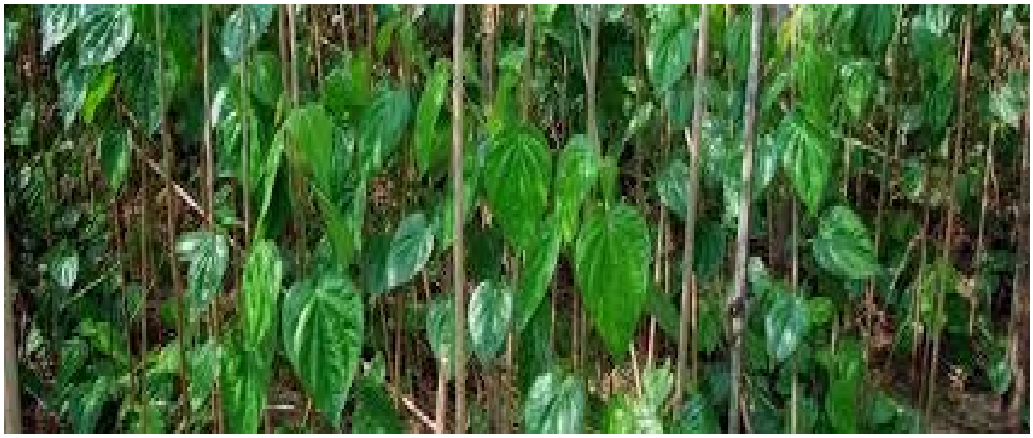
PROJECT PROPOSAL
ON AREA EXPANSION OF BETEL VINE AREA IN JAGATSINGHPUR, CUTTACK, BALASORE AND PURI DISTRICTS



UNDER

RASTRIYA KRISHI VIKASH YOJANA

2018-19

Project Cost: Rs. 121.20 Lakh

Submitted By;

DIRECTOR OF HORTICULTURE,

ODISHA, BHUBANESWAR

PROJECT SUMMARY

Name of the Project : Area Expansion on Betel Vine

Proposed Work : Establishment of Boroj 300 nos x 0.4 = 120.00 Lakh

Contingency 300 nos x 0.004 = 1.2 Lakh

Total = **121.20 Lakh**

Name of the District	**Targeted Units**	**Amount in Lakh**
Puri	100	40.4
Jagatsinghpur	100	40.4
Cuttack	50	20.2
Balasore	50	20.2
Total	**300**	**121.2**

Districts : Puri, Jagatsinghpur, Cuttack and Balasore

Project Cost : **Rs. 121.20 Lakh**

Source of fund : Rastriya Krishi Vikash Yojana

Year of Execution : 2018-19

Implementing Agency : Directorate of Horticulture, Odisha, Bhubaneswar

1. **Context and Background:**

2. Betel vine, commonly known as Pan (Piper betel Linn.) is a perennial, dioecious, evergreen creeper, cultivated in moist, tropical and sub-tropical regions of India. It is an important cash crop of Andhra Pradesh, Assam, Bihar, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal. In India it has been cultivated for its leaf since time immemorial but has assumed significant commercial importance in the last 20-25 years.

Betel vine cultivation and the consumption of Betel leaf is a traditional and wide spread practice in India as well as Odisha. Where a great deal of medicinal values is also attributed to the leaf. It is one of the instances where a cash crop is neither depended on exports nor on urban consumption only and can yet be easily marketed. For the marginal farmer who is unable to produce sufficient food on his tiny holding and whose labour resources are under employed, Betel vine cultivation on a portion his holding provides a means to put his underutilized labour to productive use enabling him make profit.

Betel vine cultivation is highly labour intensive and particularly suited to small holdings. Once established, a Betel vine garden becomes a perennial source of employment and cash for meeting the day today requirements of the farmers. The Betel Vine area in Odisha is 2046 ha and 99765 Lakh Numbers of Leafs are produced.

MAJOR AREA OF CULTIVATION

In Odisha Betel vine is cultivated in costal districts like Balasore, Bhadrak, Jagatsinghpur, Jajpur, Kendrapara, Puri, Cuttack and Ganjam. Besides home consumption the Betel leaf is exported to Varanasi, Mumbai etc. Hence there is a well-established market for the Betel leaf.

2. Aims and Objectives

A farmer has to incur a huge expenditure during its initial period of establishment. Hence it is proposed to provide assistance to the tune of 50% of the 1stYear establishment cost under RKVY with the objective to promote Betel vine cultivation in this state in a sustainable manner.

3. Strategy

- The scheme is meant for closed type system cultivated in a conservatory, locally known as "Boroj".
- Subsidy is permissible for an area of 0.04 ha. & one beneficiary will only avail subsidy for an area of 0.04 ha. only in one financial year.

4. Target Beneficiary

- The project will be taken up in Cuttack, Jagatsinghpur, Balasore and Puri districts.
- The beneficiary will apply to the concerned Assistance Horticulture Officer in the prescribed format as per Annexure-I to take up the plantation of the Betel vine and to avail subsidy.
- The beneficiaries who are willing to take up drip irrigation will be given preference during selection.
- The beneficiary will be selected well in advance by the field functionary and duly verified by the AHO/ *ADH / DDH* concerned.
- The *ADH / DDH* will provide a work order to the beneficiary after due verification of field.
- The beneficiary will collect all the inputs like Planting Material, Bamboo etc. required to establish a "Boroj".
- A beneficiary will avail an assistance to the tune of 50% of 1st year cost and the maximum limit of subsidy is Rs. 40000.00 for 10 cent of "Boroj". Assistance to the tune of Rs. 36080.00 will be released to the beneficiary after due completion, establishment and verification of the "Boroj" in DBT mode. The miscellaneous amount Rs.3920.00 will be expended by the *ADH / DDH* concerned for preparation & fixation of Display Board and misc expenditure.
- Beneficiary should submit a certificate regarding expenditure incurred by him which shall be more than Rs.8O,OOO to avail subsidy of Rs.4OOOO/- against total expenditure of Rs.80000/-for an unit of 10 cents.
- The subsidy amount will be released to the beneficiary through DBT mode.
- The beneficiary should submit the land record as a proof of ownership. The *ADH / DDH* will maintain a detailed record with respect to Name, Fathers Name, Village, GP, Block, Khata No., Plot No. etc.

- Regular visit of the field staff to plantation site shall be ensured by the concerned supervising officials.
- The beneficiary list after releasing subsidy should be uploaded in the web site online by the *ADH / DDH* concerned.
- Due emphasis should be given on ST/SC beneficiary as per the fund flow.
- The beneficiary who willing to take bank loan he may apply the same through the concerned A*DH / DDH* to the bank for loan and the subsidy amount will be released to the bank in favour of beneficiary concerned after completion of the establishment of Boroj.
- GEO tagging of the Boroj should be done as instructed earlier.

5. Management

The project will be managed by concerned DDH/ADH along with their staff.

6. Finance

Each beneficiary will be provided subsidy for Betel Vine cultivation in;

- 10 Cent. Area
- The cost of cultivation is Rs. 80,000/10cent. **(Annexure – I)**
- Subsidy @ 50% i.e. Rs. 36,080/- will be provided as assistance after deducting Rs. 3920/- for Misc. expenditure and Display Board. (Rs. 36,080 + Rs. 3,920 = Rs. 40,000/-) which will be utilised by the concerned DDH/ADH.

Project cost = Rs. 40,000 x 300 Units	= Rs. 120.00 Lakh
Contingency (1%)	= Rs. 1.20 Lakh
Total	**= Rs. 121.20 Lakh**

Name of the District	**Targeted Units**
Puri	100
Jagatsinghpur	100
Cuttack	50
Balasore	50
Total	**300**

7. Time Frame

The project will be implemented during the year 2018-19.

8. Cost Benefit Analysis

Main Crop- Beetle Vine

Yield 1st year on wards

	1st yr.	2nd yr.	3rd yr to 15th yr
Yield of Leaves (Lakh Nos.);	1	2.4	2.4
Gross Income @Rs.600 per 1000 leaves	Rs.60,OOO	1,44,000	Rs. 1,44,000
Net Income	(-) RS.20000	Rs. 1,06,500	Rs. 1,06,500

9. Risk Analysis

- As Betel Cultivation is cultivated along costal belt, so there is a threat of damage due to heavy rain and wind flow.
- High incidence of leaf blight, disease and pest.
- inappropriate management of fertilizer and pesticides due to lack of adequate knowledge, often disease and insects attack, natural calamities, lack of water supply were the other most important constraints faced by the betel vine grower during production.
- Price fluctuation was the most important constraints faced by the betel vine cultivators to realise remunerative return to the investment on betel vine cultivation.

10. Outcomes

It will provide a sustainable livelihood to small and marginal farmers and the land can be best utilized.

11. Evaluation

The Dy. Director of Horticulture / Asst. Director of Horticulture will monitor and evaluate the scheme regularly. Besides monitoring, evaluation will also be made from the Directorate of Horticulture from time to time.

30/1/18

Signature of the DDH/ADH

Annexure - I

Unit cost of cultivation of Betel Vine — **Project area- 10 cents**

(in Rs.)

Sl.No	Components of Cost	Rs.213/MD		Govt. Subsidy on 1st year	Farmer Share on 1st year in Rs.
		1st year			
	A.LABOUR	**Unit/MD**	**Cost(Rs.)**		
1	Land preparation & spreading of tank mud	15	3195		3195
2	Planting material preparation, planting and watering	6	1278		1278
3	Construction &repair of baroj	25	5325		5325
4	Vine tying with inkad,lowering of vines	20	4260		4260
5	Application of oil cake, fertilizers	3	639		639
6	Irrigation @1.5 hrs per 3 days	25	5325		5325
7	Application of PP chemicals & Hormones	6	1278		1278
8	Plucking of leaves, grading, packing	15	3195		3195
	SUB TOTAL-A	**115**	**24495**		**24495**
	B.INPUTS				
1	Planting materials @ Rs.2.50/ Vine Piece	4400	11000	11000	
2	Rooting hormone	LS	300	300	
3	Mustard oil cake @ Rs.20/kg-1.8kg/gachha/month	180 kg.	3600		3600
4	Cost of fertilizers NPK	50 kg.	1150	1150	
5	Tank mud @ Rs.650/ tractor load(100 cft)	1.5 TL	975		975
6	Irrigation charges @ Rs. SO/hour in 1.5 HP	120 hr	6000	6000	
7	Cost of PP chemicals	LS	1000	1000	
8	Bamboo for chanchana @ Rs. 80 per piece	60 no	4800		4800
9	Bamboo for guda @ 35 each	280 no	9800		9800
10	Split bamboo for vlnchana @ Rs. 25 per piece	140 no	3500	3500	
11	GI wire @ Rs.80/kg	20 kg	1600	1600	
12	Solid bamboo for adia @ Rs.30 per piece	120 no	3600	3600	
13	Split bamboo for potha @ RS.20 per piece	80 nos	1600	250	1350
14	Chhai @ Rs.60 per bundle	20	1200		1200
15	Inkad @ Rs. 1.20 per piece/Rs. 1536 per kahan	5 kahan	7680	7680	
16	Tying materials L.S.	LS	900		900
17	Side walls / thatas @ Rs. 250 per thata / no	12 nos	3000		3000
	SUB TOTAL- B		**61705**	**36080**	**25625**
	Miscellaneous / Contigency1%		800	400	400
	GRAND TOTAL		**87000**	**36480**	**50520**

N.B. **Inter- Componential changes can be made as per requirement.**

20.1.18

Signature of the DDH / ADH

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