

Directorate of Agricultural
Development and Farmers Welfare
Department, Vikas Bhavan
Dated: 05 / 07/2021
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CIRCULAR

Sub:- Annual Plan 2021-22 – Scheme on “**Revitalization of Agriculture sector in Wayanad** ” – working instructions issued – reg.

Ref :- 1.GO.(Rt)No.1070/2017/AD dated 30.10.2017. of Agriculture(Agri) Department.

2.Order No ADFW/3418/2021-TP(2) dtd12950/2019 dated

As per the reference cited first, administrative sanction was accorded for the scheme Wayanad Package 2017-18 and the scheme is continuing during the financial year 2021-22 with a budget allocation of **Rs.1335lakhs** under head of account **2401-00-800-27 Plan**. Administrative sanction was accorded for continuing components of the scheme for an amount of Rs 625 lakhs vide reference 2nd cited

with the following components as detailed below

- 1)Integrated Pepper Development (Rs 500 Lakhs)
- 2)Area expansion of nutmeg,ginger and turmeric(125Lakhs)

1)Integrated Pepper Development (Rs500Lakhs)

'Integrated Pepper Development' is a major component under the scheme“**Revitalization of Agriculture sector in Wayanad**” and during 2021-22 administrative sanction is received for an amount of **Rs 500lakhs**.

The project aims at restructuring pepper development activities incorporating new technologies for augmenting production and productivity in Wayanad district.

Components

The scheme is proposed for implementation during 2021-22 with the following components.

- 1.Area Expansion of Pepper
2. Whole farm Development
3. Establishment of Decentralized Pepper nurseries
4. Support to secondary and micro nutrients and bio pesticides for root health
5. Establishing Farmer Field Schools (FFS)
6. Front line Demonstration (FLD) of new technologies
- 7..Strengthening of Pepper Development samithies
- 8.Operational expenses

1) Area expansion of pepper (60.00lakhs)

Establishment of new pepper garden with high yielding varieties of pepper can be undertaken for improving the productivity of pepper. The estimated cost for the establishment of one ha of pepper garden is ₹ 40000/- . An amount of Rs 20000/- (limited to 50% of the total cost) is given as assistance.

The planting materials required for new planting should be preferably from the Departmental farms, Kerala Agricultural University, Central Government Institutions and other approved nurseries. The quality of planting materials should be ensured if made available through approved nurseries or progressive farmers.

Estimated cost for establishing new garden in one hectare

Sl No	Item	Cost in Rs.
1	Land preparation and labour charge for planting	8000.00
2	Cost of planting materials and standards	20000.00
3	Organic manures	10000.00
4	Others including plant protection	2000.00
	TOTAL	40000.00

During the year 2021-22 a total area of 300ha is to be brought under cultivation with improved varieties of pepper and an amount of **Rs. 60.00 lakhs** is set apart for this component.

3) Whole farm Development (Rs.360.00 lakhs)

Financial assistance will be provided for adoption of good management practices in 1500 Ha of pepper to rejuvenate pepper plantations through proper crop health management giving emphasis to organic methods.

Objectives

- To provide financial assistance for adoption of good management practices in 1500 Ha. of pepper.
- To rejuvenate pepper plantations through proper crop health management giving emphasis to organic methods.
- To increase production and productivity of pepper.
- To provide good financial returns to farmer.

The activities will cover all the 23 grama panchayats and 3 municipalities in Wayanad district.

Financial assistance will be provided to following activities in pepper gardens:

- (1) **Terracing** as per contour in uneven lands
- (2) **Digging around the standards** twice a year before the onset of the 2 monsoons
- (3) **Pruning and training standards** in March-April every year.
- (4) **Under planting** on steady yield reduction or after 20 years of planting with removal of old and senile vines 3-5 years after under planting

(5) **Organic manure application** around basin @ 10kg/year with the onset of SW monsoon. application of lime 50g/vine during April-May and NPK application @50:50:150 NPK g/vine/year applied in 2 doses as a general recommendation.

(6) **Plant protection including phytosanitation** - Removal and burning of infested vines, facilitating drainage in water stagnation areas, pruning of runner shoots or their tying back to the main trunk are some of the practices that can be adopted. Integrated Pest Management (IPM) is the most suitable way where chemical pest control methods are advocated only as a last resort and that too in a very judicious manner. Promotion of Integrated Pest Disease Management involves a combination of various measures to ensure effective pest disease management without disturbing the eco system, reducing environment pollution and eliminating direct and indirect health hazards to human beings. The methods employed are observation, prevention and intervention. Identification, surveillance and forecasting of pests disease can be done through observation whereas scientific cultural operations like use of tolerant varieties, water management etc. can be used as preventive measures. Pest management can be done through intervention method like mechanical control, biological control and need based chemical control.

Against fungal diseases, drenching of the soil with 0.20 % Copper oxychloride 5-10 l/vine or 1% Bordeaux mixture twice a year is the general recommendation. Application of Biocontrol agents like Trichoderma and Pseudomonas around the basin of vines is also recommended. Kerala Agricultural University and Indian Institute of Spices Research has recommended IPM strategies for pepper which can be applied in the field to get desired results.

(7) **Replanting/rejuvenation:** Under planting on yield reduction observed regularly or after 20 years of planting can be done with replacement of standards wherever necessary. Removal of old and senile vines can be done 3-5 years after under planting.

As per cost norms and pattern of assistance under MIDH during 12th plan for NHM & HMNEM sub schemes, for rejuvenation of existing senile plantations, the total cost is estimated as **Rs.40,000/- per ha.** Assistance @**Rs.20,000 per Ha** limited to 50% of the total cost will be provided.

Following this pattern the total cost of management of existing pepper garden is estimated as follows:

Sl. No.	Components	Estimated cost (Rs. per ha)
1	Hired human labour, mainly for manure and fertilizer application, plant protection and harvesting	11000
2	Planting materials & standards	1000
3	Organic manures and chemical fertilizers	16000
4	Plant protection	10000
5	Other expenses	2000
	Total	40000

Financial assistance sanctioned is @ 50% of the above limited to Rs.20,000/- per Ha. An area of 1500 Ha. is to be covered with total budget outlay of Rs.360.00 lakhs.

3) Establishment of Decentralised Pepper nurseries (1.20 lakhs)

One of the major problems faced by the pepper farmers is the non availability of good quality rooted pepper cuttings. Improved varieties play a significant role in augmenting the yields in any production programme. Effect of inputs applied and good practices followed can be fully realized only with the adoption of improved varieties. To achieve this, good quality planting material has to be made available to pepper farmers. Small scale nurseries with production capacity of 0.5 lakh cuttings per nursery per year can be operated through SHGs, Women Groups, Unemployed youths etc. with technical support from Department of Agriculture, Kerala Agricultural University and Research institutions, Central Government institutions, KVKs etc.

During 2020-21, a total of **4 Decentralized nurseries** will be established with an assistance of **Rs 30000 per nursery**. An amount of **Rs. 1.2 lakhs** is set apart for this purpose

4) Support to secondary and micro nutrients and biopesticides for root health including labour charges. (Rs. 54.6 lakhs)

Secondary and micronutrients play an important role in crop yield and quality particularly if the soil is deficient in Calcium, Magnesium, Sulphur, Zinc, iron etc. Application of biopesticides like Trichoderma and VAM increases root health of plant.

An assistance of **Rs.2000/ha** is given towards expenses involved like cost of nutrients and an area of **1500Ha** will be covered during 2021-22 for which **Rs. 54.6 lakhs** is set apart. Micronutrients will be supplied based on soil test data and this fund can be utilized for meeting expenses in connection with soil sample collection also.

5. Establishing Farmers Field School (FFS) (Rs4.20 lakhs)

Farmers Field Schools is a successful tool of Agricultural Extension in educating farmers on various aspects of cultivation. FFS started under 'ATMA' has been very effective in the transfer of agricultural technology. FFS shall be conducted for a period of 14 working days in a model farm of a selected farmer following integrated farming practices with emphasis on organic farming methods. 25 farmers selected from various grama panchayats of the block shall be brought to the farm to attend classes on various farming activities conducted by experts in the field.

Critical stages of crop growth and activities to be undertaken at each stage, which are listed below, can be explained in detail in the FFS and also demonstrated to the farmers attending the FFS.

Critical stages of crop growth, viz.

- **For new planting**

- **Planting** – season, quality of planting material, method of planting, mulching, shade regulation etc.
- Basal application of manures and fertilizers

- Prophylactic spraying with Bordeaux mixture 1%, Trichoderma application in plant base
- Irrigation during summer months

- **For Adult pepper Vines**

- With the onset of rains, removal of runner shoots, manure and fertilizer application at critical stages of nutrient requirement
- As preventive measures, cleaning the garden, removal of dead vines of previous years, pruning of standards for sunlight and aeration, removal of mulch to improve soil aeration, application of Trichoderma/COC at base, spraying Bordeaux mixture etc.
- Irrigation at critical stages like spike emergence and fruit set
- In General - important local and HYV in pepper with their special characteristics, availability, research findings in pepper cultivation that can be adopted by farmers for cultivation, harvesting and processing etc.

Expenses for conducting the school can be met from the provision of Rs.70000/- per FFS which is earmarked for the purpose @ Rs.200/- per farmer per day (for 25 farmers for 14 days) including refreshment charges, honorarium to experts, TA to farmers and miscellaneous expenses. There are 4 blocks in Wayanad district and 6 Nos of FFS has to be conducted for which Rs4.20Lakhs is ear marked for F.Y2021-22

6) Frontline Demonstration (FLD) of new technologies (Rs4.00 lakhs)

Demonstration of technologies is the best way of making farmers convinced of their benefits. FLD gives an opportunity for farmers to visit and learn on his own, the merits of innovations demonstrated. New varieties, new agronomic and plant protection practices etc. can be demonstrated in FLDs of plot size 0.20 Ha. FLDs (40No.s) will be established with assistance @Rs.10000/ Plot for which the total amount of Rs.4.00 lakhs is earmarked.

Frontline demonstrations shall be done in farms where FFS are organized, with the involvement of research institutions.

7) Strengthening Pepper Development samithies (Rs.14 lakhs)

There are 200 Pepper Development samithies working at the grass root level in various grama panchayats of Wayanad district. They are actively involved in arranging and distributing planting materials and other inputs received from various government agencies like Department of Agriculture, KAU and IISR to pepper cultivators. Also they act as a link between such institutions and farmers in transfer of technology. At present these samithies have no fund of their own to carry out their activities. It is therefore proposed to give **an assistance upto Rs.10,000/- per samithy** for carrying out basic functions like registration, maintenance of records, for meeting expenses in organising meetings, arranging inputs

etc. Expenditure for activities related to organic farming can also be met from this provision. An amount of Rs14 lakhs is earmarked for this purpose.

8) Operational Expenses (Rs.2.0 lakhs)

For effective implementation of the project, operational expenses including fuel charge and hiring of vehicles are to be provided from the project funds. An amount of Rs.1.4 lakhs at district level and 0.15 lakh/ block, totalling to Rs.2.00lakhs is set apart for the purpose.

Area Expansion of Nutmeg,ginger and turmeric(Rs125lakhs)

1) Area expansion of Nutmeg(75lakhs)

Nutmeg thrives well in warm humid conditions in locations with annual rainfall of 150 cm and more. The soil and climate prevailing in the hill slopes of Western ghats and Eastern ghats are ideally suited to grow Nutmeg. It is a perennial crop grown both as a commercial crop and in homestead as an intercrop. It is proposed to increase area under Nutmeg in 150 ha under area expansion programme by providing assistance as give below:

Cost of cultivation of Nutmeg Area Expansion in 1 ha.

Components	Rate (in Rs.)	Quantity	Amount (Rs in lakhs)
Cost of planting material	250/graft	156 No of graft	0.39
Cost of farm yard manure, chemical fertiliser, plant protection in chemical and spraying charges (LS)	22000/ha	1 ha	0.22
Labour charges towards planting intercultural operations and unforeseen expenses.			0.19
TOTAL			0.80

Full subsidy for planting materials (limited to Rs.250/- per seedling) and 50% subsidy for manures and other inputs and spraying charges(limited to Rs.11000/-ha.). Thus **an assistance of Rs50,000/- per ha.** against a full cost of Rs 80,000/- per ha. Thus an amount of **Rs75 lakhs** is earmarked for bringing 150 ha under Nutmeg area expansion programme.

II. Area Expansion of Ginger / Turmeric (Rs.50 lakhs)

The main objective is to increase the area of Ginger and turmeric using high yielding and improved varieties, productivity improvement of organic ginger and turmeric and to assist farmers in technology adoption for higher production. The cultivation of ginger and turmeric with high yielding varieties adopting scientific cultural practices will be undertaken for increasing production and productivity. As these crops are shade tolerant with shallow roots suitable for intercropping, there is immense scope for area expansion.

As far as possible the scheme will be implemented in a compact area on cluster basis so as to supervise the programme effectively. In the case of Ginger and Turmeric the assistance will be **50% of the cost of inputs limited to Rs.12500/- per ha.** Assistance will be given for inputs i.e. for lime, compost/ farm yard manure, wood ash, bio fertilisers and bio control agents. **400 Ha** will be covered during 2021-22 in Wayanad district and an amount of **Rs.50 lakhs** is set apart for this component.

Mode of implementation

The Principal Agricultural Officer Wayanad will take necessary steps to implement the scheme successfully. Small and marginal farmers only should be considered for providing assistance. Ten percent of the total assistance should be extended to SC/ST farmers. Wide publicity should be given for collecting eligible applications. Proper publicity is to be made for the success of the programme as the spraying against quick wilt of pepper is to be carried out in a campaign mode involving local leadership in definite time frame.

The scheme will be implemented effectively by the Agricultural officer at Krishibhavan level, Asst Director of Agriculture at block level and Deputy Director of Agriculture(H) and the Principal Agricultural Officer at the district level. Participation of all the stake holders including research institutions, Indian Institute of Spice Research(IISR), Kerala Agricultural University, NGO's, pepper samithies etc should be ensured. The details of the scheme should be maintained in separate register in the Krishibhavan where the scheme is implemented. Assistance under the programme should be given to the

beneficiaries through e-payment to the bank account of the beneficiary. The scheme should be implemented through mobilising Pepper Samithies and Local leadership in a campaign mode.

Principal Agricultural Officer should take utmost vigil in implementing the programme through effective monitoring and should assure the reach of inputs to individual farmers and proper adoption. Agricultural Assistants should verify all the plots before releasing of assistance to ensure proper adoption of technology. Agricultural Officers should inspect 30% of the plots and Assistant Director of Agriculture should inspect 20% of the plots at block level, Deputy Director of Agriculture (H) will inspect 10% of the plots at district level.

Additional Director of Agriculture (CP) will be in charge of the programme at the state level. The Principal Agricultural Officer, Wayanad will do the district level monitoring of the scheme. The Assistant Directors of Agriculture at block level will be monitoring the implementation of the programme through respective Krishibhavans. The field level implementation will be done by the Agricultural Officers of the concerned Krishibhavans. The supervision of the spraying programme is to be carried out by deploying Agricultural Assistants in the field and necessary certificates in this regard is to be obtained as and when the claim is entertained for sanctioning financial assistance.

Progress of implementation should be reported to the Director of Agriculture on or before 1st of every month. The Principal Agricultural Officer should take maximum effort for the effective and timely implementation of the scheme. Monthly Progress Report should contain component wise physical and financial targets and achievements and the stage of implementation of each component. Since Government is giving emphasis to women participation and gender budgeting maximum efforts have to be made to include women beneficiaries in the scheme. The total number of women beneficiaries and the amount utilised for such beneficiaries (component wise) should also be included in the monthly progress report.

Principal Agricultural Officer should implement the scheme with the technical guidance of the expert committee and quarterly meetings are to be conducted for the purpose.

Abstract of continuing components worth Rs625 lakhs are as follows Project

Sl No	Components	Rate(Rs)	Phy .target	Fin. Target (Rs. in lakhs)
1.	Integrated pepper Development			
1	Area Expansion of Pepper	20000/- per ha	300ha	60.00
2	Whole Farm Development	20000/- per ha	1800 ha	360.00
3	Establishment of decentralized pepper nurseries	30000/- per nursery	4nos	1.2
4	Support to secondary and micro nutrients and bio-pesticides for root health	2000/- per ha	2730ha	54.60
5	Establishing Farmers Field School (FFS)	70000/FFS	6no.s	4.2
6	Front line Demonstration (FLD) of new technologies	10000/- per FLD	40nos	4.0

8	strengthening of Pepper smithies	10000/- per samithi	140nos	14.00
	Operational expenses			
	a. District			1.4
	b. Blocks	15,000/ block	4	0.6
	sub-total			500.00
II.	Area expansion of Nutmeg, Ginger and Turmeric			
1	Nutmeg	50,000/ha	150ha	75.00
2	Ginger and Turmeric	12,500/ha	400ha	50.00
	sub-total			125.00
	Grand-total (I&2)			625.00

Financial outlay

The expenditure of **Rs. 625lakhs** will be met from the Budget provision of **Rs.1335.00** lakhs under the head of account **2401-00-800-27 OC Plan** from the current year's budget provision

Budget

During 2021-22- an amount of **Rs.1335.00 lakhs** has been set apart for the implementation of Wayanad Package under the head of account **2401-00-800-27(Plan)**. The amount required for implementing this component of the scheme **Rs625 lakhs** will be met from the budget provision under the above head.

The receipt of the circular should be acknowledged by return.

Sd/-

Director of Agriculture

To
Principal Agricultural Officer, Wayanad



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