Cucumber	Powdery mildew, Leaf Spot
10	Bitter Gourd	Downy mildew
11	Okra	Powdery Mildew
12	Runner Bean	Powdery Mildew

(x) Major diseases occurred in livestock:

Cow: Foot and mouth Disease (FMD), Black quator

Goat: Foot and mouth Disease (FMD)

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Farmers---Retailer---Consumer

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 55,000 per Annum

5. Possibility of involvement of ICAR Institutes: CIFA, NRRI

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Dept.



8. FPO formed or not? Not

9. Major interventions planned: No

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	INM in cole crops/ cabbage/ cauliflower.	305q/ha		0.04	-	-
2	Micro nutrient Application in cabbage	313q/ha	-	0.05	-	-
3	Ipm for control of stem borer and BPH in paddy.	52q/ha	-	-	0.08	0.08
4	IDM for control of sheath blight in paddy.	52q/ha	-	-	-	0.07
5.	IDM for control of BLB and sheathblight in paddy.	59q/ha	-	-	-	0.06
6.	IDM for control wilting in brinjal.	115q/ha	-	0.04	-	-
7.	IDM for control of powder mildew in okra.	78q/ha	-	0.05	-	-
8.	IPM for control of thrieves in onion.	210q/ha	-	0.05	-	-
9.	IPM for control fruit fly in cucumber/ Bitter gourd.	108q/ha	-	0.04	-	-
9.	CFLD on Greengram	5q/ha	-	0.03	-	-
6	Variety Intervention in paddy	54q/ha	-	0.04	-	-
7	Paddy Transplanting using transplanters.	54q/ha	-	1.0	-	-
8	Weed management in paddy by using power weeder.	58q/ha	-	-	-	0.03
9	Demonstration on paddy straw mushroom cultivation.	1.2kg/bed	-	-	-	0.03
10	Demonstration on oyster mushroom cultivation	2.0 kg/bed	-	-	-	0.04
11	Introduction of backyard poultry	-		0.15	-	-
12	Stunted fingerlings production	-		-	0.15	-
12	Weed management in paddy	52q/ha	-	-	0.05	-
13	Demonstration on BeeKeeping	-	-	0.15	-	-
13	Farmers Fair	-	-	-	1.5	-
14	Other extension activity	-	-	0.5	0.5	0.5
15	Trainings	-	-	0.4	0.4	0.4
18	Exposure visit	-	-	-	-	0.4

### Village-3

1. Name of KVK/ district: Nayagarh

2. Name of villages adopted: Chinara

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 22.23ha

(ii) Area of irrigated land (ha): 20ha

(iii) Number of water body: 05 no. borewell, river lift

(iv) Area of water body (ha): 2.5acre

(v) Number of different livestock animals: 45

(vi) Average yield of different crops, livestock and fisheries:

Sl No.	Crop/Livestock	Average Yield
1	Paddy	43q/ha
2	Greengram	2.0q/ha

Sl No.	Crop/Livestock	Average Yield
3	Blackgram	2.2q/ha
4.	Pointed gourd	125q/ha
5	Cabbage	422q/ha
6	Cauliflower	287q/ha
7	Brinjal	113q/ha
8	Tomato	120q/ha
9	Cucumber	105q/ha
10	Bitter Gourd	75q/ha
11	Okra	70q/ha
12	Cow pea	41.23q/ha
13	Cow	62lt/month

(vii) Soil status: N: Low, P: Medium, K: Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

N: 165 Kg/ha, P: 20Kg/ha, K: 128Kg/ha

(ix) Major diseases occurred in crops:

Sl No.	Crop	Disease
1	Paddy	BLB, Blast, Sheathrot, Sheath blight
2	Greengram	Root rot , YMV, Powdery Mildew
3	Blackgram	Root rot and YMV, Powdery Mildew
4.	pumpkin	Powdery mildew, Leaf Spot
5	Cabbage	Foot Rot
6	Cauliflower	Foot rot
7	Brinjal	Bacterial Wilt, Phomopsis blight
8	Tomato	Wilt, Leaf curl, Foot rot
9	Cucumber	Powdery mildew, Leaf Spot
10	Bitter Gourd	Downy mildew
11	Okra	Powdery Mildew
12	Runner Bean	Powdery Mildew

(x) Major diseases occurred in livestock:

Cow: Foot and mouth Disease (FMD), Black quator

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Farmers---Retailer---Consumer

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 70,000 per Annum

5. Possibility of involvement of ICAR Institutes: CIFA, NRRI

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Dept.

8. FPO formed or not? Not

9. Major interventions planned: No

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	INM in cole crops/ cabbage/ cauliflower.	310q/ha		0.04	-	-
2	Micro nutrient Application in cabbage	315q/ha	-	0.05	-	-
3	Ipm for control of stem borer and BPH in paddy.	52q/ha	-	-	0.08	0.08
4	IDM for control of sheath blight in paddy.	51q/ha	-	-	-	0.07
5	IDM for control of BLB and sheathblight in paddy.	59q/ha	-	-	-	0.06
6	IDM for control wilting in brinjal.	115q/ha	-	0.04	-	-
7	IDM for control of powder mildew in okra.	78q/ha	-	0.05	-	-
8	IPM for control of thrieves in onion.	52q/ha	-	0.05	-	-
9	IPM for control fruit fly in cucumber/ Bitter gourd.	178q/ha	-	0.04	-	-
9	CFLD on Greengram	5q/ha	-	0.03	-	-
6	Variety Intervention in paddy	54q/ha	-	0.04	-	-
7	Paddy Transplanting using transplanters.	55q/ha	-	1.0	-	-
8	Weed management in paddy by using power weeder.	58q/ha	-	-	-	0.03
9	Demonstration on paddy straw mushroom cultivation.	1.5kg/bed	-	-	-	0.03
10	Demonstration on oyster mushroom cultivation	2.0 kg/bed	-	-	-	0.04
11	Introduction of backyard poultry	-		0.15	-	-
12	Stunted fingerlings production	-		-	0.15	-
12	Weed management in paddy	52q/ha	-	-	0.05	-
13	Cultivation of off season vegetables	-	-	-	1.5	-
14	Nutritional garden	-	-	-	0.1	-
15	Demonstration on BeeKeeping	-	-	0.5	0.5	0.5
16	Farmers Fair	-	-	0.5	-	-
17	Other extension activity	-	-	0.5	0.5	0.5
18	Trainings	-	-	0.4	0.4	0.4
19	Exposure visit	-	-	0.4	-	-

**Village-4**

1. Name of KVK/ district: Nayagarh

2. Name of villages adopted: Godipalli

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

- (i) Area of agriculture land (ha): 200ha
- (ii) Area of irrigated land (ha): 50ha
- (iii) Number of water body: 2 no.of pond, 40 no.dugwell
- (iv) Area of water body (ha): 3acre
- (v) Number of different livestock animals: 75
- (vi) Average yield of different crops, livestock and fisheries:

Sl No.	Crop/Livestock	Average Yield
1	Paddy	47q/ha
2	Greengram	2.0q/ha

Sl No.	Crop/Livestock	Average Yield
3	Blackgram	2.1q/ha
4	pumpkin	110q/ha
5	Cabbage	5.4q/ha
6	Cauliflower	287q/ha
7	Brinjal	113q/ha
8	Tomato	120q/ha
9	Cucumber	105q/ha
10	Bitter Gourd	90q/ha
11	Okra	70q/ha
12	Cow pea	41.23q/ha
13	Cow	65lt/month

(vii) Soil status: N: Low, P: Medium, K: Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

N: 165 Kg/ha, P: 20Kg/ha, K: 128Kg/ha

(ix) Major diseases occurred in crops:

Sl No.	Crop	Disease
1	Paddy	BLB, Blast, Sheathrot, Sheath blight
2	Greengram	Root rot , YMV, Powdery Mildew
3	Blackgram	Root rot and YMV, Powdery Mildew
4	pumpkin	Powdery mildew, Leaf Spot
5	Cabbage	Foot Rot
6	Cauliflower	Foot rot
7	Brinjal	Bacterial Wilt, Phomopsis blight
8	Tomato	Wilt, Leaf curl, Foot rot
9	Cucumber	Powdery mildew, Leaf Spot
10	Bitter Gourd	Downy mildew
11	Okra	Powdery Mildew
12	Runner Bean	Powdery Mildew

(x) Major diseases occurred in livestock:

Cow: Foot and mouth Disease (FMD), Black quator

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Farmers---Retailer---Consumer

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 70,000 per Annum

5. Possibility of involvement of ICAR Institutes: CIFA, NRRI

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt.

8. FPO formed or not? Not

9. Major interventions planned: No

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	INM in cole crops/ cabbage/ cauliflower.	305q/ha		0.04	-	-
2	Micro nutrient Application in cabbage	312q/ha	-	-	0.05	-
3	Ipm for control of stem boarer and BPH in paddy.	52q/ha	-	0.08	-	-
4	IDM for control of sheath blight in paddy.	51q/ha	-	0.07	-	-
5.	IDM for control of BLB and sheathblight in paddy.	59q/ha	-	-	0.06	-
6.	IDM for control wilting in brinjal.	115q/ha	-	-	-	0.04
7.	IDM for control of powder mildew in okra.	78q/ha	-	0.05	-	-
8.	IPM for control of thieves in onion.	52q/ha	-	0.05	-	-
9.	IPM for control fruit fly in cucumber/ Bitter gourd.	108q/ha	-	-	0.04	-
9.	CFLD on Greengram	5q/ha	-	-	-	0.03
6	Variety Intervention in paddy	54q/ha	-	0.04	-	-
7	Paddy Transplanting using transplanters.	54q/ha	-	1.0	-	-
8	Weed management in paddy by using power weeder.	58q/ha	-	-	-	0.03
9	Demonstration on paddy straw mushroom cultivation.	1.5kg/bed	-	-	0.03	0.03
10	Demonstration on oyster mushroom cultivation	2.0 kg/bed	-	-	0.04	-
11	Introduction of backyard poultry	-	-	0.05	-	-
12	Stunted fingerlings production	-	-	0.04	-	-
12	Weed management in paddy	52q/ha	-	0.06	-	-
13	Farmers Fair	-	-	0.1	-	-
14	Demonstration on BeeKeeping	-	-	0.15	-	-
15	Cultivation of off season vegetables	-	-	-	0.05	-
16	Other extension activity	-	-	0.5	0.5	0.5
17	Trainings	-	-	0.4	0.4	0.4
18	Exposure visit	-	-	0.4	-	-

#### Village-5

1. Name of KVK/ district: Nayagarh
2. Name of villages adopted: Gopapur
3. Number of farmers targeted: 20
4. Compiled baseline survey report (point wise) of the villages:
  - (i) Area of agriculture land (ha): 48ha
  - (ii) Area of irrigated land (ha): 12ha
  - (iii) Number of water body: 1 no.of pond and 1no dugwell
  - (iv) Area of water body (ha): 1acre pond
  - (v) Number of different livestock animals: 500
  - (vi) Average yield of different crops, livestock and fisheries:

Sl No.	Crop/Livestock	Average Yield
1	Paddy	47q/ha
2	Greengram	2.8/ha
3	Blackgram	2.5q/ha
4	Cabbage	5.4q/ha

Sl No.	Crop/Livestock	Average Yield
5	Cauliflower	287q/ha
6	Brinjal	113q/ha
7	Tomato	120q/ha
8	Cucumber	105q/ha
9	Bitter Gourd	75q/ha
10	Okra	70q/ha
11	Cow	65lt/month

(vii) Soil status: N: Low, P: Medium, K: Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

N: 167Kg/ha, P: 22Kg/ha, K: 138Kg/ha

(ix) Major diseases occurred in crops:

Sl No.	Crop	Disease
1	Paddy	BLB, Blast, Sheathrot, Sheath blight
2	Greengram	Root rot , YMV, Powdery Mildew
3	Blackgram	Root rot and YMV, Powdery Mildew
4.	pumpkin	Powdery mildew, Leaf Spot
5	Cabbage	Foot Rot
6	Cauliflower	Foot rot
7	Brinjal	Bacterial Wilt, Phomopsis blight
8	Tomato	Wilt, Leaf curl
9	Cucumber	Powdery mildew, Leaf Spot
10	Bitter Gourd	Downy mildew
11	Okra	Powdery Mildew
12	Runner Bean	Powdery Mildew

(x) Major diseases occurred in livestock:

Cow: Foot and mouth Disease (FMD), Black quator

Goat: Foot and mouth Disease (FMD),

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Farmers----Retailer----Consumer

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 37,000 per Annum

5. Possibility of involvement of ICAR Institutes: CIFA, NRRI

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt.

8. FPO formed or not? Not

9. Major interventions planned: No

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	INM in cole crops/ cabbage/ cauliflower.	310q/ha		0.04	-	-
2	Micro nutrient Application in cabbage	315q/ha	-	0.05	-	-
3	Ipm for control of stem borer and BPH in paddy.	52q/ha	-	-	0.08	0.08
4	IDM for control of sheath blight in paddy.	51q/ha	-	-	-	0.07
5.	IDM for control of BLB and sheathblight in paddy.	59q/ha	-	-	-	0.06
6.	IDM for control wilting in brinjal.	115q/ha	-	0.04	-	-
7.	IDM for control of powder mildew in okra.	<b>78q/ha</b>	-	0.05	-	-
8.	IPM for control of thrips in onion.	52q/ha	-	0.05	-	-
9.	IPM for control fruit fly in cucumber/ Bitter gourd.	<b>175q/ha</b>	-	0.04	-	-
9.	CFLD on Greengram	5q/ha	-	0.03	-	-
6	Variety Intervention in paddy	54q/ha	-	<b>0.04</b>	-	-
7	Paddy Transplanting using transplanters.	<b>54q/ha</b>	-	1.0	-	-
8	Weed management in paddy by using power weeder.	<b>58q/ha</b>	-	-	-	0.03
9	Demonstration on paddy straw mushroom cultivation.	<b>1.1kg/bed</b>	-	-	-	0.03
10	Demonstration on oyster mushroom cultivation	<b>2.0 kg/bed</b>	-	-	-	0.04
11	Introduction of backyard poultry	-		0.15	-	-
12	Stunted fingerlings production	-		-	0.15	-
12	Weed management in paddy	52q/ha	-	-	0.05	-
13	Farmers Fair	-	-	-	1.5	-
14	Other extension activity	-	-	0.5	0.5	0.5
15	Trainings	-	-	0.4	0.4	0.4
18	Exposure visit	-	-	-	0.4	-



Line transplanting

#### 4.7 Krishi Vigyan Kendra, Ganjam-I

##### Village-1

1. Name of KVK/ district: Ganjam
2. Name of village adopted: Gajapadar
3. Number of farmers targeted: 05
4. Compiled baseline survey report (point wise) of the villages:
  - (i) Area of agriculture land (ha): 25 Ha
  - (ii) Area of irrigated land (ha): 15 Ha (shallow well irrigated)

- (iii) Number of water body: 01
- (iv) Area of water body (ha): 0.4 Ha
- (v) Number of different livestock animals: cattle-250, goat/sheep-200, poultry 5000
- (vi) Average yield of different crops, livestock and fisheries:  
Paddy- 33q/ha, Vegetable-165 q/ha, Groundnut-15q/ha, greengram-3.8q/ha, milk-0.8lit/cattle
- (vii) Soil status: - sandy loam and sandy clay loam
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 130-70-60 kg/ha
- (ix) Major diseases occurred in crops: Blast & BLB disease, BPH, leaf folder, stem borer in Paddy, Bacterial and Fungal Wilt, Leaf curl, in vegetables, shoot and fruit borer in brinjal, YMV in green gram,
- (x) Major diseases occurred in livestock: FMD in Cattle, PPR in Goats; Ranikhet and Fowl pox in poultry birds.
- (xi) Post-harvest management/ value addition followed :grading of vegetable by middle man,
- (xii) Marketing channels of products: Through middlemen or Direct marketing
- (xiii) Agro-based industries : No
- (xiv) Average income of the farmer: Rs86,000/- year

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State department

8. FPO formed or not -No

9. Major interventions planned:

- IWM and INM in rice and Vegetables.
- Introduction of high yield and hybrid variety of vegetable
- IPM in rice, vegetable, groundnut and green gram
- Application of micronutrients in vegetables
- Poultry breed replacement with dual purpose improved colour birds - 30 nos of poultry chicks of Vanaraj breed/ family with timely vaccination
- Indigenous cattle feeding management with azolla and mineral mixture with timely deworming and vaccination
- Health and Nutritional management of goat/sheep with deworming, vaccination, mineral mixture and concentrate feed.
- Mushroom cultivation round the year for income generation – 10 beds / family per month with scientific package of practices.
- Stocking of IMC in appropriate proportion and use of low cost farm made feed

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	INM IWM& IPMin Rice	70,000/ha	0.2	0.2	0.3	0.3
2	Introduction new variety in greengram with INM and IPM	30000/ha	0.1	0.1	0.15	0.15

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
3	Introduction variety in groundnut with IPM	80000/ha	0.25	0.25	0.3	0.3
4	HYV, INM, IPM& IWM in Vegetables	168000/ha	0.3	0.3	0.35	0.35
5	Poultry bird - 30 birds/family	30,000/-	0.3	0.3	0.3	0.3
6	Nutritional management in goat	30,000/-	0.2	0.2	0.2	0.2
7	Nutritional management in cow	15,000/-	0.015	0.02	0.02	0.02
8	Mushroom spawn - 60nos/family (10 beds per month for 6 months)	18,000/-	0.045	0.045	0.045	0.045
9	Pisciculture in community pond	200000/-	0.2	0.2	0.2	0.2

The Expected Outcome and the Budget requirement is for 05 nos. of targeted farmers of the village

### Village-2

1. Name of KVK/ district: Ganjam

2. Name of village adopted: Patharapalli

3. Number of farmers targeted: 05

4. Compiled baseline survey report (point wise) of the villages:

- Area of agriculture land (ha): 105Ha
- Area of irrigated land (ha): 75Ha
- Number of water body: 05
- Area of water body (ha): 8 Ha
- Number of different livestock animals: Cattle 100, Buffalo 200, sheep/goat 300, poultry 100
- Average yield of different crops, livestock and fisheries: Paddy- 33 q/ha, Greengram-04q/ha, Groundnut-17q/ha, Brinjal-175q/ha, Tomato-180q/ha, Cucumber-10q/ha, Cowpea-140q/ha, Fishery 6.5q/ha, milk 2 lit/cattle
- Soil status: - Sandy loam, Clay loam
- Average nutrients (nitrogen, phosphorous, potash, etc) used: 140-80-70 kg/ha
- Major diseases occurred in crops: Blast & BLB disease, BPH, leaf folder, stem borer in Paddy, Bacterial and Fungal Wilt, Leaf curl, in vegetables, shoot and fruit borer in brinjal, Tomato fruit borer, YMV & Scale insect in Cucumber, YMV in green gram & Cowpea
- Major diseases occurred in livestock: FMD, BQ, HS in Cattle, PPR and Goats; Ranikhet in poultry birds.
- Post-harvest management/ value addition followed : Local practise
- Marketing channels of products: Through middlemen or Direct marketing
- Agro-based industries : No
- Average income of the farmer: Rs1,10,000/- year

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State department

8. FPO formed or not -No

9. Major interventions planned:

- IWM and INM in rice and Vegetables.
- Introduction of high yield and hybrid variety of vegetable
- IPM in rice, vegetable, groundnut and green gram
- Application of micronutrients in vegetables
- Poultry breed replacement with dual purpose improved colour birds - 30 nos of poultry chicks of Vanaraj breed/ family with timely vaccination
- Indigenous cattle feeding management with azolla and mineral mixture with timely deworming and vaccination
- Health and Nutritional management of goat/sheep with deworming, vaccination, mineral mixture and concentrate feed.
- Mushroom cultivation round the year for income generation – 10 beds / family per month with scientific package of practices.
- Pisciculture in community pond
- Yearlings production practise

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	INM IWM & IPM in Rice	70,000/ha	0.2	0.2	0.3	0.3
2	Introduction new variety in green gram with INM and IPM	30000/ha	0.1	0.1	0.15	0.15
3	Introduction variety in groundnut with IPM	80000/ha	0.25	0.25	0.3	0.3
4	HYV, INM, IPM & IWM in Vegetables	168000/ha	0.3	0.3	0.35	0.35
5	Poultry bird - 30 birds/family	30,000/-	0.3	0.3	0.3	0.3
6	Nutritional management in goat	30,000/-	0.2	0.2	0.2	0.2
7	Nutritional management in cow	15,000/-	0.015	0.02	0.02	0.02
8	Mushroom spawn - 60nos/family (10 beds per month for 6 months)	18,000/-	0.045	0.045	0.045	0.045
9	Pisciculture in community pond	150000/-	0.4	0.4	0.5	0.5
10	Yearlings production practise	200000/-	0.35	0.35	0.45	0.45

The Expected Outcome and the Budget requirement is for 05 nos. of targeted farmers of the village

### Village-3

1. Name of KVK/ district: Ganjam

2. Name of village adopted: Ekagharia

3. Number of farmers targeted: 05

4. Compiled baseline survey report (point wise) of the villages:

- Area of agriculture land (ha): 110 Ha
- Area of irrigated land (ha): 80 Ha
- Number of water body: 05
- Area of water body (ha): 0.4 Ha

- (v) Number of different livestock animals: cattle-220, sheep/goat-80, poultry-400
- (vi) Average yield of different crops, livestock and fisheries: (Sugarcane, Paddy, Greengram, Brinjal, tamato, sweet potato)  
Sugarcane-160t/ha,Paddy- 34q/ha, greengram-4.2q/ha,Vegetable-180 q/ha,Sweet potato-190q/ha.cat-  
tle-0.8lit/cow,
- (vii) Soil status: - Sandy clay loam,Sandy loam
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 110-65-55 kg/ha
- (ix) Major diseases occurred in crops:Red rot , Stem borer,Sucking pests in Sugarcane,Blast& BLB in Paddy, Leaf Blight, Bacterial and Fungal Wilt in vegetable,Shoot&Fruit borer in Brinjal, Tomato fruit borer, Sucking pests & weevil in Sweet potato,YMV in Greengram
- (x) Major diseases occurred in livestock: FMD, BQ in Cattle and PPR inGoats; Ranikhet in poultry birds.
- (xi) Post-harvest management/ value addition followed :
- (xii) Marketing channels of products: Through middlemen or Direct marketing
- (xiii) Agro-based industries : No
- (xiv) Average income of the farmer:Rs1,05,000/- year

**5. Possibility of involvement of ICAR Institutes: Yes**

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill &Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes**

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State department

**8. FPO formed or not -No**

**9. Major interventions planned:**

- IWM and INM in rice and Vegetables.
- HYV of Sugarcane with IPM ptactices
- Introduction of high yield and hybrid variety of vegetable
- IPM in rice, vegetable , groundnut and green gram
- Application of micronutrients in vegetables
- Poultry breed replacement with dual purpose improved colour birds - 30 nos of poultry chicks of Vanaraj breed/ family with timely vaccination
- Indigenous cattle feeding management with azolla and mineral mixture with timely deworming and vaccination
- Health and Nutritional management of goat/sheep with deworming, vaccination, mineral mixture and concentrate feed.
- Mushroom cultivation round the year for income generation – 10 beds / family per month with scientific package of practices.
- Pisciculture in farm pond

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	HYV of Sugarcane with IPM	2,40,000	0.5	0.5	0.5	0.5
2	INM IWM & IPM in Rice	70,000/ha	0.2	0.2	0.3	0.3
3	Introduction new variety in green gram with INM and IPM	30000/ha	0.1	0.1	0.15	0.15
4	Introduction variety in groundnut with IPM	80000/ha	0.25	0.25	0.3	0.3
5	HYV, INM, IPM & IWM in Vegetables	168000/ha	0.3	0.3	0.35	0.35
6	Poultry bird - 30 birds/family	30,000/-	0.3	0.3	0.3	0.3
7	Nutritional management in goat	30,000/-	0.2	0.2	0.2	0.2
8	Nutritional management in cow	15,000/-	0.015	0.02	0.02	0.02
9	Mushroom spawn - 60nos/family (10 beds per month for 6 months)	18,000/-	0.045	0.045	0.045	0.045
10	Pisciculture in Farm pond with floating feed management	35000/-	0.15	0.15	0.15	0.15

The Expected Outcome and the Budget requirement is for 05 nos. of targeted farmers of the village

#### **Village-4**

**1.Name of KVK/ district:** Ganjam

**2.Name of village adopted:** Hatigada

**3.Number of farmers targeted:** 05

**4.Compiled baseline survey report (point wise) of the villages:**

- (i) Area of agriculture land (ha): 80 Ha
- (ii) Area of irrigated land (ha): 54 Ha
- (iii) Number of water body: 02
- (iv) Area of water body (ha): 1.6 Ha
- (v) Number of different livestock animals: cattle-440, Bullock-220, buffalo-70, goat/sheep-1100
- (vi) Average yield of different crops, livestock and fisheries: (Paddy- 32 q/ha, Groundnut 12q/ha, vegetable-170q/ha, Green gram -4q/ha, Avg milk production-2lit, Avg fish production 625q/ha
- (vii) Soil status: - Sandyloam, Sandy clay loam
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 140-70-60 kg/ha
- (ix) Major diseases occurred in crops : Blast & BLB disease, BPH, leaf folder, stem borer in Paddy, Bacterial and Fungal Wilt, Leaf curl, in vegetables, shoot and fruit borer in brinjal, YMV in green gram, Tomato fruit borer,Diamond back moth in Cabbage & Cauliflower
- (x) Major diseases occurred in livestock: FMD in Cattle, PPR in Goats; Ranikhet and Fowl pox in poultry birds.
- (xi) Post-harvest management/ value addition followed :
- (xii) Marketing channels of products: Through middlemen or Direct marketing
- (xiii) Agro-based industries : No
- (xiv) Average income of the farmer: Rs 90,000/- year

**5. Possibility of involvement of ICAR Institutes: Yes**

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill &Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes**

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State department

8. FPO formed or not -No

9. Major interventions planned:

- IWM and INM in rice and Vegetables.
- Introduction of high yield and hybrid variety of vegetable
- IPM in rice, vegetable, groundnut and green gram
- Application of micronutrients in vegetables
- Poultry breed replacement with dual purpose improved colour birds - 10 nos of poultry chicks of Vanaraj breed/ family with timely vaccination
- Indigenous cattle feeding management with azolla and mineral mixture with timely deworming and vaccination
- Health and Nutritional management of goat/sheep with deworming, vaccination, mineral mixture and concentrate feed.
- Mushroom cultivation round the year for income generation – 10 beds / family per month with scientific package of practices.
- Stocking of IMC in appropriate proportion and use of floating fish feed for better yield

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	INM IWM & IPM in Rice	70,000/ha	0.2	0.2	0.3	0.3
2	Introduction new variety in green gram with INM and IPM	30000/ha	0.1	0.1	0.15	0.15
3	Introduction variety in groundnut with IPM	80000/ha	0.25	0.25	0.3	0.3
4	HYV, INM, IPM & IWM in Vegetables	168000/ha	0.3	0.3	0.35	0.35
5	Nutritional management in goat	30,000/-	0.2	0.2	0.2	0.2
6	Nutritional management in cow	15,000/-	0.015	0.02	0.02	0.02
7	Mushroom spawn - 60nos/family (10 beds per month for 6 months)	18,000/-	0.045	0.045	0.045	0.045
8	Pisciculture in community pond	150000/-	0.4	0.4	0.5	0.5

The Expected Outcome and the Budget requirement is for 05 nos. of targeted farmers of the village

#### 4.8 Krishi Vigyan Kendra, Ganjam II

##### Village-1

1. Name of KVK/ district: Ganjam

2. Name of villages adopted: Dankari

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

- (i) Area of agriculture land (ha): 120 ha  
(ii) Area of irrigated land (ha): 35ha  
(iii) Number of water body: 7 No  
(iv) Area of water body (ha): 3.2 ha

(v) Number of different livestock animals:

Desi cow-60; Buffalo-8; Desi Poultry bird-200

(vi) Average yield of different crops, livestock and fisheries:

Crop	Major variety	Average Yield (q/ha)
Cereals		
Paddy	Swarna Sub-1, Masoori, Pooja, Basudha	30-32q/ha
Raagi	Budha Mandia, Bhairabi	7-8 q/ha
maize	hybrid	10-12q/ha
Pulses		
Green gram	Local Chaiti, PU-31	6-7 q/ha
Black gram	Local Chaitali, Kartika	4-5 q/ha
Oil seeds		
Ground nut	TMV-2, K-6	18-20 q/ha
Vegetables		
Chilli	Daya	220-250 q/ha
Brinjal	Hybrid, VNR	250-300q/ha
Tomato	Ameli Chiranjivi, laxmi	220-230 q/ha
Cauliflower	Hybrid	130-140 q/ha
Cabbage	Hybrid	150-160 q/ha
Cucurbits	pointed gourd, ridge gourd, bittergourd, cucumber	150-250q/ha
Livestock		
Cow	Desi	2-4 lt/day
Poultry	Desi and Vanaraja	Meat-1.5-2.5 kg/bird
Fish	Weed fishes and wild catfish	practicing fish culture in village communitypond

(vii) Soil status: N-Low,P-Low, K-Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N-60kg, P<sub>2</sub>O<sub>5</sub>-35kg, K<sub>2</sub>O-

(ix) Major diseases occurred in crops:

Crop	Major Diseases
Cereals	
Paddy	Sheath blight, Blast, BLB, BPH, Leaf folder, Stem borer
Raagi	Blast, blight, leaf spot
Pulses	
Green gram	YMV, Aphid, Sucking pest
Black gram	YMV, Pod borer, Powdery mildew
Oil seeds	
Ground nut	Wilting, Tikka, Bihari hairy caterpillar, Sucking pest
Vegetables	
Chilli	Wilting, Dieback, Leaf curl, Aphid
Pointed gourd	Rootrot, Fruit fly, Scale insect
Brinjal	Wilting, Fruit & Shoot borer, blight
Tomato	Wilting, Fruit rot, Blight, Stem borer
Cauliflower	Wilting, Head borer, DMB
Cabbage	Club root, leaf spot, Damping off

Crop	Major Diseases
Colocasia	Wilting, blight
Cucurbits	YMV, Beetle, Fruit fly, Downey mildew

(x) Major diseases occurred in livestock:

Livestock	Major Diseases
Cow	FMD, Ring worm, Mastitis, Foot rot, Milk fever
Poultry	New castle disease, Fowl Cholera
Fish	EUS, Argulosis, Fin rot & tail rot

(xi) Post-harvest management/ value addition followed, if any:

- Storage of pulses in locally made basket called Puduka with the use of ITKs like use of Mustard oil, Leaves of Neem and Begunia (*Vitex negundo*), Sun drying or semi heat treatment.

Value addition:

- Badhi and papad making from cereals and pulses for own consumption
- Pickle preparation from vegetables like chilli, Tomato, Drumstick, Mango, Lemon etc for own consumption.
- Agarbati making and preparation of processed value added products from pulses and cereals like Papad, Badhi etc. by the SHGs.

(xii) Marketing channels of products:

- Direct selling in the digapahandi market, sending vegetables to berhampur market
- Marketing through the commission agent
- Selling in the Society (Mandi) i.e. Paddy, G. Nut

(xiii) Agro-based industries, if any: Nil

(xiv) Average income of the farmer: Rs. 8,000-10,000/- per month

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Dept of Agriculture, Horticulture, Soil conservation, Irrigation, AH&VS

8. FPO formed or not? No

9. Major interventions planned:

Crop/Enterprise	Thematic area	Possible interventions and suggested measures
Rice	Varietal replacement	Introduction of HYV, hybrid rice .
	INM	Soil test based nutrient management.
	IPM and IDM	Biological and chemical control of diseases and pests.
	Weed management	Introduction of new herbicides
pulses	Varietal replacement	Introduction of HYV
Vegetables	Varietal replacement	Highyielding and hybrid varities of Vegetables like Brinjal, Tomato, cowpea, cauliflower and cabbage.
	INM	INM in vegetables
	IPM and IDM	IPM and IDM in brinjal, tomato, bitter gourd , cauliflower, cowpea, cabbage,chilli.
	Production and management	Introduction of different systems of cultivation like trellis system, intercropping etc. Better nursery management Introduction of poly house for Off-season high valued vegetable nursery and cultivation.

Crop/Enterprise	Thematic area	Possible interventions and suggested measures
Floriculture	Production and management	Introduction of year round production of flowers such as marigold and gladioli
Organic inputs	Organic farming	Introduction of vermicompost units.
	Value addition	Value addition in vegetables like tomato .chilli
Allied activities	Small scale income generation	Introduction of mushroom cultivation Nutritional security of farmers family Drudgery reduction
	Home stead	Scope for back yard poultry rearing and management
Animal science		Increase in milk yield of desi cows
	Composite pisciculture	Modified extensive methods of composite pisciculture in village community tank
Pond based Farming system	Feed management	Demonstration on use of floating pelleted feed in community pond
	Disease management	Disease management in pisciculture

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
Rain-fed Up Land	<b>Rice (Khandagiri)-Fallow</b> 18.4 q/ha	Rs. 7589				
(1 <sup>st</sup> year )	Recommened intervention • Introduction of Variety: Satyabhama/Sahbhagi • RDF 60:30:30 kg NPK kg/ha	22 q/ha (19.5%)	base year	(Rs.14597)	-	-
(2 <sup>nd</sup> year)	• Introduction of Variety: Satyabhama/Sahbhagi • RDF 60:30:30 kg NPK kg/ha • IWM in paddy- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT	28 q/ha (27.2%)		-	(Rs.20450)	-
(3 <sup>rd</sup> year)	• Variety: Satyabhama/Sahbhagi • RDF 60:30:30 kg NPK kg/ha • Line transplanting of paddy and Seed treatment with Vitavax power 1.5 gm/kg of seed/ Trichodermaviride 5gm/kg Line sowing behind the plough • IDM/IPM/INM management in transplanted rice	30q/ha		-	-	26800
Medium land	<b>Rice- Pulses</b> <b>Paddy(Lalat)+ G.gram- (28 q/ha+ 2.5 q/ha)</b>	(Rs.14000 + (Rs.9950)				
1 <sup>st</sup> year	Recommened intervention • Introduction of Bph tolerant variety hassant • RDF 60:30:30 kg NPK kg/ha • INM IN RICE • Greengram HYV-TARM-1 • Application STBF NPK(25-40-20) +S(40 kg/Ha)	36 q/ha, from paddy (28.5%) + 4.4 q/ha from G.gram (76%)	base year	44200 =(Rs.25600/ha, from paddy + Rs.18600/ha from G.gram)	-	-



Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Line transplanting of paddy</li> <li>INM in rice</li> <li>Weed management in paddy-Pre-emergence weedicides:- Londax power (Bensulfuronmethyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergence Byspyrabic sodium 200 ml per ha 25 DAT/</li> <li>IDM/IPM in rice</li> <li>Variety- IPM 02-3/ IPM 02-14in Greengram</li> <li>Seed treatment with Vitavax power 1.5 gm/kg of seed/ Trichoderma viride 5gm/kg</li> <li>seed inoculation with Rhizobium culture 20 gm/kg of seed</li> <li>ipm in g. gram</li> </ul>	42 q/ha from paddy(16.6 %) 5.4 q/ha from G.gram (22.7%)		-	50800/ha=29400/ha, from paddy +21400/ha from G.gram =	-
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Soil test based nutrient management in hybrid rice</li> <li>Micronutrient application as per soil test results</li> <li>Variety- IPM 02-3/ IPM 02-14in Greengram</li> <li>Line sowing of Greengram by seed cum fertiliser drill</li> <li>Seed inoculation with Rhizobium culture 20 gm/kg of seed and 50 gm Phosphoculture per one kg of seed and 0.3 gm sodium molybdate</li> <li>ipm in g. gram</li> </ul>	52 q/ha from paddy(23.8%) 6.1q/ha from G.gram (12.9%)		-	-	57200/ha = (Rs.33000/ha, from paddy + Rs.24200/ha from G.gram)
	<b>Rice- vegetable</b>	(Rs.14800+(Rs.31345)				
1 <sup>st</sup> yr	<ul style="list-style-type: none"> <li>Introduction of Bph tolerant variety hassant</li> <li>RDF 60:30:30 kg NPK kg/ha</li> <li>Introduction of new disease resistant varieties of vegetables with proper package and practices</li> </ul>	37q/ha from paddy(19.3%) 102 q/ha from vegetables (34.2%)	63900/ha =Rs.22200/ha, from paddy + 41700/ha from vegetables)	base year		
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Cultivation of Bph tolerant variety hassant</li> <li>Line transplanting of paddy</li> <li>Weed management in paddy- Pre-emergence weedicides:- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergence Byspyrabic sodium 200 ml per ha 25 DAT</li> <li>Crop diversification- with improved varieties of vegetables</li> <li>IPM in brinjal/ tomat/ cauliflower.cowpea</li> </ul>	43q/ha from paddy (16.21%) 128 q/ha from vegetables (25.4%)			80000/ha = (Rs.27800/ha, from paddy +52200/ha from vegetables)=	-
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Soil test based nutrient management in rice and Micronutrient application as per soil test results</li> <li>Crop diversification- with improved varieties of vegetables</li> <li>Application of growth regulator in vegetables</li> <li>IDM in brinjal/ tomato/cauliflower.cowpea</li> </ul>			-	-	110000/ha = (Rs.32000/ha, from paddy +68000/ha from vegetables)

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
Low land	Rice(Pooja)- 32 q/ha					
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Cultivation of rice Var- Swarna Sub-1</li> <li>Seed treatment with Vitavax power</li> <li>RDF of NPK 80:40:40 kg/ha</li> </ul>	37 q/ha	base year	16000	-	-
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Line transplanting of paddy</li> <li>Weed management in paddy- Pre-emergence weedicides:- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergence Byspyrabic sodium 200 ml per ha 25 DAT/</li> </ul>	41 q/ha		-	20000	-
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Soil test based nutrient management in rice</li> <li>Micronutrient application as per soil test results</li> <li>Market linkage</li> </ul>	45 q/ha		-	-	25000
	<b>Allied activities</b>					
	<b>Deshi cattle- 65 lit / month</b> (Rs.1500)					
1 <sup>st</sup> year	Azolla cultivation for supplementary feed (20%) increase milk yield up to 0.5-1lit/ per day.	85 lit/Month	base year	Rs.3500/ unit		
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Azolla supplementary feed (20%) increase milk yield up to 1-1.5lit/ per day.</li> <li>Supplementation of vitamin mineral mixture@30gm/meal</li> <li>Fodder Cultivation var. Hybrid nappier var. CO-4</li> </ul>	100lit/Month			Rs. 4250 per unit	
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Supplementation of vitamin mineral mixture@30gm/meal</li> <li>Management of Hybrid Napier</li> <li>Value addition of milk</li> </ul>	115lit/Month				5000per unit
	<b>Poultry birds- (Rs. 3800)</b>					
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry (palishree)</li> <li>Vaccination of birds (Laasota +Gumber)</li> <li>Feed management</li> </ul>	Net Income-Rs. 6,250/-		75000		
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry (kadaknath/palishree)</li> <li>Vaccination of birds (Laasota+Gumber)</li> <li>Supplementary feeding with azolla</li> <li>Feed management</li> </ul>	Net Income-Rs. 7750/-			78000	
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry 10 nos(palishree) with proper vaccination (Lassota+ Gumber)</li> <li>Supplementary feeding with azolla</li> <li>Calcium supplementation to birds</li> </ul>	Net Income-Rs.10,500/-				80000
Fishery	<ul style="list-style-type: none"> <li>IMC spawn and fry in ponds</li> <li>Productivity 12 q/ha</li> </ul>					

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1 <sup>st</sup> year	• Stocking of IMC (Catla, Rohu, Mrigal) and Exotic carp (C. carp & Grass carp) fingerlings @7,500nos/ha with a ratio 25:35:20:10:10 .	17 q/ha, (41.6% increase)	base year	37500/ha (Seed – Fingerlings (100 mm above)		
2 <sup>nd</sup> year	• Intercropping of java punti @ 2500 nos/ha in 3 species carp culture (SD @ 7,500 nos /ha at a ratio of 30:40:30 of Catla, Rohu and Mrigal). Harvesting of Java punti within 4-5 months. • Pond fertilization with RCD, urea & SSP.	22 q/ha. (29.4%)		67500/ha (seed+ pond fertilization + java punti)		
3 <sup>rd</sup> year	• Stocking of IMC (Catla, Rohu, Mrigal) and Exotic carp (C. carp & Grass carp) fingerlings @7,500nos/ha with a ratio 25:35:20:10:10 . • Intercropping of java punti @ 2500 nos/ha in 3 species carp culture • Feed management in community pond					1,41,5000/ha

## Village-2

1. Name of KVK/ district: Ganjam

2. Name of villages adopted: Badagaon

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 40 ha

(ii) Area of irrigated land (ha): 40 ha

(iii) Number of water body: 1 No.

(iv) Area of water body (ha): 16 ha

(v) Number of different livestock animals:

Desi cow-70; Bullock-10 pair; Desi Poultry bird-100

(vi) Average yield of different crops, livestock and fisheries:

Crop	Major variety	Average Yield (q/ha)
<b>Cereals</b>		
Paddy	Masoori , Pooja , MTU-1075	32-37 q/ha
<b>Vegetables</b>		
Brinjal	Hybrid,utkal	100-120 q/ha
Cauliflower	Hybrid	90-110 q/ha
Cabbage	Hybrid	100-110 q/ha
Cowpea	VNR	40-60 q/ha
Chilli	Daya	120-150 q/ha
Tomato	Laxmi Chiranjivi, Ruby	220-230 q/ha
Bitter gourd	Priya, VNR	100-120 q/ha
Cucumber	VNR	
Livestock		

Crop	Major variety	Average Yield (q/ha)
Cow	Desi	2-3 lt/day
Poultry	Desi	Meat-0.8-1.2 kg/bird

(vii) Soil status:

Parameter	Status
pH	Acidic
Nitrogen	Low
Phosphorus	Low
Potassium	Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

Parameter	kg/ha
N	50
P <sub>2</sub> O <sub>5</sub>	30
K <sub>2</sub> O	35

(ix) Major diseases and pests occurred in crops:

Crop	Major Diseases
<b>Cereals</b>	
Paddy	Blast, BLB, BPH, Sheath blight, Stem borer
<b>Vegetables</b>	
Chilli	Wilting, Leaf curl, Aphid
Brinjal	Wilting, Fruit & Shoot borer, blight
Tomato	Wilting, Fruit rot, Blight
Cauliflower	Leaf webber , caterpillar, aphid
Cabbage	White fly, white caterpillar , aphid
Bitter gourd	Beetle, damping off
Cowpea	Root rot , damping off, fusarium wilt
Cucumber	Fusarium wilt , aphid,, powdery mildew

(x) Major diseases occurred in livestock:

Livestock	
Cow	Ring worm, Foot rot, Milk fever, Foot and mouth disease
Poultry	New castle disease, Fowl Cholera

(xi) Post-harvest management/ value addition followed, if any: Nil

(xii) Marketing channels of products:

- Direct selling in the Chikiti market
- Marketing through the middleman
- Selling in the Society (Mandi)

(xiii) Agro-based industries, if any: Nil

(xiv) Average income of the farmer: Rs. 2000 to 4000 per month

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Dept of Agriculture, Horticulture, Soil conservation, Irrigation, AH&VS

8. FPO formed or not? No

9. Major interventions planned:

Crop/Enterprise	Thematic area	Possible interventions and suggested measures
Rice	Varietal replacement	Introduction of HYV, hybrid rice .
	INM	Soil test based nutrient management.
	IPM and IDM	Biological and chemical control of diseases and pests.
	Weed management	
Vegetables	Varietal replacement	Vegetables like Brinjal, Tomato, cowpea, cauliflower and cabbage.
	INM	INM in brinjal ,tomato, bitter gourd , cauliflower, cowpea, cabbage , chill.
	IPM and IDM	IPM and IDM in brinjal, tomato, bitter gourd , cauliflower, cowpea, cabbage,chilli.
	Production and management	Introduction of different systems of cultivation like trails system, intercropping etc. Better nursery management Introduction of poly house for Off-season high valued vegetable nursery and cultivation.
Floriculture	Production and management	Introduction of year round production of flowers such as marigold and gladioli
Organic inputs	Organic farming	Introduction of vermicompost units.
Home Science	Value addition	Value addition in vegetables like tomato .
	Small scale income generation	Introduction of mushroom cultivation Nutritional security of farmers family Drudgery reduction
Animal science	Production and management	Scope for back yard poultry rearing and management
		Increase in milk yield of desi cows

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
Up land	Rice -Fallow cropping system, Rice(Khandagiri)-Fallow 18 q/ha					
(1 <sup>st</sup> year )	<b>Recommended intervention</b> • Introduction of Variety: Satyabhama/Sahbhagi • RDF 60:30:30 kg NPK kg/ha	24q/ha	Base year	Rs15000/-	-	-
(2 <sup>nd</sup> year)	• Introduction of Variety: Satyabhama/Sahbhagi • RDF 60:30:30 kg NPK kg/ha • IWM in paddy- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT	28q/ha	Base year	-	18500/-	-
(3 <sup>rd</sup> year)	• Variety: Satyabhama/Sahbhagi • RDF 60:30:30 kg NPK kg/ha • Line transplanting of paddy and Seed treatment with Vitavax power 1.5 gm/kg of seed/ Trichodermaviride 5gm/kg Line sowing behind the plough • IDM/IPM/INM management in transplanted rice	30q/ha	Base year	-	-	25000/-
Medium land	<b>Rice- vegetable</b> Paddy(Swrna)+ vegetable( local varies) (33q/ha+ 70q/ha)					

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1 <sup>st</sup> year	• Introduction of BPH tolerant variety hassant. • RDF 80:40:40 kg NPK kg/ha • Introduction of new disease resistant varieties of vegetables with proper package and practices	38q/ha from paddy and 120 q/ha from vegetables	Base year	Rs 60000/- (1 ha rice+1ha vegetables)		
2 <sup>nd</sup> year	Cultivation of BPH tolerant variety hassant • Line transplanting of paddy • Weed management in paddy- Pre-emergence weedicide:- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergence Byspyrubic sodium 200 ml per ha 25 DAT • Crop diversification- with improved varieties of vegetables • IPM in brinjal/ tomato/cauliflower/cowpea	43q/ha from paddy 128 q/ha from vegetables			Rs 80000/- (1 ha rice+1ha vegetables)	-
3 <sup>rd</sup> year	• Soil test based nutrient management in rice and Micronutrient application as per soil test results • Crop diversification- with improved varieties of vegetables • Application of growth regulator in vegetables • IDM in brinjal/ tomato/cauliflower.cowpea			-	-	110000 (1 ha rice+1ha vegetables)
Low land	Rice(Pooja)- 32 q/ha					
1 <sup>st</sup> year	• Cultivation of rice Var- Swarna Sub-1 • Seed treatment with Vitavax power • RDF of NPK 80:40:40 kg/ha	37 q/ha		15000/-	-	-
2 <sup>nd</sup> year	▪ Line transplanting of paddy Weed management in paddy- Pre-emergence weedicide:- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergence Byspyrubic sodium 200 ml per ha 25 DAT/	41 q/ha		-	18000/-	-
3 <sup>rd</sup> year	▪ Soil test based nutrient management in rice ▪ Micronutrient application as per soil test results ▪ Market linkage	45 q/ha		-	-	25000/-
Allied activities	Deshi cattle- 65 lit /month (Rs.1500)		Base year			
1 <sup>st</sup> year	▪ Breed improvement through AI Azolla cultivation for supplementary feed (20%) increase milk yield up to .5-1lit/ per day.	85 lit/Month		Rs3500/ unit		
2 <sup>nd</sup> year	▪ Azolla supplementary feed (20%) increase milk yield up to 1-1.5lit/ per day. ▪ Supplementation of vitamin mineral mixture@30gm/ meal Fodder Cultivation var. Hybrid nipier var. CO-4	240 lit/Month			Rs4560/ unit	
3 <sup>rd</sup> year	▪ Management of Hybrid Napier ▪ Value addition of milk Market linkage	270 lit/Month				Rs5000/ unit
	Poultry birds- (Rs. 3800)					

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry 10 no.s (Vanaraja)</li> <li>Vaccination of birds (Laasota + Gumber)+ Feed management</li> </ul>	Net Income-Rs. 6,250/-		Rs75000/- (@Rs50/ bird for 200 bird+ vaccination+feed)		
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry 10 no.s (Vanaraja) with proper vaccination (Lassota+ Gumber)</li> <li>Supplementary feeding with azolla</li> </ul>	Net Income-Rs. 7750/-			Rs77000/-	
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry 10 nos (Palishree) with proper vaccination (Lassota+ Gumber)</li> <li>Supplementary feeding with azolla</li> <li>Calcium supplementation to birds</li> </ul>	Net Income-Rs.10,500/-			Rs79000/-	
Fishery	Productivity8q/ha					
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Stocking of IMC (Catla, Rohu, Mrigal) and Exotic carp (Common carp &amp; Grass carp) fingerlings @7,500nos/ha with a ratio 25:35:20:10:10</li> </ul>	18 q/ha		Rs600000 (16.0ha pond)		
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Intercropping of java punti @ 2500 nos/ha in 3 species carp culture (SD @ 7,500 nos /ha at a ratio of 30:40:30 of Catla, Rohu and Mrigal). Harvesting of Java punti within 4-5 months.</li> </ul>			Rs160000 (16.0ha pond)		
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Intercropping of java punti @ 2500 nos/ha in 3 species carp culture (SD @ 7,500 nos /ha at a ratio of 30:40:30 of Catla, Rohu and Mrigal). Harvesting of Java punti within 4-5 months.</li> </ul>				Rs160000 (16.0 ha pond)	

### Village-3

1. Name of KVK/ district: Ganjam

2. Name of villages adopted: Banapur

3. Number of farmers targeted: 20

Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 20ha

(ii) Area of irrigated land (ha): 5 ha

(iii) Number of water body: 9 No

(iv) Area of water body (ha): 3.2 ha

(v) Number of different livestock animals:

Desi cow-30;goat 70; Desi Poultry bird-200

(vi) Average yield of different crops, livestock and fisheries:

Crop	Major variety	Average Yield (q/ha)
<b>Cereals</b>		
Paddy	Swarna Sub-1, Masoori, Pooja, Basudha	40-45 q/ha
Raagi	Budha Mandia, Bhairabi	7-8 q/ha
maize	hybrid	10-12q/ha
<b>Pulses</b>		
Green gram	Local Chaiti, PU-31	6-7 q/ha
Black gram	Local Chaitali, Kartika	4-5 q/ha

Crop	Major variety	Average Yield (q/ha)
<b>Oil seeds</b>		
Ground nut	TMV-2, K-6	18-20 q/ha
<b>Vegetables</b>		
Chilli	Daya	220-250 q/ha
Brinjal	Hybrid, VNR	250-300q/ha
Tomato	Ameli Chiranjivi, laxmi	220-230 q/ha
Cauliflower	Hybrid	130-140 q/ha
Cabbage	Hybrid	150-160 q/ha
Cucurbits	pointed gourd, ridge gourd, bittergourd, cucumber	150-250q/ha
<b>Livestock</b>		
Cow	Desi	2-4 lt/day
Poultry	Desi and Vanaraja	Meat-1.5-2.5 kg/bird
Fish	Weed fishes and wild catfish	practicing fish culture in village communitypond

(vii) Soil status: N-Low,P-Low, K-Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used::N-60kg,P<sub>2</sub>O<sub>5</sub>-35kgK<sub>2</sub>O-

(ix) Major diseases occurred in crops:

Crop	Major Diseases
<b>Cereals</b>	
Paddy	Sheath blight, Blast, BLB, BPH, Leaf folder, Stem borer
Raagi	Blast, blight,leaf spot
Maize	Downey mildew,leaf spot, leaf blight, charcoal rot
<b>Pulses</b>	
Green gram	YMV, Aphid, Sucking pest
Black gram	YMV, Pod borer, Powdery mildew
<b>Oil seeds</b>	
Ground nut	Wilting, Tikka, Bihari hairy caterpillar, Sucking pest
<b>Vegetables</b>	
Chilli	Wilting, Dieback, Leaf curl, Aphid
Pointed gourd	Rootrot , Fruit fly, Scale insect
Brinjal	Wilting, Fruit & Shoot borer, blight
Tomato	Wilting, Fruit rot, Blight, Stem borer
Cauliflower	Wilting, Head borer, DMB
Cabbage	Club root, leaf spot, Damping off
Colocasia	Wilting, blight
Cucurbits	YMV, Beetle, Fruit fly, Downey mildew

(x) Major diseases occurred in livestock:

Livestock	Major Diseases
Cow	FMD, Ring worm, Mastitis, Foot rot, Milk fever
Poultry	New castle disease, Fowl Cholera
Fish	EUS, Argulosis, Fin rot & tail rot

(xi) Post-harvest management/ value addition followed, if any:

- Storage of pulses in locally made basket called Puduka with the use of ITKs like use of Mustard oil, Leaves of Neem and Begunia (*Vitex negundo*), Sun drying or semi heat treatment.

Value addition:

- Badhi and papad making from cereals and pulses for own consumption
- Pickle preparation from vegetables like chilli, Tomato, Drumstick, Mango, Lemon etc for own consumption.
- Agarbati making and preparation of processed value added products from pulses and cereals like Papad, Badhi etc. by the SHGs.

(xii) Marketing channels of products:

- Direct selling in the digapahandi market, sending vegetables to berhampur market
- Marketing through the commission agent
- Selling in the Society (Mandi) i.e. Paddy, G. Nut

(xiii) Agro-based industries, if any: Nil

(xiv) Average income of the farmer: Rs. 6,000-8,000/- per month

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Dept of Agriculture, Horticulture, Soil conservation, Irrigation, AH&VS

8. FPO formed or not? No

9. Major interventions planned:

Crop/Enterprise	Thematic area	Possible interventions and suggested measures
Rice	Varietal replacement	Introduction of HYV, hybrid rice .
	INM	Soil test based nutrient management.
	IPM and IDM	Biological and chemical control of diseases and pests.
	Weed management	Introduction of new herbicides
Pulses	Varietal replacement	Introduction of HYV
Vegetables	Varietal replacement	Highyielding and hybrid varieties of Vegetables like Brinjal, Tomato, cowpea, cauliflower and cabbage.
	INM	INM in vegetables
	IPM and IDM	IPM and IDM in brinjal, tomato, bitter gourd , cauliflower, cowpea, cabbage, chilli.
	Production and management	Introduction of different systems of cultivation like trellis system, intercropping etc. Better nursery management Introduction of poly house for Off-season high valued vegetable nursery and cultivation.
Floriculture	Production and management	Introduction of year round production of flowers such as marigold and gladioli
Organic inputs	Organic farming	Introduction of vermicompost units.
Allied activities	Value addition	Value addition in vegetables like tomato .chilli
Home stead	Small scale income generation	Introduction of mushroom cultivation
Animal science		Nutritional security of farmers family Drudgery reduction
	Production and management	Scope for back yard poultry rearing and management

Crop/Enterprise	Thematic area	Possible interventions and suggested measures
Pond based Farming system		Increase in milk yield of desi cows
	Composite pisciculture	Modified extensive methods of composite pisciculture in village community tank
	Feed management	Demonstration on use of floating pelleted feed in community pond
	Disease management	Disease management in pisciculture

#### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
Rain-fed Up Land	Rice (Khandagiri)-Fallow 18.4 q/ha					
(1 <sup>st</sup> year )	Reccomended intervention • Introduction of Variety: Satyabhama/Sahbhagi • RDF 60:30:30 kg NPK kg/ha • Groundnut cultivation Var: Devi	22 q/ha (19.5%) 14 q/ha (27.2 %)		(Rs.32897)	-	-
(2 <sup>nd</sup> year)	▪ Introduction of Variety: Satyabhama/Sahbhagi ▪ RDF 60:30:30 kg NPK kg/ha ▪ IWM in paddy- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT ▪ Groundnut Seed treatment with Vitavax power 1.5 gm/kg of seed or Trichoderma viride 5gm/kg ▪ Application of RDF	28 q/ha (27.2%)		-	(Rs.41350)	-
(3 <sup>rd</sup> year)	▪ Variety: Satyabhama/Sahbhagi ▪ RDF 60:30:30 kg NPK kg/ha ▪ Line transplanting of paddy and Seed treatment with Vitavax power 1.5 gm/kg of seed/ Trichoderma viride 5gm/kg Line sowing behind the plough ▪ IDM/IPM/INM management in transplanted rice	30q/ha		-	-	44500/ha
	▪ Seed inoculation with Rhizobium culture 20 gm/ kg of seed ▪ Soil test based fertiliser application in groundnut					
Medium land (Rice-Pulses)	Rice- Pulses Paddy(Lalat)+ G.gram- (28 q/ha+ 2.5 q/ha)					
1 <sup>st</sup> year	Reccomended intervention ▪ Cultivation of hybrid rice Var-Rajalaxmi/ Ajay ▪ RDF of NPK 120:60:60 ▪ Greengram HYV-TARM-1 ▪ Application STBF NPK(25-40-20) +S(40 kg/Ha)	36 q/ha, from paddy (28.5%) + 4.4 q/ha from G.gram (76%)		39200 = (Rs.20600/ha+ Rs.18600/ha)	-	-

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Line transplanting of paddy</li> <li>Weed management in paddy-Pre-emergence weedicid:- Londax power (Bensulfuronmethyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergence Byspyrabic sodium 200 ml per ha 25 DAT/</li> <li>Variety- IPM 02-3/ IPM 02-14 in Greengram</li> <li>Seed treatment with Vitavax power 1.5 gm/kg of seed/ Trichodermaviride 5gm/kg</li> <li>seed inoculation with Rhizobium culture 20 gm/kg of seed</li> </ul>	42 q/ha from paddy (16.6%) 5.4 q/ha from G.gram (22.7%)		-	47800/ha=26400/ha+21400/ha=	-
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Soil test based nutrient management in hybrid rice</li> <li>Micronutrient application as per soil test results</li> <li>Variety- IPM 02-3/ IPM 02-14 in Greengram</li> <li>Line sowing of Greengram by seed cum fertiliser drill</li> <li>Seed inoculation with Rhizobium culture 20 gm/kg of seed and 50 gm Phospoculture per one kg of seed and 0.3 gm sodium molybdate</li> </ul>	52 q/ha from paddy (23.8%) 6.1q/ha from G.gram (12.9%)		-	-	55500/ha =(Rs.31300/ha+ Rs.24200/ha)
<b>(Rice-groundnut)</b>	<b>Rice(pooja)+groundnut(k-6)</b> <b>28q/ha from +11q/ha from g.nu</b>					
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Recommened intervention</li> <li>Cultivation of bph tolerant rice</li> <li>Var: Devi</li> <li>Application of lime @ 0.2 LR and Sulphur @ 40kg/ha in groundnut</li> </ul>	35 q/ha, (28.5%) fro rice +14 q/ha fro g.nut (27.2%) Rs.20600/ha (46%)		38900/ha		
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Line transplanting of paddy</li> <li>Weed management in paddy-</li> <li>Seed treatment with Vitavax power 1.5 gm/kg of seed or Trichodermaviride 5gm/kg</li> <li>Application of RDF in G. NUT</li> </ul>	41q/ha, (17.1%) fro rice +16 q/ha fro g.nut (14.4%)			45600/ha	
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Soil test based nutrient management in rice</li> <li>ipm/idm in rice</li> <li>Seed inoculation with Rhizobium culture 20 gm/kg of seed</li> <li>Soil test based fertiliser application in G.nut</li> </ul>	51q/ha, (24.3%) fro rice +18.1 q/ha fro g.nut (12.1%)				53900/ha
<b>Rice-vegetable</b>	<b>Rice- vegetable</b> <b>Paddy(pooja)+ vegetable( local varies)(31q/ha+76.6q/ha)</b>					
1 <sup>st</sup> yr	<ul style="list-style-type: none"> <li>Introduction of Bph tolerant variety hassant</li> <li>RDF 60:30:30 kg NPK kg/ha</li> <li>Introduction of new disease resistant varieties of vegetables with proper package and practices</li> </ul>	37q/ha from paddy (19.3%) 102 q/ha from vegetables(34.2%)		63900/ha =Rs.22200/ha+ 41700/ha)		

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Cultivation of Bph tolerant variety hassant</li> <li>Line transplanting of paddy</li> <li>Weed management in paddy- Pre-emergence weedicid:- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergence Byspyrabic sodium 200 ml per ha 25 DAT</li> <li>Crop diversification- with improved varieties of vegetables</li> <li>IPM in brinjal/ tomao/cauliflower.cowpea</li> </ul>	43q/ha from paddy(16.21%) 128 q/ha from vegetables(25.4%)			80000/ha = (Rs.27800/ha +52200/ha)=	-
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Soil test based nutrient management in rice and Micronutrient application as per soil test results</li> <li>Crop diversification- with improved varieties of vegetables</li> <li>Application of growth regulator in vegetables</li> <li>IDM in brinjal/ tomato/cauliflower.cowpea</li> </ul>					110000/ha =(Rs.32000/ha +68000/ha)
<b>Low land</b>	<b>Rice(Pooja)-</b> <b>32 q/ha</b>					
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Cultivation of rice Var- Swarna Sub-1</li> <li>Seed treatment with Vitavax power</li> <li>RDF of NPK 80:40:40 kg/ha</li> </ul>	37 q/ha		15000	-	-
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Line transplanting of paddy</li> <li>Weed management in paddy- Pre-emergence weedicid:- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergence Byspyrabic sodium 200 ml per ha 25 DAT/</li> </ul>	41 q/ha			18000	-
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Soil test based nutrient management in rice</li> <li>Micronutrient application as per soil test results</li> <li>Market linkage</li> </ul>	45 q/ha				25000
<b>Allied activities</b>						
	<b>Deshi cattle- 65 lit /month</b> <b>(Rs.1500)</b>					
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Breed improvement through AI</li> <li>Azolla cultivation for supplementary feed (20%) increase milk yield up to 0.5-1lit/ per day.</li> </ul>	85 lit/Month				
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Azolla supplementary feed (20%) increase milk yield up to 1-1.5lit/ per day.</li> <li>Supplementation of vitamin mineral mixture@30gm/meal</li> <li>Fodder Cultivation var. Hybrid nappier var. CO-4</li> </ul>	240 lit/Month				
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Supplementation of vitamin mineral mixture@30gm/meal</li> <li>Management of Hybrid Napier</li> <li>Value addition of milk</li> </ul>	270 lit/Month				
	<b>Poultry birds- (Rs. 3800)</b>					

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry 10 n0. Per farmer (palishree/ kadanath)</li> <li>Vaccination of birds (Laasota +Gumber)</li> <li>Feed management</li> </ul>	Net Income-Rs. 6,250/-		75000		
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry ((palishree/kadanath)</li> <li>Vaccination of birds (Laasota+Gumber)</li> <li>Supplementary feeding with azolla</li> <li>Feed management</li> </ul>	Net Income-Rs. 7750/-			77000	
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry 10 nos(palishree) with proper vaccination (Lassota+ Gumber)</li> <li>Supplementary feeding with azolla</li> <li>Calcium supplementation to birds</li> </ul>	Net Income -Rs.10,500/-				78000
Fishery	IMC spawn and fry in ponds Productivity 12 q/ha					
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Stocking of IMC (Catla, Rohu, Mrigal) and Exotic carp (C. carp &amp; Grass carp) fingerlings @7,500nos/ha with a ratio 25:35:20:10:10</li> </ul>	17 q/ha, (41.6% increase)		37500/ha (Seed – Fingerlings(100 mm above)		
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Intercropping of java punti @ 2500 nos/ha in 3 species carp culture (SD @ 7,500 nos /ha at a ratio of 30:40:30 of Catla, Rohu and Mrigal). Harvesting of Java punti within 4-5 months.</li> <li>Pond fertilization with RCD, urea &amp; SSP.</li> </ul>	26 q/ha. (29.4%)		68500/ha (seed+ pond fertilization+java punti)		
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Stocking of IMC (Catla, Rohu, Mrigal) and Exotic carp (C. carp &amp; Grass carp) fingerlings @7,500nos/ha with a ratio 25:35:20:10:10 .</li> <li>Intercropping of java punti @ 2500 nos/ha in 3 species carp culture</li> <li>Feed management in community pond</li> </ul>					1,40,5000/ha

#### Village-4

1. Name of KVK/ district: Ganjam

2. Name of villages adopted: Bhimapur

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 120 ha

(ii) Area of irrigated land (ha): 120 ha

(iii) Number of water body: 2 No

(iv) Area of water body (ha): 3.2 ha

(v) Number of different livestock animals:

Desi cow-60; Buffalo-8; Desi Poultry bird-200

(vi) Average yield of different crops, livestock and fisheries:

Crop	Major variety	Average Yield (q/ha)
Cereals		

Crop	Major variety	Average Yield (q/ha)
Paddy	Swarna Sub-1, Masoori, Pooja, Basudha	40-45 q/ha
Raagi	Budha Mandia, Bhairabi	7-8 q/ha
<b>Pulses</b>		
Green gram	Local Chaiti, PU-31	6-7 q/ha
Black gram	Local Chaitali, Kartika	4-5 q/ha
<b>Oil seeds</b>		
Ground nut	TMV-2, K-6	18-20 q/ha
<b>Vegetables</b>		
Chilli	Daya	220-250 q/ha
Pointed gourd	Gedi potala, Kataki potala	80 q/ha
Brinjal	Hybrid, VNR	190-210 q/ha
Tomato	Andhra, Chiranjivi, Hybrid, Ruby	220-230 q/ha
Cauliflower	Hybrid	130-140 q/ha
Cabbage	Hybrid	150-160 q/ha
Colocasia	Sankha saru	60 q/ha
Cucumber	Hybrid	50 q/ha
<b>Livestock</b>		
Cow	Desi	2-4 lt/day
Poultry	Desi and Vanaraja	Meat-1.5-2.5 kg/bird
Fish	Weed fishes and wild catfish	Not practicing fish culture, weed choked

(vii) Soil status:

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

(ix) Major diseases occurred in crops:

Crop	Major Diseases
<b>Cereals</b>	
Paddy	Sheath blight, Blast, BLB, BPH, Leaf folder, Stem borer
Raagi	Blast, Stem borer
<b>Pulses</b>	
Green gram	YMV, Aphid, Sucking pest
Black gram	YMV, Pod borer, Powdery mildew
<b>Oil seeds</b>	
Ground nut	Wilting, Tikka, Bihari hairy, Sucking pest
<b>Vegetables</b>	
Chilli	Wilting, Dieback, Leaf curl, Aphid
Pointed gourd	Root grub, Fruit fly, Scale insect
Brinjal	Wilting, Fruit & Shoot borer, blight
Tomato	Wilting, Fruit rot, Blight, Stem borer
Cauliflower	Wilting, Head borer, DMB
Cabbage	Club root, leaf spot, Damping off
Colocasia	Wilting, blight
Cucurbits	YMV, Beetle, Fruit fly, Downey mildew

(x) Major diseases occurred in livestock:

Livestock	
Cow	FMD, Ring worm, Mastitis, Foot rot, Milk fever
Poultry	New castle disease, Fowl Cholera
Fish	EUS, Argulosis, Fin rot & tail rot

(xi) Post-harvest management/ value addition followed, if any:

- Storage of pulses in locally made basket called Puduka with the use of ITKs like use of Mustard oil, Leaves of Neem and Begunia (*Vitex negundo*), Sun drying or semi heat treatment.

Value addition:

- Pickle preparation from vegetables like chilli, Tomato, Drumstick, Mango, Lemon etc for own consumption.
- Agarbaty making and preparation of processed value added products from pulses and cereals like Papad, Badhi etc. by the SHGs.

(xii) Marketing channels of products:

- Direct selling in the NAC/block (Purusottampur) market
- Marketing through the commission agent
- Selling in the Society (Mandi) i.e. Paddy, G. Nut

(xiii) Agro-based industries, if any: Nil

(xiv) Average income of the farmer: Rs. 10,000-15,000/- per month

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Dept of Agriculture. Horticulture, Soil conservation, Irrigation, AH&VS

8. FPO formed or not? No

9. Major interventions planned:

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
Rain-fed Up Land	Rice (Khandagiri)-Fallow 18.4 q/ha	(Rs. 7589				
(1 <sup>st</sup> year )	<ul style="list-style-type: none"> <li>Reccomended intervention</li> <li>Introduction of Variety: Satyabhama/Sahbhagi</li> <li>RDF 60:30:30 kg NPK kg/ha</li> </ul>	22 q/ha (19.5%)	base year	Rs.0.14597	-	-
(2 <sup>nd</sup> year)	<ul style="list-style-type: none"> <li>Introduction of Variety: Satyabhama/Sahbhagi</li> <li>RDF 60:30:30 kg NPK kg/ha</li> <li>IWM in paddy- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT</li> </ul>	28 q/ha (27.2%)		-	Rs. 0. 20450	-

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
(3 <sup>rd</sup> year)	<ul style="list-style-type: none"> <li>Variety: Satyabhama/Sahbhagi</li> <li>RDF 60:30:30 kg NPK kg/ha</li> <li>Line transplanting of paddy and Seed treatment with Vitavax power 1.5 gm/kg of seed/ Trichodermaviride 5gm/kg Line sowing behind the plough</li> <li>IDM/IPM/INM management in transplanted rice</li> </ul>	30q/ha		-	-	Rs. 0.26800
Medium land	Rice- Pulses Paddy(Lalat)+ G.gram- (28 q/ha+ 2.5 q/ha)	(Rs. 0.14 +(Rs. 0. 0995 )				
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Reccomended intervention</li> <li>Introduction of Bph tolerant variety hassant</li> <li>RDF 60:30:30 kg NPK kg/ha</li> <li>INM IN RICE</li> <li>Greengram HYV-TARM-1</li> <li>Application STBF NPK(25-40-20) +S(40 kg/Ha)</li> </ul>	36 q/ha, from paddy (28.5%)+4.4 q/ha from G.gram(76%)	base year	Rs. 0.442 =(Rs. 0. 256 /ha, from paddy + Rs. 0. 186/ha from G.gram)	-	-
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Line transplanting of paddy</li> <li>INM in rice</li> <li>Weed management in paddy-Pre-emergenceweedicide:- Londax power (Bensulfuronmethyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergence Byspyrabic sodium 200 ml per ha 25 DAT/</li> <li>IDM/IPM in rice</li> <li>Variety- IPM 02-3/ IPM 02-14in Greengram</li> <li>Seed treatment with Vitavax power 1.5 gm/kg of seed/ Trichodermaviride 5gm/kg</li> <li>seed inoculation with Rhizobium culture 20 gm/ kg of seed</li> <li>IPM in g. gram</li> </ul>	42 q/ha from paddy(16.6 %) 5.4 q/ha from G.gram(22.7%)		-	0. 508 /ha= 0. 294 /ha, from paddy +0. 214/ha from G.gram	-
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Soil test based nutrient management in hybrid rice</li> <li>Micronutrient application as per soil test results</li> <li>Variety- IPM 02-3/ IPM 02-14in Greengram</li> <li>Line sowing of Greengram by seed cum fertiliser drill</li> <li>Seed inoculation with Rhizobium culture 20 gm/ kg of seed and 50 gm Phospoculture per one kg of seed and 0.3 gm sodium molybdate</li> <li>IPM in g. gram</li> </ul>	52 q/ha from paddy (23.8%) 6.1q/ha from G.gram(12.9%)		-	-	Rs. 0. 572/ ha = Rs. 0. 33/ ha, from paddy + Rs.0. 242/ ha from G.gram)
	Rice- vegetable Paddy(pooja)+ vegetable( local varies)(31q/ha+ 76.6q/ha)	(Rs. 0. 148+(Rs. 0. 31345)				
1 <sup>st</sup> yr	<ul style="list-style-type: none"> <li>Introduction of Bph tolerant variety hassant</li> <li>RDF 60:30:30 kg NPK kg/ha</li> <li>Introduction of new disease resistant varieties of vegetables with proper package and practices</li> </ul>	37q/ha from paddy(19.3%) 102 q/ha from vegetables(34.2%)	Base year	Rs. 0. 639/ha =Rs. 0.222/ ha, from paddy +Rs. 0. 417/ha from vegetables)		



Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Cultivation of Bph tolerant variety hassant</li> <li>Line transplanting of paddy</li> <li>Weed management in paddy- Pre-emergence weedicide:- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergence Byspyrabic sodium 200 ml per ha 25 DAT</li> <li>Crop diversification- with improved varieties of vegetables</li> <li>IPM in brinjal/ tomaso/cauliflower.cowpea</li> </ul>	43q/ha from paddy(16.21%) 128 q/ha from vegetables(25.4%)			Rs.0. 80/ha =(Rs.0. 278/ha, from paddy + Rs. 0. 522/ha from vegetables)	-
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Soil test based nutrient management in rice and Micronutrient application as per soil test results</li> <li>Crop diversification- with improved varieties of vegetables</li> <li>Application of growth regulator in vegetables</li> <li>IDM in brinjal/ tomato/cauliflower.cowpea</li> </ul>		-	-	Rs. 1.10/ha =(Rs.0. 32 /ha, from paddy +Rs. 0.68/ha from vegetables)	
<b>Low land</b>	<b>Rice(Pooja)- 32 q/ha</b>					
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Cultivation of rice Var- Swarna Sub-1</li> <li>Seed treatment with Vitavax power</li> <li>RDF of NPK 80:40:40 kg/ha</li> </ul>	37 q/ha	base year	Rs. 0. 16	-	-
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Line transplanting of paddy</li> <li>Weed management in paddy- Pre-emergence weedicide:- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergence Byspyrabic sodium 200 ml per ha 25 DAT/</li> </ul>	41 q/ha		-	Rs. 0.20	-
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Soil test based nutrient management in rice</li> <li>Micronutrient application as per soil test results</li> <li>Market linkage</li> </ul>	45 q/ha		-	-	Rs. 0. 25
<b>Allied activities</b>						
<b>Desi cattle- 65 lit / month (Rs.1500)</b>						
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Azolla cultivation for supplementary feed (20%) increase milk yield up to 0.5-1lit/ per day.</li> </ul>	85 lit/Month	base year	Rs.0. 035/unit		
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Azolla supplementary feed (20%) increase milk yield up to 1-1.5lit/ per day.</li> <li>Supplementation of vitamin mineral mixture@30gm/meal</li> <li>Fodder Cultivation var. Hybrid nappier var. CO-4</li> </ul>	100lit/Month			Rs.0. 0425 per unit	
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Supplementation of vitamin mineral mixture@30gm/meal</li> <li>Management of Hybrid Napier</li> <li>Value addition of milk</li> </ul>	115lit/Month				0.05 per unit
<b>Poultry birds- (Rs. 3800)</b>						
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry (palishree)</li> <li>Vaccination of birds (Laasota +Gumber)</li> <li>Feed management</li> </ul>	Net Income- Rs.0. 0625/		0.75		

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry (kadaknath/palishree)</li> <li>Vaccination of birds (Laasota+Gumber)</li> <li>Supplementary feeding with azolla</li> <li>Feed management</li> </ul>	Net Income- Rs. 0.0775/-			0.78	
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry 10 nos(palishree) with proper vaccination (Lassota+ Gumber)</li> <li>Supplementary feeding with azolla</li> <li>Calcium supplementation to birds</li> </ul>	Net Income-Rs.0. 105				0.80
<b>Fishery-</b> Not practicing fish culture Ponds are heavily infested with floating and marginal weeds ( <i>Eichhornia sp.</i> ) Only desi catfishes and weed fishes are caught very often			Total area available for Pisciculture-2.5 ha; Production – 9 q/ha			
1 <sup>st</sup> year	<b>Composite pisciculture in weed choked pond</b> <ul style="list-style-type: none"> <li>Weed clearance by using Mechanical and Chemical method (Application of 2,4-D Na Salt + Paraquat)</li> <li>Stocking of IMC (Catla, Rohu, Mrigal) and Exotic carp (C. carp &amp; Grass carp) fingerlings @7,500nos/ha with a ratio 25:35:20:10:10.</li> <li>Liming and pond aquifers application (Zeolite/ Probiotic)</li> </ul>	15 q/ha, (77.77 % increase) Rs. 1.5 lakh/ha With a B:C ratio of 1.88	base year	<b>Rs. 0.80 lakh/ha = Rs. 2.0 lakh for 2.5 ha</b> (includes fish seed, weedicides, chemicals, lime, pond sanitizers expenditure)		
2 <sup>nd</sup> year	<b>Inter-cropping of minor carp (Java Punti, <i>Puntius gonionatus</i>) with major carps by maintaining sustainable pond productivity</b> <ul style="list-style-type: none"> <li>Intercropping of java punti @ 2500 nos/ha in 3 species carp culture (SD @ 7,500 nos /ha at a ratio of 30:40:30 of Catla, Rohu and Mrigal) and Harvesting of Java punti within 4-5 months.</li> <li>Sustainable pond productivity through application of Sea weed extract, Mineral mixture, liming and pond sanitisers (Probiotic and Zeolite).</li> </ul>	24 q/ha. (53.33 %) Rs. 2.4 lakh/ha with a B:C ratio of 2.08			<b>Rs. 1.15 lakh/ha = Rs. 2.88 lakh/ha for 2.5 ha</b> (includes fish seed, quarantine chemicals, lime, pond sanitizers & fertilisers expenditure)	
3 <sup>rd</sup> year	<b>Feed management in village community pond</b> <ul style="list-style-type: none"> <li>Stocking of IMC (Catla, Rohu, Mrigal) and Exotic carp (C. carp &amp; Grass carp) fingerlings @7,500nos/ha with a ratio 25:35:20:10:10 .</li> <li>Intercropping of java punti @ 2500 nos/ha with carp</li> <li>Floating feed management in community pond</li> </ul>	35 q/ha (45.83 %) Rs. 3.5 lakh/ha with a B:C ratio of 2.18				<b>Rs. 1.60 lakh/ha = Rs. 4.0 lakh for 2.5 ha</b> (includes fish seed, floating feed, quarantine chemicals, lime, pond sanitizers expenditure)

## Village-5

1. Name of KVK/ district: Ganjam

2. Name of villages adopted: Ustajagannathpur

3. Number of farmers targeted: 20

### Compiled baseline survey report (point wise) of the villages:

- (i) Area of agriculture land (ha): 200ha
- (ii) Area of irrigated land (ha): 176 ha
- (iii) Number of water body: 2 nos pond, 13 dugwell, 3 borewell
- (iv) Area of water body (ha): 4 ha
- (v) Number of different livestock animals: 180nos (130 cows, 50 buffalos)
- (vi) Average yield of different crops, livestock and fisheries:

Crop	Major variety	Average Yield (q/ha)
<b>Cereals</b>		
Paddy	Swarna Sub-1, Masoori, Pooja, Basudha	40-45 q/ha
Raagi	Budha Mandia, Bhairabi	7-8 q/ha
maize	hybrid	10-12q/ha
<b>Pulses</b>		
Green gram	Local Chaiti, PU-31	6-7 q/ha
Black gram	Local Chaitali, Kartika	4-5 q/ha
<b>Oil seeds</b>		
Ground nut	TMV-2, K-6	18-20 q/ha
<b>Vegetables</b>		
Chilli	Daya	220-250 q/ha
Brinjal	Hybrid, VNR	250-300q/ha
Tomato	Ameli Chiranjivi, laxmi	220-230 q/ha
Cauliflower	Hybrid	130-140 q/ha
Cabbage	Hybrid	150-160 q/ha
Cucurbits	pointed gourd, ridge gourd, bittergourd, cucumber	150-250q/ha
<b>Livestock</b>		
Cow	Desi	2-4 lt/day
Poultry	Desi and Vanaraja	Meat-1.5-2.5 kg/bird
Fish	Weed fishes and wild catfish	practicing fish culture in village communitypond

(vii) Soil status: N-Low,P-Low, K-Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used::N-60kg,P<sub>2</sub>O<sub>5</sub>-35kgK<sub>2</sub>O- 30kg/ha

(ix) Major diseases occurred in crops:

Crop	Major Diseases
<b>Cereals</b>	
Paddy	Sheath blight, Blast, BLB, BPH, Leaf folder, Stem borer
Raagi	Blast, blight,leaf spot
Maize	Downey mildew,leaf spot, leaf blight, charcoal rot
<b>Pulses</b>	
Green gram	YMV, Aphid, Sucking pest
Black gram	YMV, Pod borer, Powdery mildew
<b>Oil seeds</b>	
Ground nut	Wilting, Tikka, Bihari hairy caterpillar, Sucking pest
<b>Vegetables</b>	
Chilli	Wilting, Dieback, Leaf curl, Aphid
Pointed gourd	Rootrot , Fruit fly, Scale insect

Crop	Major Diseases
Brinjal	Wilting, Fruit & Shoot borer, blight
Tomato	Wilting, Fruit rot, Blight, Stem borer
Cauliflower	Wilting, Head borer, DMB
Cabbage	Club root, leaf spot, Damping off
Colocasia	Wilting, blight
Cucurbits	YMV, Beetle, Fruit fly, Downey mildew

(x) Major diseases occurred in livestock:

Livestock	Major Diseases
Cow	FMD, Ring worm, Mastitis, Foot rot, Milk fever
Poultry	New castle disease, Fowl Cholera
Fish	EUS, Argulosis, Fin rot & tail rot

(xi) Post-harvest management/ value addition followed, if any:

- Storage of pulses in locally made basket called Puduka with the use of ITKs like use of Mustard oil, Leaves of Neem and Begunia (*Vitex negundo*), Sun drying or semi heat treatment.

Value addition:

- Badhi and papad making from cereals and pulses for own consumption
- Pickle preparation from vegetables like chilli, Tomato, Drumstick, Mango, Lemon etc for own consumption.
- Agarbati making and preparation of processed value added products from pulses and cereals like Papad, Badhi etc. by the SHGs.

(xii) Marketing channels of products:

- Direct selling in the digapahandi market, sending vegetables to berhampur market
- Marketing through the commission agent
- Selling in the Society (Mandi) i.e. Paddy, G. Nut

(xiii) Agro-based industries, if any: Nil

(xiv) Average income of the farmer: Rs. 7,000-12,000/- per month

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Dept of Agriculture, Horticulture, Soil conservation, Irrigation, AH&VS

8. FPO formed or not? No

9. Major interventions planned:

Crop/Enterprise	Thematic area	Possible interventions and suggested measures
Rice	Varietal replacement	Introduction of HYV, hybrid rice ,disease tolerant varieties
	INM	Soil test based nutrient management.
	IPM and IDM	Biological and chemical control of diseases and pests.
	Weed management	Introduction of new generation herbicides
Pulses	Varietal replacement	Introduction of HYV

Crop/Enterprise	Thematic area	Possible interventions and suggested measures
Vegetables	Varietal replacement	Highyielding and hybrid varities of Vegetables like Brinjal, Tomato, cowpea, cauliflower and cabbage.
	INM	INM in vegetables
	IPM and IDM	IPM and IDM in brinjal, tomato, bitter gourd , cauliflower, cowpea, cabbage,chilli.
	Production and management	Introduction of different systems of cultivation like trellis system, intercropping etc. Better nursery management Introduction of poly house for Off-season high valued vegetable nursery and cultivation.
Floriculture	Production and management	Introduction of year round production of flowers such as marigold and gladioli
Organic inputs	Organic farming	Introduction of vermicompost units.
Allied activities	Value addition	Value addition in vegetables like tomato .chilli
Home stead	Small scale income generation	Introduction of mushroom cultivation Nutritional security of farmers family
	Animal science	Drudgery reduction
Pond based Farming system	Production and management	Scope for back yard poultry rearing and management
		Increase in milk yield of desi cows
	Composite pisciculture	Modified extensive methods of composite pisciculture in village community tank
	Feed management	Demonstration on use of floating pelleted feed in community pond
	Disease management	Disease management in pisciculture

#### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
Rain-fed Up Land	Rice (Khandagiri)-Fallow 18.4 q/ha					
(1 <sup>st</sup> year )	Reccomended intervention ▪ Introduction of Variety: Satyabhama/Sahbhagi ▪ STVF application of fertiliser 60:30:30 kg NPK kg/ha ▪ Crop diversification-High yielding sweet corn C.v-Madhuri/Sugar-75 ▪ Cultivation of pulses Greengram( TARM-1), Blackgram( PU-31)	22 q/ha (19.5%) 35q/ha 4.4 q/ha from pulses		Rs 36000/ha	-	-
(2 <sup>nd</sup> year)	▪ Introduction of Variety: Satyabhama/Sahbhagi ▪ RDF 60:30:30 kg NPK kg/ha ▪ IWM in paddy- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT ▪ Crop diversification-High yielding sweet corn C.v-Madhuri/ Sugar 75 ▪ Weed control by pre emergence application of Atrazine @ 1-1.5kg/ha 0-3 DAS ▪ Line sowing in pulses and INM practices	28 q/ha (27.2%)  39q/ha 5.2 q/ha from g.gram			39200/ha-	-
(3 <sup>rd</sup> year)	▪ Variety: Satyabhama/Sahbhagi ▪ RDF 60:30:30 kg NPK kg/ha ▪ Line transplanting of paddy and Seed treatment with Vitavax power 1.5 gm/kg of seed/ Trichodermaviride 5gm/kg Line sowing behind the plough ▪ IDM/IPM/INM management in transplanted rice and sweetcorn ▪ Disease management and processing of pulses	30q/ha  42 q/ha 5.8q/ha from g. gram				43800/ha

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
Medium land	Rice- Pulses/ Groundnut (Rs40000/ha) Paddy(Lalat)+ G.gram+ g. Nut (28 q/ha+ 2.5 q/ha+ 11 q/ha)					
1 <sup>st</sup> year	Reccomended intervention ▪ Cultivation of hybrid rice Var-Rajalaxmi/Ajay/ ▪ RDF of NPK 120:60:60 ▪ Greengram HYV-TARM-1 ▪ Application STBF NPK(25-40-20) +S(40 kg/Ha) ▪ Cultivation of Var: K-6 of groundnut ▪ Application of lime @ 0.2 LR and Sulphur @ 40kg/ha in groundnut	36 q/ha, from paddy (28.5%) + 4.4 q/ha from G.gram (76%)+ 14 q/ha from g.nut (27.2 %)		39200 =(Rs.20600/ha+ Rs.18600/ha)=	-	-
2 <sup>nd</sup> year	▪ Line transplanting of paddy ▪ Weed management in paddy ▪ Variety- IPM 02-3/ IPM 02-14in Greengram ▪ Seed treatment with Vitavax power 1.5 gm/kg of seed/ Trichodermaviride 5gm/kg ▪ seed inoculation with Rhizobium culture 20 gm/kg of seed ▪ INM in ground nut	42 q/ha from paddy(16.6 %) 5.4 q/ha from G. gram(22.7%)+ 16 q/ha from g. Nut(14.4%)		-	47800/ha=26400/ha+21400/ha=	-
3 <sup>rd</sup> year	▪ Soil test based nutrient management in hybrid rice ▪ Micronutrient application as per soil test results ▪ Variety- IPM 02-3/ IPM 02-14in Greengram ▪ Line sowing of Greengram by seed cum fertiliser drill and ▪ Seed inoculation with Rhizobium culture 20 gm/kg of seed and 50 gmPhospoculture per one kg of seed and 0.3 gm sodium molybdate ▪ IPM/IDM in groundnut	52 q/ha from paddy (23.8%) 6.1q/ha from G.gram (12.9%) 18 q/ha from g. Nut(12.5%)		-	-	55500/ha = (Rs.31300/ha + Rs.24200/ha)
	Rice- vegetable Paddy(pooja)+ vegetable( local varities)(31q/ha+ 76.6q/ha)					
1 <sup>st</sup> yr	▪ Introduction of Bph tolerant variety hassant ▪ RDF 60:30:30 kg NPK kg/ha ▪ Introduction of new disease resistant varities of vegetables with proper package and practices	37q/ha from paddy(19.3%) 102 q/ha from vegetables(34.2%)		63900/ha =Rs.22200/ha+ 41700/ha)		
2 <sup>nd</sup> year	▪ Cultivation of Bph tolerant variety hassant ▪ Line transplanting of paddy ▪ Weed management in paddy- Pre-emergence weedicide:- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergenceByspyrabic sodium 200 ml per ha 25 DAT ▪ Crop diversification- with improved varities of vegetables ▪ IPM in brinjal/ tomao/cauliflower.cowpea	43q/ha from paddy(16.21%) 128 q/ha from vegetables(25.4%)		80000/ha = (Rs.27800/ha +52200/ha)=		-

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Soil test based nutrient management in rice and Micronutrient application as per soil test results</li> <li>Crop diversification- with improved varieties of vegetables</li> <li>Application of growth regulator in vegetables</li> <li>IDM in brinjal/ tomato/cauliflower.cowpea</li> </ul>			-	-	110000/ha =(Rs.32000 /ha +68000/ha)
<b>Low land</b>	Rice(Pooja)- 32 q/ha					
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Cultivation of rice Var- Swarna Sub-1</li> <li>Seed treatment with Vitavax power</li> <li>RDF of NPK 80:40:40 kg/ha</li> </ul>	37 q/ha		15000	-	-
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Line transplanting of paddy</li> <li>Weed management in paddy- Pre-emergence weedicide:- Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT or post emergence Byspyrabic sodium 200 ml per ha 25 DAT/</li> </ul>	41 q/ha		-	18000	-
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Soil test based nutrient management in rice</li> <li>Micronutrient application as per soil test results</li> <li>Market linkage</li> </ul>	45 q/ha		-	-	25000
<b>Allied activities</b>						
	<b>Deshi cattle-</b> 65 lit /month (Rs.1500)					
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Breed improvement through AI</li> <li>Azolla cultivation for supplementary feed (20%) increase milk yield up to 0.5-1lit/ per day.</li> </ul>	85 lit/Month				
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Azolla supplementary feed (20%) increase milk yield up to 1-1.5lit/ per day.</li> <li>Supplementation of vitamin mineral mixture@30gm/meal</li> <li>Fodder Cultivation var. Hybrid nappier var. CO-4</li> </ul>	240 lit/Month				
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Supplementation of vitamin mineral mixture@30gm/meal</li> <li>Management of Hybrid Napier</li> <li>Value addition of milk</li> </ul>	270 lit/Month				
	<b>Poultry birds-</b> (Rs. 3800)					
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry (Vanaraja)</li> <li>Vaccination of birds (Laasota +Gumber)</li> </ul>			Net Income-Rs. 6,250/-		
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry (Vanaraja)</li> <li>Vaccination of birds (Laasota+Gumber)</li> <li>Supplementary feeding with azolla</li> </ul>			Net Income-Rs. 7750/-		
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Backyard poultry 10 nos(palishree) with proper vaccination (Lassota+ Gumber)</li> <li>Supplementary feeding with azolla</li> <li>Calcium supplementation to birds</li> </ul>					Net Income-Rs.10,500/-

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
Fishery	IMC spawn and fry in ponds Productivity12 q/ha					
1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Stocking of IMC (Catla, Rohu, Mrigal) and Exotic carp (C. carp &amp; Grass carp) fingerlings @7,500nos/ha with a ratio 25:35:20:10:10 .</li> </ul>	17 q/ha, (41.6% increase)		37500/ha (Seed – Fingerlings(100 mm above)		
2 <sup>nd</sup> year	<ul style="list-style-type: none"> <li>Intercropping of java punti @ 2500 nos/ha in 3 species carp culture (SD @ 7,500 nos /ha at a ratio of 30:40:30 of Catla, Rohu and Mrigal). Harvesting of Java punti within 4-5 months.</li> <li>Pond fertilization with RCD, urea &amp; SSP.</li> </ul>	22 q/ha. (29.4%)		67500/ha (seed+ pond fertilization+java punti)		
3 <sup>rd</sup> year	<ul style="list-style-type: none"> <li>Stocking of IMC (Catla, Rohu, Mrigal) and Exotic carp (C. carp &amp; Grass carp) fingerlings @7,500nos/ha with a ratio 25:35:20:10:10 .</li> <li>Intercropping of java punti @ 2500 nos/ha in 3 species carp culture</li> <li>Feed management in community pond</li> </ul>					1,41,5000/ha

## 5. North Eastern Ghat

The districts of this Agro-Climatic Zone are Kandhamal, Rayagada, Gajapati, part of Ganjam and small part of Koraput. Total area of this zone is 23356 sq. km. which is 15% of total area covered.

### 5.1 Krishi Vigyan Kendra, Kandhamal

#### Village-1

1. Name of KVK/ district: Kandhamal

2. Name of village adopted: Katadaganda

3. Number of farmers targeted: 05

4. Compiled baseline survey report (point wise) of the villages:

- Area of agriculture land (ha): 105 Ha
- Area of irrigated land (ha): 25 Ha
- Number of water body: 02
- Area of water body (ha): 0.4 Ha
- Number of different livestock animals: 987
- Average yield of different crops, livestock and fisheries:  
Paddy- 34 q/ha, Vegetable - 180 q/ha, Turmeric-80 q/ha, Maize – 25 q/ha, Groundnut – 10 q/ha
- Soil status: - (Yellow and Red) Lateritic Soil
- Average nutrients (nitrogen, phosphorous, potash, etc) used: 30-20-10 kg/ha
- Major diseases occurred in crops : Blast & BLB in Paddy, Leaf Blight, Bacterial and Fungal Wilt, Leaf curl in vegetables.
- Major diseases occurred in livestock: PPR and FMD in Cattle and Goats; Ranikhet in poultry birds.
- Post-harvest management/ value addition followed : Grading of vegetables, Dried mango

- (xii) Marketing channels of products: Through middlemen or Direct marketing
- (xiii) Agro-based industries : No
- (xiv) Average income of the farmer: Rs 68,000/- year

**5. Possibility of involvement of ICAR Institutes : Yes**

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.) : Yes**

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State department, KASAM (Co-op marketing Society), Phulbani and KVK

**8. FPO formed or not - No**

**9. Major interventions planned:**

- INM in Maize - Lime application @ 0.2 LR + FYM @ 2 t /ha + STBFR (80.0:38.57:37.14 kg N:P2O5:K2O/ha)
- Introduction of maize hybrids identified for Odisha condition by Varietal Identification Committee, GOI.
- Integrated Weed Management in Maize, Groundnut and Vegetables.
- INM in Groundnut and vegetables
- Application of micronutrients in vegetables, groundnut and maize
- Nutrient management in turmeric through organic sources - Application of FYM @ 10 t /ha + Mulching with dry leaves @ 12.5t/ha + Neem cake 5 q/ha + Bio-fertilizers Azopirillum and PSB @ 10 Kg each/ha
- Poultry breed replacement with dual purpose high yielding colour birds - 10 nos of poultry chicks of Pallishree breed/ family with timely vaccination
- Mushroom cultivation round the year for income generation – 10 beds / family per month with scientific package of practices.

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	INM & IWM in Maize	1,00,000/-	0.2	0.2	0.3	0.3
2	INM & IWM in Groundnut	1,50,000/-	0.2	0.2	0.3	0.4
3	INM & IWM in Vegetables	3,00,000/-	0.4	0.4	0.5	0.5
4	Poultry bird - 10 birds / family	50,000/-	0.05	0.1	0.1	0.1
5	Feed management in poultry bird	25,000/-	0.02	0.02	0.02	0.02
6	Mushroom spawn - 60 nos/family (10 beds per month for 6 months)	18,000/-	0.045	0.045	0.045	0.045
7	Organic nutrient management in Turmeric	10,00,000/-	1.0	1.0	1.1	1.1

The Expected Outcome and the Budget requirement is for 05 nos. of targeted farmers of the village

**Village-2**

**1.Name of KVK/ district:** Kandhamal

**2.Name of village adopted:** Burbinaju

**3.Number of farmers targeted:** 05

**4.Compiled baseline survey report (point wise) of the villages :**

- (i) Area of agriculture land (ha): 130 Ha

- (ii) Area of irrigated land (ha): 35 Ha
- (iii) Number of water body: 03
- (iv) Area of water body (ha): 0.8 Ha
- (v) Number of different livestock animals: 1570
- (vi) Average yield of different crops, livestock and fisheries: Paddy- 43 q/ha, Vegetable - 210 q/ha, Turmeric – 90 q/ha
- (vii) Soil status: - (Yellow and Red) Lateritic Soil
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 40-20-20 kg/ha
- (ix) Major diseases occurred in crops : Blast & BLB in Paddy, Leaf Blight, Bacterial and Fungal Wilt, Leaf curl in vegetables.
- (x) Major diseases occurred in livestock: PPR and FMD in Cattle and Goats; Ranikhet in poultry birds.
- (xi) Post-harvest management/ value addition followed : Turmeric Processing, Grading of vegetables, Dried mango
- (xii) Marketing channels of products: Through middlemen or Direct marketing
- (xiii) Agro-based industries : No
- (xiv) Average income of the farmer: Rs 70,000/- year

**5. Possibility of involvement of ICAR Institutes : Yes**

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.) : Yes**

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State department, KASAM (Co-op marketing Society), Phulbani and KVK

**8. FPO formed or not - No**

**9. Major interventions planned:**

- INM in Paddy – STBFR with application of Zinc Sulphate and Boron
- IWM in Paddy – Application of post emergence weedicide Bispyribac Sodium followed by one hand weeding after 15-20 days
- Introduction of hybrid rice varieties notified and identified for Odisha with STBFR and application of Zinc Sulphate and Boron
- INM in vegetables – STBFR with application of micronutrients
- Nutrient management in turmeric through organic sources - Application of FYM @ 10 t /ha + Mulching with dry leaves @ 12.5t/ha + Neem cake 5 q/ha + Bio-fertilizers Azopirillum and PSB @ 10 Kg each/ha
- Poultry breed replacement with dual purpose high yielding colour birds - 10 nos of poultry chicks of Pallishree breed/ family with timely vaccination
- Mushroom cultivation round the year for income generation – 10 beds / family per month with scientific package of practices.

**10. Action Plan (including interventions made) for each village and Budget requirement :**

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	INM & IWM in rice	1,00,000/-	0.15	0.2	0.25	0.25

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
2	Introduction of hybrid rice	1,50,000/-	0.4	0.4	0.5	0.5
3	INM in Vegetables	3,00,000/-	0.4	0.4	0.5	0.5
4	Poultry bird - 10 birds / family	50,000/-	0.05	0.1	0.1	0.1
5	Feed management in poultry bird	25,000/-	0.02	0.02	0.02	0.02
6	Mushroom spawn - 60 nos/family (10 beds per month for 6 months)	18,000/-	0.045	0.045	0.045	0.045
7	Organic nutrient management in Turmeric	10,00,000/-	1.0	1.0	1.1	1.1

The Expected Outcome and the Budget requirement is for 05 nos. of targeted farmers of the village

### Village-3

- Name of KVK/ district:** Kandhamal
- Name of village adopted:** Pitairpi (Sugadabadi)
- Number of farmers targeted:** 05
- Compiled baseline survey report (point wise) of the villages:**
  - Area of agriculture land (ha): 105 Ha
  - Area of irrigated land (ha): 60 Ha
  - Number of water body: 01
  - Area of water body (ha): 0.2 Ha
  - Number of different livestock animals: 1240
  - Average yield of different crops, livestock and fisheries:  
Paddy- 38 q/ha, Vegetable - 280 q/ha (Majority Cole crops & Raikia bean); Turmeric – 90 q/ha; Mustard – 4 q/ha
  - Soil status: - (Yellow and Red) Lateritic Soil
  - Average nutrients (nitrogen, phosphorous, potash, etc) used: 50-30-20 kg/ha
  - Major diseases occurred in crops : Blast & BLB in Paddy, Leaf Blight, Bacterial and Fungal Wilt, Root-rot, Seedling damping off and Leaf curl in vegetables.
  - Major diseases occurred in livestock: PPR and FMD in Cattle and Goats; Ranikhet in poultry birds.
  - Post-harvest management/ value addition followed : Turmeric Processing, Grading of vegetables, Dried mango, Bamboo crafts and milling of rice
  - Marketing channels of products: Through middlemen or Direct marketing
  - Agro-based industries : No
  - Average income of the farmer: Rs 78,000/- year
- Possibility of involvement of ICAR Institutes :** Yes
- Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.) :** Yes
- Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State department, KASAM (Co-op marketing Society), Phulbani and KVK
- FPO formed or not –** No

### 9. Major interventions planned:

- Crop diversification with Black gram var. PU-35 during Kharif in the cropping system Fallow - Toria
  - Introduction of high yielding toria var. Anuradha with INM
  - Introduction of high yielding tomato varieties – Arka Rakshyak and Swarna Sampad as crop diversification for minimizing the diseases and pests
  - INM in vegetables – STBFR with application of micronutrients
  - Nutrient management in turmeric through organic sources - Application of FYM @ 10 t /ha + Mulching with dry leaves @ 12.5t/ha + Neem cake 5 q/ha + Bio-fertilizers Azopirillum and PSB @ 10 Kg each/ha
  - Poultry breed replacement with dual purpose high yielding colour birds - 10 nos of poultry chicks of Pallish-ree breed/ family with timely vaccination
- Mushroom cultivation round the year for income generation – 10 beds / family per month with scientific package of practices.

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Change of CS from Fallow-Toria to Black gram - Toria	1,00,000/- from only black gram	0.2	0.2	0.25	0.25
2	Introduction of HYV toria Anuradha	75,000/-	0.1	0.1	0.1	0.1
3	Introduction of HYV tomato Arka Rakshyak & Swarna Sampad	4,00,000/-	0.3	0.3	0.35	0.35
4	INM in Vegetables	3,00,000/-	0.4	0.4	0.5	0.5
5	Poultry bird - 10 birds / family	50,000/-	0.05	0.1	0.1	0.1
6	Feed management in poultry bird	25,000/-	0.02	0.02	0.02	0.02
7	Mushroom spawn - 60 nos/family (10 beds per month for 6 months)	18,000/-	0.045	0.045	0.045	0.045
8	Organic nutrient management in Turmeric	10,00,000/-	1.0	1.0	1.1	1.1

The Expected Outcome and the Budget requirement is for 05 nos. of targeted farmers of the village

### 5.2 Krishi Vigyan Kendra, Rayagada

#### Village-1

- Name of KVK/ district:** Rayagada
- Name of villages adopted:** Kuljing
- Number of farmers targeted:** 20
- Compiled baseline survey report (point wise) of the villages:**
  - Area of agriculture land (ha): 51
  - Area of irrigated land (ha): 11.22
  - Number of water body: 1
  - Area of water body (ha): 2.6
  - Number of different livestock animals: 560
  - Average yield of different crops, livestock and fisheries:

Sl. No.	Crop/ Enterprises/ Others	Average Yield	Remarks
1	Paddy	44.5 q/ha	
2	Ragi	9.5 q/ha	
3	Pigeon pea	9.8 q/ha	
4	Blackgram	8.0 q/ha	
5	Sunflower	9.0 q/ha	
6	Groundnut	14.6 q/ha	
7	Vegetables	-	
8	Fruits	-	
9	Livestock	-	
10	Fisheries	4.4 tonne/ha	

(vii) Soil status: Red, sandy, clay soil

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

Nitrogen	Phosphorous	Potash
7428 kg	4246 kg	3547 kg

(ix) Major diseases occurred in crops:

Crop/ Enterprises/ Others	Major Diseases occurred	Remark
Cereal crops	Paddy- blast, sheath rot and sheath blight Ragi- Seedling blight and Blast	
Pulse crops	Yellow Mosaic virus	
Oilseed crops	Groundnut- Tikka disease Sunflower- downy mildew and powdery mildew, alternaria leaf spot	
Vegetable crops	Root rot, stem rot, damping off, Leaf curl, YMV	
Fruit crops	Diplodia stem – end rot, malformation, anthracnose	

(x) Major diseases occurred in livestock:

Crop/ Enterprises/ Others	Major Diseases occurred	Remark
Livestock	Foot and mouth disease Haemorrhagic septicaemia Coccidiosis,	

(xi) Post-harvest management/ value addition followed, if any: NA

(xii) Marketing channels of products: Local market

(xiii) Agro-based industries, if any: NA

(xiv) Average income of the farmer: Rs. 88, 000/- per annum

5. Possibility of involvement of ICAR Institutes:

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Dhanuka Group and Mahindra & Mahindra

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): ITDA, Gunupur, Department of Agriculture and DAO, Gunupur

8. FPO formed or not? No

### 9. Major interventions planned:

Farming Situation	Existing practices (2017-18)		1 <sup>st</sup> year (2018-19)		2 <sup>nd</sup> year (2019-20)		3 <sup>rd</sup> year (2020-21)		4 <sup>th</sup> year (2021-22)		
	Components	Problems /practices	Interventions	Yield & Net income/ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	
Semi-Irrigated upland	Maize-Fallow 23q/ha (0.4ha) (Rs.13300/-) Arhar-Fallow 4.8 q/ha (0.4ha) (Rs.7540/ha) Brinjal-fallow 148 qt/ha (0.15ha) (Rs.9800/ha)	Use of composite variety Blanket fertilizer dose Weed problem local var. (desi kandula & sana kandula, bada kandula) Broadcasting Blanket fertilization High weed infestation Fruit and Shoot borer problem Rabi fallow Old variety- Blue Star Shoot and fruit borer	* Hybrid maize PAC 334/OMA 14 NPK @ 120:80:80 HYV Arhar ASHA/ LRG 41 Cultivation of brinjal var. Muktakeshi/ Utikal Jyoti/ Utikal Tarini	27q/ha Rs.14600/- 6.3 q/ha Rs 9800/- 195q/ha Rs. 11500/-	Weed control- Atrazin @ 1 lit/ha/Simazine @ 1 kg/ha Line sowing STBF Herbicide- Pendimethalin @1kg/ha Control of shoot and fruit borer: Use of tricho cards @ 5-6 Nos. per acre and at interval of 7-10 days	31.6q/ha Rs.15200/- 7.1q/ha Rs.10700/- 195 q/ha Rs. 14300/-	Cultivation of sweet corn variety Sugar 75/ Misti Seed production of Arhar C v BRG- 176 / BRG-4/BRG 5 Rhizobium 200 gm/ 20kg seed + Sodium molibdate @ 3 g/10kg seed Market linkage for sale of brinjal.	HYV Naveen Mechanical transplanting by transplanter STBF Herbicide: Pertilachlor Fungicide: Tricyclazole YMV management: Use of yellow sticky trap @ 12 Nos./ acre and spray of Flonicamid 1.5ml/litre/ Thiomethoxam 100 g/ha	44-4q/ha Rs.10240/- 4.7q/ha Rs.2500/-	Value addition and co-operative marketing	Value addition and co-operative marketing
Semi-Irrigated Medium Land	Rice-Green gram/Sunflower Rice: 33 q/ha (0.4 ha) (Rs.6360/-) Green gram: 3.3 q/ha (0.2ha) (Rs. 1760/-)	Local variety Manual transplanting Blanket fertilization Hand weeding Damage by Rice stem borer & BPH Blast disease YMV in Green gram Weed problem	HYV Naveen YMV tolerant Var. IPM 02 14 NPK 20-40-20	41q/ha Rs.8660/- 3.7 q/ha Rs.2140/-	HYV Naveen Line transplanting STBF Herbicide: Pertilachlor Pesticide Londax Power STBF Weed control: Application of Pendimethalin @ 1kg/ha pre emergence	47.8q/ha Rs.11440/- 5.8 q/ha Rs.2920/-	HYV Naveen Mechanical transplanting by transplanter STBF Herbicide: Pertilachlor Fungicide: Tricyclazole YMV management: Use of yellow sticky trap @ 12 Nos./ acre and spray of Flonicamid 1.5ml/litre/ Thiomethoxam 100 g/ha	Value addition and co-operative marketing	Value addition and co-operative marketing	Value addition and co-operative marketing	
	Sunflower 9q/ha (0.2 ha) (Rs 1600/-)	Local varieties Blanket fertilization Stem Rot Problem Leaf spot disease	Hybrid var- PAC 334, BSH 1 NPK @ 48-48-36 kg/ha	12q/ha Rs.2900/-	STBF Control of stem rot- Application of COC @ 1.5kg/ha	15.8q/ha Rs.3560/-	Control of Leaf spot- Application of Carbendazim + Mancozeb @ 1kg/ha	17.3 q/ha Rs.4140/-	Value addition and co-operative marketing	Value addition and co-operative marketing	

Farming Situation	Existing practices (2017-18)		1 <sup>st</sup> year (2018-19)		2 <sup>nd</sup> year (2019-20)		3 <sup>rd</sup> year (2020-21)		4 <sup>th</sup> year (2021-22)	
	Components	Problems /practices	Interventions	Yield & Net income/ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha
Homestead	Dairy 1 Cow Milk: 1.0l/day Rs. 5800/yr No secondary income	No green fodder supplements High cost of concentrate feeding No value addition in milk	Vaccination Sanitation management of cattle shed Banaraja poultry bird (10 birds), vaccination, feeding	Milk : 1.5l/day 7000/yr 2.75kg/bird 100 eggs 1 <sup>st</sup> year Rs.2000/yr	Hybrid nappier /var. CO 4. CO4/Barseem (0.25 acre) Farm made feed (broken rice, pulse bran), hay of pulses Artificial insemination Banaraja poultry enterprise (2 batches of 10 birds each) Paddy straw mushroom from June to October (2 beds/day)	Milk: 2.5 l/day Rs.8500/yr (Cost of feed will decrease by Rs.10/kg) 2 kg/bird 150 eggs/2 <sup>nd</sup> year Rs.3000/yr 2.4 kg/day Rs. 3800/yr	Location specific mineral mixture @ 80g/day. Value addition of milk for <i>chhena</i> making 3 overlapping batches of 10 birds each Paddy straw mushroom, 4 beds per day	Chhena: 1.5 kg/day Rs.9000/yr Rs.4000/yr 3.2 kg/day Rs.5200/yr	Value addition and co-operative marketing	Value addition and co-operative marketing
Homestead	Nutritional Garden	In sufficient human nutrition No plan kitchen garden	Planting of 2 mango grafts 3 lemon layers 5 papaya plants 2 banana plants (1 G9 and 1 Denga Bantha) 2 drumstick plants		Provision of leafy vegetables with seeds of brinjal, chilli and tomato	Rs.200/-	Planting of 3 papaya plants Provision of seeds of leafy vegetables with seeds brinjal, chilli and tomato	Rs.300/-		

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Cultivation of high yielding paddy var. Hasanta in medium and low land	Area spread 8.0 ha	0.112	0.174	0.070	0.131
2	Cultivation of high yielding arhar variety PRG 176	Area spread 9.0 ha	0.216	0.286	0.114	0.215
3	Cultivation of hybrid maize var. OMA 14/ NK 30 in uplands	Area spread 4.0 ha	0.120	0.142	0.057	0.107
4	Intercropping of cow pea with maize	Area spread 5.0 ha	0.165	0.172	0.069	0.129
5	Crop diversification of upland paddy to sweet corn	Area spread 5.0 ha	1.155	1.280	0.512	0.960
6	Cultivation of blackgram and greengram in rice fallow	Area spread 11.0 ha	0.242	0.265	0.106	0.199
7	Cultivation of hybrid sunflower in rice fallow	Area spread 6.0 ha	0.172	0.180	0.072	0.135
8	Cultivation of paddy straw mushroom	300 nos. of bed	0.120	0.120	0.048	0.090
9	Upgradation of dairy	115 farmers will be benefited	0.280	0.300	0.120	0.225
10	Rearing of backyard poultry	20 house hold will be benefited	0.200	0.200	0.080	0.150
11	Development of nutritional garden	20 house hold will developed	0.300	0.300	0.120	0.225
12	Distribution of seedlings and planting materials of different fruits and vegetables	All farmers of the village	0.480	0.480	0.192	0.360
	Distribution of low cost farm implements to ST farmers	20 farmers and farm women will be benefited.	0.500	0.500	0.200	0.375
	Cultivation of off season vegetables	Area spread 2.5 ha	0.168	0.200	0.080	0.150
13.	Demonstration of micro-irrigation	Area spread 1.0 ha	0.800	0.100	0.040	0.075
14.	Demonstration of protected cultivation	Area spread 1.0 ha	0.500	1.000	0.400	0.750
15.	Development of IFS model	Area spread 3.0 ha	1.500	2.320	0.928	1.740
16.	Development of organic farming	Area spread 1.5 ha	0.270	0.225	0.090	0.169
17.	Development of marketing co-operatives	All farmers will be benefited.	0.150	0.150	0.060	0.113
18.	Training, awareness programme and other extension activity	All farmers will be benefited.	0.192	0.192	0.192	0.192
19.	Miscellaneous @20% of the cost of total activities		1.528	1.717	0.710	1.300
	<b>Total</b>		<b>9.170</b>	<b>10.303</b>	<b>4.260</b>	<b>7.788</b>

#### Village-2

1. Name of KVK/ district: Rayagada

2. Name of villages adopted: Laxmanguda

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 182

(ii) Area of irrigated land (ha): 83.72

(iii) Number of water body: 3

(iv) Area of water body (ha): 18

(v) Number of different livestock animals: 1120

(vi) Average yield of different crops, livestock and fisheries:

Sl. No.	Crop/ Enterprises/ Others	Average Yield	Remarks
	Paddy	46.5 q/ha	



Sl. No.	Crop/ Enterprises/ Others	Average Yield	Remarks
	Ragi	9.2 q/ha	
	Blackgram	8.0 q/ha	
	Greengram	7.5 q/ha	
	Sunflower	9.8 q/ha	
	Groundnut	14.6 q/ha	
	Vegetables	-	
	Fruits	-	
	Livestock	-	
	Fisheries	4.2 tonne/ha	

(vii) Soil status: Red, sandy loam soil

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

Nitrogen	Phosphorous	Potash
7143 kg	4354 kg	3867 kg

(ix) Major diseases occurred in crops:

Crop/ Enterprises/ Others	Major Diseases occurred	Remark
Cereal crops	Paddy- blast, sheath rot and sheath blight Ragi- Seedling Blight and Blast	
Pulse crops	Yellow Mosaic virus	
Oilseed crops	Ground nut- Tikka disease Sunflower- downy mildew and powdery mil dew, alternaria leaf spot	
Vegetable crops	Root rot, stem rot, damping off, Leaf curl, YMV,	
Fruit crops	Diplodia stem – emd rot, malformation, anthracnose	

(x) Major diseases occurred in livestock:

Crop/ Enterprises/ Others	Major Diseases occurred	Remark
Livestock	Foot and mouth disease Haemorrhagic septicaemia Coccidiosis,	

(xi) Post-harvest management/ value addition followed, if any: NA

(xii) Marketing channels of products: Local market

(xiii) Agro-based industries, if any: NA

(xiv) Average income of the farmer: Rs. 76, 000/- per annum

5. Possibility of involvement of ICAR Institutes:

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Dhanuka Group and Mahindra & Mahindra

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): ITDA, Gunupur, Department of Agriculture and DAO, Gunupur

8. FPO formed or not? No

### 9. Major interventions planned:

Farming Situation	Existing practices (2017-18)		1 <sup>st</sup> year (2018-19)		2 <sup>nd</sup> year (2019-20)		3 <sup>rd</sup> year (2020-21)		4 <sup>th</sup> year (2021-22)		
	Components	Problems / practices	Yield & Net income/ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha		
Irrigated upland	Rice- Vegetable (Brinjal) Rice: 19.2 q/ha (0.4 ha) (Rs. 4160/-) Brinjal/Cow pea 151 q/ha (0.10 ha) (Rs. 6500/-)	Local var. Pathara, Chhetka Broadcast sowing Blanket fertilization Hand weeding Stem borer problem Blanket fertilization Fruit and shoot borer attack	23.6 q/ha Rs 5220/- 163q/ha Rs.7600/-	Drought tolerant variety Sahabagi Dhan/ Bina dhan 11 Cultivation of brinjal var. Muktareshi	27.3 q/ha Rs. 6880/- 196 q/ha Rs.9300/-	Line sowing STBF Herbicide- Pyrazol Sulfuron Ethyle @ 200g/ha/ Butador @1l/ha Cultivation of brinjal var. Muktareshi	34.6 q/ha Rs. 10640/- 212 q/ha Rs.10400/-	Crop diversification to sweet corn var. Sugar 75/ Misti Stem borer control- spray of Londax power Cultivation of brinjal var. Muktareshi Tricho cards	34.6 q/ha Rs. 10640/- 212 q/ha Rs.10400/-	Value addition and co-operative marketing	Value addition and co-operative marketing
Irrigated Medium Land/ Shallow low land	Rice-Green gram Rice: 33.3q/ha (0.4 ha) (Rs.6520/-) Green gram: 3.3 q/ha (0.2 ha) (Rs. 1780/-)	Longer duration rice var. Pooja/ Swarna Manual transplanting Blanket fertilization Hand weeding YMV in Green gram Blanket fertilization Weed problem	41.8q/ha Rs.7840/- 4.1 q/ha Rs.2260/-	HYV Naveen/ Pratikshya/ Ranidhan YMV tolerant Var. IPM 02 14 / IPM 02 03 with NPK 20-40-20	46.2q/ha Rs.10040/- 4.7 q/ha Rs.2520/-	Line transplanting STBF Herbicide: Perilachlor STBF Inoculation of Rhizobium culture with 200g/10kg seed PSB @ 50g/kg seed	51.2q/ha Rs.11520/- 5.7q/ha Rs.2940/-	Mechanical transplanting by transplanter STBF Herbicide: Perilachlor YMV control : yellow sticky trap @12/ acre, spray of Flonicamide 1.5ml/litre/ Thiomethoxam 100 g/ha	51.2q/ha Rs.11520/- 5.7q/ha Rs.2940/-	Value addition and co-operative marketing	Value addition and co-operative marketing

Farming Situation	Existing practices (2017-18)		1 <sup>st</sup> year (2018-19)		2 <sup>nd</sup> year (2019-20)		3 <sup>rd</sup> year (2020-21)		4 <sup>th</sup> year (2021-22)	
	Components	Problems / practices	Interventions	Yield & Net income/ha	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	
Homestead	<ul style="list-style-type: none"> <li>Dairy 1 Cow</li> <li>Milk: 1.0l/day</li> <li>Rs. 5800/yr</li> <li>No secondary income</li> <li>Goatary</li> <li>Rs.9900/year(2Nos.)</li> </ul>	<ul style="list-style-type: none"> <li>No green fodder supplements</li> <li>High cost of concentrate feeding</li> <li>No value addition of milk</li> <li>High mortality percent in kids</li> </ul>	<ul style="list-style-type: none"> <li>Vaccination</li> <li>Sanitation management of cattle shed</li> <li>Banaraja poultry bird (10 birds) vaccination, feeding</li> <li>Shed management (Bamboo mat)</li> </ul>	<ul style="list-style-type: none"> <li>Milk : 1.5l/day</li> <li>7000/yr</li> <li>2.75kg/bird</li> <li>100 eggs 1<sup>st</sup> year</li> <li>Rs.2000/yr</li> <li>Rs.11200/year</li> </ul>	<ul style="list-style-type: none"> <li>Hybrid nappier / var. CO 4 . CO4/Barseem (0.25 acre)</li> <li>Farm made feed (broken rice , pulse bran ), hay of pulses</li> <li>Artificial insemination</li> <li>Banaraja poultry enterprise (2 batches of 10 birds each)</li> <li>Deworming of kids (Fenbendazole .5mg/kg body wt.) &amp; proper schedule of vaccination (PPR Vaccine 1ml subcutaneous), supply of mineral mixture (Suplivate-M)</li> </ul>	<ul style="list-style-type: none"> <li>Milk: 2.5 l/day</li> <li>Rs.8500/yr</li> <li>(Cost of feed will decrease by Rs.10/kg)</li> <li>2 kg/bird</li> <li>150 eggs/2<sup>nd</sup> year</li> <li>Rs.3000/yr</li> <li>Rs.12300/year</li> </ul>	<ul style="list-style-type: none"> <li>Hybrid nappier / Barseem</li> <li>Farm made feed</li> <li>Value addition of milk for <i>chenna</i> making</li> <li>3 overlapping batches of 10 birds each</li> <li>Feed management through training &amp; demonstration (concentrate mixture 200 gm./goat/day) (3 no of goats)</li> </ul>	<ul style="list-style-type: none"> <li>Chhena: 1.5 kg/day</li> <li>Rs.9500/yr</li> <li>Rs.4000/yr</li> <li>Rs.13900/year</li> </ul>	<ul style="list-style-type: none"> <li>Value addition and co-operative marketing</li> </ul>	-
Homestead	<ul style="list-style-type: none"> <li>Paddy straw mushroom</li> </ul>	<ul style="list-style-type: none"> <li>In sufficient human nutrition</li> <li>No plan kitchen garden</li> </ul>	<ul style="list-style-type: none"> <li>Paddy straw mushroom from June to October (2 beds/day)</li> </ul>	<ul style="list-style-type: none"> <li>1.4 kg/day</li> <li>Rs. 4500/yr</li> </ul>	<ul style="list-style-type: none"> <li>Paddy straw mushroom from June to October (2 beds/day)</li> </ul>	<ul style="list-style-type: none"> <li>3.2 kg/day</li> <li>Rs.4500/yr</li> </ul>	<ul style="list-style-type: none"> <li>Oyester mushroom, 2 beds per day</li> </ul>	<ul style="list-style-type: none"> <li>Value addition and co-operative marketing</li> </ul>	-	
Homestead	<ul style="list-style-type: none"> <li>Nutritional Garden</li> </ul>	<ul style="list-style-type: none"> <li>In sufficient human nutrition</li> <li>No plan kitchen garden</li> </ul>	<ul style="list-style-type: none"> <li>Planting of 2 mango grafts</li> <li>3 lemon layers</li> <li>5 papaya plants</li> <li>2 banana plants (1 G9 and 1 Denga Bantha)</li> <li>2 drumstick plants</li> </ul>	<ul style="list-style-type: none"> <li>Rs.200/-</li> </ul>	<ul style="list-style-type: none"> <li>Provision of seeds of leafy vegetables with seeds of brinjal, chilli and tomato</li> </ul>	<ul style="list-style-type: none"> <li>Rs.300/-</li> </ul>	<ul style="list-style-type: none"> <li>Planting of 3 papaya plants</li> <li>Provision of seeds of leafy vegetables with seeds of brinjal, chilli and tomato</li> </ul>	<ul style="list-style-type: none"> <li>Value addition and co-operative marketing</li> </ul>	-	

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
	Cultivation of high yielding paddy var. Hasanta in medium and low land	Area spread 22.0 ha	0.308	0.35	0.140	0.263
	Control of stem borer of brinjal	Area spread 2.5 ha	0.045	0.07	0.028	0.053
	Cultivation of hybrid maize var. OMA 14/ NK 30 in uplands	Area spread 6.0 ha	0.18	0.26	0.104	0.195
	Intercropping of cow pea with maize	Area spread 2.0 ha	0.066	0.13	0.052	0.098
	Crop diversification of upland paddy to sweet corn	Area spread 3.0 ha	0.693	1.04	0.416	0.780
	Cultivation of blackgram and greengram in rice fallow	Area spread 9.0 ha	0.198	0.29	0.116	0.218
	Cultivation of hybrid sunflower in rice fallow	Area spread 8.0 ha	0.20	0.28	0.112	0.210
	Cultivation of paddy straw mushroom	300 nos. of bed	0.12	0.12	0.048	0.090
	Upgradation of dairy	135 farmers will be benefited	0.45	0.45	0.180	0.338
	Rearing of backyard poultry	20 house hold will be benefited	0.2	0.2	0.080	0.150
	Development of nutritional garden	20 house hold will developed	0.3	0.3	0.120	0.225
	Distribution of seedlings and planting materials of different fruits and vegetables	All farmers of the village	0.6	0.6	0.240	0.450
	Distribution of low cost farm implements to ST farmers	20 farmers and farm women will be benefited.	0.5	0.5	0.200	0.375
	Cultivation of off season vegetables	Area spread 2.0 ha	0.14	0.26	0.104	0.195
	Demonstration of micro-irrigation	Area spread 1.0 ha	0.8	0.1	0.040	0.075
	Demonstration of protected cultivation	Area spread 2.0 ha	1.0	1.0	0.400	0.750
	Development of IFS model	Area spread 4.0 ha	1.6	2.5	1.000	1.875
	Development of organic farming	Area spread 3.5 ha	0.45	0.27	0.108	0.203
	Development of marketing co-operatives	All farmers will be benefited.	0.15	0.15	0.060	0.113
	Training, awareness programme and other extension activity	All farmers will be benefited.	0.192	0.192	0.192	0.192
	Miscellaneous @20% of the cost of total activities		1.577	1.812	0.748	1.369
	<b>Total</b>		<b>9.461</b>	<b>10.874</b>	<b>4.488</b>	<b>8.214</b>

#### Village-3

1. Name of KVK/ district: Rayagada

2. Name of villages adopted: Nilamguda

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 95

(ii) Area of irrigated land (ha): 23.75

(iii) Number of water body: 3

(iv) Area of water body (ha): 4.5

(v) Number of different livestock animals: 720

(vi) Average yield of different crops, livestock and fisheries:

Sl. No.	Crop/ Enterprises/ Others	Average Yield	Remarks
1	Paddy	43.0 q/ha	

Sl. No.	Crop/ Enterprises/ Others	Average Yield	Remarks
2	Cotton	20.0 q/ha	
3	Maize	42,000 cobs/ha	
4	Pigeon pea	9.5 q/ha	
5	Blackgram	6.5 q/ha	
6	Sunflower	8.2 q/ha	
7	Groundnut	13.0 q/ha	
8	Horsegram	4.0 q/ha	
9	Vegetables	-	
10	Fruits	-	
11	Livestock	-	
12	Fisheries	3.4 tonne/ha	

(vii) Soil status: Red, black, clay soil

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

Nitrogen	Phosphorous	Potash
7233 kg	4014 kg	3244 kg

(ix) Major diseases occurred in crops:

Crop/ Enterprises/ Others	Major Diseases occurred	Remark
Cereal crops	Paddy- blast, sheath rot and seath blight Maize- Leaf spot Ragi – blast, seedling blight	
Pulse crops	Yellow Mosaic virus	
Oilseed crops	Ground nut- Tikka disease Sunflower- downy mildew and powdery mil dew, alternaria leaf spot	
Vegetable crops	Root rot, stem rot, damping off, Leaf curl, YMV,	
Fruit crops	Diplodia stem – emd rot, malformation, anthracnose	

(x) Major diseases occurred in livestock:

Crop/ Enterprises/ Others	Major Diseases occurred	Remark
Livestock	Foot and mouth disease Haemorrhagic septicaemia Coccidiosis,	

(xi) Post-harvest management/ value addition followed, if any:NA

(xii) Marketing channels of products: Local market

(xiii) Agro-based industries, if any: NA

(xiv) Average income of the farmer: Rs. 92, 000/- per annum

#### 5. Possibility of involvement of ICAR Institutes:

#### 6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Dhanuka Group and Mahindra & Mahindra

#### 7. Name of other partners involved (State Deptt./ Central gov. Deptt./ PSU/ NGO/ Private org.): Department of Agriculture and Department of Horticulture

#### 8. FPO formed or not? No

#### 9. Major interventions planned:

Farming Situation	Existing practices (2017-18)		1 <sup>st</sup> year (2018-19)		2 <sup>nd</sup> year (2019-20)		3 <sup>rd</sup> year (2020-21)		4 <sup>th</sup> year (2021-22)	
	Components	Problems / practices	Yield & Net income/ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	
Irrigated upland	Rice-Vegetable (Brinjal) Rice: 19.2 q/ha (0.4 ha) (Rs. 4160/-) Brinjal/Cow pea 151 q/ha (0.10 ha) (Rs. 6500/-)	Local var. Pathara, Chherka Broadcast sowing Blanket fertilization Hand weeding Stem borer problem Blanket fertilization Fruit and shoot borer attack	23.6 q/ha Rs 5220/- 163q/ha Rs. 7600/-	Drought tolerant variety Sahabhai Dhan/Bina dhan 11 Cultivation of brinjal var. Muktrakeshi	27.3 qtl/ha Rs. 6880/- 196 q/ha Rs. 9300/-	Line sowing STBF Herbicide- Pyrazol Sulfuron Ethyle @ 200g/ha/ Butaclor @1l/ha Cultivation of brinjal var. Muktrakeshi	34.6 qtl/ha Rs. 10640/- 212 q/ha Rs. 10400/-	Crop diversification to sweet corn var. Sugar 75/ Misti Stem borer control- spray of Londax power Cultivation of brinjal var. Muktrakeshi Tricho cards	51.2q/ha Rs.11520/- 5.7q/ha Rs.2940/-	
Irrigated Medium Land/ Shallow low land	Rice-Green gram Rice: 33.3q/ha (0.4 ha) (Rs.6520/-) Green gram: 3.3 q/ha (0.2 ha) (Rs. 1780/-)	Longer duration rice var. Pooja/ Swarna Manual transplanting Blanket fertilization Hand weeding YMV in Green gram Blanket fertilization Weed problem	41.8q/ha Rs. 7840/- 4.1 q/ha Rs.2260/-	HYV Naveen/ Pratiksha/ Ranidhan YMV tolerant Var. IPM 02 14 / IPM 02 03 with NPK 20-40-20	46.2q/ha Rs.10040/- 4.7 q/ha Rs.2520/-	Line transplanting STBF Herbicide- Pertilachlor STBF Inoculation of Rhizobium culture with 200g/10kg seed PSB @ 50g/kg seed	Mechanical transplanting by transplanter STBF Herbicide: Pertilachlor YMV control : yellow sticky trap @12/acre, spray of Flonicamide 1.5ml/litre/ Thiomethoxam 100 g/ha			

Farming Situation	Existing practices (2017-18)		1 <sup>st</sup> year (2018-19)		2 <sup>nd</sup> year (2019-20)		3 <sup>rd</sup> year (2020-21)		4 <sup>th</sup> year (2021-22)	
	Components	Problems / practices	Interventions	Yield & Net income /ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha
Homestead	<ul style="list-style-type: none"> <li>▪ Dairy 1 Cow</li> <li>▪ Milk: 1.0l/day</li> <li>Rs. 5800/yr</li> <li>▪ No secondary income</li> <li>▪ Goatary</li> <li>▪ Rs. 9900/year(2Nos.)</li> </ul>	<ul style="list-style-type: none"> <li>▪ No green fodder supplements</li> <li>▪ High cost of concentrate feeding</li> <li>▪ No value addition of milk</li> <li>High mortality percent in kids</li> </ul>	<ul style="list-style-type: none"> <li>▪ Vaccination</li> <li>▪ Sanitation management of cattle shed</li> <li>▪ Banaraja poultry bird (10 birds), vaccination, feeding</li> <li>▪ Shed management (Bamboo mat)</li> </ul>	Milk: 1.5l/day 7000/yr 2.75kg/bird 100 eggs 1 <sup>st</sup> year Rs.2000/yr Rs.11200/year	<ul style="list-style-type: none"> <li>Hybrid nappier / var. CO 4, CO4/Barseem (0.25 acre)</li> <li>Farm made feed (broken rice, pulse bran), hay of pulses</li> <li>Artificial insemination</li> <li>Banaraja poultry enterprise (2 batches of 10 birds each)</li> <li>Deworming of kids (Fenbendazole .5mg/kg body wt.) &amp; proper schedule of vaccination (PPR Vaccine 1ml subcutaneous), supply of mineral mixture (Suplivate-M)</li> </ul>	Milk: 2.5 l/day Rs.8500/yr (Cost of feed will decrease by Rs.10/kg) 2 kg/bird 150 eggs/2 <sup>nd</sup> year Rs.3000/yr Rs.12300/year	<ul style="list-style-type: none"> <li>Hybrid nappier / Barseem</li> <li>Farm made feed</li> <li>Value addition of milk for cherna making</li> <li>3 overlapping batches of 10 birds each</li> <li>Feed management through training &amp; demonstration (concentrate mixture 200 gm/ goat/day)</li> <li>(3 no of goats)</li> </ul>	Chhena: 1.5 kg/day Rs.9500/yr Rs.4000/yr Rs.13900/year		
Homestead	<ul style="list-style-type: none"> <li>▪ Paddy straw mushroom</li> </ul>		<ul style="list-style-type: none"> <li>▪ Paddy straw mushroom from June to October (2 beds/day)</li> </ul>	1.4 kg/day Rs. 4500/yr	<ul style="list-style-type: none"> <li>▪ Oyester mushroom, 2 beds per day</li> </ul>	3.2 kg/day Rs.4500/yr	<ul style="list-style-type: none"> <li>▪ Planting of 3 papaya plants</li> <li>▪ Provision of seeds of leafy vegetables with seeds brinjal, chilli and tomato</li> </ul>			
Homestead	<ul style="list-style-type: none"> <li>▪ Nutritional Garden</li> </ul>	<ul style="list-style-type: none"> <li>▪ In sufficient human nutrition</li> <li>▪ No plan kitchen garden</li> </ul>	<ul style="list-style-type: none"> <li>▪ Planting of 2 mango grafts</li> <li>▪ 3 lemon layers</li> <li>▪ 5 papaya plants</li> <li>▪ 2 banana plants (1 G9 and 1 Denga Bantha)</li> <li>▪ 2 drumstick plants</li> </ul>							

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	Cultivation of drought tolerant paddy	Area spread 19 ha	0.266	0.310	0.124	0.233
2.	Adoption of high density planting in cotton	Area spread 13.2 ha	0.528	0.590	0.236	0.443
3.	Control of stem borer of brinjal	Area spread 3.5 ha	0.063	0.075	0.030	0.056
4.	Intercropping of arhar with cotton	Area spread 11.5ha	0.120	0.120	0.048	0.090
5.	Crop diversification of upland paddy to sweet corn	Area spread 6.4 ha	1.478	1.478	0.591	1.109
6.	Cultivation of blackgram and greengram in rice fallow	Area spread 9.8 ha	0.216	0.232	0.093	0.174
7.	Cultivation of paddy straw mushroom	300 nos. of bed	0.120	0.120	0.048	0.090
8.	Upgradation of dairy	170 farmers will be benefited	0.600	0.600	0.240	0.450
9.	Rearing of backyard poultry	20 house hold will be benefited	0.200	0.200	0.080	0.150
10.	Development of nutritional garden	20 house hold will developed	0.300	0.300	0.120	0.225
11.	Distribution of seedlings and planting materials of different fruits and vegetables	All farmers of the village	0.550	0.550	0.220	0.413
12.	Distribution of low cost farm implements to ST farmers	20 farmers and farm women will be benefited.	0.500	0.500	0.200	0.375
13.	Cultivation of off season vegetables	Area spread 3.4 ha	0.238	0.451	0.180	0.338
14.	Demonstration of micro-irrigation	Area spread 1.0 ha	0.800	1.000	0.400	0.750
15.	Demonstration of protected cultivation	Area spread 2.0 ha	1.000	1.000	0.400	0.750
16.	Development of organic farming	Area spread 4.5 ha	0.576	0.314	0.126	0.236
17.	Development of marketing co-operatives	All farmers will be benefited.	0.150	0.150	0.060	0.113
18.	Development of IFS model	Area spread 4.0 ha	2.000	2.400	0.960	1.800
19.	Training, awareness programme and other extension activity	All farmers will be benefited.	0.192	0.192	0.192	0.192
20.	Miscellaneous @20% of the cost of total activities		1.979	2.116	0.870	1.597
<b>Total</b>			<b>11.876</b>	<b>12.698</b>	<b>5.218</b>	<b>9.582</b>

#### Village-4

1. Name of KVK/ district: Rayagada

2. Name of villages adopted: Pradhaniguda

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 57

(ii) Area of irrigated land (ha): 7.4

(iii) Number of water body: 2

(iv) Area of water body (ha): 2.2

(v) Number of different livestock animals: 480

(vi) Average yield of different crops, livestock and fisheries:

Sl. No.	Crop/ Enterprises/ Others	Average Yield	Remarks
1	Paddy	46.5 q/ha	
2	Maize	44,000 cobs/ha	
3	Ragi	9.2 q/ha	

Sl. No.	Crop/ Enterprises/ Others	Average Yield	Remarks
4	Cotton	18 q/ha	
5	Blackgram	7.5 q/ha	
6	Greengram	7.0 q/ha	
7	Sunflower	9.4 q/ha	
8	Groundnut	14.2 q/ha	
9	Vegetables	-	
10	Fruits	-	
11	Livestock	-	
12	Fisheries	4.6 tonne/ha	

(vii) Soil status: Red, sandy loam, clay soil

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

Nitrogen	Phosphorous	Potash
4155 kg	3128 kg	2077 kg

(ix) Major diseases occurred in crops:

Crop/ Enterprises/ Others	Major Diseases occurred	Remark
Cereal crops	Paddy- blast, sheath rot and sheath blight Sweet corn- Leaf spot Ragi – blast, seedling blight	
Pulse crops	Yellow Mosaic virus	
Oilseed crops	Ground nut- Tikka disease Sunflower- downy mildew and powdery mildew, alternaria leaf spot	
Vegetable crops	Root rot, stem rot, damping off, Leaf curl, YMV,	
Fruit crops	Diplodia stem – end rot, malformation, anthracnose	

(x) Major diseases occurred in livestock:

Crop/ Enterprises/ Others	Major Diseases occurred	Remark
Livestock	Foot and mouth disease Haemorrhagic septicaemia Coccidiosis,	

(xi) Post-harvest management/ value addition followed, if any: NA

(xii) Marketing channels of products: Local market

(xiii) Agro-based industries, if any: NA

(xiv) Average income of the farmer: Rs. 73, 000/- per annum

5. Possibility of involvement of ICAR Institutes:

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Dhanuka Group and Mahindra & Mahindra

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): Mega irrigation project, Gadiakhala, Fishery Department and Bayer

8. FPO formed or not? No

### 9. Major interventions planned:

Farming Situation	Existing practices (2017-18)		1 <sup>st</sup> year (2018-19)		2 <sup>nd</sup> year (2019-20)		3 <sup>rd</sup> year (2020-21)		4 <sup>th</sup> year (2021-22)	
	Components	Problems /practices	Interventions	Yield & Net income/ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha
Rain fed upland	Rice-Fallow (0.6 ha) 18.6 q/ha (Rs. 6400/-) Black gram-fallow (0.2ha) 3q/ha (Rs.1160/-)	Water stress Old var. Khandagiri/ Pathara Broadcast sowing Blanket fertilization Hand weeding Damage by Stem borer Rabi fallow Local variety Blanket fertilization Weed problem	Drought tolerant variety Sahabhagi Dhan/Bina dhan- 11/DRR 44 HYV var.PU 35/ PU 31//Ujala	22.3 qt/ha Rs 7380/- 3.7q/ha Rs.1500/-	Line sowing STBF Herbicide-Pyrazol Sulfuron Ethyle @ 200g/ha/ Butaclor @1l/ha, Pendimethalin @ 2l/ha Stem borer control- spray of Londax power STBF INM with seed inoculation of Rhizobium and PSB	25.6 qt/ha Rs. 9378/- 4.1q/ha Rs.2020/-	Control of sucking pest- Conicamide @ 1.5 ml/litre water	31 qt/ha Rs. 11200/- 4.9 q/ha Rs.2280/-	Value addition and co-operative marketing	-
Rainfed Medium Land/ Shallow low land	Cotton-fallow 15q/ha (0.4ha) (Rs.9200/-) Rice-Green gram Rice: 32.5 q/ha (0.4ha) (Rs.6120/-) Black m gram ( Paira) 2.8 q/ha (0.2ha) (Rs.1560/-) Green gram: 3.1 q/ha (0.2 ha) (Rs. 1620/-)	Local varieties-RGL/ MTU 1010/Lalat/ IIR 64 Hand transplanting Blanket fertilization Hand weeding Damage of stem borer Local variety No fertilizer application YMV in Green gram	High density planting-(60 x 30) cm weed control: spray Butachlor @ 1l/ha HYV Naveen/ Pratiksha/ Ranidhan HYV PU 35/ Jyoti YMV tolerant IPM 02 14/ IPM 02 03/TARM 1	19q/ha Rs.10480/-	Inter cropping of cotton with arhar with cotton : arhar @ 8: 2 row ratio	20.5 q/ha Rs. 11800/-	Control of sucking pest- Conicamide @ 1.5 ml/litre water	22q/ha Rs.12960/-	Value addition and co-operative marketing	-
				38q/ha Rs.7520/- 3.6q/ha Rs.2060/- 3.9 q/ha Rs.2080/-	Line transplanting STBF Herbicide: Butachlor/ Bispyribac Na Application of N and P @ 20-40 kg/ha in 10 days before sowing YMV tolerant IPM 02 14 / IPM 02 03 NPK 20-40-20	44.2q/ha Rs.9280/- 4.5q/ha Rs.2580/- 4.5 q/ha Rs.2360/-	Transplanting of Paddy transplanter Harvest of paddy by Paddy reaper INM with seed inoculation of Rhizobium and PSB Control of YMV in Green gram Installation of yellow sticky trap @ 12 Nos./ Acre and spray of Flonicamide 1.5ml/litre/ Thiomethoxam 100 g/ha	48.4q/ha Rs.10800/- 5.2q/ha Rs.3470/- 5.4q/ha Rs.2980/-	Value addition and co-operative marketing	-

Farming Situation	Existing practices (2017-18)		1 <sup>st</sup> year (2018-19)		2 <sup>nd</sup> year (2019-20)		3 <sup>rd</sup> year (2020-21)		4 <sup>th</sup> year (2021-22)	
	Components	Problems /practices	Interventions	Yield & Net income/ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha
Homestead	<ul style="list-style-type: none"> <li>■ Dairy 1 Cow</li> <li>■ Milk: 1.0l/day</li> <li>■ Rs. 5800/yr</li> <li>■ No secondary income</li> <li>■ Paddy straw</li> <li>■ Mushroom</li> </ul>	<ul style="list-style-type: none"> <li>■ No green fodder supplements</li> <li>■ High cost of concentrate feeding</li> <li>■ No value addition in milk</li> <li>■ Lack of knowledge of production</li> </ul>	<ul style="list-style-type: none"> <li>■ Vaccination</li> <li>■ Maintaining of sanitation of cattle shed</li> <li>■ Banaraja poultry bird (10 birds), vaccination, feeding</li> <li>■ Training on production of paddy straw mushroom</li> </ul>	Milk : 1.5l/day Rs. 7000/yr 2.75kg/bird 100 eggs 1 <sup>st</sup> year Rs. 2000/yr	Hybrid nappier / var. CO 4 - CO4(0.25 acre) <ul style="list-style-type: none"> <li>■ Farm made feed (broken rice , pulse bran ), hay of pulses</li> <li>■ Artificial insemination</li> <li>■ Banaraja poultry enterprise (2 batches of 10 birds each)</li> <li>■ Paddy straw mushroom from June to October (2 beds/day)</li> </ul>	Milk: 2.5l/day Rs.8500 (Cost of feed will decrease by Rs.10/kg) 2 kg/bird 150 eggs/2 <sup>nd</sup> year Rs.3000/yr 1.4 kg/day Rs. 3800/yr	<ul style="list-style-type: none"> <li>■ Location specific mineral mixture @ 80g/day.</li> <li>■ Value addition of milk for <i>chhena</i> making</li> <li>■ 3 overlapping batches of 10 birds each</li> <li>■ Paddy straw mushroom, 4 beds per day</li> </ul>	Chhena: 1.5 kg/day Rs.9500/yr Rs.4000/yr 3.2 kg/day Rs.5200/yr	Value addition and co-operative marketing	Value addition and co-operative marketing
Homestead	<ul style="list-style-type: none"> <li>■ Nutritional Garden</li> </ul>	<ul style="list-style-type: none"> <li>■ In sufficient human nutrition</li> <li>■ No plan kitchen garden</li> <li>■ No utilization of kitchen wastage</li> </ul>	<ul style="list-style-type: none"> <li>■ Planting of 2 mango grafts</li> <li>■ 3 lemon layers</li> <li>■ 5 papaya plants</li> <li>■ 2 banana plants (1 G9 and 1 Denga Bantha)</li> <li>■ 2 drumstick plants</li> </ul>	Rs.200/-	<ul style="list-style-type: none"> <li>■ Provision of seeds of leafy vegetables with seeds of brinjal, chilli and tomato</li> </ul>	Rs.300/-	<ul style="list-style-type: none"> <li>■ Planting of 3 papaya plants</li> <li>■ Provision of seeds of leafy vegetables with seeds brinjal, chilli and tomato</li> </ul>	Rs.300/-	Value addition and co-operative marketing	

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	Cultivation of drought tolerant paddy	Area spread 16 ha	0.224	0.289	0.116	0.217
2.	Adoption of high density planting in cotton	Area spread 6.5 ha	0.250	0.312	0.125	0.234
3.	Intercropping of arhar with cotton	Area spread 9 ha	0.110	0.150	0.060	0.113
4.	Crop diversification of upland paddy to sweet corn	Area spread 5 ha	1.155	1.210	0.484	0.908
5.	Cultivation of blackgram and greengram in rice fallow	Area spread 7.5 ha	0.165	0.182	0.073	0.137
6.	Cultivation of paddy straw mushroom	300 nos. Of bed	0.120	0.120	0.048	0.090
7.	Upgradation of dairy	35 farmers will be benefited	0.123	0.123	0.049	0.092
8.	Rearing of backyard poultry	20 house hold will be benefited	0.200	0.200	0.080	0.150
9.	Development of nutritional garden	20 house hold will developed	0.300	0.300	0.120	0.225
10.	Distribution of seedlings and planting materials of different fruits and vegetables	All farmers of the village	0.250	0.250	0.100	0.188
11.	Distribution of low cost farm implements to ST farmers	20 farmers and farm women will be benefited	0.500	0.500	0.200	0.375
12.	Cultivation of off season vegetables	Area spread 4.5 ha	0.300	0.420	0.168	0.315
13.	Demonstration of micro-irrigation	Area spread 0.5 ha	0.400	0.600	0.240	0.450
14.	Demonstration of protected cultivation	Area spread 1.4 ha	0.700	0.700	0.280	0.525
15.	Development of organic farming	Area spread 2.6 ha	0.400	0.230	0.092	0.173
16.	Development of marketing co-operatives	All farmers will be benefited.	0.100	0.100	0.040	0.075
17.	Development of IFS model	Area spread 3.0 ha	1.200	1.900	0.760	1.425
18.	Training, awareness programme and other extension activity	All farmers will be benefited.	0.192	0.192	0.192	0.192
19.	Miscellaneous @20% of the cost of total activities		1.338	1.556	0.645	1.176
		<b>Total</b>	<b>8.027</b>	<b>9.334</b>	<b>3.871</b>	<b>7.058</b>

### Village-5

1. Name of KVK/ district: Rayagada

2. Name of villages adopted: Sanahuma

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 93

(ii) Area of irrigated land (ha): 26

(iii) Number of water body: 2

(iv) Area of water body (ha): 3.6

(v) Number of different livestock animals: 915

(vi) Average yield of different crops, livestock and fisheries:

Sl. No.	Crop/ Enterprises/ Others	Average Yield	Remarks
1	Paddy	42.5 q/ha	
2	Cotton	20.0 q/ha	
3	Pigeon pea	10.4 q/ha	
4	Blackgram	7.5 q/ha	
5	Sunflower	8.8 q/ha	

Sl. No.	Crop/ Enterprises/ Others	Average Yield	Remarks
6	Groundnut	14.0 q/ha	
7	Vegetables	-	
8	Fruits	-	
9	Livestock	-	
10	Fisheries	3.4 tonne/ha	

(vii) Soil status: Red, sandy, clay soil

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

Nitrogen	Phosphorous	Potash
7428 kg	4246 kg	3547 kg

(ix) Major diseases occurred in crops:

Crop/ Enterprises/ Others	Major Diseases occurred	Remark
Cereal crops	Paddy- blast, sheath rot and sheath blight	
Pulse crops	Yellow Mosaic virus	
Oilseed crops	Ground nut- Tikka disease Sunflower- downy mildew and powdery mil dew, alternaria leaf spot	
Vegetable crops	Root rot, stem rot, damping off, Leaf curl, YMV,	
Fruit crops	Diplodia stem – emd rot, malformation, anthracnose	

(x) Major diseases occurred in livestock:

Crop/ Enterprises/ Others	Major Diseases occurred	Remark
Livestock	Foot and mouth disease Haemorrhagic septicaemia Coccidiosis,	

(xi) Post-harvest management/ value addition followed, if any: NA

(xii) Marketing channels of products: Local market

(xiii) Agro-based industries, if any: NA

(xiv) Average income of the farmer: Rs. 1,08, 000/- per annum

#### 5. Possibility of involvement of ICAR Institutes:

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Dhanuka Group and Mahindra & Mahindra

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): ITDA, Gunupur, Department of Agriculture and DAO, Gunupur

8. FPO formed or not? No

### 9. Major interventions planned:

Farming Situation	Existing practices (2017-18)		1 <sup>st</sup> year (2018-19)		2 <sup>nd</sup> year (2019-20)		3 <sup>rd</sup> year (2020-21)		4 <sup>th</sup> year (2021-22)							
	Components	Problems /practices	Interventions	Yield & Net income/ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha						
Semi-Irrigated upland	Maize- Fallow 23q/ha (0.4ha) (Rs. 13300/-) Arhar-Fallow 4.8 q/ha (0.4ha) (Rs. 7540/ha) Brinjal- fallow 148 qt/ha (0.15ha) (Rs. 9800/ha)	<ul style="list-style-type: none"> <li>Use of composite variety</li> <li>Blanket fertilizer dose</li> <li>Weed problem</li> <li>local var. (desi kandula &amp; sana kandula, bada kandula)</li> <li>Broadcast ing</li> <li>Blanket fertilization</li> <li>High weed infestation</li> <li>Fruit and Shoot borer problem</li> <li>Rabi fallow</li> <li>Old variety- Blue Star</li> <li>Shoot and fruit borer</li> </ul>	<ul style="list-style-type: none"> <li>Hybrid maize PAC 334/OMA 14</li> <li>NPK @ 120:80:80</li> <li>HYV Arhar ASHA/ LRG 41</li> <li>Cultivation of brinjal var. Mukrakeshi/ Utikal Jyoti/ Utikal Tarni</li> </ul>	27q/ha Rs.14600/- 6.3 q/ha Rs. 9800/- 195q/ha Rs. 11500/-	<ul style="list-style-type: none"> <li>Weed control- Atrazin @ 1 lit/ha/ Simazine @ 1 kg/ha</li> <li>Line sowing</li> <li>STBF</li> <li>Herbicide- Pendimethalin @1kg/ha</li> <li>Control of shoot and fruit borer. Use of tricho cards @ 5-6 Nos. per acre and at in interval of 7-10 days</li> </ul>	31.6q/ha Rs.15200/- 7.1q/ha Rs.10700/- 195 q/ha Rs. 14300/-	<ul style="list-style-type: none"> <li>Cultivation of sweet corn variety Sugar 75/ Misti</li> <li>Seed production of Arhar C.v BRG- 176 / BRG-4/BRG 5</li> <li>Rhizobium 200 gm/ 20kg seed + Sodium molibdate @ 3 g/10kg seed</li> <li>Market linkage for sale of brinjal.</li> </ul>	36.3q/ha Rs.16300/- 8.5 qt/ha Rs. 11480/- 208 q/ha Rs.16100/-	<ul style="list-style-type: none"> <li>HYV</li> <li>Naveen</li> <li>Line transplanting</li> <li>STBF</li> <li>Herbicide: Pertilachlor</li> <li>Pesticide Londax Power</li> <li>STBF</li> <li>Weed control: Application of Pendimethalin @ 1kg/ha pre emergence</li> </ul>	44.4q/ha Rs.10240/- 4.7q/ha Rs.2500/-	<ul style="list-style-type: none"> <li>HYV</li> <li>Naveen</li> <li>Mechanical transplanting by transplanter</li> <li>STBF</li> <li>Herbicide: Pertilachlor</li> <li>Fungicide: Tricyclazole</li> <li>YMV management: Use of yellow sticky trap @ 12 Nos./acre and spray of Flonicamide 1.5ml/ litre/ Thiomethoxam 100 g/ha</li> <li>Control of Leaf spot- Application of Carbendazim + Mancozeb @ 1kg/ha</li> </ul>	47.8q/ha Rs.11440/- 5.8 q/ha Rs.2920/-	<ul style="list-style-type: none"> <li>Value addition and co-operative marketing</li> </ul>	Value addition and co-operative marketing	17.3 q/ha Rs.4140/-	Value addition and co-operative marketing
Semi-Irrigated Medium Land	Rice-Green gram/ Sunflower Rice: 33 q/ha (0.4 ha) (Rs. 6360/-) Green gram: 3.3 q/ha (0.2ha) (Rs. 1760/-)	<ul style="list-style-type: none"> <li>Local variety</li> <li>Manual transplanting</li> <li>Blanket fertilization</li> <li>Hand weeding</li> <li>Damage by Rice stem borer &amp; BPH</li> <li>Blast disease</li> <li>YMV in Green gram</li> <li>Weed problem</li> </ul>	<ul style="list-style-type: none"> <li>HYV</li> <li>Naveen</li> <li>YMV tolerant</li> <li>Var. IPM 02 14</li> <li>NPK 20-40-20</li> </ul>	41q/ha Rs.8660/- 3.7 q/ha Rs.2140/-	<ul style="list-style-type: none"> <li>HYV</li> <li>Naveen</li> <li>Line transplanting</li> <li>STBF</li> <li>Herbicide: Pertilachlor</li> <li>Pesticide Londax Power</li> <li>STBF</li> <li>Weed control: Application of Pendimethalin @ 1kg/ha pre emergence</li> </ul>	44.4q/ha Rs.10240/- 4.7q/ha Rs.2500/-	<ul style="list-style-type: none"> <li>HYV</li> <li>Naveen</li> <li>Mechanical transplanting by transplanter</li> <li>STBF</li> <li>Herbicide: Pertilachlor</li> <li>Fungicide: Tricyclazole</li> <li>YMV management: Use of yellow sticky trap @ 12 Nos./acre and spray of Flonicamide 1.5ml/ litre/ Thiomethoxam 100 g/ha</li> <li>Control of Leaf spot- Application of Carbendazim + Mancozeb @ 1kg/ha</li> </ul>	47.8q/ha Rs.11440/- 5.8 q/ha Rs.2920/-	<ul style="list-style-type: none"> <li>Value addition and co-operative marketing</li> </ul>	Value addition and co-operative marketing	17.3 q/ha Rs.4140/-	Value addition and co-operative marketing				
	Sunflower 9q/ha (0.2 ha) (Rs. 1600/-)	<ul style="list-style-type: none"> <li>Local varieties</li> <li>Blanket fertilization</li> <li>Stem Rot Problem</li> <li>Leaf spot disease</li> </ul>	<ul style="list-style-type: none"> <li>Hybrid var- PAC 334, BSH 1</li> <li>NPK @ 48-48-36 kg/ha</li> </ul>	12q/ha Rs.2900/-	<ul style="list-style-type: none"> <li>STBF</li> <li>Control of stem rot- Application of COC @ 1.5kg/ha</li> </ul>	15.8q/ha Rs.3560/-	<ul style="list-style-type: none"> <li>Control of Leaf spot- Application of Carbendazim + Mancozeb @ 1kg/ha</li> </ul>	17.3 q/ha Rs.4140/-	<ul style="list-style-type: none"> <li>Value addition and co-operative marketing</li> </ul>	Value addition and co-operative marketing	17.3 q/ha Rs.4140/-	Value addition and co-operative marketing				

Farming Situation	Existing practices (2017-18)		1 <sup>st</sup> year (2018-19)		2 <sup>nd</sup> year (2019-20)		3 <sup>rd</sup> year (2020-21)		4 <sup>th</sup> year (2021-22)	
	Components	Problems /practices	Interventions	Yield & Net income/ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha	Interventions	Expected yield & Net income /ha
Homestead	Dairy 1 Cow ▪ Milk: 1.0l/day Rs. 5800/yr ▪ No secondary income	▪ No green fodder supplements ▪ High cost of concentrate feeding ▪ No value addition in milk	▪ Vaccination ▪ Sanitation management of cattle shed ▪ Banaraja poultry bird (10 birds) vaccination, feeding	Milk: 1.5l/day 7000/yr 2.75kg/bird 100 eggs 1 <sup>st</sup> year Rs.2000/yr	Hybrid nappier / var. CO 4. CO4/Barsem (0.25 acre) ▪ Farm made feed (broken rice, pulse bran), hay of pulses ▪ Artificial insemination ▪ Banaraja poultry enterprise (2 batches of 10 birds each) ▪ Paddy straw mushroom from June to October (2 beds/day)	Milk: 2.5l/day Rs.8500/yr (Cost of feed will decrease by Rs.10/kg) 2 kg/bird 150 eggs/2 <sup>nd</sup> year Rs.3000/yr 2.4 kg/day Rs. 3800/yr	▪ Location specific mineral mixture @ 80g/day. ▪ Value addition of milk for <i>chhena</i> making ▪ 3 overlapping batches of 10 birds each ▪ Paddy straw mushroom, 4 beds per day	Chhena: 1.5 kg/day Rs.9000/yr Rs.4000/yr 3.2 kg/day Rs.5200/yr	Value addition and co-operative marketing	Value addition and co-operative marketing
Homestead	▪ Nutritional Garden	▪ In sufficient human nutrition ▪ No plan kitchen garden	▪ Planting of 2 mango grafts ▪ 3 lemon layers ▪ 5 papaya plants ▪ 2 banana plants (1 G9 and 1 Denga Bantha) ▪ 2 drumstick plants	Rs.200/-	Provision of seeds of leafy vegetables with seeds of brinjal, chilli and tomato	Rs.200/-	▪ Planting of 3 papaya plants ▪ Provision of seeds of leafy vegetables with seeds brinjal, chilli and tomato	Rs.300/-		

### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	Cultivation of high yielding paddy var. Hasanta in medium and low land	Area spread 17.0 ha	0.238	0.32	0.128	0.24
2.	Cultivation of high yielding arhar variety PRG 176	Area spread 7.0 ha	0.169	0.23	0.092	0.1725
3.	Control of stem borer of brinjal	Area spread 3.0 ha	0.054	0.06	0.024	0.045
4.	Cultivation of hybrid maize var. OMA 14/ NK 30 in uplands	Area spread 5.0 ha	0.15	0.22	0.088	0.165
5.	Intercropping of cow pea with maize	Area spread 2.0 ha	0.066	0.13	0.052	0.0975
6.	Crop diversification of upland paddy to sweet corn	Area spread 4.0 ha	0.924	1.01	0.404	0.7575
7.	Cultivation of blackgram and greengram in rice fallow	Area spread 7.0 ha	0.154	0.24	0.096	0.18
8.	Cultivation of hybrid sunflower in rice fallow	Area spread 5.0 ha	0.125	0.18	0.072	0.135
9.	Cultivation of paddy straw mushroom	300 nos. of bed	0.12	0.12	0.048	0.09
10.	Upgradation of dairy	85 farmers will be benefited	0.3	0.3	0.12	0.225
11.	Rearing of backyard poultry	20 house hold will be benefited	0.2	0.2	0.08	0.15
12.	Development of nutritional garden	20 house hold will developed	0.3	0.3	0.12	0.225
13.	Distribution of seedlings and planting materials of different fruits and vegetables	All farmers of the village	0.6	0.6	0.24	0.45
14.	Distribution of low cost farm implements to ST farmers	20 farmers and farm women will be benefited.	0.5	0.5	0.2	0.375
15.	Cultivation of off season vegetables	Area spread 3.0 ha	0.2	0.4	0.16	0.3
13.	Demonstration of micro-irrigation	Area spread 1.0 ha	0.8	0.1	0.04	0.075
14.	Demonstration of protected cultivation	Area spread 2.0 ha	1	1.0	0.4	0.75
15.	Development of IFS model	Area spread 5.0 ha	2	3.0	1.2	2.25
16.	Development of organic farming	Area spread 2.5 ha	0.4	0.3	0.12	0.225
17.	Development of marketing co-operatives	All farmers will be benefited.	0.15	0.15	0.06	0.1125
18.	Training, awareness programme and other extension activity	All farmers will be benefited.	0.192	0.192	0.192	0.192
19.	Miscellaneous @20% of the cost of total activities		1.728	1.91	0.786	1.442
		<b>Total</b>	<b>10.37</b>	<b>11.462</b>	<b>4.718</b>	<b>8.654</b>



Nursery raising in poly house



### 5.3 Krishi Vigyan Kendra, Gajapati

#### Village-1

1. Name of KVK/ district: Gajapati

2. Name of villages adopted: Alama

3. Number of farmers targeted: 10

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 83

(ii) Area of irrigated land (ha): 14.96

(iii) Number of water body: 2

(iv) Area of water body (ha): 0.02

(v) Number of different livestock animals: Cattle- 70, Goats- 250 Poultry- 112

(vi) Average yield of different crops, livestock and fisheries:

Sl.No.	Crop	Average yield(q/ha)
1	Rice	23
2	Maize	35
3	Cauliflower	206
4	Cabbage	212
5	Knolkhol	186
6	Brinjal	223
7	Tomato	325
8	Okra	85
9	Cowpea	38
10	Cashew	80
11	Mango	310

(vii) Soil status: N- Medium, P- Low, K- Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 175-180 Kg DAP, 192-200 Kg Urea, 130-135 Kg MOP per hectare per annum.

(ix) Major diseases and insects occurred in crops:

Rice- Blast, Bacterial leaf blight, Sheath blight, Stem borer, Case worm, Leaf folder and Gall midge

Maize- *Rhizoctonia* collar rot

Cauliflower- Powdery Mildew, Black rot, Diamond caterpillar,

Brinjal Phomopsis blight, Shoot and fruit borer, Wilt in Brinjal and Tomato,

Blossom end rot of Tomato, YMV and aphids in Cowpea and Okra

Mango Powdery mildew, Hopper, fruit fly and Stone weevil

Cashew Tea mosquito bug

(x) Major diseases occurred in livestock: HSV and FMD in cattle

PPR in Goat

RD in Poultry birds

(xi) Post-harvest management/ value addition followed, if any: NA

(xii) Marketing channels of products: NA

(xiii) Agro-based industries, if any: NA

(xiv) Average income of the farmer: Rs. 18000-20000/- per annum

5. Possibility of involvement of ICAR Institutes:

Involvement of CTCRI for demonstration of new technologies on tuber crops like Sweet potato, Yam Bens and Elephant foot yams.

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):

Involvement of Reliance foundation and Suraksha NGO in developing marketing channel.

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):

State department of Agriculture, Horticulture, Veterinary and Animal husbandry Services

8. FPO formed or not: Not

9. Major interventions planned:

a. Maize+cow pea intercropping (2:2) , Mushroom cultivation and Poultry

b. Mango+ Pineapple intercropping and Apiary

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome (% increase over present income by 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Maize+cow pea intercropping (2:2), Mushroom cultivation and Poultry	210%	0.76	0.80	0.84	0.87
2	Mango+ Pineapple intercropping and Apiary	163.56%	1.12	1.18	1.23	1.3

#### Village-2

1. Name of KVK/ district: Gajapati

2. Name of villages adopted: Tarava

3. Number of farmers targeted: 10

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 122

(ii) Area of irrigated land (ha): 37.8

(iii) Number of water body: 2

(iv) Area of water body (ha): 0.41

(v) Number of different livestock animals: Cattle- 110, Goats- 275 Poultry- 109

(vi) Average yield of different crops, livestock and fisheries:

Sl.No.	Crop	Average yield(q/ha)
1	Rice	25
2	Ground nut	4.3
3	Cauliflower	223
4	Cabbage	217
5	Brinjal	225

Sl.No.	Crop	Average yield(q/ha)
6	Tomato	328
7	Okra	87
8	Cowpea	36

(vii) Soil status: N- Medium, P- Low, K- Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 170-175 Kg DAP, 190-195 Kg Urea, 130-135 Kg MOP per hectare per annum

(ix) Major diseases occurred in crops:

Rice- Blast, Bacterial leaf blight, Sheath blight, Stem borer, Case worm, Leaf folder and Gall midge  
Ground nut- Collar rot, Cercospora leaf spot, White fly and White grub  
Cauliflower- Powdery Mildew, Black rot, Diamond caterpillar,  
Brinjal Phomopsis blight, Shoot and fruit borer, Wilt in Brinjal and Tomato,  
Blossom end rot of Tomato, YMV and aphids in Cowpea and Okra

(x) Major diseases occurred in livestock: HSV and FMD in cattle

PPR in Goat

RD in Poultry birds

(xi) Post-harvest management/ value addition followed, if any: -NA-

(xii) Marketing channels of products: -NA-

(xiii) Agro-based industries, if any: -NA-

(xiv) Average income of the farmer: -NA-

#### 5. Possibility of involvement of ICAR Institutes: Involvement of CTCRI for demonstration of new technologies tuber crops

Involvement of CTCRI and CHES for demonstration of new technologies on tuber crops like Sweet potato, Yam Ben, Elephant foot yams and high value vegetables crops.

Involvement of CIFA for demonstration of new technologies on Pisciculture.

#### 6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):

Involvement of CCD and Reliance NGO in formation of FPO, value addition and marketing channel.

#### 7. Name of other partners involved (State Dept./ Central govt. Dept./ PSU/ NGO/ Private org.):

State department of Agriculture, Horticulture, Veterinary and Animal husbandry Services

#### 8. FPO formed: NA

#### 9. Major interventions planned:

Rice- Paira Green gram, Mushroom cultivation

#### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome (% increase over present income by 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Rice- Paira greengram, Mushroom cultivation	312%	0.50	0.53	0.56	0.58
2	Nutrient and pest management in Groundnut	54%	0.34	0.36	0.38	0.40

#### Village-3

1. Name of KVK/ district: Gajapati

2. Name of villages adopted: Landusahi

3. Number of farmers targeted: 10

#### 4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 290

(ii) Area of irrigated land (ha): 60.9

(iii) Number of water body: 5

(iv) Area of water body (ha): 0.02

(v) Number of different livestock animals: 525

(vi) Average yield of different crops, livestock and fisheries:

Sl.No.	Crop	Average yield(q/ha)
1	Rice	28
2	Sunflower	8
3	Broccoli	86
4	Cabbage	215
5	Brinjal	232
6	Tomato	315
7	Chilli	28.3

(vii) Soil status: N- Medium, P- Medium, K- Low

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 175-178 Kg DAP, 195-200 Kg Urea, 140-145 Kg MOP per hectare per annum

(ix) Major diseases occurred in crops:

Rice- Neck Blast, Bacterial leaf blight, Sheath blight, Stem borer, Brown Plant Hopper, Case worm, Leaf folder and Gall midge

Sunflower- Leaf spot, Head Borer

Brinjal Phomopsis blight, Shoot and fruit borer, Wilt in Brinjal and Tomato,

Blossom end rot of Tomato

Cabbage Head borer

Chilli Thrips and wilt

Termite attack in all crop

(x) Major diseases occurred in livestock: HSV and FMD in cattle

PPR in Goat

RD in Poultry birds

(xi) Post-harvest management/ value addition followed, if any: -NA-

(xii) Marketing channels of products: -NA-

(xiii) Agro-based industries, if any: -NA-

(xiv) Average income of the farmer: -NA-

**5. Possibility of involvement of ICAR Institutes: Involvement of CTCRI for demonstration of new technologies tuber crops**

Involvement of CTCRI and CHES for demonstration of new technologies on tuber crops like Sweet potato, Yam Ben, Elephant foot yams and high value vegetables crops.

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):**

Involvement of GRAM VIKAS and Reliance Foundation NGO in formation of FPO, value addition and marketing channel.

**7. Name of other partners involved (State Dept./ Central govt. Dept./ PSU/ NGO/ Private org.):**

State department of Agriculture, Horticulture, Veterinary and Animal husbandry Services

**8. FPO formed: NA**

**9. Major interventions planned:**

Rice- Paira Green gram, Mushroom cultivation, Vermicomposting

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome (% increase over present income by 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Rice- Paira greengram, Mushroom cultivation	312%	0.50	0.53	0.56	0.58
2	High Value Vegetable cultivation	62%	0.45	0.48	0.51	0.51

**Village-4**

**1. Name of KVK/ district: Gajapati**

**2. Name of villages adopted: Titisingh**

**3. Number of farmers targeted: 10**

**4. Compiled baseline survey report (point wise) of the villages:**

(i) Area of agriculture land (ha): 212

(ii) Area of irrigated land (ha): 7.21

(iii) Number of water body: 1

(iv) Area of water body (ha): 0.06

(v) Number of different livestock animals: Cattle-440, Poultry- 344

(vi) Average yield of different crops, livestock and fisheries:

Sl.No.	Crop	Average yield(q/ha)
1	Rice	25
2	Maize	38
3	Ragi	18
4	Cauliflower	214
5	Brinjal	265
6	Tomato	334
7	Okra	78
8	Cowpea	41
9	Cashew	83
10	Mango	320

(vii) Soil status: N- Medium, P- Low, K- Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 165-175 Kg DAP, 180-185 Kg Urea, 135-140 Kg MOP per hectare

(ix) Major diseases occurred in crops:

Rice- Blast, Bacterial leaf blight, Sheath blight, Stem borer, Case worm, Leaf folder and Gall midge

Maize- Rhizoctonia collar rot

Cauliflower- Powdery Mildew, Black rot, Diamond caterpillar,

Brinjal Phomopsis blight, Shoot and fruit borer, Wilt in Brinjal and Tomato,

Blossom end rot of Tomato, YMV and aphids in Cowpea and Okra

Cashew Tea mosquito bug

Mango powdery mildew, Fruit fly, stone weevil and mango hopper

(x) Major diseases occurred in livestock: HSV and FMD in cattle

PPR in Goat

RD in Poultry birds

(xi) Post-harvest management/ value addition followed, if any: -NA-

(xii) Marketing channels of products: -NA-

(xiii) Agro-based industries, if any: -NA-

(xiv) Average income of the farmer: -NA-

**5. Possibility of involvement of ICAR Institutes: Involvement of CTCRI for demonstration of new technologies tuber crops**

Involvement of CTCRI and CHES for demonstration of new technologies on tuber crops like Sweet potato, Yam Ben, Elephant foot yams and high value vegetables crops.

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):**

Involvement of JKP and Reliance Foundation NGO in formation of FPO, value addition and marketing channel.

**7. Name of other partners involved (State Dept./ Central govt. Dept./ PSU/ NGO/ Private org.):**

State department of Agriculture, Horticulture, Veterinary and Animal husbandry Services

**8. FPO formed: NA**

**9. Major interventions planned:**

Rice- Paira Green gram, Mushroom cultivation, High Value Vegetable cultivation

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome (% increase over present income by 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Rice- Paira greengram, Mushroom cultivation	312%	0.50	0.53	0.56	0.58
2	High Value Vegetable cultivation	62%	0.45	0.48	0.51	0.51

### Village-5

1. Name of KVK/ district: Gajapati

2. Name of villages adopted: Kaithapada

3. Number of farmers targeted: 10

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 200

(ii) Area of irrigated land (ha): 2.4

(iii) Number of water body: 5

(iv) Area of water body (ha): N.A.

(v) Number of different livestock animals: Cattle-235, Goat-456, Poultry-283

(vi) Average yield of different crops, livestock and fisheries:

Sl.No.	Crop	Average yield(q/ha)
1	Rice	28
2	Maize	38
3	Ragi	18
4	Beans	43
5	Cauliflower	226
6	Cabbage	218
7	Brinjal	255
8	Tomato	320
9	Okra	78
10	Cowpea	41
11	Banana	450

(vii) Soil status: N- Medium, P- High, K- Medium

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 165-170 Kg DAP, 85-90 Kg Urea, 145-150 Kg MOP per hectare per annum

(ix) Major diseases occurred in crops:

Rice- Blast, Bacterial leaf blight, Sheath blight, Stem borer, Case worm, Leaf folder and Gall midge

Maize- Rhizoctonia collar rot

Beans-Cercospora leaf spot, Anthracnose and Pod borer

Ground nut- Collar rot, Cercospora leaf spot, White fly and White grub

Cauliflower- Powdery Mildew, Black rot, Diamond caterpillar,

Brinjal Phomopsis blight, Shoot and fruit borer, Wilt in Brinjal and Tomato,

Blossom end rot of Tomato, YMV and aphids in Cowpea and Okra

Banana Sigatoka leaf spot, Rhizome weevil

(x) Major diseases occurred in livestock: HSV and FMD in cattle

PPR in Goat

RD in Poultry birds

(xi) Post-harvest management/ value addition followed, if any: -NA-

(xii) Marketing channels of products: -NA-

(xiii) Agro-based industries, if any: -NA-

(xiv) Average income of the farmer: -NA-

5. Possibility of involvement of ICAR Institutes: Involvement of CTCRI for demonstration of new technologies tuber crops

Involvement of CTCRI and CHES for demonstration of new technologies on tuber crops like Sweet potato, Yam Ben, Elephant foot yams and high value vegetables crops.

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):

Involvement of SWAS and Reliance foundation NGO in formation of FPO, value addition and marketing channel.

7. Name of other partners involved (State Dept./ Central govt. Dept./ PSU/ NGO/ Private org.):

State department of Agriculture, Horticulture, Veterinary and Animal husbandry Services

8. FPO formed: NA

9. Major interventions planned:

Maize+cow pea intercropping (2:2), Mushroom cultivation and Poultry

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome (% increase over present income by 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Maize+cow pea intercropping (2:2), Mushroom cultivation and Poultry	210%	0.76	0.80	0.84	0.87
2	High Value Vegetable cultivation	62%	0.45	0.48	0.51	0.51



Rice-paira Greengram

## 6. Eastern Ghat High Land

The districts of this Agro-Climatic Zone are major parts of Koraput and Nabarangpur. Total area of this zone is 12456 sq. km. which is 8% of total area covered.

### 6.1 Krishi Vigyan Kendra, Koraput

#### Village-1

- 1. Name of KVK/ district:** Koraput
- 2. Name of villages adopted:** Muliaput
- 3. Number of farmers targeted:** 20
- 4. Compiled baseline survey report (point wise) of the villages:**
  - Area of agriculture land (ha): 55
  - Area of irrigated land (ha): 22
  - Number of water body: 2
  - Area of water body (ha): 2
  - Number of different livestock animals: Poultry-285, Goat-50, Sheep- 40, Bullock- 20
  - Average yield of different crops, livestock and fisheries: Rice- 30qtl/ha, Millet- 9qtl/ha, Turmeric- 105 qtl/ha, Ginger- 90 qtl/ha
  - Soil status: Red laterite
  - Average nutrients (nitrogen, phosphorous, potash, etc) used: N: Low, P: Medium, K: High
  - Major diseases/pest occurred in crops: Blast, Leaf Blight, Wilting, Rot, Stem Borer, Leaf Folder, Sheath Rot, White Fly
  - Major diseases occurred in livestock: FMD, PPR
  - Post-harvest management/ value addition followed, if any: deseeding of tamarind and packaging, Millet powder
  - Marketing channels of products: Subai weekly market and Semiliguda daily Market
  - Agro-based industries, if any: No
  - Average income of the farmer: 70,000 to 80,000/-
- 5. Possibility of involvement of ICAR Institutes:** Yes (IISWC-ICAR)
- 6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** No
- 7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State Deptt., NGO, Central Govt. Deptt.
- 8. FPO formed or not? :** FPO Formed
- 9. Major interventions planned:** FLD, OFT, Training
- 10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Cereals and Millets		0.08	0.08	0.08	0.08
2	Fruits and vegetables		0.08	0.08	0.08	0.08

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
3	Spices		0.08	0.08	0.08	0.08
4	Post harvest/ Value addition		0.08	0.08	0.08	0.08
5	Homestead and allied activities		0.08	0.08	0.08	0.08
	Total	1,05,000/family/annum	0.4	0.4	0.4	0.4

#### Village-2

- 1. Name of KVK/ district:** Koraput
- 2. Name of villages adopted:** Patraput
- 3. Number of farmers targeted:** 20
- 4. Compiled baseline survey report (point wise) of the villages:**
  - Area of agriculture land (ha): 65
  - Area of irrigated land (ha): 25
  - Number of water body: 3
  - Area of water body (ha): 3
  - Number of different livestock animals: Poultry-310, Goat-60, Sheep- 50, Bullock- 70
  - Average yield of different crops, livestock and fisheries: Rice- 35qtl/ha, Millet- 7.5qtl/ha, Tomato- 215 qtl/ha, Maize- 30 qtl/ha
  - Soil status: laterite
  - Average nutrients (nitrogen, phosphorous, potash, etc) used: N: Low, P: Medium, K: High
  - Major diseases/pest occurred in crops: Blast, Leaf Blight, Wilting, Rot, Stem Borer, Leaf Folder, Sheath Rot, White Fly
  - Major diseases occurred in livestock: FMD, PPR
  - Post-harvest management/ value addition followed, if any: deseeding of tamarind and packaging, Millet powder
  - Marketing channels of products: Jeypore market
  - Agro-based industries, if any: No
  - Average income of the farmer: 80,000 to 95,000/-
- 5. Possibility of involvement of ICAR Institutes:** Yes (IISWC-ICAR)
- 6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** No
- 7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State Deptt., NGO, Central Govt. Deptt.
- 8. FPO formed or not? :** FPO Formed
- 9. Major interventions planned:** FLD, OFT, Training
- 10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Cereals and Millets		0.08	0.08	0.08	0.08
2	Fruits and vegetables		0.08	0.08	0.08	0.08

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
3	Spices		0.08	0.08	0.08	0.08
4	Post harvest/ Value addition		0.08	0.08	0.08	0.08
5	Homestead and allied activities		0.08	0.08	0.08	0.08
	<b>Total</b>	<b>1,05,000/family/annum</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>

### Village-3

1. Name of KVK/ district: Koraput

2. Name of villages adopted: Khejrakata

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 90

(ii) Area of irrigated land (ha): 31

(iii) Number of water body: 3

(iv) Area of water body (ha): 4

(v) Number of different livestock animals: Poultry-295, Goat-65, Sheep- 55, Bullock- 60

(vi) Average yield of different crops, livestock and fisheries: Rice- 35qtl/ha, Millet- 7.5qtl/ha, Tomato- 205 qtl/ha, Maize- 28 qtl/ha, Potato- 195qtl/ha, G. Nut- 29 qtl/ha

(vii) Soil status: laterite

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N: Low, P: Medium, K: High

(ix) Major diseases/pest occurred in crops: Blast, Leaf Blight, Wilting, Rot, Stem Borer, Leaf Folder, Sheath Rot, White Fly

(x) Major diseases occurred in livestock: FMD, PPR

(xi) Post-harvest management/ value addition followed, if any: deseeding of tamarind and packaging, Millet powder

(xii) Marketing channels of products: Kunduli Market

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 75,000 to 85,000/-

5. Possibility of involvement of ICAR Institutes: Yes (IISWC-ICAR)

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt., NGO, Central Govt. Deptt.

8. FPO formed or not? : FPO Formed

9. Major interventions planned: FLD, OFT, Training

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Cereals and Millets		0.08	0.08	0.08	0.08
2	Fruits and vegetables		0.08	0.08	0.08	0.08

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
3	Spices		0.08	0.08	0.08	0.08
4	Post harvest/ Value addition		0.08	0.08	0.08	0.08
5	Homestead and allied activities		0.08	0.08	0.08	0.08
	<b>Total</b>	<b>1,05,000/family/annum</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>

### Village-4

1. Name of KVK/ district: Koraput

2. Name of villages adopted: Mujanga

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 85

(ii) Area of irrigated land (ha): 25

(iii) Number of water body: 2

(iv) Area of water body (ha): 2

(v) Number of different livestock animals: Poultry-275, Goat-75, Sheep- 45, Bullock- 55

(vi) Average yield of different crops, livestock and fisheries: Rice- 33qtl/ha, Millet- 8.5qtl/ha, Tomato- 208 qtl/ha, Maize- 30 qtl/ha, Potato- 185qtl/ha, G. Nut- 27 qtl/ha

(vii) Soil status: Red laterite

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N: Low, P: Medium, K: High

(ix) Major diseases/pest occurred in crops: Blast, Leaf Blight, Wilting, Rot, Stem Borer, Leaf Folder, Sheath Rot, White Fly

(x) Major diseases occurred in livestock: FMD, PPR

(xi) Post-harvest management/ value addition followed, if any: deseeding of tamarind and packaging, Millet powder

(xii) Marketing channels of products: Dasmantpur and Koraput market

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 72,000 to 83,000/-

5. Possibility of involvement of ICAR Institutes: Yes (IISWC-ICAR)

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt., NGO, Central Govt. Deptt.

8. FPO formed or not? : FPO Formed

9. Major interventions planned: FLD, OFT, Training

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Cereals and Millets		0.08	0.08	0.08	0.08
2	Fruits and vegetables		0.08	0.08	0.08	0.08
3	Spices		0.08	0.08	0.08	0.08
4	Post harvest/ Value addition		0.08	0.08	0.08	0.08
5	Homestead and allied activities		0.08	0.08	0.08	0.08
	Total	1,05,000/family/annum	0.4	0.4	0.4	0.4

#### Village-5

1. Name of KVK/ district: Koraput

2. Name of villages adopted: Padampur

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 95

(ii) Area of irrigated land (ha): 35

(iii) Number of water body: 3

(iv) Area of water body (ha): 4

(v) Number of different livestock animals: Poultry-295, Goat-85, Sheep- 72, Bullock- 54

(vi) Average yield of different crops, livestock and fisheries: Rice- 30qtl/ha, Millet- 7.5qtl/ha, Tomato- 210 qtl/ha, Maize- 28 qtl/ha, Potato- 175qtl/ha, G. Nut- 29 qtl/ha

(vii) Soil status: Red laterite

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N: Low, P: Medium, K: High

(ix) Major diseases/pest occurred in crops: Blast, Leaf Blight, Wilting, Rot, Stem Borer, Leaf Folder, Sheath Rot, White Fly

(x) Major diseases occurred in livestock: FMD, PPR

(xi) Post-harvest management/ value addition followed, if any: deseeding of tamarind and packaging, Millet powder

(xii) Marketing channels of products: Koraput market

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 74,000 to 85,000/-

5. Possibility of involvement of ICAR Institutes: Yes (IISWC-ICAR)

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt., NGO, Central Govt. Deptt.

8. FPO formed or not? : FPO Formed

9. Major interventions planned: FLD, OFT, Training

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Cereals and Millets		0.08	0.08	0.08	0.08
2	Fruits and vegetables		0.08	0.08	0.08	0.08
3	Spices		0.08	0.08	0.08	0.08
4	Post harvest/ Value addition		0.08	0.08	0.08	0.08
5	Homestead and allied activities		0.08	0.08	0.08	0.08
	Total	1,05,000/family/annum	0.4	0.4	0.4	0.4

#### 6.2 Krishi Vigyan Kendra, Nabarangpur

##### Village-1

1. Name of KVK/ district: Nabarangpur

2. Name of villages adopted: Majhia

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 686 ha

(ii) Area of irrigated land (ha): Rainfed

(iii) Number of water body: 45 Farm pond

(iv) Area of water body (ha): 10.8 ha

(v) Number of different livestock animals: Cattle-210, poultry- 407, Goats- 104

(vi) Average yield of different crops, livestock and fisheries:

Crops	Yield (q/acre)	Livestock	Yield	Fisheries	Yield
Rice	12	Cow	1.8 Lit.		4.5 q/ac
Maize	26	Poultry	1.8 kg/Bird	Fish	
Green gram	3.8	Goat	12 kg/Goat		

(vii) Soil status: Sandy loam (N-low, P-Low, K-Medium)

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

168 Kg N: 79 kg P: 210 kg K/ ha

(ix) Major diseases occurred in crops: Rice- Blast, BLB; Groundnut- Colour rot, Tikka

(x) Major diseases occurred in livestock: FMD

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Mandi

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 1.5 lakh/annum

5. Possibility of involvement of ICAR Institutes: KVK

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): NGOs

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Agriculture, Horticulture, Veterinary Departments

8. FPO formed or not? No

9. Major interventions planned: INM, IDPM, ICM

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	OrganicVegetables cultivation	Rs. 65,000/acre	70,000	1,05000	1,40,000	1,75,000
2	Bio-fertilizer application in major field crops	Rs. 10,000/acre	6,000	9000	12000	15000
3	IDPM in Paddy and Maize	Rs. 15000/acre	10,000	13000	15000	18000
4	Poultry	Rs. 8,000/family	24,000	36,000	48,000	60,000
5	Mushroom	Rs. 4500/family	30,000	45,000	60,000	75,000

#### Village-2

1. Name of KVK/ district: Nabarangpur

2. Name of villages adopted: Kumuli

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

- (i) Area of agriculture land (ha): 365 ha
- (ii) Area of irrigated land (ha): Rainfed
- (iii) Number of water body: Nil
- (iv) Area of water body (ha): Nil
- (v) Number of different livestock animals: Cattle-287, poultry- 310, Goats- 88
- (vi) Average yield of different crops, livestock and fisheries:

Crops	Yield (q/acre)	Livestock	Yield	Fishery	Yield
Rice	14.4	Cow	2 Lit.	Nil	Nil
Maize	25.6	Poultry	2.5 kg/Bird		
Brinjal	140	Goat	12 kg/Goat		
Tomato	138				

(vii) Soil status: Sandy loam (N-low, P-Low, K-Medium)

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

127 Kg N: 69 kg P: 190 kg K/ ha

(ix) Major diseases occurred in crops: Rice- Blast, BLB

(x) Major diseases occurred in livestock: FMD

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Mandi

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 1.2 lakh/annum

5. Possibility of involvement of ICAR Institutes: KVK

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): NGOs

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Agriculture, Horticulture, Veterinary Departments

8. FPO formed or not? No

9. Major interventions planned: INM, IDPM, ICM

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	OrganicVegetables cultivation	Rs. 65,000/acre	70,000	1,05000	1,40,000	1,75,000
2	Bio-fertilizer application in major field crops	Rs. 10,000/acre	6,000	9000	12000	15000
3	IDPM in Paddy and Maize	Rs. 15000/acre	10,000	13000	15000	18000
4	Poultry	Rs. 8,000/family	24,000	36,000	48,000	60,000
5	Mushroom	Rs. 4500/family	30,000	45,000	60,000	75,000

#### Village-3

1. Name of KVK/ district: Nabarangpur

2. Name of villages adopted: Badabharandi

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

- (i) Area of agriculture land (ha): 380 ha
- (ii) Area of irrigated land (ha): 355 ha
- (iii) Number of water body: 20
- (iv) Area of water body (ha): 4.8 ha
- (v) Number of different livestock animals: Cattle-350, poultry- 1458,
- (vi) Average yield of different crops, livestock and fisheries:

Crops	Yield (q/acre)	Livestock	Yield	Fisheries	Yield
Rice	14.4	Cow	2 Lit.	Common carp	4.5 q/ac
Maize	25.6	Poultry	2.5 kg/Bird		
Brinjal	140	Goat	12 kg/Goat		
Tomato	138				

(vii) Soil status: Sandy loam (N-low, P-Medium, K-Medium)

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

168 Kg N: 92 kg P: 194 kg K/ ha

(ix) Major diseases occurred in crops: Rice- Blast, BLB; Groundnut- Colour rot, Tikka

(x) Major diseases occurred in livestock: FMD,

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Mandi

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 1.3 lakh/annum

5. Possibility of involvement of ICAR Institutes: KVK

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): NGOs



7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Agriculture, Horticulture, Veterinary Departments

8. FPO formed or not? No

9. Major interventions planned: INM, IDPM, ICM

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	OrganicVegetables cultivation	Rs. 65,000/acre	70,000	1,05,000	1,40,000	1,75,000
2	Bio-fertilizer application in major field crops	Rs. 10,000/acre	6,000	9000	12000	15000
3	IDPM in Paddy and Maize	Rs. 15000/acre	10,000	13000	15000	18000
4	Poultry	Rs. 8,000/family	24,000	36,000	48,000	60,000
5	Mushroom	Rs. 4500/family	30,000	45,000	60,000	75,000
	OrganicVegetables cultivation	Rs. 65,000/acre	70,000	1,05,000	1,40,000	1,75,000

#### Village-4

1. Name of KVK/ district: Nabarangpur

2. Name of villages adopted: Karmari

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 697 ha

(ii) Area of irrigated land (ha): Rainfed

(iii) Number of water body: 2

(iv) Area of water body (ha): 0.4 ha

(v) Number of different livestock animals: Cattle-100, poultry-300 , Goats- 80

(vi) Average yield of different crops, livestock and fisheries:

Crops	Yield (q/acre)	Livestock	Yield	Fishery	Yield
Rice	14.4	Cow	2 Lit.	Common carp	3.5 q/ac
Maize	25.6	Poultry	2.5 kg/Bird		
Brinjal	140	Goat	12 kg/Goat		
Tomato	138				

(vii) Soil status: Sandy loam (N-low, P-Low, K-Low)

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

207 Kg N: 82 kg P: 192 kg K/ ha

(ix) Major diseases occurred in crops: Rice- Blast, BLB; Groundnut- Colour rot, Tikka

(x) Major diseases occurred in livestock: FMD,

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Mandi

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 1.2 lakh/annum

5. Possibility of involvement of ICAR Institutes: KVK

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): NGOs

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Agriculture, Horticulture, Veterinary Departments

8. FPO formed or not? NO

9. Major interventions planned: INM, IDPM, ICM

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	OrganicVegetables cultivation	Rs. 65,000/acre	70,000	1,05,000	1,40,000	1,75,000
2	Bio-fertilizer application in major field crops	Rs. 10,000/acre	6,000	9000	12000	15000
3	IDPM in Paddy and Maize	Rs. 15000/acre	10,000	13000	15000	18000
4	Poultry	Rs. 8,000/family	24,000	36,000	48,000	60,000
5	Mushroom	Rs. 4500/family	30,000	45,000	60,000	75,000

#### Village-5

1. Name of KVK/ district: Nabarangpur

2. Name of villages adopted: Chikili

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 249 ha

(ii) Area of irrigated land (ha): Rainfed

(iii) Number of water body: 9

(iv) Area of water body (ha): 2.16 ha

(v) Number of different livestock animals: Cattle-353, poultry- 787, Goats- 185

(vi) Average yield of different crops, livestock and fisheries:

Crops	Yield (q/acre)	Livestock	Yield	Fisheries	Yield
Rice	15	Cow	2 Lit.	Common carp	5.5 q/ac
Maize	27.2	Poultry	3kg/Bird		
Brinjal	142	Goat	12 kg/Goat		
Tomato	136				

(vii) Soil status: Sandy loam (N-low, P-Low, K-Medium)

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

227 Kg N: 92 kg P: 187 kg K/ ha

(ix) Major diseases occurred in crops: Rice- Blast, BLB; Groundnut- Colour rot, Tikka

(x) Major diseases occurred in livestock: FMD,

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Mandi

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 1.2 lakh/annum

**5. Possibility of involvement of ICAR Institutes:** KVK

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** NGOs

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State Agriculture, Horticulture, Veterinary Departments

**8. FPO formed or not?** No

**9. Major interventions planned:** INM, IDPM, ICM

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	OrganicVegetables cultivation	Rs. 65,000/acre	70,000	1,05000	1,40,000	1,75,000
2	Bio-fertilizer application in major field crops	Rs. 10,000/acre	6,000	9000	12000	15000
3	IDPM in Paddy and Maize	Rs. 15000/acre	10,000	13000	15000	18000
4	Poultry	Rs. 8,000/family	24,000	36,000	48,000	60,000
5	Mushroom	Rs. 4500/family	30,000	45,000	60,000	75,000

## 7. South Eastern Ghat

The districts of this Agro-Climatic Zone are Malkangiri and part of Koraput. Total area of this zone is 7010 sq. km. which is 4.50% of total area covered.

### 7.1 Krishi Vigyan Kendra, Malkangiri

#### Village-1

**1. Name of KVK/ district:** Malkangiri

**2. Name of villages adopted:** MV-2

**3. Number of farmers targeted:** 20

**4. Compiled baseline survey report (point wise) of the villages:**

(i) Area of agriculture land (ha): 169

(ii) Area of irrigated land (ha):97

(iii) Number of water body:17

(iv) Area of water body (ha):5

(v) Number of different livestock animals: Cattle-459, poultry- 985, Goats- 167

(vi) Average yield of different crops, livestock and fisheries:

Crops	Yield (q/acre)	Livestock	Yield	Fisheries	Yield
Rice	19	Cow	2lit	Fish	4q/ Acre
Groundnut	12	Poultry	3kg./bird		
Sesame	1.5	Goat	11kg/goat		

(vii) Soil status: Sandy loam (N-low, P-Low, K-Medium)

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

118 Kg N: 92 kg P: 110 kg K/ ha

(ix) Major diseases occurred in crops: Rice- Blast, BLB; Groundnut- Colour rot, Tikka

(x) Major diseases occurred in livestock: FMD,

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products:Mandi

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer:1.6 lakh/annum

**5. Possibility of involvement of ICAR Institutes:** KVK

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** NGOs

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State Agriculture, Horticulture, Veterinary Departments

**8. FPO formed or not?** No

**9. Major interventions planned:** INM, IDPM, ICM

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Introduction of Sweet corn	Rs. 65,000/acre	70,000	1,05000	1,40,000	1,75,000
2	Bio-fertilizer application	Rs. 10,000/acre	6,000	9000	12000	15000
3	IDPM	Rs. 15000/acre	10,000	13000	15000	18000
4	Poultry	Rs. 8,000/family	24,000	36,000	48,000	60,000
5	Mushroom	Rs. 4500/family	30,000	45,000	60,000	75,000

#### Village-2

**1. Name of KVK/ district:** Malkangiri

**2. Name of villages adopted:** MV-3

**3. Number of farmers targeted:** 20

**4. Compiled baseline survey report (point wise) of the villages:**

(i) Area of agriculture land (ha): 260

(ii) Area of irrigated land (ha):Nil- Rainfed

(iii) Number of water body:Nil-River Flow

(iv) Area of water body (ha):Nil

(v) Number of different livestock animals: Cattle-930, poultry- 2480, Goats- 83,Pig-135

(vi) Average yield of different crops, livestock and fisheries:

Crops	Yield (q/acre)	Livestock	Yield
Rice	16	Cow	2lit
Vegetables	13	Poultry	2.5kg./bird

(vii) Soil status: Sandy loam (N-low, P-Low, K-Medium)

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:  
100 Kg N: 80 kg P: 80 kg K/ ha

(ix) Major diseases occurred in crops: Rice- Blast, BLB

(x) Major diseases occurred in livestock: FMD,

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Mandi

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 1.2 lakh/annum

**5. Possibility of involvement of ICAR Institutes: KVK**

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): NGOs**

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State Agriculture, Horticulture, Veterinary Departments

**8. FPO formed or not?** No

**9. Major interventions planned:** INM, IDPM, ICM

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Introduction of Sweet corn	Rs. 65,000/acre	70,000	1,05,000	1,40,000	1,75,000
2	Bio-fertilizer application	Rs. 10,000/acre	6,000	9,000	12,000	15,000
3	IDPM	Rs. 15,000/acre	10,000	13,000	15,000	18,000
4	Poultry	Rs. 8,000/family	24,000	36,000	48,000	60,000
5	Mushroom	Rs. 4,500/family	30,000	45,000	60,000	75,000

### Village-3

**1. Name of KVK/ district:** Malkangiri

**2. Name of villages adopted:** MPV-6

**3. Number of farmers targeted:** 20

**4. Compiled baseline survey report (point wise) of the villages:**

(i) Area of agriculture land (ha): 84

(ii) Area of irrigated land (ha): 84

(iii) Number of water body: 8

(iv) Area of water body (ha): 30

(v) Number of different livestock animals: Cattle-350, poultry- 1458,

(vi) Average yield of different crops, livestock and fisheries:

Crops	Yield (q/acre)	Livestock	Yield	Fisheries	Yield
Rice	18	Cow	2lit	Fish	3q/acre
Groundnut	10	Poultry	3kg./bird		
Sesame	1.0				

(vii) Soil status: Sandy loam (N-low, P-Medium, K-Medium)

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

118 Kg N: 92 kg P: 30 kg K/ ha

(ix) Major diseases occurred in crops: Rice- Blast, BLB; Groundnut- Colour rot, Tikka

(x) Major diseases occurred in livestock: FMD,

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Mandi

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 1.7 lakh/annum

**5. Possibility of involvement of ICAR Institutes: KVK**

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): NGOs**

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State Agriculture, Horticulture, Veterinary Departments

**8. FPO formed or not?** No

**9. Major interventions planned:** INM, IDPM, ICM

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Introduction of Sweet corn	Rs. 65,000/acre	70,000	1,05,000	1,40,000	1,75,000
2	Varietal trails of groundnut	Rs. 30,000/acre	90,000	1,10,000	1,25,000	1,50,000
3	Bio-fertilizer application	Rs. 10,000/acre	6,000	9,000	12,000	15,000
4	IDPM	Rs. 15,000/acre	10,000	13,000	15,000	18,000
5	Poultry	Rs. 8,000/family	24,000	36,000	48,000	60,000
6	Mushroom	Rs. 4,500/family	30,000	45,000	60,000	75,000

### Village-4

**1. Name of KVK/ district:** Malkangiri

**2. Name of villages adopted:** Undrugunda

**3. Number of farmers targeted:** 20

**4. Compiled baseline survey report (point wise) of the villages:**

(i) Area of agriculture land (ha): 228

(ii) Area of irrigated land (ha): Rainfed

(iii) Number of water body: Nil

(iv) Area of water body (ha): Nil

(v) Number of different livestock animals: Cattle-527, poultry- 913, Goats- 161

(vi) Average yield of different crops, livestock and fisheries:

Crops	Yield (q/acre)	Livestock	Yield
Rice	13	Cow	2lit
Groundnut	11	Poultry	2.5kg./bird
Sesame	1.5	Goat	10kg/goat

(vii) Soil status: Sandy loam (N-low, P-Low, K-Low)

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

80 Kg N: 72 kg P: 80 kg K/ ha

(ix) Major diseases occurred in crops: Rice- Blast, BLB; Groundnut- Colour rot, Tikka

(x) Major diseases occurred in livestock: FMD,

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Mandi

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 1.2 lakh/annum

5. Possibility of involvement of ICAR Institutes: KVK

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): NGOs

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Agriculture, Horticulture, Veterinary Departments

8. FPO formed or not? No

9. Major interventions planned: INM, IDPM, ICM

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Introduction of Sweet corn	Rs. 65,000/acre	70,000	1,05,000	1,40,000	1,75,000
2	Bio-fertilizer application	Rs. 10,000/acre	6,000	9000	12000	15000
3	IDPM	Rs. 15000/acre	10,000	13000	15000	18000
4	Poultry	Rs. 8,000/family	24,000	36,000	48,000	60,000
5	Mushroom	Rs. 4500/family	30,000	45,000	60,000	75,000

#### Village-5

1. Name of KVK/ district: Malkangiri

2. Name of villages adopted: Siripeta colony

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 181

(ii) Area of irrigated land (ha):103

(iii) Number of water body:12

(iv) Area of water body (ha):6

(v) Number of different livestock animals: Cattle-358, poultry- 977, Goats- 160

(vi) Average yield of different crops, livestock and fisheries:

Crops	Yield (q/acre)	Livestock	Yield	Fisheries	Yield
Rice	16	Cow	2lit	Fish	10q/acre
Groundnut	10	Poultry	3kg./bird		
Sesame	1.5	Goat	11kg/goat		

(vii) Soil status: Sandy loam (N-low, P-Low, K-Medium)

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

120 Kg N: 92 kg P: 100 kg K/ ha

(ix) Major diseases occurred in crops: Rice- Blast, BLB; Groundnut- Colour rot, Tikka

(x) Major diseases occurred in livestock: FMD,

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Mandi

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: 1.5 lakh/annum

5. Possibility of involvement of ICAR Institutes: KVK

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): NGOs

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Agriculture, Horticulture, Veterinary Departments

8. FPO formed or not? No

9. Major interventions planned: INM, IDPM, ICM

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Introduction of Sweet corn	Rs. 65,000/acre	70,000	1,05,000	1,40,000	1,75,000
2	Bio-fertilizer application	Rs. 10,000/acre	6,000	9000	12000	15000
3	IDPM	Rs. 15000/acre	10,000	13000	15000	18000
4	Poultry	Rs. 8,000/family	24,000	36,000	48,000	60,000
5	Mushroom	Rs. 4500/family	30,000	45,000	60,000	75,000

## 8. Western Undulating Zone

The districts of this Agro-Climatic Zone are Kalahandi and Nuapada. Total area of this zone is 11678 sq. km. which is 7.50% of total area covered.

### 8.1 Krishi Vigyan Kendra, Kalahandi

#### Village-1

1. Name of KVK/ district: Kalahandi

2. Name of villages adopted: Bindhani, Karlamunda

3. Number of farmers targeted: 230

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 110

(ii) Area of irrigated land (ha): 80

(iii) Number of water body: 1

(iv) Area of water body (ha): 4.0

(v) Number of different livestock animals: Mixed Jersey :82, Desi cows: 20, Bullock:38, Goat & Sheep:350

(vi) Average yield of different crops, livestock and fisheries:

Crops	Average Yield
Paddy	25q/ha
Greengram	4.6q/ha
Groundnut	15q/ha
Brinjal	80q/ha
Tomato	80q/ha
Chilli	35q/ha
Okra	60q/ha
Cabbage	180q/ha
Cauliflower	153q/ha
Milk(Jersey)	6-8 ltr./cow/day
Milk(Desi)	3-4 ltr./cow/day

(vii) Soil status: Mixed Red and Yellow

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N= 76 kg, P= 42 kg & K= 40 kg

(ix) Major diseases occurred in crops:

Sl. No.	Crop/Vegetable	Major Disease and pest
1	Rice	Brow Plant Hopper, Leaf Folder, Bacterial Leaf Blight ,Sheath blight & Blast
2	Greengram	YVMV, pod borer, fungal wilting, powdery mildew
3	Groundnut	Root rot, Bud necrosis and Tikka
4	Brinjal	Fruit & shoot borer, bacterial wilting, red spider mite
5	Chilli	Bacterial wilting, mite, thrips, BLB, leaf curl disease
6	Tomato	Bacterial wilting, bacterial leaf spot, mite, thrips, leaf curl disease, phomosis blight
7	Cauliflower	Whiptail in Cauliflower
8	Cabbage	Diamond Back Moth(DBM)

(x) Major diseases occurred in livestock: FMD, HS, PPR, Goat pox, Ranikhet, Coccidiosis

(xi) Post-harvest management/ value addition followed, if any: Nil

(xii) Marketing channels of products: PACS, RMC, OMFED, Local traders, local nearest market

Milk collection center is at Panchayat Headquarter-Teresinga. Which is managed by OMFED. OMFED main activities includes Milk promoting, production, procurement, processing and marketing of milk & milk products for economic development of the rural lives. Milk prices are fixed based on the percentage of fat in the milk. The fat % of the milk is tested and accordingly farmers are paid.

(xiii) Agro-based industries, if any:

(xiv) Average income of the farmer: 60,000 to 1.5 Lakh

5. Possibility of involvement of ICAR Institutes: Nil

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): Dept. of Agriculture, Horticulture, Animal husbandry, Fishery, NGO and Watershed

8. FPO formed or not? No

9. Major interventions planned:

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Farming situation	Component	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
					2018- 19	2019- 20	2020- 21	2021- 22
1	Irrigated upland Vegetable-Vegetable	Vegetable (Kharif)	Demonstration on performance of Brinjal HYV 'Arka Navneeth'	Yield (q/ha): 230	0.7	0.8	0.9	1.0
			Demonstration of foliar application of water soluble fertilizer (NPK) in Brinjal					
			Demonstration on integrated approach for management of red spider mite in Brinjal (Application of neem oil @ 2.5 ml/liter of water with 15 days interval and Etoxazole 10 % SC @ 40 gm a.i /ha)					
1	Irrigated upland Vegetable-Vegetable	Vegetable (Rabi )	Demonstration on Fruit borer and leaf curl in tomato	Yield (q/ha): 220	0.7	0.8	0.9	1.0
			(Spraying of <i>Virex-H</i> @1.5 ml/liter of water thrice at 7 days interval for management of whitefly vector & spraying of spinisod0.4ml/lit to control fruit borer in Tomato)					
			Popularisation of management practices for wilt in Tomato					
1	Irrigated upland Vegetable-Vegetable	Vegetable (Rabi )	Demonstration on Performance of Tomato variety 'Arka Rakhyak'	Yield (q/ha): 220	0.7	0.8	0.9	1.0
			(Spraying of <i>Virex-H</i> @1.5 ml/liter of water thrice at 7 days interval for management of whitefly vector & spraying of spinisod0.4ml/lit to control fruit borer in Tomato)					
			Popularisation of management practices for wilt in Tomato					
2	Irrigated medium land	Paddy (Kharif)	Demonstration on management of Brown Plant Hopper in Rice (Application of Pymetrzine @ 0.6 gm/liter and Flonicamid @0.4 gm/lit)	Yield (q/ha): 32	0.6	0.72	0.84	0.90
			Demonstration of Sheath blight management in Paddy (Application of Propiconazole @ 1lit/ha for control against sheath blight)					
			Demonstration of weed management in transplanted paddy ( Bispyribic Sodium 250 gm/ha at 0-3 DAT)					

Sl. No.	Farming situation	Component	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
					2018- 19	2019- 20	2020- 21	2021- 22
		Greengram (Rabi)	Demonstration on performance of Green gram Variety IPM 02-14	Yield (q/ha) :6.6	0.5	0.62	0.71	0.83
			Demonstration on Pre-Herbicide (Pendimethalin 1lit/ha) application in Green gram for weed management					
			Demonstration and popularization of management practices for Yellow Mosaic Virus (YMV) in Greengram.					
3	Irrigated Low land	Paddy (Kharif)	Popularization and introduction of BPH & WBPH resistant rice variety <i>Hasant</i>	Yield(q/ha):35	0.50	0.62	0.75	0.88
			Demonstration on performance of flood tolerant long duration Rice Swarna Sub-1					
			Demonstration and popularisation of Hybrid seed production programme					
		Paddy (Rabi)	Demonstration of Brown manuring in direct seeded Paddy (Sowing of Dhanicha seeds @15 kg/ha along with rice, application of 2,4-D ethyl ester 1 kg a.i/ha at 30 DAS)	Yield(q/ha):33	0.50	0.62	0.75	0.88
			Demonstration on management practices of Bacterial leaf Blight in Paddy (Application of Biomycine @ 2.5 ml/lt of water / Carbendazim 2gm/ lit +Streptomycine @1gm per 10 ltr of water)					
			Demonstration on Integrated Pest Management (IPM) in Paddy					
4	River bed	Fallow-Groundnut	Demonstration on Cluster FLD on Ground nut (ICGV 91114)	Yield(q/ha) :20	0.62	0.75	0.88	0.95
			Demonstration of post-emergence weedicide in Groundnut (Application of Imazythapyr@750ml/ha)					
			Demonstration of Integrated Disease Management in Ground nut					
5	Allied Homestead activities	Dairy	Artificial Insemination in indigenous cattle	Expected yield: 8.5 L/ Cow/day	0.5	0.5	0.6	0.6
			Regular deworming and vaccination to dairy cow					
			Supplementary feeding with mineral mixture and concentrate diet					
			Perennial fodder production					
			Supplementation with calcium minerals					
		Poultry bird	Backyard poultry Vanaraja (20nos.) with proper vaccination	Net income 8000/- per month	0.4	0.5	0.6	0.7
			Supplementary feeding with azolla					
			Calcium supplementation to birds					
		Mushroom cultivation	Mushroom production of Paddy straw mushroom (20 beds) and Oyster mushroom(20 bags)	Net Income 16kg PSM@150/ month 30kg OM@80/ month 4800/- per month	0.3	0.4	0.5	0.6
					5.32	6.33	7.43	8.34

## Village-2

1. Name of KVK/ district: Kalahandi

2. Name of villages adopted: Majhiguda

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 240 ha

(ii) Area of irrigated land (ha): 240 ha

(iii) Number of water body: 9

(iv) Area of water body (ha): 2.4 ha

(v) Number of different livestock animals: Cattle 450

(vi) Average yield of different crops, livestock and fisheries:

Agri./ horticultural Produce	Livestock	Mushroom	Fishery
Paddy-20-27q/ha	Dairy- 8.5 L/ Cow/day	16kg Paddy Straw Mushroom	3.5q/ha
Greengram/Blackgram-4-5q/ha	Poultry birds-4.5 kg/birds/Year	30kg Oyster Mushroom.	
Brinjal/Tomato-220-240q/ha			

(vii) Soil status:

Available N	Available P	Available K
Medium	Medium	Medium
Source: District Soil testing laboratory		

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 75 Kg/ha N, 40 kg/ha P<sub>2</sub>O<sub>5</sub>, 40 kg K<sub>2</sub>O

Available N	Available P	Available K	Available micro-nutrient
52%	80%	85%	Zinc 42%
			Boron 19%
			Sulphur 36%

(ix) Major diseases occurred in crops: Blast, BPH

(x) Major diseases occurred in livestock: FMD

(xi) Post-harvest management/ value addition followed, if any: Pickle preparation and sauce making

(xii) Marketing channels of products: OMFED

(xiii) Agro-based industries, if any:

(xiv) Average income of the farmer:

5. Possibility of involvement of ICAR Institutes: CSWCRI, Semiliguda.

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): Allied line departments.

8. FPO formed or not? No.

9. Major interventions planned:

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Farming situation	Component	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
					2018- 19	2019- 20	2020- 21	2021- 22
1	Irrigated (Up land) (Kharif) Vegetable-Vegetable cropping system	Vegetables (Brinjal)	1. Cultivation of HYV Brinjal A. Navneet 2. Spraying of Cartap Hydrochloride @1.5 g/lit or Thiodicarb 75 WP @1.5 g/lit of water for control against borer 3. Alternate spraying of Phosalone 35 EC@ 500ml/Ha. and Thiomethoxam 25WG @ 100gm/Ha. at 10 days interval to control sucking pest and streptomycin 1gm/10lit of water to control wilt.	Expected yield: 240 q/ha	0.4	0.6	0.4	0.5
2	(Rabi)	Vegetables (Cauliflower)	1. Installation of yellow sticky trap@20/ha 2. Spraying of Virex-H @1.5 ml/liter of water thrice at 7 days interval for management of whitefly vector 3. Sparying of 5% neem seed kernel extract to kill early stages larvae and spraying of spinosad 0.4ml/lit to control fruit borer . 4. Application of Ammonium Molybdate 2gm/lit of water to control whiptail and Dichlorovous 3ml/lit of water to control against DBM. 5. Foliar spraying of boron 1.5gm/lit of water or soil application of Barax 10kg/ha during final ploughing.	Expected yield: 220 q/ha	0.7	0.6	0.7	0.8
3	Irrigated (Medium land) (Kharif) Rice-Greengram cropping system	Rice	1. STBF 2. Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT 3. Use of power weeder 4. Spraying of Flubendiamide 240 SC + Thiachloprid 240 SC ) @ 300 ml/ha twice i.e. at Tillering & P.I. stage for management of Gall midge, LF & BPH, WBPH	Expected yield: 34 q/ha	0.65	0.8	0.9	0.8
4		Green gram	1. Demonstration of Green gram IPM 02-3 2. Line sowing 3. Demonstration on Pre-Herbicide (Pendimethalin1lit/ha) 4. Seed inoculation with rhizobium & PSB @ 20 gm/kg of seed 5. Management of YMV by Installation of yellow sticky trap 6. Flonicamid @50/ha/ 50% WG @ 75 gm a.i/ha/ Thiomethoxam 25 % WG @ 100 gm/ha to control white fly.	Expected yield: 6.8 q/ha	0.4	0.5	0.4	0.5
5	Irrigate (Low land)	Rice- Rice	1. Improved variety C.V. Pratikhya 2. Green manuring with dhanicha @ 25kg/ha 3. Herbicide pendimethlin (38.7% SC) @ 3.3 l/ha/ Bispyribic Sodium 200 gm/ha at 0-15 DAT 4. Application of Cartap hydrochloride 4% @ 1.25 kg/ 10 decimal in nursery field to control stem borer 5. Skip row method of planting 6. Foliar spraying of crop at tillering, boot leaf and grain formation stage with Isoprothilane 40% EC @1.5ml /lit of water along with sticker for blast management in paddy 7. Mechanical transplanting.	Expected yield: 25-30 q/ha	0.90	0.8	0.8	0.9

Sl. No.	Farming situation	Component	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
					2018- 19	2019- 20	2020- 21	2021- 22
6	Allied activities Home Stead	Dairy	1. Regular deworming and vaccination to dairy cow 2. Supplementary feeding with mineral mixture and concentrate diet 2kg/day/animal. 3. Perennial fodder production 4. Supplementation with calcium minerals 50g/day/animal.	Expected yield: 8.5 L/Cow/day	0.75	0.8	0.8	0.85
		Poultry birds- (Rs. 4,000)	1. Supplementary Backyard poultry 20nos (Vanaraja) with proper vaccination 2. Supplementary feeding with Azolla 3. Calcium supplementation to birds	Expected body weight gain: 4.5 kg/birds/Year	0.5	0.55	0.6	0.6
		Mushroom cultivation	1. Mushroom production of OSM-11 (50 beds/month)and Blue Oyster mushroom cultivation(50 beds/month) 2. Management of competitor moulds and diseases in straw mushroom	Net Income 16kg PSM@150 30kg OM@80 (Rs. 3400/-yr)	0.3	0.4	0.4	0.4
		Fisheries	1. Stocking of IMC fingerling @7000/ha 2. Mineral mixture agrimin fort @10g/.kg body wt. with floating feed 3. Application of CIFAX @1 l/ha water area	1ton/ha	1.5	1.8	1.85	1.90

### Village-3

1. Name of KVK/ district: Kalahandi

2. Name of villages adopted: Dhaner

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 225 ha

(ii) Area of irrigated land (ha): 200 ha

(iii) Number of water body: 06

(iv) Area of water body (ha): 9

(v) Number of different livestock animals: Jersey:200, Desi cow:150, Bullock:100 Goat:220

Sheep:75

(vi) Average yield of different crops, livestock and fisheries:

Crops	Avarage Yield
Paddy	27q/ha
Blackgram	3.5q/ha
Banana	650q/ha
Brinjal	80q/ha
Tomato	80q/ha
Chilli	35q/ha
Okra	60q/ha
Milk(Jersey)	5-6 ltr./cow/day
Milk(Desi)	3-4 ltr./cow/day
Fish	6q/ha

(vii) Soil status: Black soil or Red & Yellow soil

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N= 82 kg, P= 43 kg & K= 42 kg

(ix) Major diseases occurred in crops:

S.L No	Crops	Disease
1	Paddy	BLB, Blast, Sheath blight, BPH, Gall midge
2	Blackgram	Downey mildew, Powdery mildew, YMV
3	Brinjal	Fruit & shoot borer Wilt, Cercospora leaf spot, Damping off
4	Tomato	Wilt, Damping off, Early blight, Sucking pest, Thrips and mites, fruit Borer
5	Chilli	Wilt, Damping off
6	Okra	YVMV, Powdery mildew

(x) Major diseases occurred in livestock: FMD, HS, PPR, Goat pox, Ranikhet, Coccidiosis

(xi) Post-harvest management/ value addition followed, if any: No

(xii) Marketing channels of products: Dhaner- Charbahal (local nearest market), Local traders.

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: Rs.60,000/- to 70,000/-

**5. Possibility of involvement of ICAR Institutes:**

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):**

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** Dept. of Agriculture, Horticulture, Animal husbandry, Fishery and Watershed Govt. Of Odisha

**8. FPO formed or not?** Not

**9. Major interventions planned:**

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Farming situation	Component	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
					2018- 19	2019- 20	2020- 21	2021- 22
1	Irrigated (Up land)	Kharif Vegetables (Brinjal)	<ul style="list-style-type: none"> <li>Seed treatment with Carbendazim@2g/kg seed and bio-fertilizer for damping off control.</li> <li>IPM for fruit and shoot borer. Sparying of 5% neem seed kernel extract to kill early stages larvae and spraying of Cartap Hydrochloride @1.5 g/lit or Thiodicarb 75 WP @1.5 g/lit of water for control against fruit and shoot borer.</li> <li>Alternate spraying of Phosalone 35 EC@ 500ml/ha. and Thiomethoxam 25WG @ 100gm/ha. at 10 days interval to control sucking pest and Streptomycin@ 2gm/10lit of water to control wilt.</li> </ul>	Expected yield: 240 q/ha	0.4	0.5	0.6	0.6
2		Rabi Vegetables (Tomato)	<ul style="list-style-type: none"> <li>Integrated Pest Management for f thrips &amp; mites in tomato</li> <li>Spraying of 5% neem seed kernel extract to kill early stages larvae and spraying of spinisod 0.4ml/lit to control fruit borer in Tomato.</li> <li>Sucking pest management in tomato</li> </ul>	Expected yield: 225 q/	0.5	0.6	0.7	0.8

Sl. No.	Farming situation	Component	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
					2018- 19	2019- 20	2020- 21	2021- 22
3	Irrigated (Medium land)	Kharif- Rice	<ul style="list-style-type: none"> <li>Integraed Weed Managemnet in transplanted rice. (Londax power (Bensulfuron methyl 0.6%+ Pretilachlor @6% ) at 0-3 DAT for weed control. Use of power weeder at 45DAT)</li> <li>Demonstration on management of Brown Plant Hopper in Rice (Application of Pymetrzine @ 0.6 gm/liter and Flonicamid @0.4 gm/lit)</li> <li>Application of 2% boron and 2% potash during flowering time in Rice crop.</li> </ul>	Expected yield: 35 q/	0.4	0.5	0.62	0.75
		Rabi- Blackgram	<ul style="list-style-type: none"> <li>Demonstration on performance of Black gram Variety PU-31</li> <li>Demonstration on Pre-Herbicide (Pendimethalin1lit/ha)application in Black gram for weed management</li> <li>Demonstration and popularization of management practices for Yellow Mosaic Virus (YMV) in Black gram</li> </ul>	Expected yield: 6.8q/ha	0.5	0.6	0.7	0.82
4	Irrigated (Low land)	Kharif- Rice	<ul style="list-style-type: none"> <li>Popularization and introduction of BPH &amp; WBPH resistant rice variety <i>Hasant</i></li> <li>Demonstration on weed management in Transplanted Rice (Herbicide Bispyribac Sodium 250 gm/ha at 0-3 DAT)</li> <li>Demonstration of Shealth blight management in Paddy (Application of Propiconazole @ 1lit/ha for control against sheath blight)</li> </ul>	Expected yield: 35 q/ha	0.5	0.5	0.6	0.6
		Rabi-Rice	<ul style="list-style-type: none"> <li>Demonstration on management practices of Bacterial leaf Blight in Paddy (Application of Biomycine @ 2.5 ml/lit of water / Carbendazim 2gm/ lit +Streptomycine @1gm per 10 ltr of water)</li> <li>Demonstration of Brown manuarng in direct seeded Paddy (Sowing of Dhanicha seeds @15 kg/ha along with rice, application of 2,4-D ethyl ester 1 kg a.i/ha at 30 DAS)</li> <li>Foliar spraying of crop at tillering, booting and grain formation stage with Isoprothilane 40% EC @1.5ml /lit of water along with sticker for blast management in paddy</li> </ul>	Expected yield: 33 q/ha	0.5	0.5	0.6	0.6
6	Allied activities Home Stead	Dairy	<ul style="list-style-type: none"> <li>Regular deworming and vaccination to dairy cow</li> <li>Supplementary feeding with mineral mixture and concentrate diet</li> <li>Perennial fodder production</li> <li>Supplementation with calcium minerals</li> </ul>	Expected yield: 8.5 L/ Cow/day	0.5	0.5	0.6	0.6
		Poultry birds- (Rs. 4,000)	<ul style="list-style-type: none"> <li>Supplementary Backyard poultry 20 nos. (Vanaraja) with proper vaccination</li> <li>Supplementary feeding with Azolla</li> <li>Calcium supplementation to birds</li> </ul>	Net income 8000/- per month	0.4	0.5	0.6	0.7



Sl. No.	Farming situation	Component	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
					2018- 19	2019- 20	2020- 21	2021- 22
		Mushroom cultivation	<ul style="list-style-type: none"> <li>Mushroom production of (50 beds/ month)</li> <li>Management of competitor moulds and diseases in straw mushroom</li> </ul>	Net Income 16kg PSM@150/ month 30kg OM@80/ month 4800/- per month	0.3	0.4	0.5	0.6
7		Fisheris	<ol style="list-style-type: none"> <li>Stocking of IMC fingerling @7000/ha</li> <li>Mineral mixture agrimin fort @10g/ .kg body wt. with floating feed</li> <li>Application of CIFAX @1 l/ha water area</li> </ol>	1ton/ha	1.5	1.8	1.85	1.90
					5.5	6.4	7.37	7.97

### Village-3

1. Name of KVK/ district: Kalahandi

2. Name of villages adopted: Kendugupka

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 360

(ii) Area of irrigated land (ha): 108

(iii) Number of water body: 07

(iv) Area of water body (ha): 5.0

(v) Number of different livestock animals: Cattle- 345, Buffalo- 65, poultry- 1250, Goat- 340, Sheep- 210

(vi) Average yield of different crops, livestock and fisheries:

Sl. No	Enterprises	Yield (Qt/ha), Liter/day
1	Rice	37
2	Cotton	10
3	Pigeonpea	11
4	Greengram	5.0
5	Lathyrus	6.0
6	Chickpea	7.5
7	Brinjal	140
8	Chilli	43
9	Tomato	210

(vii) Soil status: Black soil or Red & Yellow soil

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N= 80 kg, P= 46 kg & K= 40 kg Average 84 Kg/ha.

(ix) Major diseases occurred in crops:

Sl. No.	Crop/Vegetable	Major Disease and pest
1	Rice	YSB, BPH, LF, BLB, Sheath blight & Blast

Sl. No.	Crop/Vegetable	Major Disease and pest
2	Cotton	Leaf spot disease, fusarium wilting, bacterial leaf blight, Jassids, thrips, white flies, Red bug, mealy bug
3	Pigeonpea	Leaf Webber, pod borer, fusarium wilting
4	Greengram	YVMV, pod borer, fungal wilting, powdery mildew
5	Lathyrus	Helicoverpa, spodoptera
6	Chickpea	Bacterial wilting, pod borer
7	Brinjal	Fruit & shoot borer, bacterial wilting, red spider mite
8	Chilli	Bacterial wilting, mite, thrips, BLB, leaf curl disease
9	Tomato	Bacterial wilting, bacterial leaf spot, mite, thrips, leaf curl disease, phomosis blight

(x) Major diseases occurred in livestock: FMD, HS, PPR, Goat fox, Ranikhet, Coccidiosis

(xi) Post-harvest management/ value addition followed, if any: NA

(xii) Marketing channels of products: PACS, RMC, Local traders, local nearest market

(xiii) Agro-based industries, if any: NA

(xiv) Average income of the farmer: 60,000 to 1.5 Lakh

5. Possibility of involvement of ICAR Institutes: CSWCRI, Semiliguda, Koraput

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Reliance foundation, Dhanuka group

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): Dept. of Agriculture, Horticulture, Animal husbandry, Fishery and Watershed Govt. Of Odisha

8. FPO formed or not? No

9. Major interventions planned:

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Farming situation	Component	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
					2018- 19	2019- 20	2020- 21	2021- 22
1	Kharif (Up land) Cotton+Arhar-Fallow	Cotton + Arhar inter cropping	<ol style="list-style-type: none"> <li>Ridge &amp; furrow method of cotton cultivation.</li> <li>Cotton+ Arhar intercropping with 8:2 ratio</li> <li>Micronutrient application in cotton crop.</li> <li>Sucking pest management in cotton crop.</li> </ol>	Expected yield: 20 q/ha	0.5	0.6	0.6	0.6
2	Restricted Irrigation Kharif Vegetable-fallow	Vegetables (Tomato, Chilli)	<ol style="list-style-type: none"> <li>Introduction of HYV tomato variety <i>Arka Rakhyak</i></li> <li>Micronutrient management in tomato and chilli.</li> <li>Sucking pest management in tomato and chilli</li> <li>Spraying of 5% neem seed kernel extract to kill early stages larvae and spraying of spinisod 0.4ml/lit to control fruit borer in Tomato.</li> <li>IPM for management of thrips &amp; mites in tomato and chilli crop.</li> </ol>	Expected yield: 220 q/ha (Tomato), 105q/ha (Chilli)	0.6	0.6	0.7	0.8

Sl. No.	Farming situation	Component	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
					2018- 19	2019- 20	2020- 21	2021- 22
3	Irrigated (Medium land) Rice- Green gram cropping system	Rice(Kharif)	5. STBF application in Rice crop. 6. Introduction of medium duration BPH & WBPH resistant rice variety <i>Hasant</i> . 7. Application of pre emergence herbicide in Rice Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT. 8. Line transplanting in Rice crop and Use of power weeder 9. Spraying of Flubendiamide 240 SC + Thiacloprid 240 SC ) @ 300 ml/ha twice i.e. at Tillering & P.I. stage for management of Gall midge, LF 10. Application of Pymetrzine @ 0.6 gm/liter and Flonicamid @0.4 gm/lit for management of BPH & WBPH IN Rice. 11. Application of 2% boron and 2% potash during flowering time in Rice crop.	Expected yield: 45q/ha	0.4	0.4	0.5	0.5
4		Greengram (Rabi)	7. Demonstration of Green gram IPM02-3& 2-14 8. Demonstration on Pre-Herbicide (Pendimethalin 1lit/ha) application in Green gram 9. Seed inoculation with rhizobium & PSB @ 20 gm/kg of seed 10. Line sowing 11. Management of YMV by Installation of yellow sticky trap 12. Flonicamid @50/ha/ 50% WG @ 75 gm a.i/ha/ Thiomethoxam 25 % WG @ 100 gm/ha	Expected yield: 6.8 q/ha	0.5	0.5	0.6	0.6
5	Irrigate (Low land)	Rice- Vegetable	1. Introduction of of rice variety Vina-11 2. Green manuring with dhanicha @ 25kg/ha 3. Herbicide pendimethlin (38.7% SC) @ 750gm/ha/ Bispyribic Na 25 gm.ha at 0-3 DAT 4. Application of Cartaphydrochloride 4% @ 1.25 kg/ 10 decimal in nursery field to control stem borer 5. Skip row method of planting 6. Foliar spraying of crop at tillering, boot leaf and grain formation stage with Isoprothilane 40% EC @1.5ml /lit of water along with sticker for blast management in paddy 7. Line sowing with transplanter 8. Micronutrient application in vegetable crop. 9. Application of water soluble fertilizer in vegetable crop. 10. IPM in vegetable crop. 11. Sucking pest management in vegetable crop.	Expected yield: Rice- 40/ha. Tomato- 190/ha Chilli- 42/ha Brinjal-210/ha.	0.5	0.5	0.6	0.6

Sl. No.	Farming situation	Component	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
					2018- 19	2019- 20	2020- 21	2021- 22
6	Allied activities Home Stead	Dairy	1. Regular deworming and vaccination to dairy cow 2. Supplementary feeding with mineral mixture and concentrate diet 3. AI in indigenous cattle 4. Perennial fodder production 5. Supplementation with calcium minerals	Expected yield: 8.5 L/Cow/day	0.5	0.5	0.6	0.6
		Poultry birds- (Rs. 4,000)	4. Supplementary Backyard poultry 20nos (Kadaknath & Vanaraja) with proper vaccination 5. Supplementary feeding with Azolla 6. Calcium supplementation to birds	Expected body weight gain: 4.5 kg/birds/Year				
		Mushroom cultivation	3. Mushroom production of OSM-11 (50 beds/month)and Blue Oyster mushroom cultivation(50 beds/month) 4. Management of competitor moulds and diseases in straw mushroom	Net Income 16kg PSM@100 30kg OM@60 (Rs. 3400/-yr)				

#### Village-4

1. Name of KVK/ district: Kalahandi

2. Name of villages adopted: Salepali

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 120

(ii) Area of irrigated land (ha): 80

(iii) Number of water body: 4

(iv) Area of water body (ha): 1

(v) Number of different livestock animals: Cattle- 100, Goat- 30, Poultry- 84

(vi) Average yield of different crops, livestock and fisheries:

Sl. No	Enterprises	Yield (q/ha)
1	Rice	30
2	Pigeonpea	6.0
3	Greengram	5.0
4	Blackgram	6.0
5	Brinjal	135
6	Tomato	140

(vii) Soil status: Red and Yellow

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N-85/ha, P-40/ha, K-50/ha

(ix) Major diseases occurred in crops:

Rice	:	Gall midge, leaf folder, Blast, Sheath blight, Stem borer, BPH
Pigeon Pea	:	Fusarium wilt, Pod borer, leaf webber
Blackgram/Geengram	:	Powdery mildew, YVMV
Vegetables (Tomato, Brinjal)	:	Brinjal, shoot and fruit borer in Brinjal, Bacterial Wilt, Leaf Blight in Tomato, leaf curl disease, phomosis blight

(x) Major diseases occurred in livestock: FMD, HS, PPR, Goat pox, Ranikhet, Coccidiosis

(xi) Post-harvest management/ value addition followed, if any: NA

(xii) Marketing channels of products: NA

(xiii) Agro-based industries, if any: NA

(xiv) Average income of the farmer: 65000- 1.8 lakh

5. Possibility of involvement of ICAR Institutes: No

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): Dept. of Agriculture, Horticulture, Veterinary, Fishery and Forestry

8. FPO formed or not? Not

9. Major interventions planned:

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Farming Situation	Component	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
					2018- 19	2019- 20	2020- 21	2021- 22
1	Rainfed Upland Rice-Fallow	Rice	<ul style="list-style-type: none"> <li>Line transplanting and weeding by power weeder.</li> <li>Application of pre emergence herbicide in Rice Londax power (Bensulfuron methyl+ pretilachlor) @ 10kg/ha 0-5 DAT.</li> <li>Spraying of Flubendiamide 240 SC + Thiacloprid 240 SC ) @ 300 ml/ha twice i.e. at Tillering &amp; P.I. stage for management of Gall Midge, LF</li> <li>Application of Pymetrozine @ 0.6 gm/liter and Flonicamid @0.4 gm/lit for management of BPH &amp; WBPH in Rice.</li> <li>Application of 2% Boron and 2% Pot-ash during flowering time in Rice crop.</li> </ul>	34 q/ha	0.50	0.58	0.62	0.70
	Restricted Irrigation Kharif Vegetable-fallow	Vegetable (Brinjal)	<ul style="list-style-type: none"> <li>Demonstration on Brinjal var. Arka Navneet</li> <li>Spraying of 5% neem seed kernel extract to kill early stages larvae and spraying of spinosad 0.4ml/lit to control fruit borer in Brinjal</li> <li>Spraying of Virex-H @1.5 ml/liter of water thrice at 7 days interval for management of whitefly vector</li> <li>Installation of yellow sticky trap@20/ha</li> <li>Micronutrient application in vegetable crop.</li> </ul>	250 q/ha	0.80	0.85	0.95	1.0
2	Rainfed (Medium land)	Rice (Kharif)	<ul style="list-style-type: none"> <li>Introduction of long duration BPH &amp; WBPH resistant rice variety <i>Hasant</i></li> <li>STBF application in Rice crop.</li> </ul>	32 q/ha	0.55	0.65	0.75	0.80

Sl. No.	Farming Situation	Component	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
					2018- 19	2019- 20	2020- 21	2021- 22
		Greengram (Rabi)	<ul style="list-style-type: none"> <li>Demonstration of Green gram IPM 02-3</li> <li>Demonstration on Pre-Herbicide (Pendimethalin 1lit/ha) application in Green gram</li> <li>Seed inoculation with rhizobium &amp; PSB @ 20 gm/kg of seed and Line sowing</li> <li>Management of YMV by Installation of yellow sticky trap</li> <li>Flonicamid @50/ha/ 50% WG @ 75 gm a.i/ha/ Thiomethoxam 25 % WG @ 100 gm/ha</li> </ul>	7 q/ha				
3	Rainfed (Low land)	Rice (Kharif)	<ul style="list-style-type: none"> <li>Demonstration on improved rice variety Swarna Sub-1</li> <li>Green manuring with dhanicha @ 25kg/ha</li> <li>Herbicide pendimethlin (38.7% SC) @ 3.3L/ha/ Bispyribac sodium 200gm/ha at 5-15 DAT</li> </ul>	35 q/ha	0.65	0.75	0.80	0.85
		Blackgram (Rabi)	<ul style="list-style-type: none"> <li>Demonstration on improved Blackgram variety PU-31</li> <li>Seed inoculation with rhizobium &amp; PSB @ 20 gm/kg of seed</li> <li>Application of 10 Kg borax/25 kg Zinc sulphate/ha</li> </ul>	5.8 q/ha	0.4	0.5	0.4	0.5
4	Allied Home-stead activities	Poultry bird	<ul style="list-style-type: none"> <li>Backyard poultry Vanaraja (20nos.) with proper vaccination</li> <li>Supplementary feeding with azolla</li> <li>Calcium supplementation to birds</li> </ul>	8000/- per month	0.35	0.42	0.45	0.55
		Mushroom cultivation	<ul style="list-style-type: none"> <li>Mushroom production of Paddy straw mushroom (20 beds) and Oyster mushroom (20 bags)</li> </ul>	16kg PSM@150/month 30kg OM@80/month 4800/- per month	0.30	0.35	0.42	0.50
		Dairy	<ol style="list-style-type: none"> <li>Regular deworming and vaccination to dairy cow</li> <li>Supplementary feeding with mineral mixture and concentrate diet</li> <li>AI in indigenous cattle</li> <li>Perennial fodder production</li> <li>Supplementation with calcium minerals</li> </ol>	8.5 L/Cow/day	0.50	0.50	0.60	0.60

## 8.2 Krishi Vigyan Kendra, Nuapada

1. Name of KVK/ district: Nuapada

2. Name of villages adopted: 1. Amodi, Block -Nuapada  
2. Chuhuri, Block- Nuapada  
3. Bharuamunda, Block-Komna  
4. Dhangsar, Block- Khariar  
5. Palsapada, Block-Sinapali

3. Number of farmers targeted: 25

4. Compiled baseline survey report (point wise) of the villages:

SL. No.	Parameters/ Village	Amodi	Chuhuri	Bharuamunda	Dhangsar	Palsaguda
(i)	Area of agriculture land (ha)	227 ha.	367.40 ha	152.0 ha	234.0 ha	252.0 ha
(ii)	Area of irrigated land (ha)	30 Ac.	53.0 ha	12.8 ha	80.0 ha	42.0 ha
(iii)	Number of water body	Borewell-44,LIP-2,MIP-1,Pond-6.	Borewell-40, Dugwell-4, Pond-6 Nos.	Borewell-11, Pond-3	LIP-4Nos., Pond-2	Dugwell-3, Borewell-4, LIP-2
(iv)	Area of water body (ha)	2.2 ha	1.8Ac.	1.2Ac.	0.3ha	ha
(v)	Number of different livestock animals	Cattle-358, Buff-57,Goat- 300 no, Poultry-60 no.	Cow- 450 no, Goat- 254no, Poultry-860,Cattle-345,Buff-86	Cattle-224,Buff-6, Goat- 158 no, Poultry-960no	Cattle-419, Buff-63, Poultry-468no	Cattle-264, Buff-41, Goat- 400 no, Poultry-380 no
(vi)	Average yield of different crops, livestock and fisheries	Rice- 36.5 q/ha, Greengram- 4q/ha, Cauliflowers-278q/ha,poultry-1.2 kg/ bird Mushroom (paddy straw)- 1 kg/bed Oyster mushroom- 9.2 kg/bed	Rice- 33 q/ha, Greengram- 4.3q/ha, Tomato-257.8 q/ha, poultry-1.2 kg/bird Mushroom (paddy straw)- 1 kg/bed Oyster mushroom- 1.2 kg/bed	Rice- 31.5 q/ha, Green gram-3.9q/ha,Black gram-4.2q/ha, poultry-1.2 kg/ bird	Rice- 33.9 q/ha, Mushroom (paddy straw)- 1 kg/bed Oyster mushroom- 1.2 kg/bed	Rice- 28.32 q/ha, poultry-1.2 kg/ bird
(vii)	Soil status	PH- 5.51 – 6.19 EC- 0.102 – 0.104 O.C%- 0.53 – 0.71	PH- 5.51- 5.58 EC- 0.107 – 0.138 O.C%- 0.48 – 0.62	PH- 5.25 – 6.32 EC- 0.102- 0.148 O.C%- 0.53 – 0.72	PH- 4.92 – 5.71 EC- 0.102 – 0.138 O.C%- 0.45 – 0.58	PH- 5.07- 5.74 EC- 0.114 – 0.159 O.C%- 0.49 – 0.60
(viii)	Average nutrients (nitrogen, phosphorous, potash, etc) used	N- 256 – 274 kg/ha P- 16-23 kg/ha K- 112 – 131 kg/ha	N- 245- 268kg/ha P- 14-19 kg/ha K- 117 - 127 kg/ha	N- 250- 2721kg/ha P- 15-24 kg/ha K- 113 - 129 kg/ha	N- 238- 272 kg/ha P- 11- 19 kg/ha K- 98-124 kg/ha	N- 251-287 kg/ha P- 12-18 kg/ha K- 103 - 119kg/ha
(ix)	Major diseases occurred in crops	Rice-BPH, Sheeth blight, BLB, Mite, Greengram-YMV, pod borer	Rice-BPH, Sheeth blight, BLB, Mite, Greengram-YMV, pod borer	Rice-BPH, Sheeth blight, BLB, Mite,Green gram- YMV, pod borer	Rice-BPH, Sheeth blight, BLB, Mite, Greengram-YMV, pod borer	Rice-BPH, Sheeth blight, BLB, Mite, Greengram-YMV, pod borer
(x)	Major diseases occurred in livestock	Cattle-FMD, Goat-PPR, poultry-Ranikhet	Cattle-FMD, Goat-PPR, Poultry-Ranikhet	Cattle-FMD, Goat-PPR, Poultry-Ranikhet	Cattle-FMD, Goat-PPR	Cattle-FMD, Goat-PPR, Poultry- Ranikhet

SL. No.	Parameters/ Village	Amodi	Chuhuri	Bharuamunda	Dhangsar	Palsaguda
(xi)	Post-harvest management / value addition followed, if any	No	No	No	No	No
(xii)	Marketing channels of products	Grower-Whole seller,Grower-local market	Grower-Whole seller,Grower-local market	Grower-Whole seller,Grower-local market	Grower-Whole seller,Grower-local market	Grower-Whole seller,Grower-local market
(xiii)	Agro-based industries, if any	No	No	No	No	No
(xiv)	Average income of the farmer	Rs. 88,000/-	Rs. 77,000/-	Rs.47,000/-	Rs. 82,000/-	Rs. 43,000/-

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): IFFCO

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt.(Deptt. Of Agriculture, Deptt. Of Horticulture, deptt of Animal Husbandry,Govt. of odisha)

8. FPO formed or not? No

9. Major interventions planned:hybrid rice and HYV cultivation in convergence mode, hybrid vegetable cultivation, oyster and paddy straw mushroom cultivation, crop diversification to fruit plants etc.

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
<b>(Module-I Amodi) 2018-19</b>	1. HYV rice DDR-44/Bina-11 2.Seed treatment(vitavax power)	40qtl. Rs.3,320	7230	4230	4230	3230
	1.Tomato cultivation var.A.rakshak & A.samrat	300qtl. Rs.83,320	1000	1000	1000	2000
	1.poultry rearing with pallishree 2.Vaccination with RD 3. Feeding(Home scarping+ Agril. by-product)	• chicken -2.15kg/ bird • 62 egg/bird/Yr				
	1. Mushroom Strain-OSM-11 2. dipping in lime water	0.8kg/bed 160/- per bed	150	150	150	150
	1.Oyster mushroom	2.6 kg/bed Rs.260/- per bed	200	200	200	200
<b>2019-20</b>	1.HYV Sahabhagi dhan 2.Line sowing 3. STBF 4.Post-emergence herbicide Bensulfuron methyl + petrilachlore @ 4kg/ac.	323 qtl	7310	3210	3210	3210
	1.Cauliflower var. Megha DDVP @ 1ml/lit, boron and molybdenum spray	320qtl Rs. 1,24,000/-	1000	1000	1000	1000
	1.Poultry rearing Banaraja	Chicken 5 kg/ bird 165 eggs/ Bird/yr	650	650	650	650
	1.Mushroom strain OSM-11 Disinfection of mushroom room with formalin 1ml/lit	0.8 kg/bed	150	150	150	150
<b>2020-21</b>	1.Improved management practices	2.35 kg/bed				
	1. Rice seed DRR-44 2.Application of ZnSO4 @25kg/ha 3. Line sowing	40 qtl	8750	2310	2310	2310

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
	1. Multimineral & vitamin liquid (5ml/100 birds 21-60 days duration for poultry chicks 2.Storage & packaging of egg for selling 3.Market linkage	Chicken 2.5 kg/bird	3000	3000	3000	3000
	1.Value addition (pickle,Mushroom soup powder) 2.Market linkage	30kg mushroom pickle 3.4kg mushroom soup powder out of 34kg mushroom	2000	1000	1000	1000
<b>Module-II Chuhuri 2018-19</b>						
	1.Paddy var. Bina11 along with Seed treatment with Vitavax power 2. Line transplanting	40 q/ha Rs.32,330/-				
	Greengram- Var. IPM2-14	6.2 q/ha Rs.20,000/-	2500	1500	1500	1500
	1.Hybrid tomato var. A. rakshak & A. samrat	311.8	-	-	-	1000
	1.Mushroom Strain- OSM-11 2.Maintenance of temperature	1.2 kg/bed				
	1.Oyster Mushroom Var. Hypsizygo ulmarius 2.Improved management practices	2.1 kg/bed				
	1.Poultry rearing with pallishree 2.Vaccination with RD 3.Feeding (Home scarping+ Agril bio product)	Chicken 1.6kg /bird		650	650	650
<b>2019-20</b>	1.Paddy var. DRR-44 with 2.Herbicide Pretilachlor 1lit/ha at 2-4 DAT	40.2 qtl/ha		2350	2350	2350
	1.Greengram- Var. IPM 02-14 2.Line sowing 3.Seed treatment with Vitavax power,	7.0 qtl/ha		2500	2500	2500
	1.Hybrid tomato var. BT-136 (bacterial Wilt resistant 2.STBF (100-70-60 kg NPK/ha.)	315.2 qtl/ha		1000	1000	1000
	1. Disinfection of mushroom room with formalin 1ml/lit.	1.27 kg/bed				
	1. Improved management practices	2.3 kg/bed				
	1.Home scarping & organic waste like floating hydrophytes, waste of vegetables crops	Chicken.- 2.1 kg/ / bird				
<b>2020-21</b>	Paddy var.Bina 11Application of ZnSO4 @25kg/ha	42 qtl/ha	3750	3250	3250	3250
	1.STBF 2.Herbicide application with quizalfop-p- ethyl 1lit/ha	7.0 qtl/ha	5000	2300	2300	2300

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
	1.Spraying of ridomil MZ 20gm+ streptocycline 1gm/10 lit water	335 qtl/ha	2000	2000	2000	2000
	1.Value addition (pickle,Mushroom soup powder) 2. Market linkage	92 kg ( 40 bed ) 60kg mushroom used pickle 3.2 kg as mushroom soup powder	5000	1000	1000	1000
	1.Mineral mixture & vitamin liquid (5ml/100 birds 21-60 day s duration 2.Storage packaging of egg for selling 3.Market linkage	Chicken-2.5kg/bird;	5000	2537		
<b>Module-III Bharuamunda</b>						
<b>2018-19</b>	1.Variety Sahabhagi 2.Seed treatment with Vitavax power	33.5 qtl/ha				
	1.Improved breed pallishree 2.Vaccination with RD 3.Feeding (Home scarping+ Agril bio product	chicken 1.8 kg /bird;				
<b>2019-20</b>	1.Paddy Var- Manaswini 2.Pretilachlor 1lit/ha at 2-4 DAT	32.5 qtl/ha				
	1.Backyard kitchen garden 2.STBF	50 qtl/ha	2050	2050		
	1.Home scarping organic waste like floating hydrophytes, waste of vegetables crops etc.	Chicken 2.0 kg/ bird	1070	1000		
<b>2020-21</b>	1.Application of ZnSO4 @25kg/ha 2. Rice seed Manaswini	33.5qtl/ha	6750	3271		
	2. Spraying of Dinitrofuron @ 80gm/ac.		800	800		
	1.Multimineral & vitamin liquid (5ml/100 birds 21-60 day s duration for poultry chicks 2.Storage packaging of egg for selling 3.Market linkage	Chicken 2.5kg/bird	3000	3000		
<b>Module-IV Dhansar</b>						
<b>2018-19</b>	1.Rice var-Manaswini treatment with Vitavax power @2.5 gm/kg seed	33.7qtl/ha Rs.29,470/-	8390	3210	3210	3210
	1.Mushroom Strain-OSM-11 2.Maintenance of temperature	0.8 kg/bed Rs. 160/ per bed	150	150	150	150
	1.Oyster mushroom <i>Hypsizygos ulmarius</i>	27 kg/bag Rs. 540/ bed	200	200	200	200
<b>2019-20</b>	1.Seed treatment with Vitavax power @2.5 gm/kg seed in var. Manaswini 2. Green manuring 3. Fertilizer cost	35.0 qtl/ha Rs. 31,230/-	7550	2310	2310	2310
	1.Disinfection of mushroom room with formalin 1ml/lit.	1.3 kg/bed	1000	500	500	500
	2.Improved management practices	2.3 kg/bag	5000	5000	5000	5000

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
2020-21	1.Neem based pesticide	45 qtl/ha		5000	5000	5000
	2.Bio-fertilizer 5kg/ha					
	1.packaging and market linkage	1.3 kg/bed		2000	2000	2000
Module- V Palsapada	1.Value addition (pickle, Mushroom soup powder)	92 kg(40 bed) 60 kg mushroom pickle 3.2kg mushroom soup powder				
	2. Market linkage					
2018-19	1.Paddy var. DRR-44	39.0 qtl/ha	7325	-	5997	5997
	2.Seed treatment with vitavax power	Rs. 30,120/-				
	1. poultry rearing with pallishree 2.Vaccination with RD 3.Feeding	Chicken 2.38 kg/ bird	1000	500	500	500
2019-20	1.Paddy Var. DRR-44	40 qtl/ha	7430	3275	3275	3275
	2. STBF 3. Pre-emergence herbicide pendimethalin @1.25lit/ha	Rs. 31,190/-				
2020-21	1.Home scarping organic waste like floating hydrophytes, waste of vegetables crops etc.	Chicken 2.5 kg/ bird	3000	-	-	2000
	1.Line sowing var. DRR-44	42 qtl/ha	7930	5750	5750	5750
2021-22 ( For 5 villages)	2.Application of ZnSO4 @25kg/ha	Rs. 32,170/-				
	1.Multimineral &vitamin liquid (5ml/100 birds 21-60 day s duration 2.Storage packaging of egg for selling 3.Market linkage	Chicken.2.5kg/bird		5000	5000	5000
	1.Formation of Farmers Producer Group 2.Marketing & Awareness camp 3.Training on improved technologies & market linkage					
<b>Total</b>			<b>1,09,335</b>	<b>79,003</b>	<b>72,342</b>	<b>75,342</b>



Scented paddy

## 9. Western Central Table land

The districts of this Agro-Climatic Zone are Bargarh, Bolangir, Boudh, Sonepur and parts of Sambalpur, Deogarh and Jharsugda. Total area of this zone is 24913 sq. km. which is 16% of total area covered.

### 9.1 Krishi Vigyan Kendra, Bargarh

1. Name of KVK/ district: Bargarh

2. Name of villages adopted: Patrapalli, Lahanda, T. Gandapali, Kusumuda, Bandenbahal

3. Number of farmers targeted: 25

4. Compiled baseline survey report (point wise) of the villages:

Particulars	Patrapalli,	Lahanda,	T. Gandapali	Kusumuda	Bandenbahal
Area of agriculture land (ha):	194	778.32	259.14	130.50	278.46
Area of irrigated land (ha):	164.9	739.4	54.45	118.75	41.76
Number of water body:	1	5	-	2	1
Area of water body (ha):	19	40	Nil	45	25
Number of different livestock animals	Dairy-24 Poultry-40	Dairy-600	Poultry-330	Dairy-120	Goatery-220 Poultry-300
Average yield of different crops, livestock and fisheries	Paddy-34 Groundnut-11 Vegetable-125 Dairy-3lt/day Poultry-(Egg-60 & Bodywt.-1.6kg/ annum)	Paddy-42 Greengram-2 Vegetable-140 Mushroom-1.250kg./ day Dairy-2.5	Paddy-35 Greengram-2.4 Poultry- (Egg-60 & Bodywt.-1.6kg/ annum)	Paddy-30 Greengram-2.2 Dairy-2.5lt/day	Paddy-28 Mustard-3.1 Goatery-9.4 Poultry
Soil status:	Sandy loam, Black cotton	Loamy	Sandy loam, Latrite	Sandy loam, Latrite	Sandy loam, Latrite
Average nutrients (nitrogen, phosphorous, potash, etc) used:	Low-Medium-High	Medium-Low-High	Low-Medium-Medium	Low-Medium-Medium	Low-Medium-Medium
Major diseases occurred in crops	Paddy- BLB, BPH Groundnut- TIKKA, collar rot Vegetable- Wilt, leaf curl	Paddy- BPH, Neck blast Vegetable- Fruit and Shoot borer, leaf curl Mushroom- Bud rot	Paddy- Stem borer, blast Groundnut- TIKKA, Turmite Greengram-YMV	Paddy- BPH, Neck blast Greengram- Powder mildew Mustard-Aphid	Paddy- BLB Greengram-YMV, Powder mildew
Major diseases occurred in livestock:	Dairy-FMD Poultry-IBD, Coccidiosis	Dairy-Ecto-Parasitic infestation like tick, lice, Poultry- Infectious Bursal Disease	Dairy- FMD, Mastitis	Goatery- Endo parasitic infestation like round worm, tape worm. Poultry- Coccidiosis	
Post-harvest management/ value addition followed, if any:	Pickle, Chutny, Sauce , Potato chips, Badi,	Puffed rice, Rice flakes, Potato chips, Badi	Pickle, Badi	Pickle, , Potato chips, Badi	Pickle, Chutney , Badi
Marketing channels of products	Cultivator-Middle man -Mandi	Cultivator- Middle man -consumer	Cultivator- Middle man -consumer	Cultivator- Middle man -consumer	Cultivator- Middle man -consumer
Agro-based industries, if any:	-	Rice mill	Bread factory	-	-
Average income of the farmer:	48,600	52,400	39,500	42,700	32,300

5. Possibility of involvement of ICAR Institutes: NRRI, cuttack, CTCRI, Bhubaneswar, CIFA, Bhubaneswar

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): - Reliance Industries, Dhanuka Group, ACC cement, Bhusan steel, Bedanta Almunium, Jindal steel & power, Hindalco Ltd.

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): - State Govt. Line Deptts, NGOs

8. FPO formed or not? -No

9. Major interventions planned:

- Brown manuring with Dhanicha & knocking down Dhanicha at 30 DAS by 2,4-D ester @0.5 kgai/ha, Line transplanting in Paddy.
- Varietal substitution with short duration var. Sahabghidhan, Line sowing, Application of herbicides Londax powder – (Bensulfuron methyl 0.6 % + Pretilachor 6% GR) @ 10kg/ha at 8 DAT
- Spraying of Pymetrozine 20SG@ 80 gm/ac for BPH management after making gullies, Application of post emergence herbicide Bispyribac Sodium 10 SC @200 ml/ha at 25-30 DAT, Use of mechanical rice transplanter.
- Varietal replacement of greengram with IPM 02-14, Seed treatment with *T. viridae* @ 5gm/kg
- Varietal replacement of Groundnut with Devi, application of oxyfluorfen 23.5EC @ 80ml/acre at 2-3 DAS and Spraying of imazethapyr 10 SL @400ml/ac at 20-25 DAS
- Replacement of low value vegetable radish with potato (var. Kufri Jyoti), late blight management with Metalaxyl + Mancozeb @2.5gm/ha.
- Seed treatment of vegetable with Vitavax power @ 2.5 gm/kg.
- Introduction of Mustard var P.T. – 303 in low land, seed treatment with Vitavax power.
- Introduction of Sesamum var.- Prachi in pre-rabi,
- Paddy straw mushroom cultivation by sterilization of paddy straw with formalin and bavistin
- Promotion of azolla cultivation, supplementation of azolla with commercial feed in 1:1 ratio
- Release of fingerlings@6000/ha, Lime applications in pond @ 100 kg/ac.m
- Deworming of goats – Albendazole@ 10mg/kg body weight (upto 6 months) and Zycloz@ 1 ml/10 kg body weight (after 6 months)
- Poultry Breed replacement with Rainbowrooster, timely vaccination.

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	<p><b>Promotion of improved method of cultivation in groundnut-vegetable farming system in irrigated upland.-</b></p> <ul style="list-style-type: none"> <li>• Intercropping of groundnut with Maize (6:2), Gypsum application @ 2.5 q/ha Farm Mechanisation by seed drill, groundnut decorticator, groundnut thresher</li> <li>• Early planting of potato by 1st week of Nov, Application of herbicide- Propaquizafop EC @ 1.5 lit/ha at 20 DAP, Grading, sorting of potato, Preparation of potato chips</li> </ul>	<p>Yield -</p> <p>Groundnut- 16 q/ha</p> <p>Potato- 162 q/ha</p>	0.4	0.5	0.3	0.3

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
2	<ul style="list-style-type: none"> <li>• <b>Integrated Crop Management in Paddy-Vegetable cropping system for irrigated medium land.-</b> Varietal replacement with Pratikshya / Ranidhan, Line transplanting, Application of ZnSO<sub>4</sub>@10kg/ac, Use of mechanical weeder</li> <li>• Replacement of Cucurbits with watermelon (var. Sugar baby/Sugar manic/Maya/Sugar Boss), Drip irrigation in watermelon, Foliar spray of Borax @ 2.5gm/lit</li> </ul>	<p>Paddy- 44 q/ha</p> <p>Watermelon- 210 q/ha</p>	0.5	0.4	0.4	0.4
3	<p><b>Cost effective techniques in paddy-paddy cropping pattern for irrigated canal medium and low land-</b></p> <p>Cultivation of scented paddy seeds-(Kudrat-3/ Pusa basmati/ pusa sugandha/Purnabhoga in Kharif season, Spraying of Pymetrozine 20SG@ 80 gm/ac for BPH management, Cultivation of mustard seeds var. M-27/ GM mustard as catch crop</p>	<p>Paddy- 32 q/ha</p> <p>Mustard – 5 q/ha</p>	0.3	0.4	0.4	0.5
4	<p><b>Popularisation of IFS in Paddy-Green gram cropping pattern for low land areas-</b></p> <ul style="list-style-type: none"> <li>• Azola application@1-2qtl/ha before 2-3 weeks of transplanting or 10 qtl of Azola/ha at 7DAT in Paddy,</li> <li>• Lime applications in pond @ 100 kg/ac.m for pisciculture in low land, Cultivation of pigeon pea (var. Maruti/Asha/UPAS 120) on pond bund in place of greengram, Cultivation of Papaya, banana &amp; drum stick on pond bund .</li> <li>Rearing of Ducks (Khaki Campbell/ white pekin) - 20 no.</li> </ul>	<p>Fish- 17.5 q/Acre</p> <p>Redgram- 2.5 q (Pond bund)</p> <p>Vegetable- 12 q (Pond bund)</p>	0.5	0.4	0.3	0.3
5	<p><b>Promotion of short duration paddy varieties in paddy-fallow areas for undulating Plain drought Prone situations.-</b> Popularisation of drought tolerant paddy var. DRR 44, DRR 42, Application of herbicides Londax powder – (Bensulfuron methyl 0.6 % + Pretilachor 6% GR) @ 10kg/ha at 8 DAT, Intercropping paddy with Pigeonpea 5:2 during Kharif, Promotion of Arhar &amp; Groundnut intercropping (2:6) and Seed treatment with <i>T. viridae</i> @ 5 gm /kg,</p>	<p>Paddy- 28 q/ha</p> <p>Pigeon pea- 4 q +</p> <p>Groundnut- 8q</p>	0.3	0.2	0.2	0.2
6	<p><b>Popularisation of HYV paddy and greengram for undulating Plain drought Prone situations –</b></p> <p>Introduction of HYV paddy Ajay, Hasanta, Application of Biofertilizer Azospirillum &amp; PSB during seed treatment @5gm/kg seed, Use of LCC for diagnosis of nitrogen deficiency &amp; use of neem coated urea</p> <p>Introduction of greengram var., IPM 02- 14, spraying of sulphur powder 80% WP @ 2.5 kg/ha or Sulfex @5ml/liter to control powdery mildew for G. gram, Paira cropping of field pea var. Rachana, Swarnarekha, Dhusar</p>	<p>Paddy-42 q/ha</p> <p>Greengram-5 q/ha</p>	0.4	0.5	0.5	0.5
7	<p><b>Promotion of Oilseed in Greengram-fallow under rainfed upland-</b> Line sowing of Greengram and Sesamum, Seed treatment with <i>T. viridae</i>@ 5 gm/kg of seeds, Mithomyl 40SP @ 2gm/liter of water to control pod borer -Profenofhos 50EC @2ml/lit of water</p>	<p>Greengram-3.5q/ha</p> <p>Sesamum- 4.9</p>	0.2	0.3	0.4	0.5

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
8	<b>Promotion of pulse in paddy-fallow cropping system for medium land under Undulating Sub Mountainous Tract Rainfed situation</b> – Paddy Seed treatment with azospirillum ,Use of pheromone trap 20 no/ha Line sowing of greengram,  Application of pre-emergence herbicide oxyflurofen 23.5EC @ 80ml/acre at 2-3 DAS /Pendimethaline 2 lit/ ha, Priming with potassium Chloride (0.36gm/litre) for 12 hours  5)Spraying of elemental sulfur / sulfur powder 80% WP @ 2.5 kg/ha or Carbendazim @ 500 gm/ha to control powdery mildew for G. gram	Paddy- 32 q/ha  Greengram- 5.4 q/ha	0.2	0.3	0.4	0.5
9	<b>Introduction of HYV paddy and mustard in low land areas-</b> Paddy variety Ajaya, Seed treatment with 15gm azospirillum& 15 gm phospobacter/kg of seeds, Use of pheromone trap 20 no/ha  Mustard var P.T. - 303 / M-27 in fallow land, Line sowing, Sulphur application 20 kg/ha	Paddy- 43q/ha  Mustard-4.5 q/ha	0.6	0.5	0.5	0.5
10	<b>Promotion of mushroom cultivation.-</b> Promotion of oyster mushroom & paddy straw mushroom throughout the year, Value addition of mushroom (mushroom pickle/mushroom powder)	Paddy straw mushroom- 1.2 kg/ bed  Oyster mushroom -2 kg/bed	0.2	0.2	0.3	0.3
11	<b>Improved method of Dairy management-</b> Breed replacement with crossbred of Jersey,Redsindhi, Supplementation of vitamin mineral mixture Agromin forte @ 30gm/day/cow , Value added products of milk	Milk-7 litter/day	0.3	0.3	0.4	0.4
12	<b>Promotion of goaterly as secondary agriculture -</b> Deworming of goats – Albendazole@ 10mg/kg body weight (upto 6 months)  And Zycloz@ 1 ml/10 kg body weight (after 6 months), Supplementation of vitamin & mineral mixture (Agromin forte/Supplivide-M @10-15 gm/ day)	Live body weight (kg/ annum)- 18 kg	0.2	0.2	0.3	0.3
13	<b>Promotion of backyard poultry-</b> Breed replacement with Kadaknath, Palishree, Rainbow rooster chicks ,Brooding management (Timely vaccination-Lasota F1. vaccine (5-7 days), I.B.D vaccine (14 days) &Lasota F1. vaccine booster doze (21 days), Supplementation with growth promoter- Vetzyme @ 5gm./10 bird/ day, Supplementation with calcium supplementation Calcicare/Osomin @ 3 ml/bird/day	Egg no./annum -145  Body wt.(kg)/ annum-3.2	0.1	0.1	0.2	0.2
14	<b>Promotion of Organic Farming-</b> Vermi Composting,Green manuring with Dhanicha & Sunhemp,Composting, Use of bio agents(PSB, T.viridae) and bio pesticides (jeevaamrita, NSKE,Fish amino acidsetc.)	Vermi compost-25 q/annum	0.1	0.2	0.2	0.3
		<b>Total</b>	<b>4.3</b>	<b>4.5</b>	<b>4.8</b>	<b>5.2</b>



Replacement of back yardpoultry with dual purpose poultry

## 9.2 Krishi Vigyan Kendra, Bolangir

### Village-1

1. Name of KVK/ district: Bolangir

2. Name of villages adopted: Uparjhar

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 390

(ii) Area of irrigated land (ha):38

(iii) Number of water body:8

(iv) Area of water body (ha):2.5

(v) Number of different livestock animals:250

(vi) Average yield of different crops, livestock and fisheries:

Crop/ Enterprise	Paddy	Maize	Redgram	Greengram	Vegetables	Local Poultry	Milk	Goat
Av. Yield	24 Q/ha	24 Q grain /ha	7 Q/ha	2.2 Q/ha	220 Q/ha	1.0 kg/bird / year	520 lit/ cow / annum	11 kg/ goat / annum

(vii) Soil status: Mixed red and black soil/ Low N , medium P , medium K

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

80 kg N , 20 kg P , 50 kg K/ ha.

(ix) Major diseases occurred in crops: Blast, leaf blight, wilt, damping off, YMV,

(x) Major diseases occurred in livestock: PPR, Ranikhet, FMD, HS, Mastitis, Theileria

(xi) Post-harvest management/ value addition followed, if any: NIL

(xii) Marketing channels of products:

Local market, District headquarter market (Govt. & Private) , marketing agents/ middlemen

(xiii) Agro-based industries, if any: NIL

(xiv) Average income of the farmers Rs60,000 / year



5. **Possibility of involvement of ICAR Institutes:** Nil (No presence in the district or nearby)
6. **Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** Reliance foundation, working in the district may be involved
7. **Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):**  
Agril. & allied departments of the district and NGOs
8. **FPO formed or not?** Not formed
9. **Major interventions planned:**

Substitution of local and old varieties of Paddy with high yielding and short duration/drought tolerant varieties with herbicide application and IPM measures.

Integrated approach to contain insect pest and disease in vegetables with integrated nutrient management  
Cultivation of sweet corn in open field and growing of Papaya and Banana in backyard  
Micronutrient and herbicide application in pulse crops

Rearing of improved poultry breeds, mushroom cultivation, Fodder cultivation and administration of mineral mixture for livestock

10. **Action Plan (including interventions made) for each village and Budget requirement:( 20 farmers to be covered )**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Cultivation of stress tolerant rice var. DR-42 or DR-44 with application of suitable herbicides and IPM measures against BPH , stem borer , Blast , BLB disease etc.	35 Q/ ha.	-	0.5	0.5	0.6
2	IPM against fruit and shoot borer in Brinjal, IDM for control of thrips in Onion, Management of fruitfly in cucurbit vegetables, IPM for control of wilting and other insect pest problem in Okra, crucifer vegetables	320 Q/ ha	0.3	0.5	0.5	0.4
3	Substitution of grain crop with Sweet corn variety Sugar 55	Rs 40,000 per ha.	-	0.5	0.5	0.4
4	Growing of 10 no. of Red lady var. of Papaya in the homestead	2 q/ 10 plants	-	0.04	0.04	0.04
5	Growing of 5 no. of tissue culture banana in the homestead	1 q / 5 plants	-	0.08	0.08	0.08
6	Improved variety of greengram , micronutrient application and IDM for control of YMV	5 q/ ha	0.2	0.2	0.2	-
7	Backyard poultry Rainbow rooster @ 20 per family	3 kg/ year	0.16	0.16	0.16	-
8	Paddy straw and Dhingri mushroom cultivation	5 kg / day for 200 days in a year	0.6	1.2	1.2	1,2
9	Fodder cultivation and administration of mineral mixture to the livestock	3.5 lit/ cow / day	0.06	0.06	0.06	0.06
10	Feeding of fodder, mineral mixture and concentrate for faster body growth in goats	16 kg/ goat/ annum	-	1.5	1.5	1.5
11	Trainings and other extension activities	-	0.04	0.4	0.4	0.4

**Village-2**

1. **Name of KVK/ district:** Bolangir
2. **Name of villages adopted:** Sirabahal
3. **Number of farmers targeted:** 20
4. **Compiled baseline survey report (point wise) of the villages:**  
(i) Area of agriculture land (ha) : 80

- (ii) Area of irrigated land (ha) : 50
- (iii) Number of water body : 4
- (iv) Area of water body (ha) : 1.5
- (v) Number of different livestock animals :120
- (vi) Average yield of different crops, livestock and fisheries:

Crop/ Enterprise	Paddy	Cotton	Groundnut	Greengram	Vegetables	Local Poultry	Milk	Goat
Av. Yield	28 Q/ha	12 Q seed cotton /ha	8 Q/ha	2.7 Q/ha	240 Q/ha	1.2 kg/bird / year	500 lit/ cow / annum	9 kg/ goat / annum

(vii) Soil status: Mixed red and black soil/ Low N , medium P , medium K

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:  
120 kg N , 25 kg P , 75 kg K/ ha.

(ix) Major diseases occurred in crops: Blast, leaf blight, wilt, damping off, YMV,

(x) Major diseases occurred in livestock: PPR, Ranikhet, FMD, HS, Mastitis, Theileria

(xi) Post-harvest management/ value addition followed, if any: NIL

(xii) Marketing channels of products:

Local market, District headquarter market (Govt. & Private) , marketing agents/ middlemen

(xiii) Agro-based industries, if any: NIL

(xiv) Average income of the farmers: Rs60,000 / year

5. **Possibility of involvement of ICAR Institutes:** Nil (No presence in the district or nearby)
6. **Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** Reliance foundation, working in the district may be involved
7. **Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):**  
Agril. & allied departments of the district and NGOs
8. **FPO formed or not?** Not formed
9. **Major interventions planned:**
- ◆ Substitution of local and old varieties of Paddy with high yielding and short duration/drought tolerant varieties with herbicide application and IPM measures.
  - ◆ Integrated approach to contain insect pest and disease in vegetables with integrated nutrient management
  - ◆ Growing of Papaya and Banana in backyard
  - ◆ Management of sucking pests in Cotton and Scientific intercultural operation
  - ◆ Micronutrient and herbicide application in pulse / oilseed crops
  - ◆ Rearing of improved poultry breeds , mushroom cultivation , Fodder cultivation and administration of mineral mixture for livestock
10. **Action Plan (including interventions made) for each village and Budget requirement: ( 20 farmers to be covered )**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Cultivation of hybrid rice var. Ajay , Silky with application of suitable herbicides and IPM measures against BPH , stem borer , Blast , BLB disease etc.	50 Q/ ha.	-	0.5	0.5	0.6
2	IPM against fruit and shoot borer in Brinjal, IDM for control of thrips in Onion, Management of fruitfly in cucurbit vegetables, IPM for control of wilting and other insect pest problem in Okra, crucifer vegetables	320 Q/ ha	0.3	0.5	0.5	0.4
3	Integrated nutrient and weed management in Groundnut	14 Q/ ha	-	0.6	0.6	0.4
4	Growing of 10 no. of Red lady var. of Papaya in the homestead	2 q/ 10 plants	-	0.04	0.04	0.04
5	Growing of 5 no. of tissue culture banana in the homestead	1 q / 5 plants	-	0.08	0.08	0.08
6	Improved variety of greengram , micronutrient application and IDM for control of YMV	5 q/ ha	0.2	0.2	0.2	-
7	Backyard poultry Rainbow rooster @ 20 per family	3 kg/ year	0.16	0.16	0.16	-
8	Paddy straw and Dhingri mushroom cultivation	5 kg / day for 200 days in a year	0.6	1.2	1.2	1,2
9	Fodder cultivation and administration of mineral mixture to the livestock	3.5 lit/ cow / day	0.06	0.06	0.06	0.06
10	Feeding of fodder, mineral mixture and concentrate for faster body growth in goats	15 kg/ goat/ annum	-	1.5	1.5	1.5
11	Trainings and other extension activities	-	0.04	0.4	0.4	0.4

### Village-3

1. Name of KVK/ district: Bolangir

2. Name of villages adopted: Tamiyan

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 250

(ii) Area of irrigated land (ha) : 70

(iii) Number of water body : 7

(iv) Area of water body (ha) : 2.5

(v) Number of different livestock animals : 165

(vi) Average yield of different crops, livestock and fisheries:

Crop/ Enterprise	Paddy	Cotton	Redgram	Greengram	Vegetables	Local Poultry	Milk	Goat
Av. Yield	28 Q/ha	13 Q seed cotton /ha	8 Q/ha	3 Q/ha	240 Q/ha	1.1 kg/bird / year	525 lit/ cow / annum	10 kg/ goat /annum

(vii) Soil status: Mixed red and black soil/ Low N , medium P , medium K

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

160 kg N ,30 kg P , 90 kg K/ ha.

(ix) Major diseases occurred in crops: Blast, leaf blight, wilt, damping off, YMV,

(x) Major diseases occurred in livestock: PPR, Ranikhet, FMD, HS, Mastitis, Theileria

(xi) Post-harvest management/ value addition followed, if any: NIL

(xii) Marketing channels of products:

Local market, District headquarter market (Govt. & Private) , marketing agents/ middlemen

(xiii) Agro-based industries, if any: NIL

(xiv) Average income of the farmers: Rs85,000 / year

5. Possibility of involvement of ICAR Institutes: Nil (No presence in the district or nearby)

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Nil

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):

Agril. & allied departments of the district and NGOs

8. FPO formed or not? Not formed

9. Major interventions planned:

- ◆ Substitution of local and old varieties of Paddy with high yielding and short duration/drought tolerant varieties with herbicide application and IPM measures.
- ◆ Integrated approach to contain insect pest and disease in vegetables with integrated nutrient management
- ◆ Growing of Papaya, Drumstick and Pomogranate in backyard
- ◆ Management of sucking pests in Cotton and Scientific intercultural operation
- ◆ Micronutrient and herbicide application in pulse / oilseed crops
- ◆ Rearing of improved poultry breeds , mushroom cultivation , Fodder cultivation and administration of mineral mixture for livestock

10. Action Plan (including interventions made) for each village and Budget requirement: ( 20 farmers to be covered )

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Timely and line transplanting of paddy with application of suitable herbicides and IPM measures against BPH, stem borer, Blast, BLB disease etc.	50 Q/ ha.	-	0.5	0.5	0.6
2	IPM against fruit and shoot borer in Brinjal, Okra, IPM for control of borers and defoliators in Cabbage and Cauliflower, Management of fruitfly and powdery mildew in cucurbit vegetables,	320 Q/ ha	0.3	0.5	0.5	0.4
3	Integrated nutrient, pest and weed management in Redgram	10 Q/ ha	-	0.6	0.6	0.4
4	Growing of 10 no. of Red lady var. of Papaya in the homestead	2 q/ 10 plants	-	0.04	0.04	0.04
5	Growing of 5 no. of Pomogranate in the homestead	20 kg/ plants	-	0.1	0.1	0.1
6	Improved variety of greengram , micronutrient application and IDM for control of YMV	5 q/ ha	0.2	0.2	0.2	-
7	Backyard poultry Rainbow rooster/ Banaraja @ 20 per family	3 kg/ year	0.16	0.16	0.16	-
8	Paddy straw and Dhingri mushroom cultivation	5 kg / day for 200 days in a year	0.6	1.2	1.2	1,2
9	Fodder cultivation and administration of mineral mixture to the livestock	3.5 lit/ cow / day	0.06	0.06	0.06	0.06
10	Feeding of fodder, mineral mixture and concentrate for faster body growth in goats	15 kg/ goat/ annum	-	1.5	1.5	1.5
11	Trainings and other extension activities	-	0.04	0.4	0.4	0.4

#### Village-4

1. Name of KVK/ district: Bolangir

2. Name of villages adopted: Kaudia

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 170

(ii) Area of irrigated land (ha) : 40

(iii) Number of water body : 3

(iv) Area of water body (ha) : 2

(v) Number of different livestock animals : 120

(vi) Average yield of different crops, livestock and fisheries:

Crop/ Enterprise	Paddy	Groundnut	Redgram	Greengram	Vegetables	Local Poultry	Milk	Goat
Av. Yield	27 Q/ha	9 Q/ha	7 Q/ha	2 Q/ha	210 Q/ha	1.0 kg/bird / year	480 lit/ cow / annum	9 kg/ goat / annum

(vii) Soil status: Mixed red and black soil/ Low N , medium P , medium K

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

140 kg N , 30 kg P , 80 kg K/ ha.

(ix) Major diseases occurred in crops: Blast, leaf blight, wilt, damping off, YMV,

(x) Major diseases occurred in livestock: PPR, Ranikhet, FMD, HS, Mastitis, Theileria

(xi) Post-harvest management/ value addition followed, if any: NIL

(xii) Marketing channels of products:

Local market, District headquarter market (Govt. & Private) , marketing agents/ middlemen

(xiii) Agro-based industries, if any: NIL

(xiv) Average income of the farmers :Rs 70,000 / year

5. Possibility of involvement of ICAR Institutes: Nil (No presence in the district or nearby)

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Nil

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):

Agril. & allied departments of the district and NGOs

8. FPO formed or not? Not formed

9. Major interventions planned:

- ◆ Substitution of local and old varieties of Paddy with high yielding and short duration/drought tolerant varieties with herbicide application and IPM measures.
- ◆ Integrated approach to contain insect pest and disease in vegetables with integrated nutrient management
- ◆ Growing of Papaya and Pomogranate in backyard
- ◆ Management of pests in Groundnut, Redgram and greengram with Scientific intercultural operation
- ◆ Micronutrient and herbicide application in pulse / oilseed crops

- ◆ Rearing of improved poultry breeds , mushroom cultivation , Fodder cultivation and administration of mineral mixture for livestock

10. Action Plan (including interventions made) for each village and Budget requirement:( 20 farmers to be covered )

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Timely and line transplanting of paddy with varieties like Pooja, DR 42 with application of suitable herbicides and IPM measures against BPH, stem borer, Blast, BLB disease etc.	38 Q/ ha.	-	0.5	0.5	0.6
2	IPM against fruit and shoot borer in Brinjal, Okra, IPM for control of borers and defoliators in Cabbage and Cauliflower, Management of fruitfly and powdery mildew in cucurbit vegetables,	300 Q/ ha	0.3	0.5	0.5	0.4
3	Integrated nutrient, pest and weed management in Redgram	10 Q/ ha	-	0.6	0.6	0.4
4	Growing of 10 no. of Red lady var. of Papaya in the homestead	2 q/ 10 plants	-	0.04	0.04	0.04
5	Growing of 5 no. of Pomogranate in the homestead	20 kg/ plants	-	0.1	0.1	0.1
6	Improved variety of greengram , micronutrient application and IDM for control of YMV	5 q/ ha	0.2	0.2	0.2	-
7	Backyard poultry Rainbow rooster/ Banaraja @ 20 per family	3 kg/ year	0.16	0.16	0.16	-
8	Paddy straw and Dhingri mushroom cultivation	5 kg / day for 200 days in a year	0.6	1.2	1.2	1,2
9	Fodder cultivation and administration of mineral mixture to the livestock	3.5 lit/ cow / day	0.06	0.06	0.06	0.06
10	Feeding of fodder, mineral mixture and concentrate for faster body growth in goats	15 kg/ goat/ annum	-	1.5	1.5	1.5
11	Trainings and other extension activities	-	0.04	0.4	0.4	0.4

#### Village-5

1. Name of KVK/ district: Bolangir

2. Name of villages adopted: Kareldhua

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha) : 90

(ii) Area of irrigated land (ha) : 10

(iii) Number of water body : 8

(iv) Area of water body (ha) : 4

(v) Number of different livestock animals : 150

(vi) Average yield of different crops, livestock and fisheries:

Crop/ Enterprise	Paddy	Redgram	Greengram	Vegetables	Local Poultry	Milk	Goat
Av. Yield	24 Q/ha	7 Q/ha	2.2 Q/ha	220 Q/ha	1.0 kg/bird / year	520 lit/ cow/ annum	11 kg/ goat/ annum

(vii) Soil status: Mixed red and black soil/ Low N , medium P , medium K

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

80 kg N , 25 kg P , 60 kg K/ ha.

(ix) Major diseases occurred in crops: Blast, leaf blight, wilt, damping off, YMV,

(x) Major diseases occurred in livestock: PPR, Ranikhet, FMD, HS, Mastitis, Theileria

(xi) Post-harvest management/ value addition followed, if any: NIL

(xii) Marketing channels of products:

Local market, District headquarter market (Govt. & Private) , marketing agents/ middlemen

(xiii) Agro-based industries, if any: NIL

(xiv) Average income of the farmers: Rs50,000 / year

**5. Possibility of involvement of ICAR Institutes:** Nil (No presence in the district or nearby)

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** Nil

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):**

Agril.& allied departments of the district and NGOs

**8. FPO formed or not?** Not formed

**9. Major interventions planned:**

- ◆ Substitution of local and old varieties of Paddy with high yielding and short duration/drought tolerant varieties with herbicide application and IPM measures.
- ◆ Integrated approach to contain insect pest and disease in vegetables with integrated nutrient management
- ◆ Cultivation of sweet corn in open field and growing of Papaya and Banana in backyard
- ◆ Micronutrient and herbicide application in pulse crops
- ◆ Rearing of improved poultry breeds , mushroom cultivation , Fodder cultivation and administration of mineral mixture for livestock

**10. Action Plan (including interventions made) for each village and Budget requirement:( 20 farmers to be covered )**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Cultivation of stress tolerant rice var. DR-42 or DR-44 with application of suitable herbicides and IPM measures against BPH , stem borer , Blast , BLB disease etc.	35 Q/ ha.	-	0.5	0.5	0.6
2	IPM against fruit and shoot borer in Brinjal, IDM for control of thrips in Onion, Management of fruitfly in cucurbit vegetables, IPM for control of wilting and other insect pest problem in Okra, crucifer vegetables	320 Q/ ha	0.3	0.5	0.5	0.4
3	Growing of 10 no. of Red lady var. of Papaya in the homestead	2 q/ 10 plants	-	0.04	0.04	0.04
4	Growing of 5 no. of tissue culture banana in the homestead	1 q / 5 plants	-	0.08	0.08	0.08
5	Improved variety of greengram , micronutrient application and IDM for control of YMV	5 q/ ha	0.2	0.2	0.2	-
6	Backyard poultry Rainbow rooster @ 20 per family	3 kg/ year	0.16	0.16	0.16	-
7	Paddy straw and Dhingri mushroom cultivation	5 kg / day for 200 days in a year	0.6	1.2	1.2	1,2
8	Fodder cultivation and administration of mineral mixture to the livestock	3.5 lit/ cow / day	0.06	0.06	0.06	0.06
9	Feeding of fodder, mineral mixture and concentrate for faster body growth in goats	16 kg/ goat/ annum	-	1.5	1.5	1.5
10	Trainings and other extension activities	-	0.04	0.4	0.4	0.4

### 9.3 Krishi Vigyan Kendra, Boudh

#### Village-1

1. **Name of KVK/ district:** Boudh

2. **Name of villages adopted:** Kanakpur

3. **Number of farmers targeted:** 05

4. **Compiled baseline survey report (point wise) of the villages:**

(i) Area of agriculture land (ha): 120 Ha

(ii) Area of irrigated land (ha): 40 Ha

(iii) Number of water body: 2

(iv) Area of water body (ha): 1 Ha

(v) Number of different livestock animals: 1050

(vi) Average yield of different crops, livestock and fisheries:

Paddy- 32qt/ha, Vegetable-160 qt/ha

(vii) Soil status: - Red & Black Soil

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 60-50-40 kg/ha

(ix) Major diseases occurred in crops: Blast in Paddy, Blight, Wilt, leaf curl in vegetable

(x) Major diseases occurred in livestock: Foot & Mouth disease etc

(xi) Post-harvest management/ value addition followed, if any: Grading of vegetables

(xii) Marketing channels of products: Through middlemen, Direct marketing

(xiii) Agro-based industries, if any: No

(xiv) Average income of the farmer: Rs 50,000/ year

**5. Possibility of involvement of ICAR Institutes:** Yes

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** No

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State department

**8. FPO formed or not?** No

**9. Major interventions planned:**

A) Substitution of Pigeon pea Variety PRG-176

B) Seed inoculation with Rhizobium@ 20 gram/kg of seed

C) Pod borer management in Pegeon pea

D) Poultry bird- Rain booster-50 birds/farmer

E) Mushroom spawn-30Nos

F) Supply of mineral mixture

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Substitution of Pigeon pea Variety PRG-176	30,000	0.25	0.27	0.28	0.30
2	Seed inoculation with Rhizobium@ 20 gram/kg of seed	10,000	0.035	0.045	0.050	0.055
3	Pod borer management in Pegeon pea	15,000	0.02	0.02	0.02	0.02
4	Poultry bird- -50 birds/farmer	15,000	0.075	0.085	0.90	0.95
5	Mushroom spawn-30Nos	8000	0.022	0.030	0.036	0.042
6	Feed management in poultry bird	15,000	0.015	0.015	0.015	0.015
7	Supply of mineral mixture	10,000	0.01	0.01	0.01	0.01

#### Village-2

- 1.Name of KVK/ district: Boudh
- 2.Name of villages adopted: Rampur
- 3.Number of farmers targeted: 05
- 4.Compiled baseline survey report (point wise) of the villages:
  - (i) Area of agriculture land (ha): 80 Ha
  - (ii) Area of irrigated land (ha): 20 Ha
  - (iii) Number of water body: 2
  - (iv) Area of water body (ha): 1 Ha
  - (v) Number of different livestock animals: 950
  - (vi) Average yield of different crops, livestock and fisheries:  
Paddy- 32qt/ha, Vegetable-160 qt/ha
  - (vii) Soil status: - Red & Black Soil
  - (viii)Average nutrients (nitrogen, phosphorous, potash, etc) used: 60-50-40 kg/ha
  - (ix) Major diseases occurred in crops:Blast in Paddy, Blight, Wilt, leaf curl in vegetable
  - (x) Major diseases occurred in livestock: Foot & Mouth disease etc
  - (xi) Post-harvest management/ value addition followed, if any: Grading of vegetables
  - (xii) Marketing channels of products: Through middlemen, Direct marketing
  - (xiii)Agro-based industries, if any: No
  - (xiv)Average income of the farmer:Rs 50,000/ year
5. Possibility of involvement of ICAR Institutes: Yes
6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill &Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No
7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State department
8. FPO formed or not? No
9. Major interventions planned:
  - A) Substitution of Pigeon pea Variety PRG-176
  - B) Seed inoculation with Rhizobium@ 20 gram/kg of seed
  - C) Pod borer management in Pegeon pea

D) Poultry bird- Rain booster-50 birds/farmer

E) Mushroom spawn-30Nos

F) Supply of mineral mixture

#### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Substitution of Pigeon pea Variety PRG-176	30,000	0.25	0.27	0.28	0.30
2	Seed inoculation with Rhizobium@ 20 gram/kg of seed	10,000	0.035	0.045	0.050	0.055
3	Pod borer management in Pegeon pea	15,000	0.02	0.02	0.02	0.02
4	Poultry bird- -50 birds/farmer	15,000	0.075	0.085	0.90	0.95
5	Mushroom spawn-30Nos	8000	0.022	0.030	0.036	0.042
6	Feed management in poultry bird	15,000	0.015	0.015	0.015	0.015
7	Supply of mineral mixture	10,000	0.01	0.01	0.01	0.01

#### Village-3

1. Name of KVK/ district: Boudh
2. Name of villages adopted: Amathapada
3. Number of farmers targeted: 5
4. Compiled baseline survey report (point wise) of the villages:
  - (i) Area of agriculture land (ha): 210 Ha
  - (ii) Area of irrigated land (ha): 60 Ha
  - (iii) Number of water body: 4
  - (iv) Area of water body (ha): 1.5 Ha
  - (v) Number of different livestock animals: 840
  - (vi) Average yield of different crops, livestock and fisheries: paddy-37 q/Ha, Vegetables-170 qt/ha
  - (vii) Soil status: Black Brown Forest soil
  - (viii)Average nutrients (nitrogen, phosphorous, potash, etc) used: 75-55-40 kg/ha
  - (ix) Major diseases occurred in crops: Blast in Paddy, Blight, Wilt, leaf curl in vegetable
  - (x) Major diseases occurred in livestock: Foot & Mouth disease, Ringworm etc
  - (xi) Post-harvest management/ value addition followed, if any: Grading of vegetables
  - (xii) Marketing channels of products: Through middlemen, Direct marketing
  - (xiii)Agro-based industries, if any: No
  - (xiv)Average income of the farmer:Rs74000/ year
5. Possibility of involvement of ICAR Institutes: Yes
6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill &Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No
7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State department
8. FPO formed or not? No
9. Major interventions planned:

- A) Substitution of Pigeon pea Variety PRG-176
- B) Seed inoculation with Rhizobium@ 20 gram/kg of seed
- C) Pod borer management in Pigeon pea
- D) Poultry bird- Rain booster-50 birds/farmer
- E) Mushroom spawn-30Nos
- F) Feed management in poultry bird

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Substitution of Pigeon pea Variety PRG-176	30,000	0.25	0.27	0.28	0.30
2	Seed inoculation with Rhizobium@ 20 gram/kg of seed	10,000	0.035	0.045	0.050	0.055
3	Pod borer management in Pigeon pea	15,000	0.02	0.02	0.02	0.02
4	Poultry bird- -50 birds/farmer	15,000	0.075	0.085	0.90	0.95
5	Mushroom spawn-30Nos	8000	0.022	0.030	0.036	0.042
6	Feed management in poultry bird	15,000	0.015	0.015	0.015	0.015
7	Supply of mineral mixture	10,000	0.01	0.01	0.01	0.01

**Village-4**

1. Name of KVK/ district: Boudh
2. Name of villages adopted: Pankhimal
3. Number of farmers targeted: 5
4. Compiled baseline survey report (point wise) of the villages:
  - (i) Area of agriculture land (ha): 362 Ha
  - (ii) Area of irrigated land (ha): 40 Ha
  - (iii) Number of water body: 1
  - (iv) Area of water body (ha): 0.5 Ha
  - (v) Number of different livestock animals: 1532
  - (vi) Average yield of different crops, livestock and fisheries: Paddy-32 qt/ha, Vegetable-155 qt/ha
  - (vii) Soil status: Black Brown Forest soil
  - (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 60-50-30 kg/Ha
  - (ix) Major diseases occurred in crops: Blast in Paddy, Blight, Wilt, leaf curl in vegetable,
  - (x) Major diseases occurred in livestock: Foot & Mouth disease
  - (xi) Post-harvest management/ value addition followed, if any: Grading of vegetables
  - (xii) Marketing channels of products: Through middlemen, Direct marketing
  - (xiii) Agro-based industries, if any: No
  - (xiv) Average income of the farmer:Rs57000/year
5. Possibility of involvement of ICAR Institutes: Yes
6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State department

8. FPO formed or not? No

**9. Major interventions planned:**

- A) Substitution of Pigeon pea Variety PRG-176
- B) Seed inoculation with Rhizobium@ 20 gram/kg of seed
- C) Pod borer management in Pigeon pea
- D) Poultry bird- Rain booster-50 birds/farmer
- E) Mushroom spawn-30Nos
- F) Feed management in poultry bird

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Substitution of Pigeon pea Variety PRG-176	30,000	0.25	0.27	0.28	0.30
2	Introduction of kharif onion HYV Bhima super Red	40,000	0.15	0.15	0.15	0.15
3	Pod borer management in Pegeon pea	15,000	0.02	0.02	0.02	0.02
4	Poultry bird- -50 birds/farmer	15,000	0.075	0.085	0.90	0.95
5	Mushroom spawn-30Nos	8000	0.022	0.030	0.036	0.042
6	Feed management in poultry bird	15,000	0.015	0.015	0.015	0.015
7	Supply of mineral mixture	10,000	0.01	0.01	0.01	0.01

**Village-5**

1. Name of KVK/ district: Boudh
2. Name of villages adopted: Balakira
3. Number of farmers targeted: 5
4. Compiled baseline survey report (point wise) of the villages:
  - (i) Area of agriculture land (ha): 110 Ha
  - (ii) Area of irrigated land (ha): 20 Ha
  - (iii) Number of water body: 1
  - (iv) Area of water body (ha): 0.5 Ha
  - (v) Number of different livestock animals: 1250
  - (vi) Average yield of different crops, livestock and fisheries: Paddy-32 qt/Ha, Vegetable- 140 qt/Ha
  - (vii) Soil status: Black Brown Forest soil
  - (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 55-40-25 kg NPK/ha
  - (ix) Major diseases occurred in crops: Blast in Paddy, Blight, Wilt, leaf curl in vegetable, Leaf spot in Mustard

- (x) Major diseases occurred in livestock: Foot & Mouth disease, Ringworm etc
- (xi) Post-harvest management/ value addition followed, if any: Grading of vegetables
- (xii) Marketing channels of products: Through middlemen, Direct marketing
- (xiii) Agro-based industries, if any: No
- (xiv) Average income of the farmer: Rs 56,000/year

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State department

8. FPO formed or not? No

9. Major interventions planned:

- A) Green manuring of Dhaincha
- B) Crop substitution of Brinjal by Onion var. Bhima super Red in Kharif
- C) Use of LCC for effective nitrogen management
- D) IPM in Moong (yellow sticky trap @ 20/ha and Thiomethoxam spray @ 200 g/ha.)
- E) INM in onion
- F) Weed management of onion by Pendimethalin @1kg a.i /ha at 3 DAT as pre emergence.
- G) Introduction of hybrid paddy Rajalaxmi
- H) Supply of IMC fingerlings /Fish fry

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Green manuring of Dhaincha	12000	0.01	0.01	0.01	0.01
2	Crop substitution of Brinjal by Onion var. Bhima super Red in Kharif	40000	0.05	0.05	0.05	0.06
3	Use of LCC for effective nitrogen management	11000	0.005	0.005	0.005	0.006
4	IPM in Moong (yellow sticky trap @ 20/ha and Thiomethoxam spray @ 200 g/ha.)	12000	0.03	0.034	0.037	0.04
5	INM in onion	15,000	0.03	0.034	0.037	0.04
6	Weed management of onion by Pendimethalin @1kg a.i /ha at 3 DAT as pre emergence.	15,000	0.02	0.024	0.027	0.03
7	Introduction of hybrid paddy Rajalaxmi	16,000	0.003	0.035	0.037	0.04
8	A) Supply of IMC fingerlings /Fish fry	25,000	0.05	0.05	0.05	0.06

#### Village-6

1. Name of KVK/ district: Boudh

2. Name of villages adopted: Lambakani

3. Number of farmers targeted: 5

4. Compiled baseline survey report (point wise) of the villages:

- (i) Area of agriculture land (ha): 240 Ha

- (ii) Area of irrigated land (ha): 40 Ha
- (iii) Number of water body: 2
- (iv) Area of water body (ha): 1 Ha
- (v) Number of different livestock animals: 1825
- (vi) Average yield of different crops, livestock and fisheries: Paddy-33qt/Ha, Vegetable- 140 q/Ha
- (vii) Soil status: Lateritic soil
- (viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: 60-50-30 kg NPK/ha
- (ix) Major diseases occurred in crops: Blast in Paddy, Blight, Wilt, leaf curl in vegetable, Leaf spot in Mustard
- (x) Major diseases occurred in livestock: Foot & Mouth disease, Ringworm etc
- (xi) Post-harvest management/ value addition followed, if any: Grading of vegetables
- (xii) Marketing channels of products: Through middlemen, Direct marketing
- (xiii) Agro-based industries, if any: No
- (xiv) Average income of the farmer: Rs 70,000/year

5. Possibility of involvement of ICAR Institutes: Yes

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State department

8. FPO formed or not? No

9. Major interventions planned:

- A) Green manuring of Dhaincha
- B) Crop substitution of Brinjal by Onion var. Bhima super Red in Kharif
- C) Use of LCC for effective nitrogen management
- D) IPM in Moong (yellow sticky trap @ 20/ha and Thiomethoxam spray @ 200 g/ha.)
- E) INM in onion
- F) Weed management of onion by Pendimethalin @1kg a.i /ha at 3 DAT as pre emergence.
- G) Introduction of hybrid paddy Rajalaxmi
- H) Supply of IMC fingerlings /Fish fry

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	Green manuring of Dhaincha	12000	0.01	0.01	0.01	0.01
2	Crop substitution of Brinjal by Onion var. Bhima super Red in Kharif	40000	0.05	0.05	0.05	0.06
3	Use of LCC for effective nitrogen management	11000	0.005	0.005	0.005	0.006
4	IPM in Moong (yellow sticky trap @ 20/ha and Thiomethoxam spray @ 200 g/ha.)	12000	0.03	0.034	0.037	0.04
5	INM in onion	15,000	0.03	0.034	0.037	0.04

Sl. No.	Activities planned	Expected Outcome in Rupees (in 2022)	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
6	Weed management of onion by Pendimethalin @1kg a.i / ha at 3 DAT as pre emergence.	15,000	0.02	0.024	0.027	0.03
7	Introduction of hybrid paddy Rajalaxmi	16,000	0.003	0.035	0.037	0.04
8	B) Supply of IMC fingerlings /Fish fry	25,000	0.05	0.05	0.05	0.06

#### 9.4 Krishi Vigyan Kendra, Sonapur

##### Village-1

1. Name of KVK/ district: Sonapur

2. Name of villages adopted: Brahmanipali

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 203

(ii) Area of irrigated land (ha): 7

(iii) Number of water body: 24

(iv) Area of water body (ha):

(v) Number of different livestock animals: Goats- 112 nos, cows- 116 nos., bullock- 120 nos, poultry- 85 nos., sheep- 126, ducks- 56 nos

(vi) Average yield of different crops, livestock and fisheries:

Paddy- , green gram, vegetable

(vii) Soil status: Sandy loam and loamy

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N- 16.3MT, P- 3.89MT, K- 4.16

(ix) Major diseases occurred in crops: BPH, leaf folder, sheath blight in paddy, YMV in okra, YMV in green gram, wilt in brinjal and tomato

(x) Major diseases occurred in livestock: foot and mouth disease

(xi) Post-harvest management/ value addition followed, if any: NA

(xii) Marketing channels of products: Local market

(xiii) Agro-based industries, if any: One small rice meal

(xiv) Average income of the farmer: 90000/- 1,20000/-

5. Possibility of involvement of ICAR Institutes: Training, OFT to identify the specificity of technology, field visit, FLD to popularise established technology in farmers field, to create awareness of new innovations, providing quality planting material

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State dept, NGO

8. FPO formed or not? No

9. Major interventions planned:

- Integrated Pest Management of BPH in paddy
- Assessment of BPH tolerant rice variety Hasanta
- Demonstration of triple disease resistant tomato var. Arka Rakshak
- Crop diversification, Rice-vegetable
- Backyard poultry, round the year mushroom cultivation

#### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	2018-19:- Rice ( Bina - 11) - green gram ( PiaraGreengram cultivation in Rabi( Paira)IPM 02-03)	35400	0.35	0.55	0.70	1.0
	2019-20: Rice (Binadhan-11) – green gram (IPM-02-03)+ 2% sparay of DAP	39200				
	2020-21 Soil test based fertilizer application					
	Spraying of water soluble fertilizer 19:19:19 @ 5 g./lit at 30 DAS and 10 g./lit at 45 DAS	42650				
2	2021-22:- Weed management : Bensulfuron methyl + Preetilachlor 10 Kg/ha within 3 DAT	45900	0.25	0.35	0.40	0.45
	spraying of Tricyclazole 75 % WP 0.2 g/lit					
2	Backyard poultry 15 nos/farmers two batchwith supplement feed and shelter management	2700	0.15	0.45	0.60	0.40
	Backyard poultry 25 nos/farmers two batch	4790				
	Backyard poultry 30nos/farmers two batch	5800				
	Backyard poultry 35nos/farmers two batch	7000				
3	Cultivation of triple disease resistant tomato var. Arka Rakshak	197000	0.15	0.25	0.35	0.40
	Trelley system of cultivation alongwith weed managemet	219000				
	INM in tomato	264000				
4	Post harvest management in tomato	285000	0.15	0.25	0.35	0.40
	Paddy straw mushroom (25 beds) ( June to Sept.) and Oyster (25 beds)(Oct to Jan)	4650				
	Paddy straw mushroom (50 beds) ( June to Sept.) and Oyster (50 beds)(Oct to Jan)	10850				
	Paddy straw mushroom (75 beds) ( June to Sept.) and Oyster (75 beds)(Oct to Jan)	18075				
5	Paddy straw mushroom (100 beds) ( June to Sept.) and Oyster (100 beds)(Oct to Jan)	25000				

##### Village-2

1. Name of KVK/ district: Subarnapur

2. Name of villages adopted: Charda

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

(i) Area of agriculture land (ha): 104

(ii) Area of irrigated land (ha): 62.4

(iii) Number of water body: 19

(iv) Area of water body (ha):

(v) Number of different livestock animals: Goats- 102 nos, cows- 122 nos., bullock- 145 nos, poultry- 105 nos., ducks- 160nos



(vi) Average yield of different crops, livestock and fisheries:

Paddy- , green gram, vegetable

(vii) Soil status: Clay loam, loamy

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N- 66.7MT, P- 12MT, K- 12.9

(ix) Major diseases occurred in crops: BPH , leaf folder, sheath blight in paddy, YMV in green gram, tikka & leaf spot in groundnut

(x) Major diseases occurred in livestock: foot and mouth disease, ppr in goat

(xi) Post-harvest management/ value addition followed, if any: NA

(xii) Marketing channels of products: Local market and mandis, govt. co-operative society

(xiii) Agro-based industries, if any: 2 nos. of rice mill

(xiv) Average income of the farmer: 150000/--200000/-

**5. Possibility of involvement of ICAR Institutes:** Training, OFT to identify the specificity of technology, field visit, FLD to popularise established technology in farmers field, to create awareness of new innovations, providing quality planting material

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** Yes

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State dept, NGO

**8. FPO formed or not?** No

**9. Major interventions planned:**

- Integrated Pest Management of BPH in paddy
- Assessment of BPH tolerant rice variety Hasanta
- Crop diversification, Rice-vegetable
- Backyard poultry
- Round the year mushroom cultivation

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	2018-19:- Varietal replacement & BPH management ( Pooja to Hasanta)	35400				
	2019-20: INM in paddy					
	2020-21:- Green manuring	39200	0.35	0.62	0.45	0.85
	2021-22:- Weed management : Bensulfuron methyl + Preetilachlor 10 Kg/ha within 3 DAT spraying of Tricyclazole 75 % WP 0.2 g/lit	42650 45900				

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
2	Backyard poultry 15 nos/farmers two batchwith supplement feed and shelter management	2700				
	Backyard poultry 25 nos/farmers two batch	4790	0.25	0.35	0.40	0.45
	Backyard poultry 30nos/farmers two batch	5800				
	Backyard poultry 35nos/farmers two batch	7000				
3	Rice – Vegetable- crop rotation					
	Paddy line transplanting in Kharif	135000				
	Cauliflower and chilli in Rabi	165000				
	STBF in vegetable	172000	0.30	0.50	0.62	0.70
4	IPM in vegetable	190000				
	Paddy straw mushroom (25 beds) ( June to Sept.) and Oyster (25 beds)(Oct to Jan)	4650				
	Paddy straw mushroom (50 beds) ( June to Sept.) and Oyster (50 beds)(Oct to Jan)	10850	0.15	0.25	0.35	0.40
	Paddy straw mushroom (75 beds) ( June to Sept.) and Oyster (75 beds)(Oct to Jan)	18075				
4	Paddy straw mushroom (100 beds) ( June to Sept.) and Oyster (100 beds)(Oct to Jan)	25000				

### Village-3

**1. Name of KVK/ district:** Subarnapur

**2. Name of villages adopted:** Kirasira

**3. Number of farmers targeted:** 20

**4. Compiled baseline survey report (point wise) of the villages:**

(i) Area of agriculture land (ha): 172

(ii) Area of irrigated land (ha): 10.32

(iii) Number of water body: 21

(iv) Area of water body (ha):

(v) Number of different livestock animals: Goats- 95 nos, cows- 110 nos., bullock- 98 nos, poultry- 85 nos

(vi) Average yield of different crops, livestock and fisheries:

Paddy , green gram, vegetable, mustard, arhar

(vii) Soil status: Black cotton and clay loam(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:  
N-5MT, P- 2.6MT, K- 2.8

(ix) Major diseases occurred in crops: BPH , leaf folder, sheath blight in paddy, YMV in okra, YMV in green gram, wilt in brinjal and tomato

(x) Major diseases occurred in livestock: foot and mouth disease

(xi) Post-harvest management/ value addition followed, if any: NA

(xii) Marketing channels of products: Local market

(xiii) Agro-based industries, if any: One small rice meal

(xiv) Average income of the farmer: 75000/-- 100000/-

**5. Possibility of involvement of ICAR Institutes:** Training, OFT to identify the specificity of technology, field visit, FLD to popularise established technology in farmers field, to create awareness of new innovations, providing quality planting material

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.):** Yes

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):** State dept, NGO

**8. FPO formed or not?** No

**9. Major interventions planned:**

- Paira cropping
- Demonstration of triple disease resistant tomato var. Arka Rakshak
- Crop diversification, Rice-vegetable
- Backyard poultry, round the year mushroom cultivation
- Vermicomposting

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	2018-19:- Rice ( Bina - 11) - green gram ( PiaraGreengram cultivation in Rabi( Paira)IPM 02-03)	35400	0.35	0.55	0.70	1.0
	2019-20: Rice (Binadhan-11) – green gram (IPM-02-03)+ 2% sparay of DAP	39200				
	21-2020:- Soil test based fertilizer application Spraying of water soluble fertilizer 19:19:19 @ 5 g./lit at 30 DAS and 10 g./lit at 45 DAS	42650				
	22-2021:- Weed management : Bensulfuron methyl + Preetilachlor 10 Kg/ha within 3 DAT spraying of Tricyclazole 75 % WP 0.2 g/lit	45900				
2	Backyard poultry 15 nos/farmers two batchwith supplement feed and shelter management	2700	0.25	0.35	0.40	0.45
	Backyard poultry 25 nos/farmers two batch	4790				
	Backyard poultry 30nos/farmers two batch	5800				
	Backyard poultry 35nos/farmers two batch	7000				
3	Cultivation of triple disease resistant tomato var. Arka Rakshak	197000	0.15	0.45	0.60	0.40
	Trelley system of cultivation alongwith weed managemet	219000				
	INM in tomato	264000				
	Post harvest management in tomato	285000				

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
4	Paddy straw mushroom (25 beds) ( June to Sept.) and Oyster (25 beds) (Oct to Jan)	4650	0.15	0.25	0.35	0.40
	Paddy straw mushroom (50 beds) ( June to Sept.) and Oyster (50 beds) (Oct to Jan)	10850				
	Paddy straw mushroom (75 beds) ( June to Sept.) and Oyster (75 beds) (Oct to Jan)	18075				
	Paddy straw mushroom (100 beds) ( June to Sept.) and Oyster (100 beds)(Oct to Jan)	25000				
5	Vermicoposting		0.12	0.25	0.38	0.27
	Vermi composting ( one tank 4 ft. size well ring, two times per year)	3550				
	Vermi composting ( two tank 4 ft. size well ring, two times per year	6750				
	Vermi composting ( three tank 4 ft. size well ring, two times per year	12000				
	Selling of vermiworm and compost, production of vermiwash	22000				

#### Village-4

**1. Name of KVK/ district:** Subarnapur

**2. Name of villages adopted:** Bahirkhaman

**3. Number of farmers targeted:** 20

**4. Compiled baseline survey report (point wise) of the villages:**

(i) Area of agriculture land (ha): 135

(ii) Area of irrigated land (ha): 4.05

(iii) Number of water body: 22

(iv) Area of water body (ha):

(v) Number of different livestock animals: Goats- 135 nos, cows- 120 nos., bullock- 130 nos, poultry- 115 nos

(vi) Average yield of different crops, livestock and fisheries:

Paddy- , green gram, vegetable, groundnut, black gram, sesamum

(vii) Soil status: Sandy loam, loamy, clay loam

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used: N- 9.2MT, P- 3.3MT, K- 3.5

(ix) Major diseases occurred in crops: Gall midge ,leaf folder, sheath blight in paddy, YMV in green gram and black gram leaf spot in groundnut, Wilt in tomato, fruit & shoot borer in brinjal, leaf curl in chilli

(x) Major diseases occurred in livestock: foot and mouth disease, ppr in goat, Ranikhet in poultry

(xi) Post-harvest management/ value addition followed, if any: NA

(xii) Marketing channels of products: Local market and mandis, govt. co-operative society

(xiii) Agro-based industries, if any: 4 nos. of rice mill

(xiv) Average income of the farmer: 135000/--150000/-

**5. Possibility of involvement of ICAR Institutes:** Training, OFT to identify the specificity of technology, field visit, FLD to popularise established technology in farmers field, to create awareness of new innovations, providing quality planting material

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State dept, NGO

8. FPO formed or not? No

9. Major interventions planned:

- Assessment on Stress tolerant rice variety Sahabhazi dhan
- Drip with mulching in vegetable cultivation
- Backyard poultry
- Round the year mushroom cultivation

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	2018-19:- Stress tolerant rice variety Sahbhagidhan	37000	0.37	0.62	0.45	0.85
	2019-20: INM in paddy	39200				
	2020-21:- Green manuring	42650				
	2021-22:- Weed management : Bensulfuron methyl + Preetilachlor 10 Kg/ha within 3 DAT spraying of Tricyclazole 75 % WP 0.2 g/lit	45900				
2	Backyard poultry 15 nos/farmers two batchwith supplement feed and shelter management	2700	0.25	0.35	0.40	0.45
	Backyard poultry 25 nos/farmers two batch	4790				
	Backyard poultry 30nos/farmers two batch	5800				
	Backyard poultry 35nos/farmers two batch	7000				
3	Drip with mulching in high value crops like broccoli and capsicum	116000	3.0	0.7	0.85	0.90
	Organic fertilizer application	120000				
	STBF in vegetable	145000				
	IPM in vegetable	165000				
4	Paddy straw mushroom (25 beds) ( June to Sept.) and Oyster (25 beds)(Oct to Jan)	4650	0.15	0.25	0.35	0.40
	Paddy straw mushroom (50 beds) ( June to Sept.) and Oyster (50 beds)(Oct to Jan)	10850				
	Paddy straw mushroom (75 beds) ( June to Sept.) and Oyster (75 beds)(Oct to Jan)	18075				
	Paddy straw mushroom (100 beds) ( June to Sept.) and Oyster (100 beds)(Oct to Jan)	25000				

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
5	Genotype intervention development programme (Black bengal/ Ganjam /Sundargarh local)	12,150	0.6	0.25	0.30	0.35
	Deworming & animal health camp	15000				
	Protein supplementation (khurak powder 20 g./goat/day)	22000				
	PPR and other disease management	28000				

#### Village-5

1. Name of KVK/ district: Subarnapur

2. Name of villages adopted: Kamalpur

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

- Area of agriculture land (ha): 248
- Area of irrigated land (ha): 12.4
- Number of water body: 16
- Area of water body (ha):
- Number of different livestock animals: Goats- 120 nos, cows- 125 nos., bullock- 118 nos, poultry- 145 nos
- Average yield of different crops, livestock and fisheries:  
Paddy- , green gram, vegetable, groundnut, black gram, sesamum
- Soil status: Sandy loam, loamy
- Average nutrients (nitrogen, phosphorous, potash, etc) used: N- 4.5MT, P- 1.8MT, K- 2.2
- Major diseases occurred in crops: Gall midge ,leaf folder, sheath blight in paddy, YMV in green gram and black gram leaf spot in groundnut, Wilt in tomato, fruit & shoot borer in brinjal, leaf curl in chilli
- Major diseases occurred in livestock: foot and mouth disease, ppr in goat, Ranikhet in poultry
- Post-harvest management/ value addition followed, if any: NA
- Marketing channels of products: Local market and mandis, govt. co-operative society
- Agro-based industries, if any: 4 nos. of rice mill
- Average income of the farmer: 135000/--150000/-

5. Possibility of involvement of ICAR Institutes: Training, OFT to identify the specificity of technology, field visit, FLD to popularise established technology in farmers field, to create awareness of new innovations, providing quality planting material

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Yes

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State dept, NGO

8. FPO formed or not? No

9. Major interventions planned:

- Assessment on Stress tolerant rice variety Sahabhazi dhan

- Drip with mulching in vegetable cultivation
- Backyard poultry
- Round the year mushroom cultivation

#### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1	2018-19:- Stress tolerant rice variety Sahbhagidhan	37000	0.37	0.62	0.45	0.85
	2019-20:- INM in paddy	39200				
	2020-21:- Green manuring	42650				
	2021-22:- Weed management : Bensulfuron methyl + Preetilachlor 10 Kg/ha within 3 DAT spraying of Tricyclazole 75 % WP 0.2 g/lit	45900				
2	Backyard poultry 15 nos/farmers two batchwith supplement feed and shelter management	2700	0.25	0.35	0.40	0.45
	Backyard poultry 25 nos/farmers two batch	4790				
	Backyard poultry 30nos/farmers two batch	5800				
	Backyard poultry 35nos/farmers two batch	7000				
3	Drip with mulching in high value crops like broccoli and capsicum	116000	3.0	0.7	0.85	0.90
	Organic fertilizer application	120000				
	STBF in vegetable	145000				
	IPM in vegetable	165000				
4	Paddy straw mushroom (25 beds) ( June to Sept.) and Oyster (25 beds)(Oct to Jan)	4650	0.15	0.25	0.35	0.40
	Paddy straw mushroom (50 beds) ( June to Sept.) and Oyster (50 beds)(Oct to Jan)	10850				
	Paddy straw mushroom (75 beds) ( June to Sept.) and Oyster (75 beds)(Oct to Jan)	18075				
	Paddy straw mushroom (100 beds) ( June to Sept.) and Oyster (100 beds)(Oct to Jan)	25000				
5	Genotype intervention development programme (Black bengal/Ganjam /Sundargarh local)	12150	0.6	0.25	0.30	0.35
	Deworming & animal health camp	15000				
	Protein supplementation (khurak powder 20 g./goat/day)	22000				
	PPR and other disease management	28000				

### 10. Mid Central Table land

The districts of this Agro-Climatic Zone are Angul, Dhenkanal, parts of Cuttack and Jajpur. Total area of this zone is 13235 sq. km. which is 8.50% of total area covered.

#### 10.1 Krishi Vigyan Kendra, Angul

##### Village-1

1. Name of KVK/ district: Angul

2. Name of villages adopted: Kanja

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

- Area of agriculture land (ha): 600 ha.
- Area of irrigated land (ha): 50 ha.
- Number of water body: 12
- Area of water body (ha): 7.2 ha.
- Number of different livestock animals: Cow – 1000 no., Goat – 2000 no.
- Average yield of different crops, livestock and fisheries: Avg. Paddy yield 35 q/ha., Avg. yield of Pulse crops – 3.2 q/ha., Avg. yield of Groundnut crops – 18 q/ha., Avg. Solanaceous veg. yield – 230 q/ha., Avg. Milk yield – 1.5 lit./cow Avg. body wt. of Goat – 8 kg./6 months, Fish Yield – 2 tonn/ha./yr.
- Soil status: Red Loam
- Average nutrients (nitrogen, phosphorous, potash, etc) used: N:P:K – 80:50:40
- Major diseases occurred in crops: Wilting and Root rot disease in solanaceous vegetables Fruit & shoot borer incidence in Brinjal, Leaf folder, Case-worm infestation and Sheath blight incidence in paddy etc.
- Major diseases occurred in livestock: FMD, HS & BQ
- Post-harvest management/ value addition followed, if any: Value addition in milk (Ghee, Paneer, Cheese, whey etc.)
- Marketing channels of products: Direct marketing / Nearby Hatas of Mahidharpur & Angul
- Agro-based industries, if any: No
- Average income of the farmer: 6000/- per month

5. Possibility of involvement of ICAR Institutes: CIFA, CHES

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Dhanuka Group

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt. NGO & KVK

8. FPO formed or not - No

9. Major interventions planned:

- ❖ Varietal substitution in paddy
- ❖ IWM in paddy

- ❖ Line transplanting in paddy
- ❖ IDM in paddy
- ❖ ICM in brinjal
- ❖ STBF with Fruit & shoot borer management
- ❖ Deworming, PPR Vaccination in goats, Breed upgradation
- ❖ Jayanti rohu with IMC along with disease management & feeding management

#### 10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. In Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	<b>Crop: Paddy</b> <ul style="list-style-type: none"> <li>• HYV- Sahabhadhan (2019-20)</li> <li>• HYV- Sahabhadhan with line sowing, Herbicide-Oxadiazyl(2020-21)</li> <li>• HYV- Sahabhadhan with line sowing, Herbicide-Oxadiazyl, IDM in Paddy for sheath blight(2021-22)</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 30 q/ha. G.I –8 lakhs/16 ha.(20 farmers)</li> <li>• Yield – 32 q/ha. G.I –8.48 lakhs/16 ha.(20 farmers)</li> <li>• Yield – 38 q/ha. G.I –9.92 lakhs/16 ha.(20 farmers)</li> </ul>	-	0.8	1.0	1.2
2.	<b>Crop: Brinjal</b> <ul style="list-style-type: none"> <li>• Scientific cultivation(optimum seed rate,sowing time, RDF, STBF)–(2019-20)</li> <li>• Wilt tolerant Var. Swarna Shyamali, cartaphydrochloride/Indoxacarb for F&amp;S Borer(2020-21)</li> <li>• Var. Swarna Shyamali, Organic practices (2021-22)</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 320 q/ha. G.I – 5.12 lakhs/2 ha.(20 farmers)</li> <li>• Yield – 345 q/ha. G.I – 5.52 lakhs/2 ha.(20 farmers)</li> <li>• Yield – 360 q/ha. G.I – 5.76 lakhs/2 ha.(20 farmers)</li> </ul>		0.2	0.3	0.5
3.	<b>Enterprise: Goatery</b> <ul style="list-style-type: none"> <li>• Dewormingwithalbendazole@10 mg/ kg body wt + Vaccination(2019-20)</li> <li>• Deworming, PPR Vaccination, Feeding @ 250 gm/ pregnant doe 1 month before &amp; 1 month after kidding (2020-21)</li> <li>• Breed upgradation through introduction of buck of distance genetic location (2021-22)</li> </ul>	<ul style="list-style-type: none"> <li>• 220 No. Kids Live wt. 8.5 kg/goat G.I – 5.28 lakhs/100 goats</li> <li>• 122 No. Kids Live wt. 8.5 kg/goat G.I – 2.92 lakhs/100 goats</li> <li>• 244 No. Kids Live wt. 9.2 kg/goat G.I – 8.5 lakhs/100 goats</li> </ul>	0.02	0.12	0.16	0.5

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. In Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
4.	<b>Enterprise: Fishery</b> <ul style="list-style-type: none"> <li>• Jayanti rohu with IMC (C: JR :M : G.C:C.C) @ 2:4:2:1:1 @ 6000 fingerlings/ha.,Liming @ 250kg/ha.mt. (2019-20)</li> <li>• Jayanti rohu with IMC (C: JR:M G.C:C.C) @ 2:4:2:1:1 @ 6000 fingerlings/ha.,Liming @ 250kg/ha.mt.,Feeding @ 3% of B.Wt. (2020-21)</li> <li>• Jayanti rohu with IMC (C: JR :M G.C:C.C) @ 2:4:2:1:1 @ 6000 fingerlings/ha.,Liming @ 250kg/ha.mt.Feeding @ 3% of B.Wt.,CIFAX @ 1 lt./ha.mt. for disease mgt. (2021-22)</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 110 q/ 5ha. G.I –15.4 lakhs/5 ha.(20 farmers)</li> <li>• Yield – 180 q/ 5ha. G.I –25.2 lakhs/5 ha.(20 farmers)</li> <li>• Yield – 200 q/ 5ha. G.I –28 lakhs/5 ha.(20 farmers)</li> </ul>	0.3	0.63	1.63	1.72
5.	<b>Enterprise: Apiary</b> <ul style="list-style-type: none"> <li>Honey bee box (2 nos.per farmer)for 20 farmers</li> <li>Honey bee box (4 nos.per farmer) For 20 farmers</li> </ul>	<ul style="list-style-type: none"> <li>Yield – 3 kg/box G.I -36,000/-</li> <li>Yield – 3.5 kg/box G.I- 84,000/-</li> <li>Yield – 4 kg/box G.I -96,000/-</li> </ul>	-	1.0	2.0	-

#### Village-2

1. Name of KVK/ district: Angul

2. Name of villages adopted: Parabil

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

- i. Area of agriculture land (ha):120 ha.
- ii. Area of irrigated land (ha):60 ha
- iii. Number of water body:8nos
- iv. Area of water body (ha):10ha.
- v. Number of different livestock animals:Cow – 1200 no., Bullock-500, Goat – 1200 no.
- vi. Average yield of different crops, livestock and fisheries:Paddy- 42 q/ ha,Groundnut-18q/ha, Green gram- 3.2 q/ ha, Black gram- 2.6 q/ha, Desi cows- 1lts/cow, Weight of 6-month old goats- 7 kg, Fish Yield – 1.2 ton/ha/yr.
- vii. Soil status:Sandyloam
- viii. Average nutrients (nitrogen, phosphorous, potash, etc) used:N:P:K- 80:40:40
- ix. Major diseases occurred in crops:Paddy- Sheath blight, Root Rot  
Groundnut-YMV  
Arhar-sucking pest
- x. Major diseases occurred in livestock: Cow-BQ, FMD, Goat-PPR,
- xi. Post-harvest management/ value addition followed, if any:Groundnut oil extraction and oilcake production.
- xii. Marketing channels of products:Marketing through middle man and local vendors
- xiii. Agro-based industries, if any: No
- xiv. Average income of the farmer: 70,000/- per annum

5. Possibility of involvement of ICAR Institutes: CPDO, CIFA, KVK

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): CSR wing of Zindal

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt. & KVK

8. FPO formed or not - Not

9. Major interventions planned:

- ❖ Varietal substitution in paddy
- ❖ IWM in paddy
- ❖ Line transplanting in paddy
- ❖ IDM in paddy
- ❖ IDM in groundnut
- ❖ Value addition in paddy
- ❖ IMC culture along with feeding management & disease management
- ❖ Backyard poultry with feed management

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	<b>Crop: Paddy</b> <ul style="list-style-type: none"> <li>• HYV- Hiranmayee (2019-20)</li> <li>• HYV- Hiranmayee with line sowing, Herbicide-Oxadiazyl (2020-21)</li> <li>• HYV- Hiranmayee with line sowing, Herbicide-Oxadiazyl, IDM in Paddy-Validamycin/propiconazole (2021-22)</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 32 q/ha. G.I – 8.48 lakhs/16 ha.(20 farmers)</li> <li>• Yield – 35 q/ha. G.I - 9.0 lakhs/16 ha.(20 farmers)</li> <li>• Yield – 38 q/ha. G.I - 9.92 lakhs/16 ha.(20 farmers)</li> </ul>	-	0.8	1.0	1.2
2.	<b>Crop: Groundnut</b> <ul style="list-style-type: none"> <li>• IDM in Groundnut var. Kadri</li> <li>• Value addition in groundnut (Groundnut chiki)</li> <li>• Value addition in groundnut (Peanut butter)</li> </ul>	<ul style="list-style-type: none"> <li>• 128q/8 ha for 20 farmers</li> <li>• 128q/8 ha for 20 farmers (100q direct marketing+Groundnut chiki from 28 q)</li> <li>• 128q/8 ha for 20 farmers 100q direct marketing+Peanut butter from 28 q)</li> </ul>	-	5.12	5.68	10.3
3.	<b>Enterprise: Fishery</b> <ul style="list-style-type: none"> <li>• IMC stunted yearlings @ 3000 /ha., Liming @ 250kg/ha.mt. (2019-20)</li> <li>• IMC stunted yearlings @ 3000 /ha., Liming @ 250kg/ha.mt., Feeding @ 3% of B.Wt. (2020-21)</li> <li>• IMC stunted yearlings @ 3000 /ha., Liming @ 250kg/ha.mt., Feeding @ 3% of B.Wt., CIFAX @ 1 lt./ha.mt. for disease mgt. (2021-22)</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 230 q/ 10ha. G.I - 32.2 lakhs/10 ha.(20 farmers)</li> <li>• Yield – 380 q/ 10ha. G.I - 53.2 lakhs/10 ha.(20 farmers)</li> <li>• Yield – 420q/ 10ha. G.I - 58.8 lakhs/10 ha.(20 farmers)</li> </ul>	0.6	1.83	3.42	3.51

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
4.	<b>Enterprise: Poultry</b> <ul style="list-style-type: none"> <li>• Introduction of backyard poultry var. Pallishree/Blackrock (500 birds/20 unit)</li> <li>• 2 Nos. of batches of backyard poultry var. Pallishree/Blackrock</li> <li>• 2 Nos. of batches of backyard poultry var. Pallishree/Blackrock+ Supplementation of Vitamin-E &amp; Selenium mix.</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 3 kg/bird G.I - 2.25 lakhs/20 units</li> <li>• Yield – 3 kg/bird G.I – 4.5 lakhs/20 units</li> <li>• Yield – 3.2 kg/bird G.I – 4.8 lakhs/20 units</li> </ul>	-	0.325	0.65	0.70

### Village-3

1. Name of KVK/ district: Angul

2. Name of villages adopted: Purikia

3. Number of farmers targeted: 20

4. Compiled baseline survey report (point wise) of the villages:

- i. Area of agriculture land (ha):240 ha.
  - ii. Area of irrigated land (ha):60 ha
  - iii. Number of water body:3 nos
  - iv. Area of water body (ha):6.4 ha.
  - v. Number of different livestock animals:Cow – 150 no., Goat – 100 no., Poultry- 5000
  - vi. Average yield of different crops, livestock and fisheries:Paddy- 40 q/ ha, Green gram- 2 q/ ha, Black gram- 1.6 q/ha, Desi cows- 1.5lts, CB cows- 7 lts, Weight of 6 month old goats- 8kg, Fish Yield – 2 tonn/ha./yr.
  - vii. Soil status:Clay type
  - viii. Average nutrients (nitrogen, phosphorous, potash, etc) used:N:P:K- 120:40:40
  - ix. Major diseases occurred in crops:Paddy-Stem borer, Sheath blight, BPH  
Blackgram- Aphids  
Greengram-Sucking pest  
Groundnut- Pod borer  
Brinjal-Fruit and shoot borer, Wilting
  - x. Major diseases occurred in livestock: Cow-BQ, FMD,  
Goat-PPR,  
Poultry- Coccidiosis, *E. coli*, CRD
  - xi. Post-harvest management/ value addition followed, if any:No
  - xii. Marketing channels of products:Direct marketing
  - xiii. Agro-based industries, if any: No
  - xiv. Average income of the farmer: 7000/- per month
5. Possibility of involvement of ICAR Institutes: CIFA, KVK, CPDO
6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): CSR of NALCO
7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt., NGO & KVK

**8. FPO formed or not –No (Will be formed)**

**9. Major interventions planned:**

- ❖ Varietal substitution in paddy
- ❖ IWM in paddy
- ❖ Line transplanting in paddy
- ❖ IDM in paddy
- ❖ Varietal substitution in blackgram
- ❖ IWM in blackgram
- ❖ IPM in blackgram
- ❖ Feeding management for cows
- ❖ Mushroom cultivation
- ❖ Amur carp with IMC along with feed & disease management
- ❖ Backyard Poultry

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	<b>Crop: Paddy</b> <ul style="list-style-type: none"> <li>• HYV- Satyabhama (2019-20)</li> <li>• HYV- Satyabhama with line sowing, Herbicide-Oxadiargyl(2020-21)</li> <li>• HYV- Satyabhama with line sowing, Herbicide-Oxadiargyl, IDM in Paddy (2021-22)</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 32 q/ha. G.I – 8.48 lakhs/16 ha.(20 farmers)</li> <li>• Yield – 35 q/ha. G.I - 9.0 lakhs/16 ha.(20 farmers)</li> <li>• Yield – 38 q/ha. G.I - 9.92 lakhs/16 ha.(20 farmers)</li> </ul>	-	0.8	1.0	1.2
2.	<b>Crop: Blackgram</b> <ul style="list-style-type: none"> <li>• Blackgram (HYV-PU 35) (2019-2020)</li> <li>• Blackgram (HYV-PU 35)+ Rhizobium culture+ NPK (20-40-20 kg/ha)(2020-21)+Imidachloprid/Thiomithoxam</li> <li>• Blackgram (HYV-PU 35)+ Rhizobium culture+ NPK (20-40-20 kg/ha)+Imidachloprid/Thiomithoxam(2021-22) + Pendimethalin</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 5 q/ha. G.I - 1.80lakhs/8 ha.(20 farmers)</li> <li>• Yield –5.5q/ha. G.I – 1.98 lakhs/8 ha.(20 farmers)</li> <li>• Yield – 6.5q/ha. G.I –2.34lakhs/8 ha.(20 farmers)</li> </ul>	-	0.09	0.24	0.5
3.	<b>Enterprise: Dairy</b> <ul style="list-style-type: none"> <li>• Azolla cultivation for feed management in dairy cows (2019-2020)</li> <li>• Perennial fodder cultivation(0.5 acre) 6000 root slips + Azolla cultivation. (2020-2021)</li> <li>• Hydroponic fodder cultivation(10,000/- per low cost unit)20 farmers</li> </ul>	<ul style="list-style-type: none"> <li>• MilkYield –1.75lit/cow G.I - 5.07 lakhs/40 cows from 20 farmers)</li> <li>• MilkYield –2 lit/cow G.I - 6.96 lakhs/40 cows from 20 farmers)</li> <li>• MilkYield –2.5lit/cow G.I - 10.15lakhs/40 cows from 20 farmers)</li> </ul>	-	0.5	0.60	2.0

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
4.	<b>Enterprise: Mushroom</b> <ul style="list-style-type: none"> <li>• Paddy straw Mushroom cultivation Var. <i>V.volvacea</i> (1000 beds)/ 20 farmers</li> <li>• Mushroom cultivation round the year Paddy straw Mushroom cultivation Var. <i>V.volvacea</i> (1000 beds)/ 20 farmers.Oyster mushroom var. <i>Hypsizygousulmarius</i> 500beds/20 farmers</li> <li>• Mushroom cultivation round the year Paddy straw Mushroom cultivation Var. <i>V.volvacea</i> (1000 beds)/ 20 farmers. Oyster mushroom var. <i>Hypsizygousulmarius</i> 500beds/20 farmers +Value addition in Oyster mushroom var. <i>Hypsizygousulmarius</i></li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 1kg/bed. G.I - 1.0 Lakhs/20farmers)</li> <li>• Yield – 1kg/bed/paddystraw mushroom. 2kg/bed/oyster mushroom. G.I - 1.5 lakhs(20 farmers)</li> <li>• Yield – 1kg/bed/paddystraw mushroom. 2kg/bed/oyster mushroom G.I – 1.8lakhs(20 farmers)</li> </ul>	0.2	0.4	0.95	1.1
5.	<b>Enterprise: Fishery</b> <ul style="list-style-type: none"> <li>• Amur carp with IMC (C: R : M : G.C : A.C) @ 2: 2: 1: 3: 2 @ 8000 fingerlings/ha., Liming @ 250kg/ha.mt. (2019-20)</li> <li>• Amur carp with IMC (C: R : M : G.C : A.C) @ 2: 2: 1: 3: 2 @ 8000 fingerlings/ha., Liming @ 250kg/ha.mt.Feeding @ 3% of B.Wt. (2020-21)</li> <li>• Amur carp with IMC (C: R : M : G.C : A.C) @ 2: 2: 1: 3: 2 @ 8000 fingerlings/ha., Liming @ 250kg/ha.mt., Feeding @ 3% of B.Wt. CIFAX @ 1 lt./ha.mt. for disease mgt. (2021-22)</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 140 q/ 6ha. G.I - 19.6 lakhs/6 ha.(20 farmers)</li> <li>• Yield – 220 q/ 6ha. G.I - 30.8 lakhs/6 ha.(20 farmers)</li> <li>• Yield – 240 q/ 6ha. G.I - 33.6 lakhs/6 ha.(20 farmers)</li> </ul>	0.4	0.84	1.83	1.92
6.	<b>Enterprise: Poultry</b> <ul style="list-style-type: none"> <li>• Introduction of backyard poultry var. Pallishree/Blackrock (500 birds/20 unit)</li> <li>• 2 Nos. of batches of backyard poultry var. Pallishree/Blackrock</li> <li>• 2 Nos. of batches of backyard poultry var. Pallishree/Blackrock+ Supplementation of Vitamin-E &amp; Selenium mix.</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 3 kg/bird G.I - 2.25 lakhs/20 units</li> <li>• Yield – 3 kg/bird G.I – 4.5 lakhs/20 units</li> <li>• Yield – 3.2 kg/bird G.I – 4.8 lakhs/20 units</li> </ul>	-	0.325	0.65	0.70

**Village-4**

**1. Name of KVK/ district: Angul**

**2. Name of villages adopted: Kantala**

**3. Number of farmers targeted: 20**

**4. Compiled baseline survey report (point wise) of the villages:**

- i. Area of agriculture land (ha):720 ha.
- ii. Area of irrigated land (ha):80 ha.
- iii. Number of water body:3
- iv. Area of water body (ha):1.8 ha.
- v. Number of different livestock animals:Cow – 430 no., Goat – 570 no.
- vi. Average yield of different crops, livestock and fisheries: Avg. Paddy yield 32 q/ha., Avg. yield of Pulse crops – 3.1 q/ha., Avg. Solanaceous veg. yield – 250 q/ha.,Avg. Milk yield – 1.3 lit./cow Avg. body wt. of Goat – 6 kg./6 months,

- vii. Soil status: Red Loam soil
- viii. Average nutrients (nitrogen, phosphorous, potash, etc) used: N:P:K – 90:40:40
- ix. Major diseases occurred in crops:
  - Wilting and Root rot disease in solanaceous vegetables
  - Fruit & shoot borer incidence in Brinjal
  - Leaf folder and Sheath blight incidence in paddy
  - Leaf curl disease in onion and garlic etc.
- x. Major diseases occurred in livestock: FMD, HS & BQ
- xi. Post-harvest management/ value addition followed, if any: Value addition in milk (Ghee, Paneer, Cheese, whey etc.)
- xii. Marketing channels of products: Direct marketing / Nearby Hatas
- xiii. Agro-based industries, if any: No
- xiv. Average income of the farmer: 5000/- per month

**5. Possibility of involvement of ICAR Institutes: KVK, DOGR**

**6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No**

**7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt., SEDP, Kolkata, Trupti, OLM & KVK**

**8. FPO formed or not - No**

**9. Major interventions planned:**

- ❖ Varietal substitution in paddy
- ❖ IWM in paddy
- ❖ Line transplanting in paddy
- ❖ IDM in paddy
- ❖ Varietal substitution in onion
- ❖ IPM in onion
- ❖ Mushroom cultivation
- ❖ Feed management for cows

**10. Action Plan (including interventions made) for each village and Budget requirement:**

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	<b>Crop: Paddy</b> <ul style="list-style-type: none"> <li>• HYV- Satyabhama dhan (2019-20)</li> <li>• HYV- Satyabhama dhan with line sowing, Herbicide-Oxadiargyl (2020-21)</li> <li>• HYV- Satyabhama dhan with line sowing, Herbicide-Oxadiargyl, IDM in Paddy for sheath blight Validamycin/ propiconazole (2021-22)</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 31 q/ha. G.I – 2.63 lakhs / 5ha. (20 farmers)</li> <li>• Yield – 33 q/ha. G.I – 2.81 lakhs/5ha. (20 farmers)</li> <li>• Yield – 37 q/ha. G.I – 3.15 lakhs/5 ha. (20 farmers)</li> </ul>	0.2	0.25	0.32	0.36
2.	<b>Crop: Onion</b> <ul style="list-style-type: none"> <li>• HYV=Agri found light red (AFLR) (2019-20)</li> <li>• HYV=Agri found light red (AFLR) (2019-20), STBF</li> <li>• HYV=Agri found light red (AFLR) (2019-20), STBF</li> <li>• IPM practice for thrips management Imidacloprid/Thiomethoxam</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 170 q/ 2ha. G.I - 3.3 lakhs/2 ha. (20 farmers)</li> <li>• Yield – 182 q/ 2 ha. G.I – 4.5 lakhs/2 ha. (20 farmers)</li> <li>• Yield – 190 q/ 2ha. G.I-5.0 lakhs/2ha (20 farmers)</li> </ul>	0.02	0.06	0.09	0.11

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
3.	<b>Enterprise: Mushroom</b> <ul style="list-style-type: none"> <li>• Paddy straw Mushroom cultivation Var. V.vol-vacea (1000 beds)/ 20 farmers</li> <li>• Mushroom cultivation round the year Paddy straw Mushroom cultivation Var. V.vol-vacea (1000 beds)/ 20 farmers. Oyster mushroom var. Hypsizygousulmarius 500beds/20 farmers.</li> <li>• Mushroom cultivation round the year Paddy straw Mushroom cultivation Var. V.vol-vacea (1000 beds)/ 20 farmers. Oyster mushroom var. Hypsizygousulmarius 500beds/20 farmers + Value addition in Oyster mushroom var. Hypsizygousulmarius</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 1kg/bed. G.I - 1.0 Lakhs/20farmers)</li> <li>• Yield – 1kg/bed/paddystraw mushroom. 2kg/bed/oyster mushroom. G.I - 1.5 lakhs(20 farmers)</li> <li>• Yield – 1kg/bed/paddystraw mushroom. 2kg/bed/oyster mushroom G.I – 1.8lakhs(20 farmers)</li> </ul>	0.2	0.4	0.95	1.1
4.	<b>Enterprise: Dairy</b> <ul style="list-style-type: none"> <li>• Processing of paddy straw for feed management in dairy cows (2019-2020)</li> <li>• Processed paddy straw+ mineral mixture @ 50 gm per cow per day(2020-2021)</li> <li>• Processed paddy straw + vitamin +mineral+calcium (2021-2022)</li> </ul>	<ul style="list-style-type: none"> <li>• MilkYield –1.75 lit/cow G.I - 5.07 lakhs/40 cows from 20 farmers)</li> <li>• MilkYield –2 lit/cow G.I - 6.96 lakhs/40 cows from 20 farmers)</li> <li>• MilkYield –2.5lit/cow G.I - 10.15lakhs/40 cows from 20 farmers)</li> </ul>		0.3	0.48	0.8

**Village-5**

**1. Name of KVK/ district: Angul**

**2. Name of villages adopted: Karnapur**

**3. Number of farmers targeted: 20**

**4. Compiled baseline survey report (point wise) of the villages:**

- i. Area of agriculture land (ha): 60 ha.
- ii. Area of irrigated land (ha): 50 acre
- iii. Number of water body: 3
- iv. Area of water body (ha): 2.4 ha.
- v. Number of different livestock animals: Cow – 120 no., Goat – 150 no.
- vi. Average yield of different crops, livestock and fisheries: Avg. Paddy yield 32 q/ha., Avg. yield of Pulse crops – 3.1 q/ha., Avg. Solanaceous veg. yield – 250 q/ha., Avg. Milk yield – 1.5 lit./cow Avg. body wt. of Goat – 6 kg./6 months,
- vii. Soil status: Red Loam soil
- viii. Average nutrients (nitrogen, phosphorous, potash, etc) used: N:P:K – 90:40:40
- ix. Major diseases occurred in crops: Wilting and Root rot disease in solanaceous vegetables Fruit & shoot borer incidence in Brinjal, Leaf folder and case worm infestation, Sheath blight incidence in paddy, Leaf curl disease in onion and garlic etc.
- x. Major diseases occurred in livestock: FMD, HS & BQ
- xi. Post-harvest management/ value addition followed, if any: Value addition in milk (Ghee, Paneer, Cheese, whey etc.)
- xii. Marketing channels of products: Direct marketing / Nearby Hatas



xiii. Agro-based industries, if any: No

xiv. Average income of the farmer: 5000/- per month

5. Possibility of involvement of ICAR Institutes: DOGR

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): No

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.): State Deptt., SEDP, Kolkata, Trupti, OLM & KVK

8. FPO formed or not - No

9. Major interventions planned:

- ❖ Varietal substitution in paddy
- ❖ IWM in paddy
- ❖ Line transplanting in paddy
- ❖ IDM in paddy
- ❖ Varietal substitution in onion
- ❖ IPM in onion
- ❖ Mushroom cultivation
- ❖ Deworming & vaccination in goats & Breed upgradation

10. Action Plan (including interventions made) for each village and Budget requirement:

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	<b>Crop: Paddy</b> <ul style="list-style-type: none"> <li>• HYV- Satyabhama (2019-20)</li> <li>• HYV- Satyabhama with line sowing, Herbicide-Oxadiazyl (2020-21)</li> <li>• HYV- Satyabhama with line sowing, Herbicide-Oxadiazyl, IDM in Paddy for sheath blight Validamycin/propiconazole (2021-22)</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 12 q/ha. G.I - 4 lakhs/8 ha. (20 farmers)</li> <li>• Yield – 16 q/ha. G.I – 4.24 lakhs/8 ha. (20 farmers)</li> <li>• Yield – 19 q/ha. G.I – 4.96 lakhs/8ha. (20 farmers)</li> </ul>	0.2	0.4	0.5	0.8
2.	<b>Crop: Onion</b> <ul style="list-style-type: none"> <li>• HYV=Agri found light red (AFLR) (2019-20), STBF</li> <li>• HYV=Agri found light red (AFLR) (2019-20), STBF</li> <li>• IPM practice for thrips management Imidacloprid/Thiomethoxam</li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 170 q/ha. G.I - 3.3 lakhs/2 ha. (20 farmers)</li> <li>• Yield – 182 q/ha. G.I – 4.5 lakhs/2 ha. (20 farmers)</li> <li>• Yield – 190 q/ha. G.I-5.0 lakhs/2ha (20 farmers)</li> </ul>	0.02	0.06	0.09	0.11
3.	<b>Enterprise: Mushroom</b> <ul style="list-style-type: none"> <li>• Paddy straw Mushroom cultivation Var. OSM-11 (1000 beds)/ 20 farmers</li> <li>• Mushroom cultivation round the year Paddy straw Mushroom cultivation Var. OSM-11 (1000 beds)/ 20 farmers. Oyster mushroom var. <i>P.sajarcaju</i> 500beds/20 farmers.</li> <li>• Mushroom cultivation round the year Paddy straw Mushroom cultivation Var. OSM-11 (1000 beds)/ 20 farmers. Oyster mushroom var. <i>P.sajarcaju</i> 500beds/20 farmers + Value addition in Oyster mushroom var. <i>Hypsizygousulmaris</i></li> </ul>	<ul style="list-style-type: none"> <li>• Yield – 1kg/bed. G.I - 1.0 Lakhs/20farmers)</li> <li>• Yield – 1kg/bed/paddystraw mushroom. 2kg/bed/oyster mushroom. G.I - 1.5 lakhs(20 farmers)</li> <li>• Yield – 1kg/bed/paddystraw mushroom. 2kg/bed/oyster mushroom G.I – 1.8lakhs(20 farmers)</li> </ul>	0.2	0.4	0.95	1.1

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
	<b>Enterprise: Goatery</b> <ul style="list-style-type: none"> <li>• Deworming with albendazole @ 10mg/kg body wt + Vaccination (2019-20)</li> <li>• Deworming, PPR Vaccination, Feeding @ 250gm/ pregnant doe 1 month before &amp; 1 month after kidding (2020-21)</li> <li>• Breed upgradation through introduction of buck of distance genetic location (2021-22)</li> </ul>	<ul style="list-style-type: none"> <li>• 220 No. Kids Live wt. 8.5 kg/goat G.I – 5.28 lakhs/100 goats</li> <li>• 122 No. Kids Live wt. 8.5 kg/goat G.I – 2.92 lakhs/100 goats</li> <li>• 244 No. Kids Live wt. 9.2 kg/goat G.I – 8.5 lakhs/100 goats</li> </ul>	0.02	0.12	0.16	0.5



Varietal substitution in brinjal

## 10.2 Krishi Vigyan Kendra, Dhenkanal

1. Name of KVK/ district: Dhenkanal

2. Name of villages adopted: Kanapal, Balikiari, Rampa, Brajabiharipur, Sundarmundi

3. Number of farmers targeted: 100 (20 per village)

4. Compiled baseline survey report (point wise) of the villages:

Sl. No.	Parameters	Kanapal	Balikiari	Rampa	Brajabiharipur	Sundarmundi
(i)	Area of agriculture land (ha):	25	140	140	112	20
(ii)	Area of irrigated land (ha):	10	-	100	80	4
(iii)	Number of water body:	4	7	2	2	3
(iv)	Area of water body (ha):	2.0	3.4	4.0	2.0	1.2

(v) Number of different livestock animals:

Sl. No.	Name of Villages	No. of livestock animals						
		Cow	Bullocks	Buffalo	Goat	Sheep	Poultry (Backyard)	Poultry (Broiler)
1.	Kanapal	150	10	-	60	-	60	-
2.	Balikiari	400	20	-	12	-	50	-
3.	Rampa	150	10	-	50	-	60	-
4.	Brajabiharipur	100	30	-	50	-	100	-
5.	Sundarmundi	200	30	-	300	-	250	-

(vi) Average yield of different crops, livestock and fisheries:

Crops / Livestock / fisheries	Kanapal	Balikiari	Rampa	Brajabiharipur	Sundarmundi
Paddy (q/ha)	-	40	50	50	37.5
Pulses (Pigeonpea, Blackgram & Greengram), (q/ha)	-	7.5	3.0	5.0	6.0
Groundnut (q/ha)	-	-	-	25	-
Vegetable (q/ha)	400	350	300	350	400
Mango (q/ha)	-	80	-	50	-
Banana (q/ha)	-	-	-	-	-
Cashew (q/ha)	-	12.5	-	12.5	-
Fishery (q/ha)	-	3.5	-	2.0	2.5

(vii) Soil status:

Sl. No.	Name of Villages	Soil status
1.	Kanapal	Sandy loam
2.	Balikiari	Sandy loam
3.	Rampa	Sandy loam
4.	Brajabiharipur	Black cotton, sandy loam
5.	Sundarmundi	Red sandy loam

(viii) Average nutrients (nitrogen, phosphorous, potash, etc) used:

Sl. No.	Name of Villages	Average nutrients (nitrogen, phosphorous, potash, etc) used
1.	Kanapal	250 kg/ha
2.	Balikiari	125 kg/ha
3.	Rampa	125 kg/ha
4.	Brajabiharipur	150 kg/ha
5.	Sundarmundi	75 kg/ha

(ix) Major diseases occurred in crops:

Sl. No.	Name of Villages	Major diseases occurred in crops
1.	Kanapal	Aphid, Fruit & shoot borer, Wilting, Root rot
2.	Balikiari	Blast, BLB, BPH, Stem borer, Aphid, Fruit & shoot borer, Wilting
3.	Rampa	Blast, BLB, BPH, Stem borer, Aphid, Fruit & shoot borer, Wilting
4.	Brajabiharipur	Blast, BLB, BPH, Stem borer, Aphid, Fruit & shoot borer, Wilting
5.	Sundarmundi	Blast, BLB, BPH, Stem borer, Aphid, Fruit & shoot borer, Wilting

(x) Major diseases occurred in livestock:

Sl. No.	Name of Villages	Major diseases occurred in livestock
1.	Kanapal	FMD, BQ & HS
2.	Balikiari	FMD, BQ & HS
3.	Rampa	FMD, BQ & HS
4.	Brajabiharipur	FMD, BQ & HS
5.	Sundarmundi	FMD, BQ & HS

(xi) Post-harvest management/ value addition followed, if any:

Sl. No.	Name of Villages	Post-harvest management/ value addition followed
1.	Kanapal	Nil
2.	Balikiari	Nil
3.	Rampa	Nil
4.	Brajabiharipur	Nil
5.	Sundarmundi	Nil

(xii) Marketing channels of products:

Sl. No.	Name of Villages	Marketing channels of products
1.	Kanapal	Weekly market, Middle man
2.	Balikiari	Weekly market, Middle man, PACS
3.	Rampa	Weekly market, Middle man, PACS
4.	Brajabiharipur	Weekly market, Middle man, PACS
5.	Sundarmundi	Weekly market, Middle man, PACS

(xiii) Agro-based industries, if any: Nil

(xiv) Average income of the farmer:

Sl. No.	Name of Villages	Average income of the farmer
1.	Kanapal	84000
2.	Balikiari	60000
3.	Rampa	48000
4.	Brajabiharipur	50000
5.	Sundarmundi	72000

5. Possibility of involvement of ICAR Institutes:

ICAR institutes located inside the state like NRRI, CIWA, IIWM, CIFA, CHES, CTCRI etc. are already working in this district in collaboration with this KVK.

6. Possibility of involving private sectors for CSR funds (TCS, WIPRO, Reliance Industries, Bill & Millinda Gates Foundation, Dhanuka Group, Surya Foundation, Mahindra & Mahindra, etc.): Presently the scope is not visible in near future.

7. Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.):

State Agriculture, Horticulture, Animal Resource Development, Fishery Deptt, Development organisation like Foundation for Ecological Security, LANDESA, Access Development Services, New Odisha etc. are the major partners involved.

8. FPO formed or not?

Two FPOs have been formed and registered by Access Development Services, a development organisation. NABARD is taking steps to form FPOs.

9. Major interventions planned:

- Line transplanting of paddy
- Line sowing of oilseed / pulse crops
- Use of improved agricultural implements like tractor drawn rotavator, rice transplanter, power sprayer, paddy reaper, combine harvester, axial flow paddy thresher, power weeder etc.
- Rearing of improved poultry breeds , mushroom cultivation , Fodder cultivation and administration of mineral mixture for livestock
- Integrated approach to contain insect pest and disease in vegetables with integrated nutrient management
- Substitution of local and old varieties of Paddy with high yielding and short duration/drought tolerant varieties with herbicide application and IPM measures.

10. Action Plan (including interventions made) for each village and Budget requirement (Total for 5 villages):

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
1.	Growing of 10 no. of Red lady var. of Papaya in the homestead	2 q/ 10 plants	-	0.04	-	-
2.	Growing of 10 no. of drumstick plants in the homestead	2 q/ 10 plants	-	0.10	-	-
3.	Growing of 5 no. of tissue culture banana in the homestead	1 q / 5 plants	-	0.08	-	-
4.	Growing of 5 no. of mango grafts in the homestead	1 q / 5 plants	-	0.20	-	-

Sl. No.	Activities planned	Expected Outcome	Budget (Rs. in Lakhs)			
			2018- 19	2019- 20	2020- 21	2021- 22
5.	Growing of 5 no. of seedless lemon grafts in the homestead	1 q / 5 plants	-	0.25	-	-
6.	Growing of 5 no. of cashew grafts in the homestead	1 q / 5 plants	-	0.25	-	-
7.	Growing of 10 no. of pomegranate plants in the homestead	1 q / 10 plants	-	0.60	-	-
8.	Growing of 10 no. of guava plants in the homestead	1 q / 10 plants	-	0.60	-	-
9.	Demonstration of stress tolerant rice var. DR-42 or DR-44 with application of suitable herbicides and IPM measures against BPH , stem borer , Blast , BLB disease etc.	35 q/ ha.	-	0.50	0.50	0.50
10.	Demonstration on IPM against fruit and shoot borer in Brinjal, IDM for control of thrips in Onion, Management of fruitfly in cucurbit vegetables, IPM for control of wilting and other insect pest problem in Okra, crucifer vegetables	320 q/ ha	0.30	0.40	0.40	0.40
11.	Improved variety of pigeonpea, blackgram, greengram etc., micronutrient application and IDM for control of YMV	5 q/ ha	0.20	0.20	0.20	-
12.	Backyard poultry @ 20 per family	3 kg/ year	0.16	0.16	0.16	-
13.	Paddy straw and Dhingri mushroom cultivation	5 kg / day for 200 days in a year	0.60	1.20	1.20	1.20
14.	Fodder cultivation and administration of mineral mixture to the livestock	3.5 lit/ cow / day	0.06	0.06	0.06	0.06
15.	Feeding of fodder, mineral mixture and concentrate for faster body growth in goats	16 kg/ goat/ annum	-	1.50	1.50	1.50
16.	Trainings and other extension activities	-	0.20	0.40	0.40	0.40
	<b>TOTAL</b>		<b>1.52</b>	<b>6.54</b>	<b>4.42</b>	<b>4.06</b>

## APPENDIX-I

### Potential Technology Modules identified for Doubling Farmers' Income in Odisha

Name of KVK (Agro-climatic Zone wise)	Technology Modules identified
<b>I. North-Western Plateau</b>	
Sundargarh-I	<ol style="list-style-type: none"> <li>Varietal substitution in paddy, oilseeds and pulses</li> <li>STBR fertiliser application.</li> <li>Increase in production through herbicide application.</li> <li>Bio-fertiliser application of N:P:K consortia.</li> <li>IPM in paddy, vegetables, oilseeds and pulses.</li> <li>Additional income in homestead through mushroom cultivation, poultry rearing, vermicomposting and value addition.</li> <li>Marketing through FPOs CIGs and SHGs</li> </ol>
Sundargarh-II	<ol style="list-style-type: none"> <li>Nutrition, Weed, Pest &amp; disease management in Sahabhagi dhan</li> <li>Demonstration of Maize – Cowpea intercropping,</li> <li>Demonstration of Cow pea with INM, IPM, IDM, IWM practices</li> <li>Demonstration of Late kharif tomato with staking &amp; INM, IPM, IDM practices</li> <li>Feed &amp; Disease, Housing management of Poultry</li> <li>Mushroom</li> <li>Nutrient &amp; Weed, Pest &amp; disease management in Hybrid paddy</li> <li>Nutrient ,pest, weed &amp; disease management in Okra</li> <li>Nutrient , weed &amp; pest management in Onion</li> <li>Value addition in Tamarind &amp; Jackfruit</li> <li>Feed, Disease, Housing management in poultry</li> <li>Kitchen gardening</li> <li>Demonstration of Sweet corn with INM IPM, IDM &amp; weed management</li> <li>Demonstration of Mustard with INM, IPM practices</li> <li>Demonstration of Bottle gourd with INM practices</li> <li>Demonstration of Naveen paddy with INM practices Demonstration of Mustard with IPM practices</li> </ol>
Deogarh	<ol style="list-style-type: none"> <li>Upland-crop substitution from rice to offseason tomato/Pulses/Oilseed</li> <li>Medium land- paira cropping (Blackgram), Backyard – poultry</li> <li>Goatery and mushroom cultivation.</li> </ol>
Sambalpur	<ol style="list-style-type: none"> <li>FLD on paddy, vegetables, livestock,</li> <li>OFT on INM, IPM in horticultural crops</li> </ol>
Jharsugda	<ol style="list-style-type: none"> <li>Intercropping of Cow pea, var-KasiKanchan</li> <li>INM in Greengram IPM-02-14</li> <li>INM in paddy</li> <li>INM in potato</li> <li>Dairy farming</li> <li>Intensification of hybrid Napier</li> <li>Vanaraja Bird rearing</li> <li>Weed management in paddy</li> <li>Mushroom cultivation</li> <li>INM in Onion</li> <li>IMC + Chinese carp</li> <li>Vanaraja Bird rearing</li> </ol>

Name of KVK (Agro-climatic Zone wise)	Technology Modules identified
<b>2. North Central Plateau</b>	
Mayurbhanj-I	<ol style="list-style-type: none"> <li>1. Crop diversification from Paddy to Green gram during Rabi season.</li> <li>2. Training on Packages and practices of Green gram cultivation</li> <li>3. Training on Fishery</li> <li>4. Supply of inputs in fish farming</li> <li>5. Training on Paddy straw mushroom cultivation</li> <li>6. Improved Vegetable Cultivation (varietal substitution), Value addition of tomato &amp; fruit crops</li> <li>7. INM of Vegetable crops</li> <li>8. Mushroom cultivation throughout the year and value addition of mushroom</li> <li>9. Poultry chicks Development of semi intensive poultry unit</li> </ol>
Mayurbhanj-II	<ol style="list-style-type: none"> <li>1. IPM and INM in paddy and Chick pea</li> <li>2. Mechanization</li> <li>3. Value addition</li> <li>4. Mushroom cultivation</li> <li>5. Post harvest management</li> <li>6. Free range poultry</li> <li>7. De-worming and vaccination</li> <li>8. Off season vegetable cultivation etc.</li> </ol>
Keonjhar	<ol style="list-style-type: none"> <li>1. Post harvest management and storage, group marketing in ginger</li> <li>2. STB fertiliser application in paddy</li> <li>3. IPDM modules (stem borer and blast ) in paddy</li> <li>4. Shed management and sanitation in goats</li> <li>5. Brooding management (Shed management and additional feeding) in poultry</li> <li>6. Marketing strategies in mushroom</li> </ol>
<b>3. North Eastern Coastal Plain</b>	
Balasore	<ol style="list-style-type: none"> <li>1. Varietal substitution of swarnna with Swarna sub-1</li> <li>2. INM &amp; IWM in Groundnut</li> <li>3. Introduction of new poultry breed rainbow roster</li> <li>4. Varietal substitution of medi with luna sampad</li> <li>5. Introduction of toria var. Anuradha</li> <li>6. Feed management for dairy</li> <li>7. Varietal substitution of Mandakini</li> <li>8. INM in Toria</li> </ol>
Bhadrak	<ol style="list-style-type: none"> <li>1. Cost saving technology in kharif rice</li> <li>2. Pulses in Rice fallow</li> <li>3. enhancing income from dairy</li> <li>4. poultry and fishery</li> <li>5. promoting vegetable cultivation agronomic management for improving pulse productivity</li> <li>6. species diversity and feed management in pisciculture</li> <li>7. enhancing income from dairy</li> <li>8. poultry, oilseeds</li> <li>9. Vegetables</li> <li>10. promoting azolla and fodder crops</li> <li>11. Irrigation development.</li> </ol>

Name of KVK (Agro-climatic Zone wise)	Technology Modules identified
Jajpur	<ol style="list-style-type: none"> <li>1. HYV rice Sahabhagi dhan</li> <li>2. Seed treatment</li> <li>3. Potato var- Kufri Surya (75days)</li> <li>4. Poultry rearing with pallishree</li> <li>5. Vaccination with RD</li> <li>6. Feeding (Home scraping+ Agril. by-product)</li> <li>7. Paddy var. Swarna along with Seed treatment with Vitavax power</li> <li>8. Line transplanting</li> <li>9. Application of ZnSO<sub>4</sub> @25kg/ha</li> <li>10. STBF</li> <li>11. Herbicide application with quizalfop-p- ethyl 1lit/ha</li> <li>12. Value addition (pickle, Mushroom soup powder)</li> <li>13. Market linkage</li> </ol>
<b>4. East and South Eastern Coastal Plain</b>	
Kendrapara	<ol style="list-style-type: none"> <li>1. Crop diversification</li> <li>2. IPM &amp; INM</li> <li>3. Introduction of new breed</li> <li>4. Breed up-gradation</li> <li>5. Introduction of improved varieties etc.</li> </ol>
Khordha	<ol style="list-style-type: none"> <li>1. Crop diversification</li> <li>2. Improvement in crop management practices</li> <li>3. Profitable enterprises</li> <li>4. Improved storage practices</li> <li>5. Value addition and processing</li> </ol>
Jagatsinghpur	<ol style="list-style-type: none"> <li>1. Varietal substitution,</li> <li>2. Integrated Nutrient management</li> <li>3. Integrated Pest &amp; Disease management</li> <li>4. Farm mechanization</li> <li>5. Value addition</li> <li>6. Livestock production &amp; management</li> </ol>
Cuttack	<ol style="list-style-type: none"> <li>1. Capacity building of farmers and ground level extension workers</li> <li>2. Cluster demonstrations of various technologies</li> <li>3. Awareness camps on soil health, animal health and seed treatment etc.</li> <li>4. Routine field visit, monitoring and surveillance</li> <li>5. Providing critical inputs for optimization of plant and livestock health &amp; production</li> <li>6. Formation of Farmers club and FPO</li> <li>7. Value addition</li> <li>8. Exposure visit</li> <li>9. Development of Agri-preneurs</li> <li>10. Establishment of market linkage</li> <li>11. Farmer Field School</li> </ol>

Name of KVK (Agro-climatic Zone wise)	Technology Modules identified
Puri	<ol style="list-style-type: none"> <li>1. Introduction of Var – Swarna Sub-1, CR-1009 Sub-1</li> <li>2. Relay farming system with multiple stocking</li> <li>3. Awareness on INM &amp; IPM in coconut</li> <li>4. Awareness on deworming &amp; supplement feeding bypass protein</li> <li>5. Seed treatment in greengram and blackgram</li> <li>6. Apiary in coconut orchard</li> <li>7. Varietal evaluation in floriculture</li> <li>8. Biological management of aquatic weeds</li> <li>9. Goat farming</li> <li>10. Varietal evaluation of Vegetables</li> <li>11. Introduction of Jayanti Rohu to substitute traditional Rohu in composite carp culture</li> <li>12. Demonstration of Java Punti (<i>P. gonionotus</i>) within 3-species IMC culture</li> <li>13. Cultivation of mushroom in agroschednet</li> <li>14. Introduction of Amur carp in composite carp culture</li> <li>15. Demonstration of Floating fish feed for growth enhancement</li> <li>16. Value addition in milk, greengram and blackgram</li> </ol>
Nayagarh	<ol style="list-style-type: none"> <li>1. Varietal Intervention in paddy</li> <li>2. Paddy Transplanting using transplanters</li> <li>3. Weed management in paddy by using power weeder</li> <li>4. INM in cole crops/ cabbage/ cauliflower</li> <li>5. Control of stem borer, sheath blight, BLB, sheathrot and BPH in paddy</li> <li>6. Control wilting in brinjal, pointed gourd, powdery mildew in okra, thrips in onion, fruit fly in Bitter gourd</li> <li>7. Nematode management in pointed gourd</li> <li>8. Demonstration on paddy straw mushroom cultivation</li> <li>9. Demonstration on oyster mushroom cultivation</li> <li>10. Weed management in brinjal</li> <li>11. IPM for control of fruit and shootborer in brinjal</li> <li>12. Varietal evaluation in sugarcane</li> <li>13. Demonstration on BeeKeeping</li> </ol>
Ganjam-I	<ol style="list-style-type: none"> <li>1. IWM and INM in rice and Vegetables.</li> <li>2. Introduction of high yield and hybrid variety of vegetable</li> <li>3. IPM in rice, vegetable, groundnut and green gram</li> <li>4. Application of micronutrients in vegetables</li> <li>5. Poultry breed replacement with dual purpose improved colour birds - 30 nos of poultry chicks of Vanaraj breed/ family with timely vaccination</li> <li>6. Indigenous cattle feeding management with azolla and mineral mixture with timely deworming and vaccination</li> <li>7. Health and Nutritional management of goat/sheep with deworming, vaccination, mineral mixture and concentrate feed.</li> <li>8. Mushroom cultivation round the year for income generation – 10 beds / family per month with scientific package of practices.</li> <li>9. Stocking of IMC in appropriate proportion and use of low cost farm made feed</li> <li>10. Pisciculture in community pond</li> <li>11. Yearlings production practise</li> </ol>

Name of KVK (Agro-climatic Zone wise)	Technology Modules identified
Ganjam-II	<ol style="list-style-type: none"> <li>1. Varietal replacement</li> <li>2. INM</li> <li>3. IPM and IDM</li> <li>4. Weed management</li> <li>5. Varietal replacement</li> <li>6. INM</li> <li>7. IPM and IDM</li> <li>8. Production and management</li> <li>9. Organic farming</li> <li>10. Value addition</li> <li>11. Small scale income generation</li> <li>12. Composite pisciculture</li> <li>13. Feed management</li> <li>14. Disease management</li> </ol>
<b>5. North Eastern Ghat</b>	
Kandhamal	<ol style="list-style-type: none"> <li>1. INM in Maize - Lime application @ 0.2 LR + FYM @ 2 t /ha + STBFR (80.0:38.57:37.14 kg N:P2O5: K2O/ha)</li> <li>2. Introduction of maize hybrids identified for Odisha condition by Varietal Identification Committee, GOI.</li> <li>3. Integrated Weed Management in Maize, Groundnut and Vegetables.</li> <li>4. INM in Groundnut and vegetables</li> <li>5. Application of micronutrients in vegetables, groundnut and maize</li> <li>6. Nutrient management in turmeric through organic sources - Application of FYM @ 10 t /ha + Mulching with dry leaves @ 12.5t/ha + Neem cake 5 q/ha + Bio-fertilizers Azopirillum and PSB @ 10 Kg each/ha</li> <li>7. Poultry breed replacement with dual purpose high yielding colour birds - 10 nos of poultry chicks of Pallishree breed/ family with timely vaccination</li> <li>8. Mushroom cultivation round the year for income generation – 10 beds / family per month with scientific package of practices.</li> <li>9. Crop diversification with Black gram var. PU-35 during Kharif in the cropping system Fallow - Toria</li> <li>10. Introduction of high yielding toria var. Anuradha with INM</li> <li>11. Introduction of high yielding tomato varieties – Arka Rakshyak and Swarna Sampad as crop diversification for minimizing the diseases and pests</li> <li>12. INM in vegetables – STBFR with application of micronutrients</li> </ol>
Rayagada	<ol style="list-style-type: none"> <li>1. Weed control-Atrazine @ 1 lit/ha/Simazine @ 1 kg/ha</li> <li>2. Control of shoot and fruit borer: Use of tricho cards @ 5-6 Nos. per acre and at in interval of 7-10 days</li> <li>3. HYV</li> <li>4. Naveen with Line transplanting and STBF</li> <li>5. Weed control: Application of Pendimethalin @ 1kg/ha pre emergence</li> <li>6. Provision of seeds of leafy vegetables with seeds of brinjal, chilli and tomato</li> <li>7. Drought tolerant variety Sahabhagi Dhan/Bina dhan 11</li> <li>8. Cultivation of brinjal var. Muktakeshi</li> <li>9. Crop diversification to sweet corn var. Sugar 75/ Misti</li> <li>10. Stem borer control- spray of Londax power</li> <li>11. Cultivation of brinjal var. Muktakeshi</li> <li>12. YMV control : yellow sticky trap @12/acre, spray of Flonicamide 1.5ml/litre/ Thiomethoxam 100 g/ha</li> </ol>
Gajapati	<ol style="list-style-type: none"> <li>1. Maize+cow pea intercropping (2:2), Mushroom cultivation and Poultry</li> <li>2. Mango+ Pineapple intercropping and Apiary</li> <li>3. Rice- Paira Green gram, Mushroom cultivation</li> </ol>
<b>6. Eastern Ghat High Land</b>	
Koraput	<ol style="list-style-type: none"> <li>1. Cereals and Millets</li> <li>2. Fruits and vegetables</li> <li>3. Spices</li> <li>4. Post harvest/ Value addition</li> <li>5. Homestead and allied activities</li> </ol>

Name of KVK (Agro-climatic Zone wise)	Technology Modules identified
Nabarangpur	<ol style="list-style-type: none"> <li>1. OrganicVegetables cultivation</li> <li>2. Bio-fertilizer application in major field crops</li> <li>3. IDPM in Paddy and Maize</li> <li>4. Poultry</li> <li>5. Mushroom</li> </ol>
<b>7. South-Eastern Ghat</b>	
Malkangiri	<ol style="list-style-type: none"> <li>1. Introduction of Sweet corn</li> <li>2. Bio-fertilizer application</li> <li>3. IDPM in paddy and other crops</li> <li>4. Poultry</li> <li>5. Mushroom</li> </ol>
<b>8. Western Undulating Zone</b>	
Kalahandi	<ol style="list-style-type: none"> <li>1. Seed treatment with Carbendazim@2g/kg seed and bio-fertilizer for damping off control</li> <li>2. IPM for fruit and shoot borer</li> <li>3. Integrated Pest Management for f thrips &amp; mites in tomato</li> <li>4. Regular deworming and vaccination to dairy cow</li> <li>5. Supplementary feeding with mineral mixture and concentrate diet</li> <li>6. Perennial fodder production</li> <li>7. Supplementary Backyard poultry 20 nos. (Vanaraja) with proper vaccination</li> <li>8. Supplementary feeding with Azolla</li> <li>9. Calcium supplementation to birds</li> <li>10. Management of competitor moulds and diseases in straw mushroom</li> <li>11. Stocking of IMC fingerling @7000/ha</li> <li>12. Supply of Mineral mixture with floating fish feed</li> </ol>
Nuapada	<ol style="list-style-type: none"> <li>1. Hybrid rice and HYV cultivation in convergence mode</li> <li>2. Hybrid vegetable cultivation</li> <li>3. Oyster and paddy straw mushroom cultivation</li> <li>4. Crop diversification to fruit plants etc.</li> </ol>
<b>1. Western Central Table Land</b>	
Bargarh	<ol style="list-style-type: none"> <li>1. Brown manuring with Dhanicha&amp; knocking down Dhanicha at 30 DAS by 2,4-D ester @0.5 kgai/ha, Line transplanting in Paddy.</li> <li>2. Varietal substitution with short duration var. Sahabgaidhan, Line sowing, Application of herbicides Londax powder – (Bensulfuron methyl 0.6 % + Pretilachor 6% GR) @ 10kg/ha at 8 DAT</li> <li>3. Spraying of Pymetrozine 20SG@ 80 gm/ac for BPH management after making gullies, Application of post emergence herbicide Bispyribac Sodium 10 SC @200 ml/ha at 25-30 DAT, Use of mechanical rice transplanter.</li> <li>4. Varietal replacement of greengram with IPM 02-14, Seed treatment with <i>T. viridae</i> @ 5gm/kg</li> <li>5. Varietal replacement of Groundnut with Devi, application of oxyfluorfen 23.5EC @ 80ml/acre at 2-3 DAS and Spraying of imazethapyr 10 SL @400ml/ac at 20-25 DAS</li> <li>6. Replacement of low value vegetable radish with potato (var. Kufri Jyoti), late blight management with Metalaxyl + Mancozeb @2.5gm/ha.</li> <li>7. Seed treatment of vegetable with Vitavax power @ 2.5 gm/kg.</li> <li>8. Introduction of Mustard var P.T. – 303 in low land, seed treatment with Vitavax power.</li> <li>9. Introduction of Sesamum var.- Prachi in pre-rabi,</li> <li>10. Paddy straw mushroom cultivation by sterilization of paddy straw with formalin and bavistin</li> <li>11. Promotion of azolla cultivation, supplementation of azolla with commercial feed in 1:1 ratio</li> <li>12. Release of fingerlings@6000/ha, Lime applications in pond @ 100 kg/ac.m</li> <li>13. Deworming of goats – Albendazole@ 10mg/kg body weight (upto 6 months) and Zycloz@ 1 ml/10 kg body weight (after 6 months)</li> <li>14. Poultry Breed replacement with Rainbowrooster, timely vaccination.</li> </ol>

Name of KVK (Agro-climatic Zone wise)	Technology Modules identified
Bolangir	<ol style="list-style-type: none"> <li>1. Substitution of local and old varieties of Paddy with high yielding and short duration/drought tolerant varieties with herbicide application and IPM measures.</li> <li>2. Integrated approach to contain insect pest and disease in vegetables with integrated nutrient management</li> <li>3. Cultivation of sweet corn in open field and growing of Papaya and Banana in backyard</li> <li>4. Micronutrient and herbicide application in pulse crops</li> <li>5. Rearing of improved poultry breeds, mushroom cultivation, Fodder cultivation and administration of mineral mixture for livestock</li> <li>6. Growing of Papaya, Drumstick and Banana in backyard</li> <li>7. Management of sucking pests in Cotton and Scientific intercultural operation</li> </ol>
Boudh	<ol style="list-style-type: none"> <li>1. Substitution of Pigeon pea Variety PRG-176</li> <li>2. Seed inoculation with Rhizobium@ 20 gram/kg of seed</li> <li>3. Pod borer management in Pegeon pea</li> <li>4. Poultry bird- Rain booster-50 birds/farmer</li> <li>5. Mushroom spawn-30Nos</li> <li>6. Supply of mineral mixture</li> <li>7. Feed management in poultry bird</li> <li>8. Green manuring of Dhaincha</li> <li>9. Crop substitution of Brinjal by Onion var. Bhima super Red in Kharif</li> <li>10. Use of LCC for effective nitrogen management</li> <li>11. IPM in Moong( yellow sticky trap @ 20/ha and Thiomethoxam spray @ 200 g/ha.)</li> <li>12. INM in onion</li> <li>13. Weed management of onion by Pendimethalin @1kg a.i /ha at 3 DAT as pre emergence.</li> <li>14. Introduction of hybrid paddyRajalaxmi</li> <li>15. Supply of IMC fingerlings /Fish fry</li> </ol>
Sonepur	<ol style="list-style-type: none"> <li>1. Integrated Pest Management of BPH in paddy</li> <li>2. Assessment of BPH tolerant rice variety Hasanta</li> <li>3. Demonstration of triple disease resistant tomato var. Arka Rakshak</li> <li>4. Crop diversification, Rice-vegetable</li> <li>5. Backyard poultry, round the year mushroom cultivation</li> <li>6. Vermicomposting</li> <li>7. Assessment on Stress tolerant rice variety Sahabhagi dhan</li> <li>8. Drip with mulching in vegetable cultivation</li> <li>9. Backyard poultry</li> <li>10. Round the year mushroom cultivation</li> </ol>
<b>10. Mid Central Table Land</b>	
Angul	<ol style="list-style-type: none"> <li>1. Varietal substitution in paddy</li> <li>2. IWM in paddy</li> <li>3. Line transplanting in paddy</li> <li>4. IDM in paddy</li> <li>5. ICM in brinjal</li> <li>6. STBF with Fruit &amp; shoot borer management</li> <li>7. Deworming, PPR Vaccination in goats, Breed upgradation</li> <li>8. Jayanti rohu with IMC along with disease management &amp; feeding management</li> <li>9. IDM in groundnut</li> <li>10. Value addition in paddy</li> <li>11. IMC culture along with feeding management &amp; disease management</li> <li>12. Backyard poultry with feed management</li> <li>13. Line transplanting in paddy</li> <li>14. IDM in paddy</li> <li>15. Varietal substitution in onion</li> <li>16. IPM in onion</li> <li>17. Mushroom cultivation</li> <li>18. Feed management for cows</li> </ol>

Name of KVK (Agro-climatic Zone wise)	Technology Modules identified
Dhenkanal	<ol style="list-style-type: none"> <li>Line transplanting of paddy</li> <li>Line sowing of oilseed / pulse crops</li> <li>Use of improved agricultural implements like tractor drawn rotavator, rice transplanter, power sprayer, paddy reaper, combine harvester, axial flow paddy thresher, power weeder etc.</li> <li>Rearing of improved poultry breeds , mushroom cultivation , Fodder cultivation and administration of mineral mixture for livestock</li> <li>Integrated approach to contain insect pest and disease in vegetables with integrated nutrient management</li> <li>Substitution of local and old varieties of Paddy with high yielding and short duration/drought tolerant varieties with herbicide application and IPM measures.</li> </ol>

## APPENDIX-II

### Proposed budget requirement by KVKs for undertaking activities associated with Doubling Farmers' Income in Odisha

Name of KVKs (Agro-climatic Zone wise)	Budget (Rs. in Lakhs)				
	2018-19	2019-20	2020-21	2021-22	Total
<b>1. North-Western Plateau</b>					
Sundargarh-I	4.10	5.10	4.50	4.40	18.10
Sundargarh-II	1.40	1.69	2.71	2.89	8.68
Deogarh	100.00	50.00	25.00	12.50	187.50
Sambalpur	3.50	4.10	4.70	5.30	17.60
Jharsugda	2.00	2.00	2.00	2.00	8.00
<b>Zone Total</b>	<b>111.00</b>	<b>62.89</b>	<b>38.91</b>	<b>27.09</b>	<b>239.88</b>
<b>2. North Central Plateau:</b>					
Mayurbhanj-I	21.37	26.31	31.82	35.62	115.12
Mayurbhanj-II	49.00	11.20	8.70	8.60	77.50
Keonjhar	0.50	2.00	1.75	1.50	5.75
<b>Zone Total</b>	<b>70.87</b>	<b>39.51</b>	<b>42.27</b>	<b>45.72</b>	<b>198.37</b>
<b>3. North Eastern Coastal Plain</b>					
Balasore	1.66	1.87	2.06	2.20	7.79
Bhadrak	17.87	11.90	6.92	6.70	43.39
Jajpur	1.57	1.68	1.50	1.50	6.25
<b>Zone Total</b>	<b>21.10</b>	<b>15.45</b>	<b>10.48</b>	<b>10.40</b>	<b>57.43</b>
<b>4. East and South Eastern Coastal Plain</b>					
Kendrapara	2.00	4.49	22.22	14.04	42.75
Khordha	19.10	27.20	29.60	33.82	109.72
Jagatsinghpur	3.26	12.96	17.41	6.79	40.42
Cuttack	11.85	12.85	12.35	12.55	49.60
Puri	13.37	16.66	19.54	22.05	71.62
Nayagarh	10.00	14.87	13.03	5.69	43.59
Ganjam-I	6.34	7.76	8.66	8.66	31.42
Ganjam-II	1.98	7.81	2.21	5.45	17.45
<b>Zone Total</b>	<b>67.90</b>	<b>104.60</b>	<b>125.02</b>	<b>109.05</b>	<b>406.57</b>
<b>5. North Eastern Ghat</b>					
Kandhamal	6.09	6.29	7.34	8.34	28.06
Rayagada	48.90	54.67	22.55	41.30	167.43
Gajapati	5.83	6.17	6.50	6.71	25.21
<b>Zone Total</b>	<b>60.82</b>	<b>67.13</b>	<b>36.39</b>	<b>56.35</b>	<b>220.70</b>
<b>6. Eastern Ghat High Land</b>					
Koraput	2.00	2.00	2.00	2.00	8.00
Nabarangpur	7.70	11.45	15.15	18.90	53.20
<b>Zone Total</b>	<b>9.70</b>	<b>13.45</b>	<b>17.15</b>	<b>20.90</b>	<b>61.20</b>
<b>7. South-Eastern Ghat</b>					
Malkangiri	7.90	11.50	18.75	18.65	56.80
<b>Zone Total</b>	<b>7.90</b>	<b>11.50</b>	<b>18.75</b>	<b>18.65</b>	<b>56.80</b>
<b>8. Western Undulating Zone</b>					

Name of KVKs (Agro-climatic Zone wise)	Budget (Rs. in Lakhs)				
	2018-19	2019-20	2020-21	2021-22	Total
Kalahandi	23.97	27.28	30.24	32.76	114.25
Nuapada	1.09	0.79	0.72	0.75	3.35
<b>Zone Total</b>	<b>25.06</b>	<b>28.07</b>	<b>30.96</b>	<b>33.51</b>	<b>117.6</b>
<b>9. Western Central Table Land</b>					
Bargarh	4.30	4.50	4.80	5.20	18.80
Bolangir	6.86	25.54	25.54	23.04	80.98
Boudh	2.22	2.61	5.85	6.23	16.91
Sonepur	11.71	9.51	11.00	13.07	45.29
<b>Zone Total</b>	<b>25.09</b>	<b>42.16</b>	<b>47.19</b>	<b>47.54</b>	<b>161.98</b>
<b>10. Mid Central Table Land</b>					
Angul	2.38	15.77	24.65	18.21	61.01
Dhenkanal	1.52	6.54	4.42	4.06	16.54
<b>Zone Total</b>	<b>3.90</b>	<b>22.31</b>	<b>29.07</b>	<b>22.27</b>	<b>77.55</b>
<b>Grand Total</b>	<b>403.35</b>	<b>407.08</b>	<b>396.20</b>	<b>391.48</b>	<b>1586.11</b>





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