PROPOSED PROJECT PLAN
FOR
INTEGRATED DEVELOPMENT OF
DENUA FARM, NIMAPARA

Under **RKVY** for the Year 2017-18

Project Cost: Rs. 66.008 Lakh

Submitted by
Deputy Director of Horticulture, Puri
Sakhigopal

Directorate of Horticulture
Odisha, Bhubaneswar

EXECUTIVE SUMMARY

Name of the Project	**Integrated Development of Denua Farm Nimapara**			
Implementing Agency	Directorate of Horticulture, Odisha Bhubaneswar			
Name and address of executant	Deputy Director of Horticulture, PuriSakhigopal			
Proposed Work	**Quantity**	**Unit Cost in Rupees**	**Amount in Lakh Rupees**	**Norm followed**
Construction of masonry compound wall with pillar structure along with MS gate	45 rmt	5,500	3.0	State PWD
Construction of internal Cement Concrete Road (12'width)	300 rmt	2,850	16.5	State PWD
Renovation of existing Farm Ponds	2 nos.	LS	2.5	State PWD
Digging of bore well with energization	1no.	2,00,000	2.5	State PHD
Energization of existing borewells with setting up of a Transformer (3 phase 16KV with 2kilowatt load)	1 no.	LS	4.0	CESU
Construction of Pump House	1 no.	75,000	0.75	State PWD
Construction of farm store cum watchman shed	1000 Sft	1,400	14.0	State PWD
Land reclamation & development	2 ha	1,00,000	2.0	State PWD
Digging of Farm Ponds in submerged low land	6600 Cum	50	3.30	State PWD
Nursery area development Filling of Sand & garden soil in 0.85 ha of nursery area for 1m depth vol. - 170mx50mx1m = 8500cum	8500 Cum	50	4.25	State PWD
Construction of Cement concrete field channel for irrigation purpose	308 rmt	2000	6.16	State PWD
Establishment of nucleus seed garden of Coconut	2 ha	1,16,700	2.334	Cost structure approved by DHO
Drip system installation in Coconut garden	2 ha	LS	0.507	PMKSY
Maintenance of nucleus garden for 1st year	2 ha	52,600	1.052	Cost structure approved by DHO
Maintenance of nucleus garden for 2nd year	2 ha	55,900	1.118	Cost structure approved by DHO
Maintenance of nucleus garden for 3rd year	2 ha	69,200	1.384	Cost structure approved by DHO
Misc. contingencies & unforeseen expenses	-	LS @1%	0.653	
TOTAL			**66.008**	

Source of Fund : RKVY 2017-18
Project cost : Rs. 66.008 lakhs
Project duration : Four years

Basic Farm Information and land utilization pattern

Year of Establishment	:	1964
Total orchard area	:	8.92 ha
High Land	:	nil
Medium Land	:	6.2 ha
Low Land	:	1.8 ha
Cultivated Area	:	6.2 ha
Area under Road	:	0.92 ha
Building	:	0.3 ha
No of Ponds	:	3 (2 big, 1 small)
Nursery area	:	2.0 ha
Irrigation Channel	:	0.2

Mother Plants

Coconut (Tall)	:	400 nos.
Mango	:	320 nos. (commercial-250, Local elite-70)
Arecanut	:	2000 nos.

Existing Infrastructure

No. of building	:	4 Nos. (3 nos asbestos + 1 no RCC)
Usable building	:	2 Nos. (1 asbestos + 1 RCC)
Non usable building	:	2 Nos. asbestos
Bore well	:	2 nos. (one functional and one defunct)

Context/Background :

Puri district comes under central table having costal climate for coconut palm and production of Quality Planting Material of coconut seedlings. The geographical area of the district is 348102ha. out which 19100 ha.(10.12%) high land and 57654ha. (30.54%) medium land and 111991 ha(59.33)low land out of which only upland and part of medium land is suitable for horticulture sectors. which contributes 19100 ha. (10.12%)Most of the farm families are dependent on coconut plantation directly or indirectly for their livelihood support and income generation. There is irrigation facility of 39.46%in Puri district. Coconut based cropping is the need of the hour considering the micro climatic condition of the district.

Problems to be addressed:

- Due to irrigation constraint at peak summer season, difficulty is being experienced in maintaining coconut seedlings and irrigating coconut palms.
- Borewells need to be energized.
- Due to lack of fencing, animal and human trespassers are creating problems for which boundary wall has been proposed.

Aims & Objectives :

- To establish a well-managed coconut seed garden in odisha.
- To increase the quality & quantum of planting materials of Coconut to meet the increased demand of the State.
- To produce dwarf coconut seed nuts for which there is a great demand.
- To facilitate production of hybrid seed nuts and seedlings of coconut.
- Increase coconut production in the state.
- To provide employment to the rural locals and to discourage migration.
- To protect the farm and mother plants by construction of compound wall.
- To improve supervision, mobility & transportation facility by development of internal farm road.
- To increase revenue receipt of the farm.
- Green coverage and environmental protection.

Strategy :

Availability of Quality Planting Material (QPM) is the main factor for successful crop production in terms of both quality and quantity. In case of perennial fruit crops, it is more so required as perennial crops have long gestation period. Under State Planprogramme, there is adequate provision for area expansion of coconut. Thus, there is requirement of sizeable quantity of quality planting materials. To meet such growing demand, focus is be given to produce large numbers of QPM both in public and private sectors. There is also growing demand of quality planting materials of Coconut and Arecanutin other neighboring states of Odisha such as Chhatishgarh, Madhya Pradesh, Bihar etc. Puri district is blessed with suitable agro-climatic condition for growing of coconut and the proposed site of Denua farm is well communicated.

Target Beneficiaries : Farmers of the State covered under MGNREGS and State Plan scheme particularly the small & marginal farmers, tribal households as well as farmers of neighbouring states will be benefited much from this project by getting QPM of dwarf and hybrid Coconuts.

Management : The Denua farm is managed by one Assistant Horticulture Officer under the administrative control of Deputy Director of Horticulture, Puri, Sakhigopal. Other man powers include One Horticulture Extension Worker and Casual labourers.

Finance :

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Maintenance of nucleus garden for 1st year	2 ha	52,600	1.052	Cost structure approved by DHO
Maintenance of nucleus garden for 2nd year	2 ha	55,900	1.118	Cost structure approved by DHO
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TOTAL			**66.008**	

Year wise Expenditure

Proposed Work	Amount in Lakh Rupees	2017-18	2018-19	2019-20
Construction of masonry compound wall with pillar structure along with MS gate	3.0	3.0	0	0
Construction of internal Cement Concrete Road (12'width)	16.5	16.5	0	0
Renovation of existing Farm Ponds	2.5	2.5	0	0
Digging of bore well with energization	2.5	2.5	0	0
Energization of existing borewells with setting up of a Transformer (3 phase 16KV with 2kilowatt load)	4.0	4.0	0	0
Construction of Pump House	0.75	0.75	0	0
Construction of farm store cum watchman shed	14.0	14.0	0	0
Land reclamation & development	2.0	2.0	0	0
Digging of Farm Ponds in submerged low land	3.30	3.30	0	0
Nursery area development Filling of Sand & garden soil in 0.85 ha of nursery area for 1m depth vol. - 170mx50mx1m = 8500cum	4.25	4.25	0	0
Construction of Cement concrete field channel for irrigation purpose	6.16	6.16	0	0
Establishment of nucleus seed garden of Coconut	2.334	2.334	0	0
Drip system installation in Coconut garden	0.507	0.507	0	0
Maintenance of nucleus garden for 1st year	1.052	0	1.052	0
Maintenance of nucleus garden for 2nd year	1.118	0	0	1.118
Maintenance of nucleus garden for 3rd year	1.384	0	0	1.384
Misc. contingencies & unforeseen expenses	0.653	0.653	0	0
Total	**66.008**	**62.454**	**1.052**	**2.502**

Time Frame :

Sl. No	Item of work	Phases of execution of work			
		2017-18	2018-19	2019-20	2020-21
1	Land reclamation & development	April - May			
2	Establishment of nucleus seed garden of Coconut	April - July			
3	Digging of Farm Ponds in submerged low land	April-June			
4	Renovation of existing Farm Ponds	April-June			
5	Nursery area development	April-June			
6	Digging of bore well with energization	May - Oct			
7	Energization of existing borewells with setting up of a Transformer	May - Oct			
8	Drip system installation in Coconut garden	June - July			
9	Construction of masonry compound wall with pillar structure along with MS gate	Sept - Dec			
10	Construction of internal Cement Concrete Road	Sept - Dec			
11	Construction of Cement concrete field channel for irrigation purpose	Sept - Dec			
12	Maintenance of nucleus garden for 1st year		April - Feb		
13	Maintenance of nucleus garden for 2nd year			April - Feb	
14	Maintenance of nucleus garden for 3rd year				April - Feb

Cost benefit analysis :

A Coconut Palm starts bearing after 4th year and attains full bearing after 14th year from planting.

Production (Avg) - 80 nuts per plant per year

Total production - 80 x 175 x 2 = 28000 nuts from 2ha per year.

Quality nuts production - 70 to 75 % of total production i.e. 20000 nos. (avg)

Good quality nuts will be utilized for hybridization and seedling production and average quality nuts will be sold in the market as per prevailing RMC rate

a) 20000 x Rs. 25/nut = Rs. 5,00,000/ year
b) 8000 x Rs. 10/nut = Rs. 56,000/ year

Total return: Rs. 5,56,000/ year

Risk Analysis :

i) **Legal / Contractual Risks**
Contractual labourers shall submit undertaking to avoid claims beyond their term of engagement.

ii) **Environmental Risks**
Insurance to be made against the Environmental Risks.

iii) **Project Management Risks**
Any risk on management shall be monitored by the Director of Horticulture, Odisha, Bhubaneswar

Outcomes :

a) **Expected Output**

- 4ha. of Nuclear Seed Garden will be established
- The garden will be maintained for subsequent 3 years
- Renovation and desalting of the existing ponds will be taken up
- Bore well will be installed and energize
- Drip Irrigation and Fertigation system will be facilitated

b) **Expected Outcome**

- Production of coconut seedlings of Tall, Dwarf and Hybrids
- Increase in availability of coconut seedlings in the state
- Area expansion of coconut in the state

Evaluation :

Success of scheme deliverables / outcomes shall be evaluated by the third party i.e. any other body directed / instructed by Govt.

Check list

a. Funds available under other schemes of the State / Govt. of India for the proposed projects have been accessed and utilized before it is proposed under RKVY.
b. There will be no duplication or overlapping of assistance / area coverage through other State / Central Govt. Schemes.
c. The funds under the project is not proposed as additional or top-up subsidy to other ongoing schemes/programmes of State / Central Govt.
d. DPRs includes contingency.

20.03.17

Deputy Director of Horticulture
Puri, Sakhigopal