# PROCEEDINGS OF THE DIRECTOR OF AGRICULTURE DIRECTORATE OF AGRICULTURE DEVELOPMENT AND FARMERS WELFARE DEPARTMENT, THIRUVANANTHAPURAM

(Present:Dr.K.Vasuki IAS)

Sub:-

Annual Plan 2021-22 – Scheme of 'Revitalization of agriculture sector in Wayanad' – Continuous Administrative sanction accorded – orders issued- reg:

Read:-

- 1) G.O.(Rt)No. 1070/2017/AD dated.30.10.2017
- 2) G.O.(Rt)No.619/2019/Agri dated.05.07.2019
- 3) G.O.(Rt)No.800/2019/Agri dated.19.08.2019
- 4) G.O.(Rt)No.964/2019/Agri dated.21.10.2019
- 5) G.O.(Rt)No.186/2020/Agri dated.12.02.2020
- 6) Order No. ADFW/479/2020-TP2 dated 15.06.2020
- 7) Order No. ADFW/479/2020-TP2 dated 30.07.2020
- 8) Order No. ADFW/479/2020-TP2 dated 01.01.2021
- 9) G.O.(Rt)No.588/2020/AGRI dated 29.06.2020
- 10) G.O.(Rt)No.781/2017/AD dated.04.08.2017
- 11) Annual Plan 2021-22

#### ORDER NO. ADFW/3418/2021-TP2 Dated.14/06/2021

Government of Kerala, vide order read 1<sup>st</sup> above accorded Administrative sanction for the implementation of the scheme, Wayanad package during the year 2017-18. Administrative Sanction was accorded for new components as per G.Os read vide reference 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> above. During 2020-21, continuous Administrative Sanction was accorded for the ongoing components with revisions vide references 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> cited above.

As per the Annual Plan 2021-22, the scheme is proposed to be continued during the current financial year with a total allocation of Rs.1335.00 lakh, with the following components.

Sl No.	Components	Amount (Rs.in lakh)	
1	Integrated Pepper and Coffee Development	1000.00	
2	Area expansion of nutmeg, ginger and turmeric	125.00	
3	Restoration and flood mitigation	210.00	
	Total	1335.00	

Components worth Rs.625.00 lakh is continuing during 2021-22 also, the details of which are given below.

#### 1) Integrated Pepper Development – Rs.500.00 lakh

The following activities are proposed under this component.

#### (a) Area Expansion of Pepper (Rs.60.00 lakh)

Establishment of new pepper garden with high yielding varieties of pepper can be undertaken for improving the productivity of pepper and increasing production. The estimated cost for the establishment of one ha of pepper garden is Rs. 40000/- as given below.

Estimated cost for establishing new garden in one hectare

SINo	Item	Cost in Rs 8000.00	
1	Land preparation and labour charge for planting		
2	Cost of planting materials and standards	20000.00 10000.00	
3	Organic manures		
4	Others including plant protection	2000.00	
	Total	40000.00	

An amount of Rs. 20000/- ( limited to 50% of the total cost) will be provided as assistance.

During the current financial year, an area of 300 ha is proposed to be brought under cultivation with improved varieties of pepper and an amount of Rs.60.00 lakh is set apart for this component.

#### (b) Whole farm development (Rs. 360.00 lakh)

Financial assistance will be provided for adoption of good management practices in 1800 ha of pepper to rejuvenate pepper plantations through proper crop health management giving emphasis to organic methods.

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

- Terracing as per contour in uneven lands
- Digging around the standards twice a year before the onset of the 2 monsoons
- · Pruning and training standards in March-April every year.
- 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
- 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.
- 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 Integrated Pest/Disease Management involves a combination of various measures to ensure effective pest /disease management without disturbing the ecosystem, 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 I/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.

 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 to be Rs.40,000/- per ha. Assistance given is 50% of the total cost limited to Rs.20,000/- per ha.

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

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

Financial assistance provided is 50% of the above limited to Rs.20,000/- per ha. An area of 1800 ha. is will be covered with a provision of Rs.360.00 lakh.

# (c) Establishment of Decentralised Pepper nurseries (Rs.1.20 lakh)

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 materials have to be made available to pepper farmers. Small scale nurseries with annual production capacity of 50,000 rooted pepper cuttings per nursery can be raised through SHGs, women groups, unemployed youths etc. with technical support of Department of Agriculture, Kerala Agricultural University, IISR, KVKs etc.

During 2021-22, sanction is accorded for establishing 4 (four) decentralised pepper nurseries by providing assistance @ Rs.30000/-per nursery. An amount of Rs. 1.20 lakh is set apart for this purpose.

# (d) Support to secondary and micro-nutrients and biopesticides for root health (Rs.54.60 iakh)

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 the plant.

Assistance @ Rs.2000/ha will be provided towards expenses like cost of inputs & labour charges to cover an area of 2730 ha under this component with an allocation of Rs.54.60 lakh.

# (e) Establishing Farmers' Field School (FFS) (Rs.4.20 lakh)

Establishing Farmers' Field Schools has been successful tool of Agricultural Extension in educating farmers on various aspects of cultivation. FFS started under 'ATMA' has been very effective in 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

#### 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, manurial 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
- · 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 FFS 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, teaching aids and miscellaneous expenses.

During 2021-22, 6 no. of FFS will be established for which a total amount of Rs.4.20 lakh is proposed.

#### (f) Frontline Demonstration (FLD) of new technologies (Rs.4.00 lakh)

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. 40 no.s. of FLDs plots will be established with assistance @Rs.10000/- per plot for which the total amount of Rs.4.00 lakh is earmarked.

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

#### (g) Strengthening Pepper Development Samities (Rs.14.00 lakh)

There are 200 Pepper Development Samities 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. They also act as a link between such institutions and farmers in the transfer of technology. At present these samities have no fund of their own to carry out their activities. Financial assistance upto Rs.10000/- per samithy can be provided for carrying out basic functions like registration, maintenance of records, organising meetings, arranging inputs etc. Expenditure for activities related to organic farming can also be met from this provision. An amount of Rs.14.00 lakh is earmarked for this purpose.

#### (g) Operational Expenses (Rs.2.00 lakh)

For effective implementation of the project, operational expenses including fuel charge and hire charge of vehicles, expenses of review meetings etc. are to be met from the project funds. An total amount of Rs.2.00 lakh (Rs.1.40 lakh at district level and Rs.0.60 lakh for blocks @ Rs.0.15 lakh per block for four blocks) is set apart for the purpose.

#### 2) Area expansion of nutmeg, ginger and turmeric (Rs.125.00 lakh)

#### (a) Area expansion of Nutmeg (Rs.75.00 lakh)

Administrative sanction for the component "Area expansion of Nutmeg" was received vide order cited 9<sup>th</sup> above. Assistance will be provided for the area expansion of Nutmeg in 150 Ha in Wayanad district during 2021-22. The rate of assistance will be as shown below:

For area expansion in 1 ha.

Component 2	Rate (Rs)	Quantity	Amount (Rs in lakh)	
Cost of planting material	250/- per graft	156 no.s of grafts	0.39	
Cost of farmyard manure, chemical fertilizer, plant protection and spraying	22000/- per Ha	. • 1 Ha	0.22	

charges	Α.	8.5	
Labour charges towards planting, intercultural operations and unforseen expenses	-		0.19
Total			0.80

Full subsidy for planting materials (limited to Rs.250/- per graft) and 50% subsidy for manures and other inputs and spraying charges (limited to Rs.11000/- per ha.). Thus an assistance of Rs.50000/- per ha against a full cost of 80000/- per ha will be provided under this component. Thus during 2021-22 an amount of Rs.75.00 lakh is earmarked for bringing 150 ha under Nutmeg area expansion programme.

#### (b) Area expansion of Ginger and Turmeric (Rs.50.00 lakh)

Administrative sanction was accorded for the scheme "Development of Spices" during the financial year 2017-18 vide GO cited 10<sup>th</sup> above. The main objectives envisaged are 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 should 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% cost of inputs limited to Rs.12500/- per hectare. Farmers will be provided assistance for inputs i.e. for lime, compost/ farm yard manure, wood ash, bio fertilizers and bio control agents. The rate of assistance is as per the sanctioned rate mentioned in the Government Order cited above.

During 2021-22 an amount of Rs.50.00 lakh is earmarked for the implementation of area expansion of Ginger and Turmeric in an area of 400 ha in Wayanad district.

### Financial Outlay

The abstract of continuing components worth Rs.625.00 lakh is as follows:

	Grand Total (A+B)			625.00
	Sub-Total (B)			125.00
~ b	Ginger and Turmeric	12500/- per Ha	- 400 Ha	50:00
a	Nutmeg	50000/- per Ha	150 Ha	75.00
2	Area expansion of Nutmeg, Ginger and Turmeric			
	Sub-Total (A)			500.00
	-Blocks	15,000/- per block		0.60
	-District			1.40
h	Operational expenses			
g	Strengthening of Pepper Development Samities	10000/- per samiti	140	14.00
f	Frontline Demonstration (FLD) of new technologies	10000/- per FLD	40 nos	4.00
e	Establishing Farmers Field School (FFS)	70000/FFS	6no.s	4.20
d	Support to secondary µ nutrients and bio pesticides	2000/- per ha	2730ha	54.60
С	Establishment of Decentralised Pepper nurseries	30000 per unit	4 nos.	1.20
b	Whole Farm Development	20000/- per ha	1800 ha	360.00
a	Area Expansion of Pepper	20000/- per Ha	300 На	60.00
1	Integrated Pepper Development			
SlNo	Components	Rate (Rs)	Phy .target	Fin. Target (Rs. in lakh)

(Rupees Six crore and twenty five lakh only)

Under the above circumstances, continuous Administrative Sanction is hereby issued for the implementation of the scheme 'Revitalization of Agriculture sector in Wayanad' during 2021-22 for an amount of Rs.625.00 lakh (Rupees Six Crore and twenty five lakh only), as per the above statement debiting the expenditure to the head of account 2401-00-800-27 (P) from current year's budget provision. The scheme shall be implemented abiding by the terms and conditions stipulated in the Government Orders read above.

The scheme components will be implemented by the implementing sections as specified earlier. **TS section of the directorate will be the nodal section for the scheme** and will be responsible for the overall monitoring of the scheme at State level and preparation of consolidated progress report with the support of other implementing sections.

Monthly progress report should invariably contain component wise physical and financial targets and achievements, number of beneficiaries and the stage of implementation of each component. Since the Government is giving emphasis to women participation and gender budgeting, maximum efforts have to be made to include women beneficiaries in the scheme. The number of women beneficiaries and the amount utilized for such beneficiaries (component wise) should also be separately shown in the monthly progress report.

DR. K. VASUKI IAS DIRECTOR

Deputy Director of Agriculture (Plg)

Directorate of Agriculture

.Thiruvananthagurarn

To

TS Section of Directorate for issue of detailed working instructions

Copy to

TA to Director of Agriculture

CA to all Additional Directors of Agriculture at HQ

State Agricultural Engineer, Senior Finance Officer at HQ for information

IT Cell of the Directorate for posting on the website