

**DIRECTORATE OF AGRICULTURE DEVELOPEMENT AND
FARMERS WELFARE DEPARTMENT, THIRUVANANTHAPURAM
CIRCULAR**

Sub:- Annual Plan 2021-22- Scheme on Coconut Development
-Rehabilitation and rejuvenation of coconut palms in Kerala as
part of coconut mission - coconut council (3rd year activities)-
Coconut seed nut procurement and nursery charges -H/A 2401-00-
103-87 Plan- working instructions issued- Reg

Ref:- 1) G.O.(Rt) 251/2019/Agri dated 08/03/2019
2) G.O.(Rt) 766/2019/Agri dated 09/08/2019
3) Annual plan 2021-2022
4) Order no ADFW/3118/2021-TP2 dated 23/4/2021

Government of Kerala vide order read 1st paper above , accorded administrative sanction for the implementation of the component "Rehabilitation and rejuvenation of coconut palms in Kerala as part of coconut mission - coconut council during the year 2019-20 as part of Green book.

During the financial year 2021-22 there is a budget provision of Rs.7547 lakh for the scheme "Coconut Development " under H/A 2401-00-103-87 Plan.

As a part of the scheme Rs 2591 Lakh is earmarked for the component "Rehabilitation and rejuvenation of coconut palms in Kerala as part of coconut mission - coconut council (3rd year activities)".

As per reference 2nd cited above administrative sanction was obtained for the scheme component "Kera Samrudhi".As per the annual plan 2021-22 it is proposed to converge the activities of Kera Samrudhi project for the production and distribution of quality coconut seedlings with the production of coconut seedlings under coconut mission.

Vide reference 4 above ,continuous sanction has been received for implementing the activity " Coconut seednut procurement and nursery charges for a total cost of Rs.1359.10 Lakh as part of the component coconut mission - coconut council third year activities.

Accordingly working instructions are issued for the implementation of seednut procurement activity and nursery charges with the following components.

1. Coconut Seednut Procurement

1. 1 Cost of seednuts- Rs.1135 lakh

It is proposed to procure 12 lakh seednuts of variety WCT , 1 Lakh dwarf seednuts and 3 Lakh hybrid seednuts during 2021-22 seednut procurement season. The prevailing rate of procurement as per G.O.(Rt) no 1144/2018/Agri dated 19/11/2018 is Rs 70/nut for WCT/ Dwarf seednuts and Rs 75/nut for hybrid seednuts is continued for this year also.

The district wise target is as shown below

Name of District	No.of Dwarf nuts to procure(in lakh)	No.of WCT nuts to procure(in lakh)	No.of Hybridnuts to procure(in lakh)	Amount allotted(Rs. in lakh)
TVM	0.05			3.5
KLM	0.05			3.5
ALP	0.05			3.5
PTA	0.05			3.5
KTM	0.05			3.5
IDKY	0.03			2.1
EKM	0.05			3.5
TSR	0.30	2.0	1.6	281
PKD	0.05			3.5
MLPM	0.18	0.3	0.4	63.6
KKD	0.05	8.7		612.5
KNR	0.05	1.0	1.0	148.5
KSGD	0.04			2.8
TOTAL	1.00	12.0	3.0	1135

The Department will procure quality coconut seednuts from selected farmers fields , Departmental farms etc, utilizing the existing coconut seed procurement system and raise in Departmental farms for the production of quality coconut seedlings.Seed Development Unit,Vadakara(AEU-2,11,15) Seed development unit,Chavakkad (AEU2)and TXD Unit Chalod (AEU2,7,11)are entrusted with the procurement of seednuts and hybridisation activities of respective districts.At Malappuram district the hybridisation activities at Perumpadappa region(AEU6) and SGC munderi (AEU 15)shall be monitored by ADA Perumpadappa and DDA,SGC Munderi respectively.ADA(CD)Thrissur should co ordinate the hybridisation and procurement activities at Thrissur and Perumpadappa region of Malappuram district.

1.2.Transportation Charges-60 Lakh

An amount of Rs. 60 lakhs is set apart for the transportation of seednuts within the district and also inter district which will be carried out through tender process.

The district wise allotment of funds is as follows

Sl. No.	Name of Principal Agricultural Officer	Amt(Rs in lakh)
1	TVM	0.1
2	KLM	0.1
3	ALP	0.1
	PTA	0.1
5	KTM	0.1
6	IDKY	0.1
7	EKM	0.1
8	TSR	15
9	PKD	0.1
10	MLPM	3
11	KKD	37.1
12	KNR	4
13	KSGD	0.1
	TOTAL	60.0

1.3.Operational Expences of Seed developement units and Pollination units Rs.75 lakhs

File No.ADFW/2841/2021-TH2

An amount of **Rs.75.00 lakh** is earmarked for meeting the operational expenses of Seed Development Units (SDU) and Pollination unit.

The seed development units at Chavakkadu in Thrissur district and vadakara in Kozhikkode district and also TXD Pollination unit at Chalode at Kannur distict are involved in coconut seednut procurement programme.An amount of Rs.75 lakhs is earmarked for meeting the operational expences of these units.This amount can be utilised for the purchase of computer,printer ,laptop, office furniture,purchase of refrigerators,electronic scale, microscopes etc. for pollination units, maintenance of pollen storage rooms,paint,coir,banding,numbering,sealing charges,building rent,hiring of vehicles, feul charges ,urgent minor repair of vehicles engaged in seednut transportation etc. and all other operational expences in connection with coconut seednut procurement.

Sl. No	Name of Principal Agricultural Officer	Amt(Rs in lakhs)
1	Thrissur	20
2	Kozhikkod	45
3	Kannur	10
	Total	75

1.4. Tagging of coconut seedling and miscellaneous expenses -Rs.30 lakhs

The Coconut seedlings distributed under coconut Development programme is tagged for traceability. The tags are printed and distributed by Kerala Books and publishing society (KBPS,Kakkanad, Ernakulam)or by any other agencies. An amount of Rs. 23 lakh is set apart for meeting the printing charges of tags.

File No.ADFW/2841/2021-TH2

An amount of Rs. 7 lakh is provided for meeting the miscellaneous expenses in connection with coconut seednut procurement activities. The allotment of funds for these items is as follows.

	District	Amount (in lakh)
1	TVM	0.25
2	KLM	0.25
3	ALP	0.25
4	PTA	0.25
5	KTM	0.25
6	IDKY	0.20
7	EKM	0.25
8	TSR	1.00
9	PKD	0.25
10	MLPM	0.3
11	KKD	2.05
12	KNR	1.5
13	KSGD	0.20
14	HQ	23.0
	Total	30.0

2.Coconut seedling production and nursery management expenses

Rs.59.1 lakhs

An amount of Rs.59.1 lakhs has been earmarked for nursery charges.This amount can be utilized for site clearing, purchase of inputs in connection with coconut seedling production, establishing and maintaining irrigation systems, providing temporary shade / pandal etc. All expenses right from sowing of seednuts in the nursery till distribution can be met from nursery expenses. The amount allotted can be utilized for all departmental farm involved in coconut seedling production

Principal Agricultural Officers should ensure that the maximum coconut seedling production capacity of all the farms in their districts have been attained, by utilizing the funds allotted for nursery charges.

The district wise allocation of funds for nursery charges is as follows.

District wise allotment – Nursery Expenses - Rs.59.1 lakh

Sl. No.	District	Amount (in lakhs)
1	Thiruvananthapuram	6
2	Kollam	5
3	Alappuzha	4
4	Pathanamthitta	4
5	Kottayam	3
6	Idukki	3
7	Ernakulam	4
8	Thrissur	6
9	Palakkad	7
10	Malappuram	6
11	Kozhikkod	5
12	Kannur	5
13	Kasaragod	1.1
	Total	59.1

File No.ADFW/2841/2021-TH2

Total allocation of funds (Rs. In lakhs) H/A 2401-00-103-87 Plan

Sl. No.	Name of PAO	Cost of Seednut	Transportation cost	Operational Expenses	Miscellaneous expenses	Nursery Expenses	Total	AEU
1	Thiruvananthapuram	3.5	0.1		0.25	6.0	9.85	1,8,9,12,14
2	Kollam	3.5	0.1		0.25	5.0	8.85	1,3,9,12,14
3	Alappuzha	3.5	0.1		0.25	4.0	7.85	1,3,11
4	Pathanamthitta	3.5	0.1		0.25	4.0	7.85	4,9,12,14
5	Kottayam	3.5	0.1		0.25	3.0	6.85	4,9,12
6	Idukki	2.1	0.1		0.20	3.0	5.4	12,14,16,17
7	Ernakulam	3.5	0.1		0.25	4.0	7.85	5,9,12,14
8	Thrissur	281	15	20	1.0	6.0	323	2,5,6,10,14,15
9	Palakkad	3.5	0.1		0.25	7.0	10.85	10,13,14,15,18,19,22,23
10	Malappuram	63.6	3.0		0.30	6.0	72.9	6,15
11	Kozhikkod	612.5	37.1	45	2.05	5.0	701.65	2,11,15
12	Kannur	148.5	4.0	10	1.5	5.0	169	2,7,11,13,15
13	Kasaragod	2.8	0.1			1.1	4.2	2,7,11,13,15
	HQ				0.20			
					23		23	
	TOTAL	1135	60.0	75.0	30	59.1	1359.1	

(Rupees One Thousand Three Hundred and Fifty Nine Lakh Ten Thousand Only)

General guidelines

1.The selection of mother palms for seednut procurement should be as per the guidelines given in the package of practices recommendations of Kearala Agricultural University/Manual for coconut nurseries of the Department of Agriculture.

Procurement of WCT Seednuts

Gardens having palms with the record of consistently high yield and containing high proportion of heavy bearers and situated under average conditions without heavy manuring or irrigation and free from pest and diseases are to be selected. The willingness of the garden owners be obtained in the prescribed proforma.

Numbering of Gardens and Mother Palms :

The Agricultural Assistants engaged in the selection of mother palms will first inspect all the trees in a selected garden. The trees should be identified and chalk marked. Then the mother palms so identified in each garden should be given a circular band with yellow paint (5cm width) around the tree at a height of about 1.5 M above the ground level so that the mother palms can be located from any part of the garden. The serial number of the trees and the garden numbers are to be written with red paint. The Tree number and garden number should be marked as shown (Tr.No/ G.No).

Garden number need be written only on trees for those having numbers in multiples of ten. All the last tree number in the garden should have tree number and garden number .For banding and numbering semi skilled laborers can be employed. All the above process have to be monitored by Agricultural Assistants.

The Agricultural Assistants should record all the information related to the selection of mother palm in the mother palm register , and should be attested by him.The Agricultural officer in charge of the region should inspect all the mother palms selected by the Agricultural Assistant and if any undesirable tree selected should be rejected. The rejected tree number will be rounded with red ink in the register.

File No.ADFW/2841/2021-TH2

Only a reasonable percentage of rejection is allowable . The concerned Agricultural Assistant will be held responsible for too much of rejection if noticed.

Marking of the mother palms should be started from 1st November 2021 and completed before 31st December.

Harvesting of Seed Coconuts:

Harvest of seed nuts will start from 1st week of January 2022 and will be completed before 31st May 2022. During this period 2 to 3 rounds of harvest will be taken in such a way that 10 nuts will be obtained in the 1st round ,10 to 15 nuts in the second and third round .Single fully matured bunch should be harvested at a time.The seed nut selected should be above 11 month old. A minimum of 30 days interval should be given between two harvests. Agricultural Assistants should record all the relevant details of harvest in the field notebook and the same should be recorded in the mother palm register maintained in the office on the same day itself.

Selection of Nut :

Care should be taken in the selection of good quality seed nuts from the selected mother palms. Only fully matured, medium sized seed nuts will be selected. Fruit weight should be more than 400 g and spherical or oblong in size and shape. Undersized and oversized nuts should be rejected at the time of inspection of harvest and also while loading the seed nuts in lorries for despatch.The selection of nuts are to be done by engaging skilled masdoor. The selection should be done only in the presence of Agricultural Assistants .

Sealing of Nuts :

As soon as the nuts are selected it should be sealed using sealing hammers on all the segments at the distal end of the nut. The sealing of nuts should be done legibly else will be returned to the procurement centre . In case the sealed nuts are to be rejected , the sealing should be cancelled by sealing cross wise over the seal already marked.

The maximum number of seednuts that can be procured from a selected palm during the entire period of procurement is fixed as a maximum of 25 (Twenty five).

Procurement of Dwarf seednuts.

The dwarf palms should be identified based on the following characteristics

- a. The trunk of dwarf palms will be comparatively thinner than the tall, with narrow base.
- b. The leaf scars on the trunk will also be much closer than that of tall.
- c. The palms will be much shorter in stature.
- d. The leaf arrangements will be much closer with thin and short petioles and narrow and thin leaf blades.
- e. There is always overlapping of male and female phases.
- f. Retention of unfertilised female flowers is generally noticed in dwarf palms.
- g. Dwarf palms can be identified by their typical colour also.

Regarding the procurement of dwarf seednuts, harvesting of seed nuts by farmers will be done under the direct supervision of Agricultural Assistants in Krishi Bhavans and selected nuts should be sealed and stored as per the procedure at one point. As soon as the nuts are selected, the same should be sealed using sealing hammers on the entire segment at the distal end of the nuts. Seed nuts without sealing should not be taken for sowing and the same will be rejected and returned. In case the seed nuts are to be rejected the sealing should be cancelled by sealing cross wise over the seal already marked. The Agricultural Officers/ Agricultural Field Officers should monitor the programme at Panchayat/Municipality/Corporation level and inform the progress to the Assistant Director of Agriculture concerned. After the harvest of the day is over, the Agricultural Assistants should physically verify the total number of nuts recorded in the field note book. This must tally in all the cases. The Agricultural Assistants should post their entries in the mother palm register maintained in the office on the same day itself. Under no circumstances this should be postponed.

Since the dwarf seed nuts need to be sown within 15- 20 days, make sure that the dwarf seed nuts procured reach the Coconut Nurseries/Farms where the nuts are to be sown within this time limit. The staff at Krishi Bhavan/ Assistant Director of Agriculture/ Farm Officers/ Deputy Director of Agriculture should be vigilant in

this aspect at appropriate level. Transportation cost will also be provided for seed procurement based on store purchase rules.

Procurement of Hybrid seednuts

Utmost care should be taken for the selection of parent palms for hybridization. In every garden the palms selected should be serially numbered and physically watched to spot out the inflorescence nearing opening. The date of opening should be carefully watched and recorded. Emasculation should be done in time and immediately after emasculation the inflorescence is enclosed in a close meshed clothbag to prevent contamination with other pollen. The pollen collected from the male parent should be dusted on the stigmatic end of female flower during the receptive stage of female flower which is judged from the secretion of nectar and splitting of stigmatic end. Each female flower has to be pollinated 3 days consecutively and the process has to be repeated till the last flower at the base of the inflorescence become receptive. The cloth bag can be removed after a week of pollination of last flower. The bunch should be immediately labeled noting the parent material used for crossing. The hybrid nuts developed will be ready for harvest after 11 months from the date of pollination.

December to May is the ideal time for carrying out pollination work.

The DXT nuts collected should be transported to the nurseries without any time gap as it will affect the germination due to drying up of water.

The details of pollination and hybridization works undertaken should be properly entered in registers maintained at field offices. Maximum number of dwarf mother palms of the locality/farms should be identified for carrying out hybridization works for the production of hybrids.

6. Proper registers and records must be kept at the Krishi Bhavans/procurement centres in connection with the selection of mother palms, procurement of seed nuts and payment of seed nut cost to farmers.

Supervision

All the palms selected for Dwarf seednut procurement under the programme should be periodically inspected by both Agricultural Officers and Agricultural Assistants. The Assistant Director of Agriculture at block level should closely watch the implementation of the programme and should ensure that a minimum of 10% of the plots are inspected by them. In the case of WCT and Hybrid seednut procurement SAO,Seed Development unit and Pollination unit should visit 20% of palms selected by Agricultural Assistants/Agricultural officers.Deputy Director of Agriculture (YP) in charge of the scheme at District level should inspect 5% of the plots. The Principal Agricultural Officers of the districts should visit at least 1% of the gardens/plots. It should be ensured that the palms are selected according to the guidelines specified. In the case of erring officers, appropriate actions should be initiated/ recommended to higher officials at state level.

Additional Director of Agriculture (Farms) is monitoring the scheme at state level. The Principal Agricultural Officers should submit weekly report of the programme to the Additional Director of Agriculture (Farms) in his name cover/ agrifarmsth@gmail.com. Any difficulties or bottle necks in the implementation of the programme should be brought to the notice of the Director of Agriculture or Additional Director of Agriculture (Farms) or Joint Director of Agriculture (Farms) and get it cleared then and there.

The expenditure towards the implementation of the scheme will be met from **Rs. 1359.1 lakh** earmarked for the component "coconut seednut procurement and funds for departmental farms for coconut seedling production and nursery management expenses" under the Head of account: **2401-00-103-87 Plan** from current year's budget provision.


Joint Director of Agriculture (Farms)
Directorate of Agriculture Development
& Farmer's Welfare Department
Vikas Bhavan, TVPM - 33

Sd/-

DR. K.VASUKI IAS
DIRECTOR

File No.ADFW/2841/2021-TH2

To

1. All Principal Agricultural Officers

Copy to

1.All Additional Directors of Agriculture

2.All Joint Directors of Agriculture

3.Planning section/TA to Director of Agriculture

4.DDA(IT) for publishing in website

5.SW section for updation in plan space