

Coconut Development Board

1. Area Expansion:

The objective of the programme is to extend area under Coconut plantation on private lands, adequate technical and financial support to the farmers to take up coconut cultivation on scientific line in potential areas to reach is a significant achievement in future production potentials. To encourage farmers to take up plantations, assistance is provided @ Rs. 8000/- per ha in 2 equal annual installments. The incentive is meant for maximum 4 ha of coconut plantation of an individual for accommodating 700 plants. The subsidy/ assistance will be released in full by CDB without any matching state share.

Those farmers who will take up minimum 0.06 ha of new area under coconut or 10 seedlings alone, are eligible for subsidy irrespective of any category, they belong to. The subsidy amount for 10 seedlings at spacing of 7.5m X 7.5m will be Rs. 480/- in two equal installments.

For these purposes the farmer has to purchase coconut seedlings from any departmental farms of state Govt./Coconut Development Board/CPCRI/CDB assisted private nursery/ SAUs and take up planting during the plantation season as per recommended practices of packages. The Horticulturists/ AHO can obtain blank application form from CDB state Centers, ODISHA on written request along with tentative list of beneficiaries and no of seedling/ areas concerned.

The Horticulturist/A.H.O. shall verify the plantation and if satisfied, will only recommend to C.D.B. through a prescribed application, duly filled by the beneficiary along with the copy of the land document and proof of source of seedling, CDB officers will verify the plantation of the beneficiaries recommended by the horticulturists/ A.H.O and if satisfied will recommend to the deputy director of CDB. State center, Pitapalli, Odisha for release of subsidy. After due random scrutiny for minimum of 10% area by the deputy director. CDB state center Pitapalli Odisha. The subsidy will be released for the surviving plants in safe of a/c payee cheque in the name of the beneficiary through Horticulturist / AHO by distribution for the beneficiary, preferably in a small meeting of coconut growers in the sub division / village level. The individual acknowledgement for each beneficiary has to be obtained on distribution of subsidy cheque and shall be forwarded to CDB state center Pitapalli Odisha.

Similar procedure will also be followed for release of subsidy for second year maintenance depending on the survival and verification of horticulturist / AHO and CDB officials.

2. Production and Distribution of planting materials

a. Establishment of Regional Coconut Nursery

Finance and assistance with 50:50 shares from CDB and state Govt. shall be provided for raising of coconut seedlings of promising cultivars. The total assistance is Rs. 25 per seedlings share by both CDB and state Govt. on 50:50 basis.

After release of funds by CDB, Kochi to State Govt., the state Govt. will sanction the forms with matching share to director of horticulture and director in turn will allot the funds to the concerned departmental farms and nursery for *raising* of seedlings.

For this purpose 12 months old mature seed nuts will be collected from the mother plants with good pedigree records, existing in the departmental farms or in the farmers field and will be sown in the nursery beds after proper curing. Germination may continue up to four to five months and there after

seedling will continue to grow which will be maintain in the nursery bed and after reaching 12 months from germination with 4-6 leaves , those will be ready for disposal. The minimum recovery of seedling shall be 66.66% of the total nuts sown in the nursery bed. The horticulturist / AHO will make a record of entry in the stock book of the concerned farm/ nursery. Those seedlings so rest shall be utilize for plantation in different Govt. programmes as well as sold to public at Govt. approved rate. The sale proceeds to obtain shall be deposited as revenue receipt into the Govt. account through treasury challan.

b. Production and distribution TxD/DxT Hybrid seedlings or other released varieties

This program implemented on equal matching share (50:50) between CDB and state Govt. the norms of assistant are Rs. 25 for raising of one seedling. This programme is beign taken up now only in departmental coconut farms and nurseries where technical expertise is available. But this can also be taken up in farmers filled where facilities for hybridization and technical expertise are available. The sale rate is decided horticulture department, Odisha.

In the production progamee, the details of male and female parent sources should be clearly recorded. The receipt accrued from the sale of seedling under TxD or DxT scheme shall be intimated to CDB without fail. These receipts are to be shared by the board and state govt. on 50:50 basis.

In the process of DxT seedling production programme , dwarf plants are taken the female parent where in the male flowers are emasculated from the spadix, immediately after its emergence from the plant , leaving the female flowers only and are covered with a cotton cloth. Bag / polythene bag to avoid pollination from any other male parent. Pollens are collected from the tall male parent from the spedix, proceed at 45 degree f and are brushed (touched) against/ over the stigma of the flowers of the female parent manually. Alternatively this pollination process can also be affected through an auto miser and covered with cotton bag/polythene bag immediately. This process has to be repeated for three consecutive days for effective pollination. The cotton/ polythene bags will be removed from the spadix after week of pollination. The fruits on the spadix will grow and will be matured after 12 months which will be harvested from the mother plant and will be treated as DxT hybrid seed nuts. These seed nuts shall be sown in the nursery beds for raising seedlings and full grown seedlings of 10-12 months old will be obtained for planting in the field. For large scale production of DxT hybrid seedling sufficient number of dwarf plants should be available in the State Govt. farms.

Similar in the case for the production of TxD hybrid seedlings where tall plants will be treated as female parent and dwarf plants will be treated as male parent.

3. Integrated Farming in Coconut holdings for productivity improvement:

a) Laying out of demonstration plot (100% central assistance)

Under this scheme, full assistance is made available to the coconut growers @ Rs 35000 per ha in two equal installments for two consecutive years for maintenance for existing coconut orchards through adaptations of integrated management practices in disease effected gardens. The objective of the progamee is to encourage the farmers to adopt the technoly developed for the management of the dieses affected coconut gardens. Demonstration plots will also help in motivating in adoption of result. Oriented production technologies. Fertilizer, pesticides, inter cropping etc. are the critical inputs, for which a miscellaneous expenditure, the financial assistance is provided to the farmer. Each beneficiary is given assistance for a plantation of minimum 0.2 ha or minimum 35 plants to maxim 1 ha or 175 plants only, owned individually incase of scattered plantation. A display board indicating that demonstration plot is financed by the coconut development board. Shall be erected in

front of the plot. Full package of technologies developed for management of coconut gardens shall be followed by the beneficiaries. Record shall be maintained by the farmer as well as department staff indicating. All basic information, base yield, operations taken up, inputs applied, yield data, etc.

This programme preferably should be implemented on cluster approach basis which will augment the income of farmers and increase productivity. This will create a visible impact in the farming community. While selecting the cluster, preference should be given for areas with high incidence of pest and diseases. The compact area to be extended of 25 ha shall be selected for implementation of the scheme where a minimum criterion for 35 plants is not applicable. All small marginal farmers coming under the cluster shall be considered as beneficiary of the programme based on the suitability of that coconut gardens irrespective of size land holding. Before implementation the present status of crop as well as the farmers should be recorded and properly documented. Preference should be given to groups which are promoted or supported by NGO/ Community based organization/ Co-operative societies. Each cluster should have technical resource groups consisting of field functionaries of the department, SAU, CDB officials and scientists from research station for monitoring implementation of different components of the programme. This resource group should visit different areas in the cluster in fixed days in a month. A farmer leader should be identified for each group in the project area and the leader should be trained on all technologies. To be adopted in the project area. The technical programme and the calendar of operations for the year shall be prepared and distributed to the beneficiary's immediately for making arrangements for supply of inputs and timely adoption of the management practices. Supply of quality coconut seedlings is to be insured in the selected clusters for new planting/ under planting.

The horticulturist/ AHO will select the plantation as well as beneficiaries who are having minimum 35 nos. coconut palms in his garden. Selection of plots shall be based on merit and demonstration value of the plot and shall be done by a committee consisting of officials of the Board and Development of Horticulture. After selection, the farmers will be advised for taking up a suitable inter crop like Banana, Papaya, Ginger, Turmeric, Elephant Foot Yam, Colocasia, Cucurbits, Black paper only in the coconut garden based on the inter space available in that garden. Inputs & planning materials should be supplied by the Department of Horticulture. The farmers will also be advised to apply the said required dose of fertilizers; pesticides to the coconut palms out of which the inputs supplied under this scheme will form a part of such inputs. The rest amount for such supplied shall be borne by the beneficiary. The component wise break up assistance from the CDB is furnished below:-

Sl no	Component	Amount(Rs)	
		1st year	2nd year
1	Organic fertilizer @Rs 20 per palm	3500	3500
2	Inorganic fertilizer @Rs 20 per palm	3500	3500
3	Pesticide(monocrotophos/Blitos/Biopesticide/Neemazon/Bordeaux mixture and paste)	5000	5000
4	Intercropping including maintenance	4500	4500
5	Signboard/gape filling/Misc.expenditure etc	1000	1000
	Total	17500	17500

The basic yield data prior to the adoption of improved packages should be recorded from the plots identified for demonstration purpose

b) Organic manure unit:

To promote to use of organic manure like vermin compost, coir pith compost, ordinary compost and FYM in coconut holdings, financial assistance of Rs 20000 per unit (50% of the cost of production) is provided for setting up of a unit.

Farmers having coconut gardens shall be selected for the purpose. The organic manure unit shall be set up either in coconut garden or in the backward of the house hold of the farmer. The specification of 1 unit will be 15m x 1.5m x 0.7m with a production capacity of 10MT per cycle. A bamboo shed with a size of 15m x 1.5m x 1.5m has to be constructed over the pit to protect from rain and also prevent evaporation loss. After completion of the construction work, earthworms shall be released inside the pit having green matters following the recommended procedure. Vermi compost shall be obtained after 2-3 months of inoculation and this cycle of production shall be repeated throughout the year. In a year there can be four cycles producing about 40MT of compost. For composting 1 tonne of waste, about 1 kg of earth worm is required. About 1000 average sized worms will weigh 1kg. The worms can be easily multiplied in a mixture of cow dung and compost totally mulched with decaying straw or grasses. Subsidy will be released to the beneficiary after completion of the unit including earthworm rearing. The compost thus produced shall be applied to the coconut palms which will help in increasing the productivity.

However, smaller units can be promoted and financial assistance shall be reduced accordingly.