

DETAIL PROJECT REPORT ON

Area Expansion on Cashew under RKVY-RAFTAAR



**Stream: RKVY-RAFTAAR special sub-scheme notified
by Govt. of India**

Project Cost: Rs. 3360.00 Lakh

Submitted by:

**DIRECTORATE OF HORTICULTURE,
ODISHA, BHUBANESWAR**

PROJECT SUMMARY

Name of the Project : **Area Expansion on Cashew**

Proposed Work :

Sl. No.	Name of the Programme	2018-19	2019-20	2020-21	2021-22	Total
		Financial (Lakh Rs.)	Financial (Lakh Rs.)	Financial (Lakh Rs.)	Financial (Lakh Rs.)	
1	New planting of cashew	998.04	998.04			1996.08
2	2nd year maintenance		332.68	332.68		665.36
3	3rd year maintenance			332.68	332.68	665.36
4	Contingency Charges	9.98	13.30	6.62	3.30	33.20
	Total	1008.02	1344.02	671.98	335.98	3360.00

Districts proposed : Angul, Boudh, Bargarh, Bhadrak, Balasore, Cuttack, Deogarh, Dhenkanal, Ganjam, Gajapati, Jagatsinghpur, Jajpur, Jharsuguda, Koraput, Khordha, Kandhamal, Kendrapara, Keonjhar, Mayurbhanj, Malkangiri, Nawarangpur, Nayagarh, Puri, Rayagada, Sambalpur & Sundargarh.

Project Cost : **Rs.3360.00 lakh (4 years)**
2018-19 - Rs.1008.02 lakh
2019-20 - Rs.1344.02 lakh
2021-22 - Rs.671.98 lakh (Maintenance)
2022-23 - Rs.335.98 lakh (Maintenance)

Source of fund : RKVY-RAFTAAR

Year of Execution : 2018-19 to 2022-23

Implementing Agency : Directorate of Horticulture, Odisha, Bhubaneswar.

Detailed Project Report

Area Expansion of Cashew under RKVY-RAFTAR

1. Context / Background :

Orissa is the 10th largest state in area and 11th in population in the country, accounting for 5% of the geographical area and 4% of the population of the country. The state has a geographical area of 1.56 lakh sq. km. Administratively the state is divided into 30 districts, 58 subdivisions, 314 CD blocks, 171 tahasils, 35 municipalities and corporations, 6234 gram panchayat and 11349 villages. Out of the total population, Scheduled Caste and Scheduled Tribe constitute 17% and 22% of the total population respectively. 85% of the population lives in rural area. Cultivators and agricultural labourers constitute 65% of the total workforce. The state is located in the eastern region of the country and spreads 450 kms along the Bay of Bengal.

Group of Secretaries (GoS) has recommended for augmenting the area and production of Cashew in the country with special emphasis on backward / tribal districts. In view of this a sub-scheme of RKVY-RAFTAAR for area expansion of Cashew has been approved by Govt. of India.

1.2. Climate : The climate of the state is tropical, characterized by high temperature, high humidity, medium to high rainfall and a mild winter. The normal rainfall is 1482.2 mm distributed over 72 rainy days. South West monsoon contributes about 81-83 % of the annual rainfall in 53-57 days during June-September. The mean annual temperature of the State is 26.89^o C with mean annual maximum of 32.56^o C and mean annual minimum of 21.30^o C.

1.3. Soil : From the physio-graphic point of view, the State consists of four Zones, viz. (i) Northern Plateau (ii) Eastern Ghat zone (iii) Central Table lands, and (iv) Coastal plain zone. However, on the basis of climate, soil, rainfall, topography and crops suitability, the state has been divided into ten Agro- Climatic zones. The soil types differ widely from highly acidic to slightly alkaline and from light sandy to stiff clays. The soils are mainly acidic with the degree of acidity varying widely. Further, about 4 lakhs ha, are exposed to saline inundation, 3.54 lakh ha. to flooding and 0.75 lakh ha. to water logging particularly in the deltaic areas.

1.4. Irrigation : The total irrigation potential created so far from all sources is about 39.31 lakh ha. (Kharif 26.65 lakh ha. & Rabi 12.66 lakh ha.). The gross irrigated cropped area is 27 lakh ha. which is about 68% of the potential created. The source wise irrigation potential created so far (up to 2004-05) is indicated below.

Area in lakh hect

Sl No.	Sources	Kharif	Rabi
1.	Major & Medium	12.38	5.63
2.	Minor (Flow)	4.98	0.71
3.	Minor (Lift)	3.64	2.19
4.	Other sources	5.65	4.13
TOTAL		26.65	12.66

Source: A profile on Agriculture in Orissa, 2006. DA&FP, Orissa.

1.5. Land Availability: The state has a total cultivable area of 61.65 lakh hectares. Out of this, 15.57 lakh hectares are low lands, 19.14 lakh hectares are medium lands and 26.94 lakh hectares are high lands. In Orissa generally Agricultural crops particularly Paddy are grown in the Low & Medium land area in a consolidated manner. So there is vast scope to convert the Up lands and waste lands of the state for Horticultural crops. Hence, there is immense scope for crop diversion particularly to horticultural crops. Thus the proposed area can be safely covered under Cashew plantation in coming years.

1.6. Farming structure: According to the agricultural census there were 40.66 lakh operational farm holdings occupying 50.81 lakh ha with an average land holding of 1.25 ha the marginal and small farmers constitute 85% of the farmers who have access about 50% of the operational area. Thus the remaining 50% is occupied by only 15% of landholders as depicted.

NUMBER AND STRUCTURE OF FARM HOLDINGS

Category of farmers	Holding size (ha)	Nos (Lakh)	Area (Lakh ha)
Marginal	< 1.0	22.95	11.55
Small	1.0-2.0	11.13	15.44
Semi-medium	2.0-4.0	5.00	13.44
Medium	4.0-10.0	1.45	8.18
Large	> 10.0	0.13	2.20
Total	1.25	40.66	50.81

The present cashew cultivation area is 150715 ha. and Production is 90832 MT with productivity of 0.79 MT / ha. The agro climatic condition of the State (except Bolangir, Sonepur, Kalahandi, Nuapada districts) is mostly conducive for cultivation cashew plantation. The cashew plantation programme taken up under MIDH – NHM previously is being taken up under RKVY – RAFTAR in a project mode from 2018-19.

2. Problems to be addressed :

Though the agro-climatic situation mostly favours for cultivation of Cashew but survivability is low due to the following reasons:

- Odisha is frequently faced the natural calamities like flood, cyclone etc.
- Sporadic rainfall
- Extreme heat
- Lack of water availability

3. Aims and Objective :

The main objective of the project is to enhance the area expansion under cashew plantation and enhancement of production and productivity. The endeavour will be to double the production of cashew crops in coming years. In the first place, the focus will be to minimize the import of cashew nut from other states and thereafter the marketable surplus will be planned for export. As it is a remunerative crops it will also helps for enhancement of farmer's income. The endeavor shall be to cover plantations in compact patches and cluster of villages.

4. Strategy :

In achieving the targeted area expansion under cashew, the following strategies will be adopted.

1. Awareness building through extension and information dissemination on crop possibilities and market demand. The State Horticulture extension machinery as well as private sector will have a role to play in this regard.
2. Quality planting material – grafts will be made available for cashew plantation – both through the Govt. nursery as well as through private sector participation only from the accredited nurseries. However, preference will be given to Govt. nurseries.

3. Technical support services will be made available at the doorstep of farmers to ensure adoption of appropriate crop production as per market demand.
4. Special thrust will be laid on Hilly / Tribal areas, including the KBK region, which have tremendous potential for cashew plantation.
5. The programme will be taken up in convergence with MGNREGA wherever feasible. However, subsidy from multiple source for particular component is not allowed.
6. In case of Convergence programme with MGNREGA, the plantation programme will be taken up as per the RAFTAR guideline. The cost of Mulching, Drip Irrigation, fencing etc. will be borne from other source for successful implementation.
7. The State will strive to emerge as a major producer of cashew. Area expansion under Normal Density is proposed.
8. The cost norm proposed is as per the MIDH (NHM) norm. The maintenance will be provided to the beneficiary subject to survival of 75% in 2nd year and 90% in 3rd year. The assistance will be 40% of Rs. 50,000/- as per MIDH norm in the ratio of Rs.12000:4000:4000/ha in three years.
9. The maintenance cost will be provided after due verification by the concerned field staffs.
10. Subsidy is permissible for a minimum area of 0.4 ha and up to maximum 4 ha. for an individual beneficiary in a compact patch of 4 ha. or above.
11. The subsidy will be paid to the beneficiaries through DBT mode. Hortnet team, NIC, Hyderabad may also be requested for inclusion in the hortnet programme.
12. The assistance will be directly deposited in beneficiary account.
13. The farmer will have to deposit the money receipt of the planting material purchased, GPS photograph of plantation and a certificate to the effect that the balance farmer share has to be utilised.
14. Concerned DDH / ADH will make 10% random check and keep the list of eligible beneficiary with no. of plants available, area covered and % of survival. AHO shall make 50% test check, HEW and HO should make 100% check of plantation site. Basing on the survival report the maintenance cost will be paid to the beneficiary.
15. Govt. of India proposed for cashew cultivation will be taken up 7 districts. But looking to the demand and potential the programme will be taken up in 26 districts.
16. The programme and district wise break up is enclosed at **Annexure – I**.

5. Target Beneficiaries :

The beneficiaries will be selected among the interested farmers having minimum land holding of 0.4 ha. and having irrigation facilities. The beneficiaries are selected by the field staff involving the Panchayat Raj Institution. Looking into the demand of the plantation, though it is suggested in 7 districts, the plantation will be taken up in 26 potential districts in the State.

6. Management :

The project will be implemented by Directorate of Horticulture, Odisha with the field functionaries. The planting materials will be procured from the accredited nurseries of State Cashew Development Corporation Ltd.

7. Finance :

Project has been framed for Rs.3360.00 lakh over a period of 4 years. The cost norm is as per the MIDH (NHM). The provision for contingency of 1% is kept as per the RKVY-RAFTAAR norm. The year wise amount required for the purpose is given below:

Phy. In Ha and Fin in Lakh										
Components	2018-19		2019-20		2020-21		2021-22		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Plantation @ Rs. 12000/ha	8317	998.04	8317	998.04					16634	1996.08
2 nd Year Maint. @ Rs. 4000/ha			8317	332.68	8317	332.68			665.36	665.36
3 rd Year Maint. @ Rs. 4000/ha					8317	332.68	8317	332.68	665.36	665.36
Total		998.04		1330.72		665.36		332.68		3326.8
Cont. (1%)										33.20
G. Total										3360.00

(Rupees Thirty Three Crore and sixty lakh) only

As per MIDH norms, 2 years of maintenance has been kept apart from planting year. The plantation will be of Normal Density @ 200 plants / ha. (spacing 7mt x 7 mt)

8. Time Frame :

The project will be completed in 4 years.

9. Cost Benefit Analysis :

Main Crop – Cashew

Yield – 4 years onwards

Yield / Year	4 th year	5 th year	6 th year	7 th year	8 th to 30 th
Yield / Tree (Kg.)	1	2	5	8	10
Yield / Ha. (Kg.)	200	400	1000	1600	2000
Income @ Rs.75/- per kg.	15000	30000	75000	120000	150000

10. Risk Analysis :

- As Odisha is frequently faced natural calamities of flood and cyclone there is a threat of damage.
- Extreme heat in the summer season caused scarcity of water.

11. Outcomes :

It will provide a regular income after 4 years of the plantation. The implantation of the Cashew Development Programme will generate employment opportunity especially in rural areas. It will improve the livelihood security of small and marginal farmers and the workers employed in processing sector. While implementing the area expansion, lot of family and hired labor may generate in the plantations from farmers side for planting and other horticultural practice and a minimum of 85 man days is needed in first year for land preparation, planting etc. Processing sector also provides employment in factories mainly to women entrepreneurs.

12. Evaluation :

The Deputy Director of Horticulture / Assistant Director of Horticulture will monitor the programme and evaluate the scheme. Besides monitoring and evaluation will also be made from the Directorate of Horticulture from time to time.


 30/5/18
Dy. Director of Horticulture, MIDH

Annexure - I

**The district wise break up of Physical Target for Cashew Plantation under
RKVY-RAFTAR**

Sl.No.	Name of the Districts	Proposed Area (ha.)	
		2018-19	2019-20
1	Angul	300	300
2	Balasore	250	250
3	Bargarh	200	200
4	Cuttack	250	250
5	Deogarh	250	250
6	Dhenkanal	400	400
7	Ganjam	400	400
8	Gajapati	400	400
9	Keonjhar	450	450
10	Koraput	450	450
11	Kandhamal	400	400
12	Khordha	400	400
13	Mayurbhanj	500	500
14	Malkangiri	350	350
15	Nayagarh	450	450
16	Nowarangpur	500	500
17	Puri	250	250
18	Rayagada	450	450
19	Sambalpur	350	350
20	Sundargarh	350	350
21	Jagatsinghpur	117	117
22	Jajpur	250	250
23	Jharsuguda	100	100
24	Boudh	250	250
25	Bhadrak	100	100
26	Kendrapada	150	150
	G. Total	8317	8317

N.B. - Inter district change of targets may be allowed as per requirement.