

Directorate of Agriculture Development and Farmers' Welfare

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No:ADFW/2608/2021-TH2

Date:27/12/2021

Circular

Sub:- Department of Agriculture Development and Farmers' Welfare - Centrally Sponsored Scheme – Sub- mission on Agroforestry (SMAF) – Working Instructions issued – reg.

Ref:- 1)Letter F.No. 1-19/2020-NRM-SMAF dated: 02.06.2021 of Department of Agriculture and Farmers Welfare, Government of India.

2)Letter F.No. 1-19/2020-NRM-SMAF(FTS-86745) dated: 28.06.2021 of Department of Agriculture and Farmers Welfare, Government of India.

3) GO(Rt) No. 813/2021/AGRI dated: 12.10.2021.

4) GO(Rt) No. 986/2021/AGRI dated: 06.12.2021.

As per the letter read (1) above, Government of India had approved the Annual Action Plan submitted by the state under the scheme 'Sub-mission on Agro Forestry (SMAF) for an amount of Rs. 100 lakhs for the year 2021-22. This CSS is coming under the ambit of National Mission for Sustainable Agriculture (NMSA) with the objective to expand tree plantation in integrated manner with crops and livestock to improve employment , income and lively hood of rural households. to ensure availability of quality planting materials and to popularise agroforestry models suited to different agro ecological regions.

Vide reference (2) Government of India had released first instalment of funds for the implementation of SMAF in the state. The details of Central Share released and corresponding State Share is as follows.

Sl. No	Category	Central Share (Rs. In lakhs)	State Share (Rs. In lakhs)	Total (Rs. In lakhs)
1	General	31.92	21.28	53.2
2	SCP Central Share	6.72	4.48	11.2
3	TSP Central Share	3.32	2.24	5.6
	Total	42.0	28.0	70.0

As per the Government Order cited as reference (3) Government of Kerala

have accorded Administrative Sanction for an amount of Rs. 100 lakhs for the implementation of the scheme 'Sub-mission on Agro forestry in 60:40 sharing pattern of funds between the Central and State.

Government have accorded sanction to release the first instalment funds under SMAF, an amount of Rs. 42 lakhs as Central Share (60%) with a matching state share of Rs. 28 lakhs(40%) totalling Rs. 70 lakh from the corresponding heads of account detailed in the table below through the Expenditure and Advance Transfer (EAT) module of the revised PFMS module.

Sl. No	Category	Head of Account	Amount (Rs.in lakhs)
1	General-Central Share	2401-00-104-68-01	31.92
2	General-State Share	2401-00-104-68-02	21.28
3	SCP-Central Share	2401-00-789-73-01	6.72
4	SCP-State Share	2401-00-789-73-02	4.48
5	TSP-Central Share	2401-00-796-72-01	3.36
6	TSP-State Share	2401-00-796-72-02	2.24
TOTAL			70.00

These amount will be transferred to the implementing agencies through PFMS

The main components under the scheme are the following.

1.Nursery Development for Quality Planting Material Production(NDQPM)in State Govt. Farms-100% funding

NDQPM is to be implemented in Departmental farms.The sub mission will give more emphasis on production of quality planting materials to meet the requirement of farming community. Assistance shall be given

- For establishing big nurseries -2 nos.
- For establishing Hi-tech nurseries-1 no.

The details of various types of nurseries, their specific requirements and pattern of assistance is given in Annexure I(A), I(B), and I(C). The endemic and other species including trees of medicinal value suitable to the Agro Ecological zones of Kerala may only be promoted under the programme. Any species which are exotic and not suitable to local agro ecology will not be supported under the programme.

The following farms are selected for NDQPM during 2021-22

Sl.No	District	Type of nursery	Name of farm	Minimum production Capacity	Financial Target(Rs . In lakh)	Financial Target(Rs . In lakh)	Total
					General	TSP	
1	Pathanamthitta	Big Nursery	Sugarcane Seed Farm, Pandalam	50000 plants/year	13.2	2.8	16
2	Thrissur	High Tech Nursery	Model Horticultural Farm, Kannara	100000 plants/year	40.0	0	40
Total				150000	53.2	2.8	56

2. Assistance for peripheral and boundary plantations (PBP) to farmers (SCP / TSP Component)

Tree species will be grown around the periphery of the farmer's field. To make potential use of the area occupied by the bunds around the periphery of the farmers fields, tree species can be grown as peripheral/boundary plantations to add more income to the farmers' basket. This will not only make effective use of the precious land for livelihood support but also for generating additional income opportunities to the farmers. It will also help in stabilizing the bunds and reducing soil erosion. Eligible components, cost norms and pattern of assistance for PBP is given as Annexure II

The planting materials produced in big and high tech nurseries shall be utilized for the establishment of peripheral and boundary plantations in farmers

fields. During 2021-22, 1 lakh no. of planting materials have to be planted in farmer's field as PBP. PBP have to be established with provision for maintenance for a period of 4 years including gap filling. Assistance will be provided to farmers @ 50% of total cost per plantation and the cost will be segregated for a period of four years in the proportion of 40:20:20:20. The unit cost per plant comes to Rs.70/- and the eligible 50% assistance for 4 years is Rs 35/plant with first year assistance of Rs 14/plant and Rs.7/plant in the subsequent years.

For the effective implementation of the programme component, nearby villages shall be selected to form clusters and maximum number of of saplings shall be planted based on the availability of land. The coverage of plantation would be assessed in terms of running meter with number of plants.

Soil Health Cards is to be made a pre-requisite for farmers in getting the benefit of the programme. The plantation measures would be planned based on the soil health parameters and also this will help in monitoring soil carbon improvement from time to time.

At least 50% of the beneficiaries shall be small, marginal farmers of which at least 30% are women beneficiaries/ farmers. The amount earmarked for the establishment of peripheral and boundary plantations in farmers fields is from Special Component Plan (SCP) and Tribal Sub Plan (TSP) . Hence SC/ST beneficiaries in the district should be selected for the implementation of the component.

The physical targets allotted for establishing peripheral/boundary plantations is as follows.

Sl.No	Name of District	Target(no. of plants)	Financial Target(Rs. In lakh)SCP fund	Financial Target(Rs. In lakh)TSP fund	Total(Rs. In lakh)
1	Ernakulam	25000	2.8	0.7	3.5
2	Thrissur	25000	2.8	0.7	3.5
3	Malappuram	25000	2.8	0.7	3.5

4	Palakkad	25000	2.8	0.7	3.5
Total		100000	11.2	2.8	14.0

Total allocation of Fund

Sl No.	District	Component	Allotted Amount (Rs. in lakh)						Total
			General		SCP		TSP		
			Central Share	State Share	Central Share	State Share	Central Share	State Share	
1	Pathanamthitta	Big Nursery - 1	7.92	5.28	-	-	1.68	1.12	16
2	Ernakulam	PBP	-	-	1.68	1.12	0.42	0.28	3.5
3	Thrissur	High Tech Nursery - 1	24	16	-	-	-	-	40
		PBP	-	-	1.68	1.12	0.42	0.28	3.5
4	Malappuram	PBP	-	-	1.68	1.12	0.42	0.28	3.5
5	Palakkad	PBP	-	-	1.68	1.12	0.42	0.28	3.5
Total			31.92	21.28	6.72	4.48	3.36	2.24	70

The Deputy Director of Agriculture(YP) of the district will be the nodal officer for the implementation of SMAF scheme in the district and they should periodically monitor and evaluate the progress of scheme implementation. At state level, Joint Director of Agriculture(Farms) and the Additional Director of Agriculture (Farms) will co ordinate the programme.

Monitoring & Evaluation:

Monitoring & Evaluation will be the vital and integral part of the sub-mission to assess the implementation and progress of the programme in accordance with the set norms and guidelines. Apart from coverage of area under plantation, the performance of the scheme will be monitored based on a few

quantifiable success indicators viz., Number of plants in area/ periphery, Soil carbon sequestration, soil organic matter, improvement in livelihood, productivity enhancement of crop and cropping systems etc. Mechanism for monitoring information system (MIS) and periodical assessment using GIS technologies would be adopted for ensuring effective implementation of the programme. The digital location of the cluster with the attributes of interventions like plantation area, number of plants, name of beneficiaries, details of nurseries, project cost etc need to be uploaded in the Bhuvan Platform.

Districts are required to furnish quarterly and annual progress report as per formats given at Annexure-VI.

Sd/-

SUBHASH T.V. IAS
DIRECTOR

To:

Principal Agricultural Officers

Pathanamthitta, Ernakulam, Thrissur, Malappuram, Palakkad

Copy to:

Planning Section

SW Section

DD, IT Cell

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V. R. SONYA

Additional Director of Agriculture (Farms, VO & Piggas)
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Annexure-I (A)

Cost Norms and for Nursery Development for Production of Quality Planting Material (NDQPM)

Sl. No	Nursery area(ha)	Indicative field of expenditure	indicative Unit cost (Lakh Rs)
1.	Small Nursery (0.5ha)**	Land preparation etc., nursery equipments, seed/mother scion production/root stock production etc., infrastructure and other essential operational costs etc. as per norms as existed in case of MIDH	10.00
2.	Big Nursery (1.0 ha)		16.00
3.	Hi-tech** Nursery		40.00

** Cost norms as already approved under National Bamboo Mission (NBM)

Annexure-I(B)

Mandatory Requirement for availing support for Nursery Development

S.No.	Type of Nursery	Basic Requirement	Infrastructure Requirements
1.	Small Nursery (0.5 ha)	<p>Selection of Site Nurseries will be established only to produce planting material which are suitable for that agroecology. The nurseries should be well connected to road / rail networks to facilitate transport. Sites exposed to strong winds and with danger of flooding or landslides should be avoided.</p> <p>Soil Conditions Well drained, light to medium textured fertile soils.</p> <p>Source of Irrigation Availability of good quality assured irrigation source is an essential pre-requisite for setting up of a commercial nursery production unit. For increased water use efficiency, Drip irrigation system, rose cans or micro sprinklers should be used.</p> <p>Layout of Nursery Generally a good nursery must consist of water tank/pond, water pump/pump house, seed and fertilizer store room, implement shed, germination/main bed area; potting/container filling area, seedling raising area, worker mess/hall, office room, propagation structures, compost</p>	<ul style="list-style-type: none"> • Fencing • Water Source (Irrigation source/ Ponds/ Tanks/ Well/ Tube well) • Energy Source (electricity or Genset) • Water lifting devices • Water distribution system • Farm machineries required for land preparation, bed preparation and other operations • Other equipments & tools for raising seedlings • Composting Unit • Watch & ward
2.	Big Nursery (1.0 ha)	<p>Source of Irrigation Availability of good quality assured irrigation source is an essential pre-requisite for setting up of a commercial nursery production unit. For increased water use efficiency, Drip irrigation system, rose cans or micro sprinklers should be used.</p> <p>Layout of Nursery Generally a good nursery must consist of water tank/pond, water pump/pump house, seed and fertilizer store room, implement shed, germination/main bed area; potting/container filling area, seedling raising area, worker mess/hall, office room, propagation structures, compost</p>	<p>As above.</p> <p>Number of equipments may increase or decrease based on size of nursery</p>
3.	Ili-tech Nursery	<p>Layout of Nursery Generally a good nursery must consist of water tank/pond, water pump/pump house, seed and fertilizer store room, implement shed, germination/main bed area; potting/container filling area, seedling raising area, worker mess/hall, office room, propagation structures, compost</p>	<p>Office An office building, best located near</p>

			<p>High-tech green house</p> <p>Green-house with automated misting equipments and temperature control is desirable but low cost polytunnels can also be an alternative</p> <p>Irrigation systems</p> <p>Modern mechanized irrigation systems with sprinklers, misting units, high pressure pumps and filtering equipments for fertigation are essential components to be installed and used in nurseries</p> <p>Pump house with overhead water storage tanks</p> <p>The tanks should have enough storage capacity to meet at least 2 days irrigation requirements</p> <p>Nursery records¹¹</p>
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Note:

- The Small nursery will have a minimum capacity to produce 25,000 plants per year.
- The Big nursery will have a minimum capacity to produce 50,000 plants per year.
- The High-tech Nurseries will have a minimum capacity to produce 100,000 propagules per year
- Assessment of nursery for its quality/standard will be done on the basis of its location, quality of mother plants, techniques for nursery development, infrastructural facilities created, irrigation facilities with water use efficiency, bio-security & disease free conditions and overall management practices. Assessment of nursery for accreditation / certification will be undertaken either through any of the available institutional certification mechanism of Central / State Government or through suitable institutional mechanism to be devised specifically for this purpose in future.

Annexure-II

Cost Norms and Pattern of Assistance for Peripheral and Boundary Plantation (PBP)

Sl. No.	Type of Interventions	Indicative Unit cost per plant (Rs.)
1	Pre-Plant activities/Land clearing/maintenance etc.	10.00
2	Digging /Planting etc	6.00
3	single unit Planting material etc	15.00
4	Transportation charges	1.00
5	Critical inputs viz., FYM, Fert., seed treatment, PP chemicals etc.	10.00
6	Planting cost	2.00
7	Fencing	10.00
9	Maintenance (weeding+ watering etc.)	16.00
12	Total	70.00

Note:

(i) The activity wise cost indicated above are tentative and states have the flexibility to formulate their own estimate based on local requirements subject to a maximum of Rs. 70/- per plant

(ii) The assistance will be given in the year wise proportion of 40:20:20:20 for four years.

Annexure-VII

Region / State - wise priority list of Medicinal Plants species for Plantation

(As suggested by AYUSH)

Sr. No.	Regions/ States/ UTs	Trees	Climbers / Shrubs
1.	East India: Bihar, Orissa, Jharkhand, West Bengal and Andaman & Nicobar Islands,	<i>Aegle marmelos</i> <i>Albizzialesbeck</i> <i>Azadirachtaindica</i> <i>Caesalpiniasappan</i> <i>Emblica officinalis</i> <i>Eugenia jambolana</i> <i>Garcinia indica</i> <i>Gmelinaarborea</i> <i>Holarrhenaantidysenterica</i> <i>Litsea glutinosa</i> <i>Moringaoleifera</i> <i>Santalum album</i> <i>Saracaasoca</i> <i>Tamarindusindica</i> <i>Terminalia arjuna</i> <i>Terminalia bellirica</i> <i>Terminalia chebula</i>	<i>Adhatodavasica</i> <i>Asparagus racemosus</i> <i>Desmodingangeticum</i> <i>Embeliaribes</i> <i>Gynnemasyloestre</i> <i>Mucunapruriens</i> <i>Piper longum</i> <i>Tinosporacordifolia</i>
	North India: Jammu and Kashmir, Himachal Pradesh, Punjab, Uttarakhand, Uttar Pradesh, Haryana, Chandigarh and Delhi	<i>Aegle marmelos</i> <i>Albizzialesbeck</i> <i>Azadirachtaindica</i> <i>Berberisaristata</i> <i>Caesalpiniasappan</i> <i>Cinnamomumtamala</i> <i>Cinnamomumverum</i> <i>Emblica officinalis</i> <i>Eugenia jambolana</i> <i>Ginkgo biloba</i>	<i>Adhatodavasica</i> <i>Asparagus racemosus</i> <i>Embeliaribes</i> <i>Gynnemasyloestre</i> <i>Mucunapruriens</i> <i>Tinosporacordifolia</i>

Department of Agriculture, Cooperation & Farmers Welfare

OPERATIONAL GUIDELINES: SUB-MISSION ON AGROFORESTRY (SMAF) UNDER NMSA

		<p><i>Gmelinaarborea</i> <i>Hippophaerhamnoides</i> <i>Holarrhenaantidysenterica</i> <i>Litseaglutinosa</i> <i>Santalum album</i> <i>Saracaasoca</i> <i>Stereospermumsuveolens</i> <i>Tamarindusindica</i> <i>Taxuswallichiana</i> <i>Terminalia arjuna</i> <i>Terminalia bellirica</i> <i>Zenthoxylumalatum</i></p>	
	<p>Central India: Chhattisgarh, Madhya Pradesh</p>	<p><i>Aegle marmelos</i> <i>Albizzialebeck</i> <i>Azadirachtaindica</i> <i>Caesalpiniasappan</i> <i>Commiphorawightii</i> <i>Emblica officinalis</i> <i>Garcinia indica</i> <i>Holarrhenaantidysenterica</i> <i>Litseaglutinosa</i> MORINDACITRIFOLIA <i>Moringaoleifera</i> <i>Oroxylumindicum</i> <i>Pterocarpus marsupium</i> <i>Santalum album</i> <i>Saracaasoca</i> <i>Stereospermumsuaveolens</i> <i>Terminalia arjuna</i> <i>Terminalia bellirica</i></p>	<p><i>Asparagus racemosus</i> <i>Embeliaribes</i> <i>Gymnemasyloestre</i> <i>Mucunaprurita</i> <i>Piper longum</i> <i>Tinosporacordifolia</i></p>
	<p>South India: Andhra Pradesh,</p>	<p><i>Aegle marmelos</i> <i>Albizzialebeck</i></p>	<p><i>Adhatodavastica</i> <i>Desmodiumgangeticum</i></p>

OPERATIONAL GUIDELINES: SUB-MISSION ON AGROFORESTRY (SMAF) UNDER NMSA

	<p>Karnataka, Kerala, Telangana Tamil Nadu, Lakshadweep and Puducherry</p>	<p><i>Azadirachta indica</i> <i>Boswelliaserrata</i> <i>Caesalpiniasappan</i> <i>Cinnamomumzeylanicum</i> <i>Commiphorawightii</i> <i>Emblica officinalis</i> <i>Eugenia jambolana</i> <i>Garcininaindica</i> <i>Gmelinaarborea</i> <i>Litsea glutinosa</i> MORINDACITRIFOLIA <i>Pterocarpus marsupium</i> <i>Pterocarpussantalinus</i> <i>Santalum album</i> <i>Saracaasoca</i> <i>Semicarpusanacardium</i> <i>Stereospermumcolais</i> <i>Tamarindusindica</i> <i>Terminalia arjuna</i> <i>Terminalia bellirica</i> <i>Terminalia chebula</i> <i>Vateriaindica</i></p>	<p><i>Gymnemasylvestre</i> <i>Mucunapruriens</i> <i>Piper longum</i> <i>Plumbagozeylanica</i></p>
	<p>Western India: Rajasthan , Gujarat, Goa, Maharashtra and Daman & Diu</p>	<p><i>Aegle marmelos</i> <i>Albizziallebeck</i> <i>Azadirachta indica</i> <i>Caesalpiniasappan</i> <i>Cinnamomumzeylanicum</i> <i>Commiphorawightii</i> <i>Emblica officinalis</i> <i>Eugenia jambolana</i> <i>Garcininaindica</i> <i>Gmelinaarborea</i> <i>Holarrhenaantidysenterica</i></p>	<p><i>Adhatodavastica</i> <i>Asparagus racemosus</i> <i>Celastruspaniculatus</i> <i>Desmodiumgangeticum</i> <i>Embeliaribes</i> <i>Gymnemasylvestre</i> <i>Leptadenia reticulata</i> <i>Mucunapruriens</i> <i>Piper longum</i> <i>Plumbagozeylanica</i> <i>Tinosporacordifolia</i></p>