

Project Proposal for Front Line Demonstration under NHM
at Krishi Vigyan Kendra, Ganjam-I, Bhanjanagar
(Odisha University of Agriculture and Technology, Bhubaneswar)

1. Name & Address of the Organization:

Krishi Vigyan Kendra, Ganjam-I, Bhanjanagar (OUAT)

At: Benakunda, Po: Dihapadhala, Bhanjanagar, Dist: Ganjam, Pin: 761140

2. Name of the Project/ Activity:

Front Line Demonstration under NHM

3. Name and address with telephone number of the key person, who will be in charge of implementation of the project:

Bishnupada Giri, Scientist (Horticulture), KVK, Ganjam-I,

Mob. No.9937131964, E mail.: kvkganjam1.ouat@gmail.com

4. Brief background of the project:

Ganjam is an agrarian district and more than 80% people depend on Agriculture. It is broadly divided into two Agro climatic zones i.e. East and South Eastern Coastal plains zone and North Eastern Ghat zone. Total cultivable area is 434,000 ha (52.86%) where as cultivated area is 406,000 ha. There are two KVKs functioning in the district, one at Bhanjanagar and other at Berhampur. KVK, Ganjam-I, aims at assessment of location specific technology modules in agriculture and allied enterprises through technology assessment, demonstrations and training. KVK, Ganjam-I have been functioning as Knowledge and Resource Centre of agricultural and allied technology for improving the agrarian economy of the district.

In Ganjam district fruits and vegetable crops are grown in an area of 16427 ha and 35427 ha respectively. The major fruit crops grown are banana (792 ha), mango (10360 ha), papaya (570 ha), lime (2662 ha), guava (464 ha), sapota (296 ha). The major vegetable crops grown are Sweet potato (8384 ha), Brinjal (5089 ha), Chili (5000 ha), Tomato (4293 ha), Okra (4273 ha), Cucurbits (3106 ha), Cauliflower (2364 ha), Cabbage (1810 ha), root tubers (1034 ha), pod vegetables (1020 ha), Onion (963 ha), leafy vegetables (835 ha) and potato (710 ha). In this context, establishment fruit orchard and structures for QPM production as Front Line Demonstration under NHM is going to be beneficial for the farming community of Ganjam and nearby districts.

5. Objectives:

- To popularize high density planting and micro irrigation in fruit orchard
- To encourage mechanization in fruit orchard
- To demonstrate off season vegetable seedling raising in walk in tunnel.
- To encourage farmer on quality planting material production in fruit crops.
- To create a model fruit orchard for inspiring other farmers/agripreneurs

6. Location of the Project and availability of building for the purpose:

Location: Krishi Vigyan Kendra, Ganjam-I(Odisha University of Agriculture and Technology)

At: Benakunda, Po: Dihapadhala, Bhanjanagar, Dist: Ganjam, PIN:-761140

Availability of land: Yes, the project can be executed in KVK campus.

7. Justification for creating a facility in the area with special reference to findings of study if any carried out in this regard:

In Ganjam district, fruit and vegetable crops are cultivated in 16427 ha and 35427 ha area respectively. However, since inception KVK, Ganjam-I is striving hard to provide technological backstopping for the farming community in the district for increasing fruit production with limited resource and manpower. With the help of NHM funds, KVK, Ganjam-I can perform better in the district and deliver the desired training and demonstration on fruit production in an efficient and effective manner.

8. Component wise cost of project supported by quotations/ documents along with source of funding:

Component wise cost of project is given in a separate Annexure-I

Source of funding: NHM, Directorate of Horticulture, Govt. of Odisha.

9. Area of operation:

Area of operation of this project will be the KVK Ganjam-I campus but farmers from different blocks can be trained and demonstrated in KVK campus on fruit, vegetable production and QPM production of horticultural crops .

10. List of Districts, Talukas, Villages to be covered:

Out of 22 nos of blocks of the district, KVK Ganjam-I is operating in 11 blocks and farmers from these blocks will be directly benefitted. Farmers of other neighbouring blocks will also be benefitted by this project. Besides, farmers from neighbouring district can be educated by exposure visit to this centre.

11. No. of farmers to be benefitted:

Initially selected farmers will be trained through on campus training programme but gradually when the farmers will know about this project, maximum number of farmers will be benefitted. Besides, farmers can be educated by exposure visit to the KVK campus.

12. Economics of the project along with profitability and cost at which services will be made available to the farmers:

Cost of the project: Rs. 20.0 lakh

13. Certificate stating the subsidy has not been received from any other sources:

This is to certify that no subsidy has been received from any other sources for this project

14. Social benefits:

Farmers will be benefitted by adopting high tech fruit cultivation and horticulture nursery in their farm which will improve their socioeconomic status. Mechanization in orchard will directly reduce the cost of cultivation by reducing labour requirement and increase the income. Farmers can earn more profit from fruit cultivation and nursery business.

Employment:

Direct employment:

Farmers will be engaged through out the year as fruit crops are perennial in nature and off season vegetable cultivation can be undertaken by raising seedling in polytunnel.

Indirect Employment:

Gradually, awareness will be created and skill trainings will be imparted to the farmers. The trained farmers can take it as an enterprise which will lead to generate indirect employment.

15. Commitment of the organization for deployment of experts and staffs to the project for continuity and accountability:

Experts and staffs of the KVK, Ganjam-I will provide full cooperation in implementation and execution of the project

16. Details of the sustainability of the project

After implementation of FLD in the KVK campus, fruits, vegetables and QPM produced can be sold among farmers thus generating revenue under revolving fund for running the unit in future.

17. SWOT Analysis

Strength

- Fruit cultivation in 16427 ha in the district
- Vegetable cultivation in 35427 ha in the district
- Operation of ARYA project in nursery raising enterprise
- Operation of FPO in the district funded by RKVY
- Operation of FPO in the district managed by NGOs.
- Promotion of commercial orcharding by Govt. of Odisha
- Year round fruit cultivation by farmer in the district

Weakness

- Seasonal market surplus decreasing price of vegetable
- Lack of adoption of improved nursery raising practices in vegetable
- Unavailability quality planting material in fruit crops
- Lack of mechanization in orchard
- Lack of knowledge and skill on commercial orchard establishment and management
- Lack of market information and market intelligence to farmers
- Heavy pest and disease attack in horticultural crops
- Non adoption of post harvest management like sorting and grading

Opportunities

- Prevalence of mild climate and edaphic factor for off-season vegetables
- Good demand for vegetable seedling in off season
- Good demand quality planting material of fruit crops
- Prevalence of mild climate and edaphic factor for fruit cultivation
- Vegetable cultivation can be done in Kharif by raising seedling in plastic tunnel
- Good market demand of vegetable during off season
- Govt. support for orchard development and hybrid vegetable cultivation through Dept. of Horticulture

Constraints

- ❖ Lack of linkage among stake holder
- ❖ Poor transportation facility
- ❖ Inadequate knowledge and poor skill of farmers
- ❖ Perishable in nature of fruit and vegetable
- ❖ Wild animal menace like wild boar and monkey
- ❖ Lack of enough storage facilities
- ❖ Malpractices in fruit and vegetable marketing
- ❖ Lack of irrigation facility for off season vegetable cultivation

18. Implementation schedule

Phase I:- Procurements of materials - Within 3 months of receiving fund, the materials required for front line demonstration under NHM will be procured.

Phase II:- Implementation- The front line demonstration under NHM will be executed within one month of purchase of material.

Phase III:- Running of the Project - The project will be continued soon after completion of above 2 phase

Signature of the in charge

Signature of the Head of KVK

Signature of the Head of the Department/ Director of Institution

Signature of Comptroller/ Financial Advisor

**TENTATIVE BREAK UP OF BUDGET FOR FRONYLINE DEMONSTRATION AND
TRAINING UNDER NHM AT KVK, GANJAM-1**

A. Crop component

1. Economics of HDP mango var. Pusa Surya , Area= 0.2 ha, spacing= 5 m x 5 m

SL NO	COMPONENT	1ST YEAR		2ND YEAR		3RD YEAR		TOTAL	
		NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)
1	Land development for orchard	1 hr	1,200	1 hr	1,200	1 hr	1,200	3	3,600
2	working expenses	86 no.C.L.	28,638	48 no.C.L.	16,051	48 no.C.L.	16,117	182 no.C.L.	60,806
3	Planting materials and inputs for crop management		21,000		4,200		6,000		31,200
4	Drip irrigation	0.2 ha	9,328					0.2	9,328
5	MISC @ 10 %		6,166		2,145		2,332		10,643
	TOTAL		66,332		23,596		25,649		1,15,577

2. Economics of custard apple cultivation , Area= 0.1 ha, spacing= 5 m x 5 m

SL NO	COMPONENT	1ST YEAR		2ND YEAR		3RD YEAR		TOTAL	
		NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)
1	Land development for orchard	0.5 hr	600	0.5 hr	600	0.5 hr	600	1.5	1,800
2	working expenses	23 no.C.L.	7,792	16 no.C.L.	5,228	15 no.C.L.	5,028	54 no.C.L.	18,048
3	Planting materials and inputs for crop management		8,700		3,400		4,500		16,600
4	Drip irrigation	0.1 ha	4,664					0.1	4,664
5	MISC @ 10 %		21,756		923		1,013		23,692
	TOTAL		43,512		10,151		11,141		64,804

3. Economics of guava(Thai var.) cultivation , Area= 0.2 ha, spacing= 3 m x 3 m

SL NO	COMPONENT	1ST YEAR		2ND YEAR		3RD YEAR		TOTAL	
		NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)
1	Land development for orchard	1 hr	1,200	1 hr	1,200	1 hr	1,200	3	3,600
2	working expenses	59 no.C.L.	19,780	32 no.C.L.	10,789	21 no.C.L.	6,926	112 no.C.L.	37,495
3	Planting materials and inputs for crop management		27,200		4,000		5,600		31,800
4	Drip irrigation	0.2 ha	10,323					0.2	10,323
5	MISC @ 10 %		4,850		1,599		1,373		7,822
	TOTAL		58,353		17,588		15,099		91,040

4. Economics of bael (NB-1) cultivation , Area= 0.1 ha, spacing= 8 m x 8 m

SL NO	COMPONENT	1ST YEAR		2ND YEAR		3RD YEAR		TOTAL	
		NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)
1	Land development for orchard	0.5 hr	600	0.5 hr	600	0.5 hr	600	1.5	1,800
2	working expenses	17 no.C.L.	5,794	11 no.C.L.	3,663	12 no.C.L.	3,963	40 no.C.L.	13,420
3	Planting materials and inputs for crop management		6,000		2,000		2,500		10,500
4	Drip irrigation	0.1 ha	4,282					0.1	4,282
5	MISC @ 10 %		1,668		626		706		3,000
	TOTAL		18,344		6,889		7,769		33,002

5. Economics of tissue culture banana cultivation , Area= 0.1 ha, spacing= 2 m x 2 m

SL NO	COMPONENT	1ST YEAR		2ND YEAR		3RD YEAR		TOTAL	
		NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)
1	Land development for orchard	0.5hr	600					0.5	600
2	working expenses	67.5 no.C.L.	22,411	240 no.C.L.	15,984	48 no.C.L.	15,984	288 no.C.L.	54,379
3	Planting materials and inputs for crop management		25,000		19,000		19,000		63,000
4	Drip irrigation	0.1 ha	12,364					0.1	12,364
5	MISC @ 10 %		1,237		3,499		3,499		8,235
	TOTAL		61,612		38,483		38,483		1,38,578

6. Economics of pineapple (Queen) cultivation , Area= 0.1 ha, spacing= 0.9 m x 0.6 m

SL NO	COMPONENT	1ST YEAR		2ND YEAR		3RD YEAR		TOTAL	
		NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)
1	Land development for orchard	2.5 hr	2,000					2.5	2,000
2	working expenses	72.5 no.C.L.	24,143	42 no.C.L.	13,820	40 no.C.L.	13,154	154.5 no.C.L.	51,117
3	Planting materials and inputs for crop management		33,500		5,000		5,000		43,500
	Mulching	0.1 ha	9,600					0.1	9,600
4	Drip irrigation	0.1 ha	15,102					0.1	15,102
5	MISC @ 10 %		8,435		1,882		1,816		12,133
	TOTAL		92,780		20,702		19,970		13,3452

7. Economics of Seragarh lime cultivation , Area= 0.1 ha, spacing= 5 m x 5 m

SL NO	COMPONENT	1ST YEAR		2ND YEAR		3RD YEAR		TOTAL	
		NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)
1	Land development for orchard	0.5 hr	600	0.5 hr	600	0.5 hr	600	1.5	1,800
2	working expenses	28 no.C.L	9,457	23 no.C.L	7,559	15 no.C.L.	5,028	66 no.C.L	22,044
3	Planting materials and inputs for crop management		9,000		7,000		6,100		22,100
4	Drip irrigation	0.1 ha	4,664					0.1	4,664
5	MISC @ 10 %		2,372		1,516		1,173		5,061
	TOTAL		26,093		16,675		12,901		55,669

8. Economics of hybrid papaya cultivation , Area= 0.1 ha, spacing= 2 m x 2m

SL NO	COMPONENT	1ST YEAR		2ND YEAR		3RD YEAR		TOTAL	
		NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)
1	Land development for orchard	0.5hr	600	0.5hr	600	0.5 hr	600	1.5	1800
2	working expenses	70 no.C.L.	23344	30 no.C.L.	9824	30 no.C.L.	9824	130 no.C.L.	42992
3	Planting materials and inputs for crop management		24,200		13,900		14,100		52,200
4	Drip irrigation	0.1ha						0.1	
5	MISC @ 10 %		1,237		2,433		2,453		6,123
	TOTAL		49,381		26,757		26,977	1	1,03,115

9. Economics of apple ber (Thae Var.)cultivation , Area= 0.1 ha, spacing= 3 m x 3m

SL NO	COMPONENT	1ST YEAR		2ND YEAR		3RD YEAR		TOTAL	
		NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)
1	Land development for orchard	0.5 hr	600	0.5 hr	600	0.5 hr	600	1.5	1,800
2	working expenses	43 no.C.L.	14,153	46 no.C.L.	15,152	46 no.C.L.	15,152	135 no.C.L.	44,457
3	Planting materials and inputs for crop management		18,000		6,300		6,300		30,600
4	Drip irrigation	0.1 ha	12,364					0.1	12,364
5	MISC @ 10 %		4,512		2,205		2,205		8,922
	TOTAL		49,629		24,257		24,257		98,143

10 .Economics of sapota (DHS-1) cultivation , Area= 0.2 ha, spacing= 9 m x 9 m

SL NO	COMPONENT	1ST YEAR		2ND YEAR		3RD YEAR		TOTAL	
		NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)	NO .	COST (Rs.)
1	Land development for orchard	1 hr	1,200	1 hr	1,200	5 hr	1,200	7	3,600
2	working expenses	31 no.C.L.	10,456	23 no.C.L.	7,526	122 no.C.L.	8,125	176 no.C.L.	26,107
3	Planting materials and inputs for crop management		12,600		4,000		5,200		21,800
4	Drip irrigation	0.2 ha	8,565						8,565
5	MISC @ 10 %		3,282		1,272		1,452		6,006
	TOTAL		36,103		13,998		15,977		57,513

A. Total of crop component (1 to 10) = Rs.8,90,893

B. Cost structure of Capacity Building Programmes

Sl. No.	Particulars	No. of Training per annum (25 trainee per training)	Duration (Days)	Cost per Day per trainee	Amount
1.	Training Programme	5	3	150	56,250
2.	Training Aids (Pen, Pad, Folder, Banner, Certificate)	Rs.1,500 per training			7,500
3.	Resource Person	12 nos per training @ 500/- per resource person = 6000		000	30,000
4.	Training Hall Charge including AV	10	3	1,000	15,000
5.	Training Manuals	250			10,000
6.	Publications				10,000
7.	Office Contingency				50,000
				Sub total	1,78,750

C. Other machinery / infrastructure / contingency needed

Sl. No.	Particulars	Unit Price (Rs)	Area/ No	Appox. Cost (Rs)
1.	Walk in tunnel	600/sq.m	50sq.m	30,000
2.	Shadenet house	710/sq.m	50sq.m	35,500
3.	Tillage equipments	30,000/no	2 nos	60,000
4.	Pit digging equipment	30,000/no	1 no	30,000
5.	Power operated sprayer	20,000/no	2 nos	40,000
6.	Soil sterilizing unit		1 no	50,000
7.	Solar system for drip	2,00,000/ ha	1 ha	2,00,000
8.	Brush cutter	30,000/no	1 no	30,000
9.	Power weeder	50,000/ no	1 no	50,000
10.	Solar fencing	2,00,000/ha	1no	2,00,000
11.	Vermicompost pit	1,50,000	1 nos	1,50,000
	Subtotal			8,75,500

D. Misc. Expenditure= Rs.54,857

Grand total (A+B+C+D) = 20,00,000


16/03/2023

Senior Scientist and Head

KVK Ganjam-I, Bhanjanagar

SENIOR SCIENTIST & HEAD
KVK, GANJAM-I BHANJANAGAR