

Directorate of Agriculture Development and Farmers' Welfare

Vikas Bhavan, Thiruvananthapuram – 695033

e-mail:cru.agridir@kerala.gov.in, Phone: 0471-2304481

No:ADFW/5810/2024-TA1

Date:21-05-2024

CIRCULAR

Sub:- Agriculture Department– Scheme on Rice Development 2024-25–
Administrative sanction received - working instructions issued - reg

Ref:- G.O.(Rt)No.406/2024/AGRI dated: 03.05.2024 Thiruvananthapuram

During the financial year 2024-25, a budget provision of Rs.9360.00 lakh is earmarked for the implementation of “Scheme on Rice Development” under the ‘Area Expansion and Development Approach’ programme in the Annual Plan 2024-25 under the H/A 2401-00-102-90 (Plan) and Administrative Sanction has been issued for Rs.9360.00 lakh.

Objective

The ultimate objective of Scheme on Rice Development is to augment the area under paddy cultivation and aim for self-sufficiency in the State. AEU based approach will be followed for the scheme implementation. Rice development programme will be implemented with the active involvement and convergence of MNREGS, Kudumbasree, PACS, FPOs and LSGD institutions.

The important strategies proposed to be adopted for sustaining and improving rice cultivation in the State during 2024-25 are:

I. Sustaining existing area under paddy cultivation through :

- Financial assistance for group farming activities
- Provision of Royalty to paddy land owners
- Operational support to Padasekhara Samithies for group farming.
- Assistance for Paddy Development Agencies

II. Increasing Area under paddy cultivation through:

- Promotion of fallow land cultivation
- Promotion of Specialty Rice Cultivation
- Operation Double Kole

III. Maintaining Soil and Root health in paddy fields through application of soil ameliorants

- Support for soil and root health management and productivity improvement through application of soil ameliorants.

IV. Improving production and productivity of rice and increasing fertilizer use efficiency through

- Foliar application of micro nutrients

V. Developing infrastructure facilities in padasekharams and support for processing, branding and marketing through :

- Project based support for infrastructure development in padashekharms for reviving paddy cultivation including block level convergence, establishment of rice mills and promotion of local brands.

VI. Production of quality seeds at regional level through :

- Registered Seed Growers Programme (RSGP)

The various components under this programme and budget provisions for 2024-25 are as follows:

Sl. No.	Scheme Component	Rate of assistance	Physical target (ha)	Financial target (ha)
I. Assistance for Sustainable Rice Development and Royalty to paddy land owners				
a	Sustainable Development of Rice	5500/ha	90909.09	5000.00
b	Royalty to Paddy land owners	3000/ha	16666.67	500.00
	Sub Total			5500.00
II Soil and root health management and productivity improvement through application of soil ameliorants				
a	Application of lime	5400/ha	49074.07	2650.00
b	Transportation & handling charges			10.00
	Sub Total			2660.00
III Area Expansion				
a	Fallow land paddy cultivation	40000/ha	700	280.00
b	Promotion of Specialty rice cultivation	10000/ha	200	20.00
	Sub Total			300.00

'217571/2024

IV	Registered Seed Growers Programme	5000/ha	2500	125.00
V	Operation Double Kole			50.00
VI Operational support to padasekhara samithies and Paddy Development Agencies				
a	Operational support to padasekhara samithies for group farming	360/ha subject to a maximum of Rs 50000/Padasekharam	83333.33	300.00
b	Operational support to Paddy Development Agencies	10 Paddy Development agencies		30.00
Sub Total				330.00
VII	Project based support for infrastructure development in padasekharams for reviving paddy cultivation including block level convergence, establishment of rice mills, promotion of local brands			200.00
VIII	Foliar application of micro nutrients in rice	2000/ha	9750	195.00
GRAND TOTAL				9360.00

The details of various components of the scheme are as follows :

I. Assistance for Sustainable Development of Rice and Royalty to paddy land owners: (Rs. 5500.00 lakh)

a. Sustainable Development of Rice : (Rs.5000.00 lakh)

This component is implemented on a rice-based farming system approach, based on group farming concept and scientific package of practices suited to each agroclimatic condition. It aims at enhancing production and productivity and simultaneously bringing down cost of cultivation. The group farming activities in each padasekharam will be undertaken in each season in a coordinated manner as per an action plan prepared at Krishi Bhavan level which will be approved by the concerned block level ADA.

An amount of Rs.5000.00 lakh is proposed for providing input assistance under sustainable rice development for 90909.09 Ha @ Rs.5500/Ha. The support for input assistance will be in the form of quality seeds, inputs and bio control agents only.

b. Royalty to owners of cultivable Paddy land : (Rs.500.00 lakh)

217571/2024

Paddy land are a complex ecosystem having multi fold role in the conservation of Nature. They play a major role in water conservation, providing living habitat for various species of flora and fauna, conservation of natural enemies of pests and diseases and carbon sequestration to name a few. Considering the role of paddy fields in Ecosystem Service (ESS), Government of Kerala, vide G.O.(Rt)No.483/2020/AGRI dated 01.06.2020, have introduced the concept of "Royalty" to the owners of cultivable paddy land for conserving cultivable paddy lands and accorded sanction for the same. Such a support is also recommended in the Agricultural Policy of the State. As per G.O.(Rt) No. 976/2021/AGRI dated 03.12.2021, paddy royalty can be availed as a one time assistance every year.

Owners of paddy fields that are being cultivated with paddy alone/ paddy fields with paddy and short duration annuals like vegetables or pulses/ and paddy fields kept as fallow but will be brought under paddy cultivation within 3 years are eligible to avail Royalty during the current year. **Paddy fields kept as fallow and availed Royalty for the past 3 years will be eligible to avail Royalty during the current year only if this land is brought under cultivation.** Paddy Royalty may be sanctioned as a one time assistance for every year.

During 2024-25, an amount of Rs.500.00 lakh is set apart as Royalty to the owners of cultivable paddy land @ Rs.3000/Ha for conserving cultivable paddy lands. A total area of 16666.67 Ha of paddy area will be benefited by the implementation of this component. The component will be implemented in online mode through AIMS portal. The registration in the AIMS portal is an one time process, but the online application submitted during previous years should be updated each year by including changes, if any, in the details already entered and also by uploading the latest document regarding paddy land owned.

The registration / updation shall be done within 15 days of start of the crop in the main field and the applications should be sanctioned within 30 days of applying, by the sanctioning authority. The end date for sanctioning of applications should be fixed by the Principal Agricultural Officer before the start of each crop and intimated to the concerned officers.

II. Support for soil and root health management and productivity improvement through lime application for paddy crop: (Rs.2660.00 lakhs)

Soil is the basis of farming activity. Soil health/quality refers to the physical, chemical and biological features of a soil that are essential for long term sustainable agricultural production with minimal environmental impact. Healthy soils have optimal physical,

217571/2024

chemical and biological properties. Soil acidity is a major issue in Kerala soils and about 90% of the soil are acidic with over 50% strongly to extremely acidic. Application of soil ameliorants and nutrients based on soil testing, help in augmenting crop production. Correcting soil acidity is very much essential for getting optimum yield from our crops. Since soil acidity is a major issue in Kerala soils, amelioration of soil has to be given top priority and this component is included as a systematic intervention in correcting soil acidity to improve soil fertility status.

Objectives:

1. To correct the soil acidity (pH) and improve the soil fertility status to enhance productivity of paddy.
2. To supplement Calcium and Magnesium deficiencies in the soils.
3. To improve the intake of primary, secondary and micro-nutrients by the crops by improving soil health status.
4. To sustain good soil health and improved agricultural practices.

Programme:

Support for Soil and Root Health Management and productivity improvement of paddy crop will be done by providing assistance for lime application @ 75% of the total cost of lime limited to Rs.5400/ha, including application charges. The general recommendation of lime for correction of soil acidity for paddy crop is 600 Kg/Ha. This will vary from place to place based on soil test data. If the quantity of lime required as per soil test data exceeds the general recommendation the cost for the excess quantity applied will be borne by the farmers themselves. **The farmers who avail any assistance from any other scheme for the same purpose will not be considered for subsidy under this scheme.**

An amount of Rs.2650.00 lakh is set apart for subsidy of liming materials for an area of 49074.07 Ha and an amount of Rs.10.00 lakh is set apart for transportation and handling charges.

The liming material like Dolomite/ Lime/ powdered lime stone @ 600 Kg/Ha should be arranged in the Primary Agricultural Co-op Banks/ Societies and supplied to the farmers de linking the e- payment system. Necessary Store Purchase Rules are to be followed for arrangement of the materials at the Co-operative Societies/ Co-operative Banks. The Government have accorded sanction for inclusion of Kainakary Limeshell Co-operative Society Ltd. No. 2065 also for stocking and distribution of lime, they may also be considered.

The Agricultural Officer shall take necessary steps to test and ensure the quality of

'217571/2024

liming materials and only quality liming materials shall be distributed. This should be ensured by the Principal Agricultural Officer and Deputy Director of Agriculture (WM).

Neutralising value (Calcium carbonate equivalent) of liming materials

Liming materials differ in their ability to neutralise soil acidity. The effectiveness or efficiency of liming material is expressed as Calcium Carbonate Equivalent or Neutralising Value. Pure calcium carbonate is taken as the standard with a value of 100 percent. The neutralising value of common liming materials is given in Table below. The values mentioned are for pure materials and will change depending on the quality of the material. The highest neutralising value for Calcium oxide is indicative of its superiority over other liming materials in terms of efficiency to neutralise acidity.

Table. Calcium carbonate equivalent of pure forms of liming materials

Liming materials	Neutralizing value(%)
Calcium Oxide (Burnt lime/quick lime)	179
Calcium hydroxide (Slaked lime)	136
Dolomite (Calcium Magnesium Carbonate)	109
Calcium Carbonate (powdered lime stone)	100
Calcium Silicate	86

(Source: Outcome of Soil Based Plant Nutrient Management Plan for Agro Eco systems of Kerala)

In the case of dolomite, materials of different quality and different price tags are available in the local market. To ensure supply of quality materials to the farmers at fair prices, it is absolutely necessary to enforce standards already fixed by the Bureau of Indian Standards (BIS).

Pricing:

The neutralizing value requirement (minimum) for dolomite is 70 and this shall be taken as the basis for fixing maximum price. Materials with neutralising value less than 60% shall be rejected. Price of materials with NV in between may be fixed using the following formula:

$$\text{Price (calculated)} = A \times B \div 70$$

where, A = market price, B = NV as per analytical report

For example, Sample with NV 65 % and market price for standard material is Rs.12 per Kg, the price for the sample can be calculated as follows:

217571/2024

Price = $12 \times 65 \div 70 = \text{Rs.}11.14/-$.

This scheme component will be implemented in all districts of Kerala.

Mode of Implementation:

The field level implementation will be done by the Agricultural Officers of the concerned Krishi Bhavans. The quality of soil ameliorants should be ensured before distribution. The required soil ameliorants will be stocked and distributed by Co-operative Societies/ Co-operative Banks to Padasekhara Samithies/ farmers as per the permits issued by the Agricultural Officers of Krishi Bhavans. After completion of the distribution, the subsidy amount will be released to the concerned Co-operative Societies/ Co-operative Banks.

The scheme will be implemented by the Deputy Directors of Agriculture (WM) at the District level and the Assistant Director of Agriculture at Block level. Since the Government is giving emphasis to women participation and gender budgeting, maximum efforts should be made to include women beneficiaries in the scheme. The number of beneficiaries and the amount utilized for such beneficiaries (component wise) should also be separately shown in the monthly progress report

Timeline for implementation:

Period	Progress (%)
April- September	75
April- December	90
April-March	100

III. Area Expansion : (Rs. 300.00 lakh)

Njangalum Krishiyilekku” is a campaign programme being organized on a massive scale by the Agriculture Development and Farmers Welfare Department. It aims to bring more area under cultivation by attracting people from all sections of the society into farming activities. Area expansion programme under Rice Development will be linked to this campaign activity. The following activities will be implemented for area expansion activities during 2024-25.

a. Fallow Land Cultivation : (Rs.280.00 lakh)

In order to increase rice production in the State, it is important to revive paddy cultivation in paddy lands kept fallow. The owners of fallow land may be persuaded to take up paddy cultivation on their own or can lease out their land to willing individuals/groups based on mutual agreement. Active involvement of LSG Institutions,

MNREGS and Kudumbasree shall be assured for sustainable cultivation in fallow lands. Since the land preparation and weed control for this type of cultivation is labour intensive, reasonable assistance has to be given to farmers for resorting to fallow land cultivation. Fallow land cultivation will be taken up in an area of **700 Ha** by providing assistance @ **Rs.40000/- per hectare**, out of which Rs.35000/- will be for the actual cultivator and Rs.5000/- for the paddy land owner. The total financial outlay for this activity is **Rs.280.00 lakh**.

b. Promotion of Specialty Rice : (Rs.20.00 lakh)

The programme envisaged under this scheme is to promote and encourage the cultivation of traditional specialty rice varieties of Kerala like Pokkali, Njavara, Jeerakasala and Gandhakasala. Basmati cultivation will also be promoted since it is highly profitable. In order to motivate farmers to undertake cultivation of special rice varieties, which have high relevance in GI registry and biodiversity conservation, it is proposed to provide incentive @ **Rs.10,000/ha**. In addition to the above-mentioned specialty rice, other special varieties like Rakthashali and other traditional varieties will also be promoted.

Special rice varieties will be cultivated in 200 ha during 2024-25 with a financial outlay of **Rs.20.00 lakh**.

IV. Registered Seed Growers Programme (RSGP) : Rs.125.00 lakh

Seed is the critical input necessary for enhancing crop production and productivity, hence the use of good quality seeds by the farmers has to be ensured. Farmers usually prefer good quality seeds raised in their region. The Registered Seed Growers' Programme (RSGP) will be implemented during 2024-25 too in order to meet the requirement of certified seeds in the State. Existing rules and norms for the scheme will be followed.

The Kerala State Seed Development Authority (KSSDA) functioning under the Department of Agriculture will coordinate the activities such as Foundation Seed production in State Seed Farms and Certified Seed production by registered seed growers.

Registered Seed Growers Programme will be implemented in **2500 Ha** in the State with the co-operation of the Kerala Agricultural University, State Seed Farms, Krishi Bhavans and farmers of registered Padashekhara Samithies at Panchayat level. Foundation Seeds (FS I & FS II) are produced in various State Seed Farms from the breeder seeds obtained from Kerala Agricultural University. Foundation Seeds (FS II) will be supplied free of cost to registered seed growers for the production of certified seeds, which can be distributed to farmers. **The detailed Working instruction for implementation of**

Registered Seed Growers Programme 2024-25 will be issued separately.

V. Operation Double Kole : (Rs. 50.00 lakh)

Operation Double Kole aims to promote double crop in Kole lands by providing attractive incentives to farmers who are taking extra risks for raising additional crop of paddy and also for raising second crop of pulses or fodder crops .

Objectives:-

- To increase paddy production in Kole lands of Thrissur District as part of ensuring food security
- Increase and utilize the potential of Kole lands infrastructure and Enrichment of soil through cultivation of Pulses
- Additional income to farmers through additional crop
- Empowering the farm mechanization through Agro service centres.
- Additional farm employment generation

An amount of Rs.50.00 lakh is earmarked for the “Operation Double Kole” programme during 2024-25. This component is implemented for encouraging double cropping in Kole areas. The assistance should be provided for inputs and infrastructure development activities as detailed below, which is based on project proposal submitted by the Principal Agricultural Officer/ Special Officer of the programme.

Sl. No.	Sub-Component	Maximum rate admissible (Rs. In Lakhs)
1	Assistance for machinery/pump sets (50HP, 30HP, 20 HP, 10 HP submersible pumps)	50.00
2	Infrastructural assistance (Breach of bunds/Bund maintenance/ sluices)	15.00
3	Electric connection/ Transformer installation	5.00
4	Assistance for taking double crop paddy in 900 Ha @ Rs.20000/Ha (Critical inputs, land preparation, need based plant protection etc.) No additional assistance will be provided.	180.00
5	Assistance for cultivating second crop Pulses/ Maize/ Oilseeds in 200 Ha @ Rs.7500/Ha (Critical inputs, land preparation, need based plant protection etc.)	15.00
6	Operational expenses	10.00

'217571/2024

1) Machinery/pumpsets

Machineries / pumpsets (10 HP to 50 HP submersible pumps) can be purchased under the scheme. Store purchase rules should be strictly adhered to. Duplication of subsidy should be strictly avoided.

2) Infrastructural Assistance

Include assistance for strengthening of weak bunds between Padasekharams, maintenance of sluices and other need based infrastructural activities. The estimate/valuation of works should be undertaken by LSGD Engineer or A Ex E (Agri). During selection of works, care should be taken to avoid those works selected under LSGD/RIDF/RKVY etc. No duplication of assistance will be permitted.

3) Electricity connection/Transformer Installation

Substitution of Transformer for low voltage problem, electricity connection should be provided to Kole padasekharams taking double crop. Estimate of the work should be taken by KSEB.

4) Incentive for taking double crop

For promotion of double crop in Kole lands, an Incentive @ Rs 20,000/- per hectare will be given, where second crop of Paddy having more than 90 days duration is taken. Incentive @ Rs 7,500/- per hectare will also be given, where second crop of Pulses/fodder crops such as Maize having duration less than 90 days or oil seeds like sesamum is being taken. Priority should be given to those padasekharams who are completing first crop in time.

The area of paddy/pulses/maize/oil seed crops will be finalised at district level committee based on the time available for taking second crop after first crop completes. The electric motors HP should be decided based on the padasekharams area requirement assessed by A. Exe.(Agri).

5) Operational Expenses

Project expenses for hiring vehicles for field visits, conducting meetings, seminars, trainings, deputing pest scouts (where there are no pest scouts in Krishi Bhavan) for crop monitoring, data entry operators on daily wages basis, purchase of laptop for data operation on yield analysis, innovative operations like use of drone for spraying different combinations of water soluble fertilizers and bio pesticides, crop monitoring and surveillance, use of different machine trails in kole lands like puddler, rain gun irrigation

'217571/2024

and other innovative activities to be conducted, different sprayers for spraying (ULV), use of motorised cono weeder, use of critical inputs like ppm, bleaching powder, water soluble fertilizers, critical inputs through group activities like pest/disease surveillance and control measures, and any other activities proposed by Executive committee, documentation, demonstrations on increasing the yield in first and second crop providing assistance for critical inputs, maize harvester, pulses harvester, winnowing, weed management in pulses, fallow kole lands for pulses or oil seed cultivation etc., for purchase of inputs/machineries for demonstration value through ADA/Agri ExE/KAICO/KAU. Also deputing the pest scouts and data operator on daily wages basis for crop monitoring from the beginning with regard to soil nutrients, pests diseases, water management, timely operations and data compiling and data observations.

The Crop insurance coverage can be given to those padasekharams who are following cropping plan according to the time schedule fixed by Operation Kole Double Executive Committee.

A Liason Officer can be deputed as special Officer to look after all the project activities and monitor the project throughout the implementation. He/She will work under the supervision and guidance of Deputy Director of Agriculture (WM) and Principal Agricultural Officer and will co-ordinate the activities through padasekharasamithies, officials of Agriculture department, Kerala Agricultural University and line departments for the timely and successful implementation of the scheme. Liason officer will promote the farmer groups to take second crop and complete the activities in time, give necessary trainings, plan the requirement of inputs and machineries well in advance and ensure their timely availability, procurement of paddy, monitoring of water level at Enamakkel regulator and all such activities for the successful implementation of the programme.

Liason officer will also co-ordinate Plant Health Management in Kole land paddy cultivation in association with NIPHM and KAU to monitor the pests, disease, nutrients and their management during the crop period through Plant Health Clinics. ATMA, BTM & ATM and Pest scouts of concerned blocks will assist in this regard for taking observations.

The scheme will be reviewed by Operation Kole Double Executive Committee chaired by Principal Agricultural Officer, Thrissur (members selected during 2018-19 can be continued for 2024-25 also) once in a month and physical and financial progress should be reported in monthly review meetings.

Financial outlay:

An amount of Rs 50.00 lakh is provided under the head of account 2401- 00-102-90

'217571/2024

Plan for meeting the expenses under the scheme.

VI. Operational support to Padashekhara Samithies and Paddy Development agencies : (Rs. 330.00 lakh)

a. Operational support to Padasekhara Samithies for group farming : (Rs.300.00 lakh)

In the major rice growing tracts of the State with natural endowments to sustain rice cultivation and to augment the average productivity above 3 MT per hectare through group farming activities, financial support will be provided to Padasekhara Samithies for meeting their operational expenses, based on transparent criteria for promoting group farming with a total outlay of Rs.300.00 lakh.

The Padasekhara Samithies have to be strengthened to encourage group activities by integrating state schemes for rice development, rice development programme of Local Self Governments & rice promotion schemes under RKVY. Operational support to Padasekhara Samithies is an inevitable item for their existence and functioning. Hence an amount of Rs.300.00 lakhs has been set apart as operational support to Padasekhara Samithies for group farming for an area of 83,333.33 Ha @ Rs.360/Ha subject to a maximum of Rs.50,000/- for one padasekharam. **Padasekharams having a minimum area of 5 ha alone should be considered for assistance under this programme.**

The group activities of padasekhara samithies which require additional funds are enlisted below:

- Renewal of registration.
- Preparation of pothu njaattadi/community nursery.
- Maintenance of accounts.
- Conducting group meetings, executive committee meetings etc. Office expenses for printing charges of forms, registers etc.
- Laying out of demonstration plots, erecting boards etc.
- Repair and maintenance of farm machineries and equipment.
- Hiring of machineries during peak seasons.
- Maintenance and repair of common bunds, channels etc. Expenses for the repair of bunds breached due to flood.
- Registered seed growers programme.
- Additional expenses for de watering and irrigation.

'217571/2024

- Selling the produce through Civil Supplies Corporation.
- Preparation of claims and statement for e-payment.
- Organising seminars, campaigns, harvest melas with farmers participation, highlighting their achievements.
- Development of infrastructural facilities for Selected Group Farming Padasekharams in the Block Area.
- Mechanisation of tillage operations.
- Packing and distribution of seeds, fertilizers, PP chemicals and other inputs.

b. Operational support to Paddy Development Agencies : (Rs.30.00 lakh)

Government of Kerala has constituted 10 Paddy Development Agencies for tackling the problems of rice cultivation in special problem areas. Financial assistance will be provided to these agencies for development of the problem areas for taking up location specific projects based on actual needs. The funds will be provided to Paddy Development Agencies based on the proposals approved by the Executive Committee of the concerned agency. Operational support to paddy development agencies includes honorarium to the Vice Chairman of the paddy development agency, sitting fees to members and funds for infrastructure development works on a project-based manner. An amount of Rs.30.00 lakh is set apart for this component for the following items.

Sl. No.	Item	Amount (Rs. In lakh)
1	Project based assistance	21.10
	Administrative expenses (5%)	1.10
	Honorarium to Vice Chairman (Rs. 4000 per month x 12 x 10)	4.80
	Sitting fee to members once in 2 months (Rs.500 x10 x 6) x 10 agencies	3.00
	Total	30.00

VII. Project based support for infrastructure development in padashekharms for reviving paddy cultivation including block level convergence, establishment of rice mills, promotion of local brands: (Rs.200.00 lakh)

Considering the need for reviving paddy cultivation in the backdrop of recurring floods and natural calamities, an amount of Rs.200.00 lakh is set apart for project- based support for infrastructure development in padashekharms including block level convergence and establishing rice mills and parboiling units for the promotion of local brands.

'217571/2024

(a). Project based support for infrastructure development in padasekharams including block level convergence

There are projects/ activities/works for Paddy Development which are to be considered beyond the boundaries of a single panchayat. Community nursery, development of irrigation and drainage facilities, purchase of machinery including combine harvester, establishment of seed godowns, organizing plant protection measures including rodent control campaigns, establishment of processing and marketing units etc. are such activities which benefit a wider area covering more than one panchayat within a block. It is proposed to extend 50% assistance for production-oriented activities, and 100% for infrastructure development activities. Existing norms will be followed for major components. However, relaxation of norms may be sanctioned by the Sanctioning Committee, subject to justification. It shall be ensured that infrastructure development will benefit paddy cultivation and that the proposal is supported by estimate prepared as per Government approved norms. The District Sanctioning Committee will sanction project proposals up to Rs. 5.00 lakh. Projects above Rs.5.00 lakh will be recommended and forwarded to the State Sanctioning Committee for approval. Convergence of activities under RKVY, RIDF, other CSS and LSGD schemes should be ensured while undertaking infrastructural development. The scheme will be implemented in integration with good working PACS in the area.

(b). Establishment of rice mills and promotion of local brands

It is proposed to establish Rice mills including mini rice mills and parboiling units to undertake local processing and distribution of rice and rice products in potential padasekharams. The aim is to process, brand and market the rice produced in each region within that region itself, converting each area into self-sustaining units. In areas where specialty rice varieties like Njavara are grown, special mini rice mills to process such rice varieties are also proposed to be established. The scheme can also be implemented in integration with good working PACS in the area. Such interventions from seed to marketing of produce will fetch more income to the farmer. This component will be implemented on a project mode in a need based manner.

Selection of beneficiaries - Co-operatives, Padasekhara samithies, other registered groups and individual entrepreneurs recommended by padasekhara samithies are eligible beneficiaries of this component.

Rice mill proposals upto Rs. 5.00 lakh will be sanctioned by the District Committee and eligible proposals above Rs. 5.00 lakh will be scrutinized by District Committee and forwarded to State Committee with clear recommendations for approval.

An amount of **Rs. 200.00 lakh** is proposed for the above two sub- components which will be sanctioned on a project-based manner.

Implementation

The projects received under the above two sub components will be sanctioned by the District Level Sanctioning Committee or the State Level Sanctioning Committee depending upon the total cost of the programme. The constitution of the District Level Sanctioning Committee or the State Level Sanctioning Committee are furnished below:

State Level Sanctioning Committee

1	Director of Agriculture	Chairman
2	Additional Director of Agriculture (CP)	Member
3	Additional Director of Agriculture (Extension)	Member
4	Additional Director of Agriculture (Plg.)	Member
5	State Agricultural Engineer	Member
6	Joint Director of Agriculture(WM)	Convenor

District Level Sanctioning Committee

1	Principal Agricultural Officer	Chairman
2	Project Director ATMA	Co-Chairman
3	Deputy Director of Agriculture (WM)	Convenor
4	Assistant Director of Agriculture (concerned block)	Member
5	Assistant Executive Engineer (Agri)	Member
6	Expert from KAU/ KVK (wherever possible)	Member

VIII. Foliar Application of Micro Nutrients in Rice

- a. For the purpose of the implementation of this scheme component, Micro nutrient refers to the relative quantity of a nutrient that is required for plant growth. It takes part in metabolic activities, enzymatic process/catalysts etc which directly and indirectly help in plant growth and development. There are 8 essential plant nutrient elements defined as micro nutrients like boron (B), zinc (Zn), manganese (Mn), iron (Fe), copper (Cu), molybdenum (Mo), chlorine (Cl) and silicon (Si). They constitute in total less than 1% of the dry weight of most plants. Organic sources like farm yard manure, compost, vermi compost etc. may contain less quantity of these nutrients but presence of these help the plant in their growth and development. They are also called trace elements or minor elements.
- b. Micro Nutrients plays a vital role in balancing major metabolic events in plants. Deficiency of even a single Micro Nutrient make the plant unable to complete many metabolic process which cause substantial yield reduction. Micro Nutrients like Zinc, Boron, Silicon and Manganese are involved in the metabolism of rice plants,

217571/2024

- including Chlorophyll Synthesis, Photo Synthesis, Enzyme activation and membrane integrity. Availability and uptake of Micro Nutrients from the root zone depend on the physio chemical soil properties like pH, soil organic matter, soil moisture and interaction of these Micro Nutrients with other co-existing nutrients. Micro Nutrient application can help in correcting Micro Nutrient deficiency and enhance grain filling. Foliar Fertilization with Micro Nutrients can be effectively done where soil application is not beneficial.
- c. At present, the effect of application of nano urea is also well proven in rice cultivation. Application of nano urea fertilizers had a significant effect on the grain and straw yield as per many research studies.
 - d. In this scheme support is provided for application of Micro Nutrients / nano nutrients using aerial spraying methodology. The nutrient uptake by grain and straw was found to be increased with the foliar application of nutrients because many nutrient formulations have large surface area and particle size is minute which is less than leaves and root pore size, this may cause higher penetration of nutrient into the plant.
 - e. At present, the effect of application of nano urea is also well proven in rice cultivation. Application of nano urea fertilizers had a significant effect on the grain and straw yield as per many research studies.
 - f. In this scheme support is provided for application of Micro Nutrients / nano nutrients using aerial spraying methodology. The nutrient uptake by grain and straw was found to be increased with the foliar application of nutrients because many nutrient formulations have large surface area and particle size is minute which is less than leaves and root pore size, this may cause higher penetration of nutrient into the plant.
 - g. Any micro / nano nutrient formulation suitable for application in rice fields can be selected for foliar application in rice. The Block Level Agricultural Knowledge Centres (BLAKC) can take a lead in this regard. All BLAKCs shall record the pre and post application data and documented. The BLAKC shall act as a technical committee for fixing up the procedures for foliar spraying. The Asst. Exe. Engineers or their nominees shall attend the BLAKC meetings for facilitation.
 - h. The application shall preferably be carried out using drones. Department of Agriculture has provided drones to various farmer producer organizations (FPOs) of different districts. Implementation can be done with these FPOs or can engage any other private agencies with proven track record. The availability of drones for spraying shall be ascertained with the help of the Asst. Executive Engineers of the Districts. They shall render suitable help for arranging sufficient number of drones for spraying.
 - i. The total cost of aerial spraying of Micro Nutrients in paddy crop is estimated to be Rs. 2625/- per hectare. An amount of Rs. 2000/- hectare is provided as assistance for aerial spraying of Micro Nutrients in paddy in suitable areas so as to popularize the technology. The spraying shall be carried out in a demonstration mode. It shall

be demonstrated in front of a group of farmers.

- j. The financial assistance includes the cost of chemicals, the labour requirement for preparing the solution, rent on drone, transportation cost etc. The assistance can be extended to the beneficiary farmer if he is able to pay in full for the cost of application or to the person or agency who operates the drone for spraying depending up on the field conditions.

An area of **9750 hectare** of paddy in first/second/ third crop season shall be covered and an amount of **Rs. 195 lakhs** is sanctioned for implementation of foliar application of Micro Nutrients in rice. The department may explore ways to induct new technology into this area by way of stakeholder participation and credit linkage.

GUIDE LINES TO BE FOLLOWED IN THE IMPLEMENTATION OF RICE DEVELOPMENT SCHEME

1. For each padasekharam, an action plan should be prepared by the Agricultural Officer with the involvement of all stake holders by integrating schemes implemented by various agencies. In the padasekhara samithy, 10-20 members should be entrusted with special tasks for collecting information from Krishibhavan, Panchayath and Karshika Vikasana Samithy and to give information to members and give feedback. A representative from the local financial institution should also be invited to the padasekhara samithy. The action plan should contain the details of all activities right from the arrangement of seed till production, procurement as seed / paddy including their post harvest management and marketing.
2. The annual action plan at Krishi bhavan level should be verified and approved by the concerned block level ADAs.
3. The assistance of subject experts from KAU and KVK institutions can be utilized in solving the field problems.
4. The scheme will be implemented in all potential rice growing tracts with the active participation of group farming samithies. The activities should be carried out based on action plan already prepared for each samithi before the commencement of each cropping season.
5. Soil testing campaigns should be arranged in all the padasekharams or padasekharams combined and the Chief Soil Chemist has to see that the campaigns are arranged accordingly, in a co-ordinated and effective manner covering all the major areas, before the start of the season.
6. Extension support through ATMA and LEADS, including Farm school and

'217571/2024

Farmer's Field School should be ensured, in consultation with the block level ADAs for imparting training programmes. PAOs can utilize the funds available under ATMA programme.

7. Services of PGDPHM officers can be spared for trainings, workshops etc., for promoting latest technologies among farmers.
8. Timely availability of sufficient quantities of inputs like seeds, lime, manures, fertilizers, inputs for plant protection etc., should be ensured. In the case of other inputs, necessary arrangements should be made by the Agricultural Officers under the guidance and supervision of Block level ADAS /DDA (WM) of District HQ.
9. Availability of agricultural machinery should be ensured and put to effective use for reducing the cost of cultivation and to overcome labour scarcity.
10. Regular, continuous and need based transfer of new techniques in rice cultivation should be made available and also necessary steps should be taken to solve field problems. The visit of extension staff of Krishi Bhavans to padasekarams has to be ensured by fixing a schedule of visit.
11. Support of LSGDs and NGOs can be sought for the effective implementation of the programme.
12. Use of soil ameliorants, biofertilizers, light traps, biocontrol agents etc., should be promoted on padasekharam basis as a part of INM and IPM programmes.
13. Action should be initiated to insure the crops under the Insurance schemes and proper arrangements should be done in advance at all levels.
14. Activities of Surveillance Teams, Plant Health Clinics, Referral Clinics etc., should be equipped before the commencement of each season.
15. Proper documentation should be done by the grass root level officers incorporating the achievements of each samithi in connection with the implementation of the programmes.
16. ADA at block level should give proper guidance for the successful implementation of the programme and the field level functionaries should visit all the padasekharams.
17. The assistance to the beneficiary will be transferred through e-payment.
18. No Double benefit should be given to any beneficiaries and regular monitoring of fund flow should be ensured.
19. As far as Operation Double Kote is concerned, the entire AIMS beneficiary data base should be brought under the unified registry setting by the Government.
20. DDA (WM) in each district HQ should monitor the progress of achievements of each component of the scheme and should visit a minimum of 10% of the areas of implementation.
21. Agricultural Officer should give the padasekharam wise detailed report (name of padasekharam, area covered, variety grown, no. of farmers benefitted, assistance

given for various components through various agencies etc.) to the block level ADA soon after the completion of each season. The ADAs should submit a consolidated block wise report to the DDA (WM) who in turn will submit detailed report to Additional Director Of Agriculture (CP) along with panchayath wise area covered under paddy cultivation and the yield obtained, soon after the completion of each season. Wide publicity and media coverage of the scheme should be ensured through FIB. Principal Agricultural Officer of each district will submit monthly progress report to the Additional Director of Agriculture (CP) by 5th of every month.

22. Maximum number of crop cutting experiments should be taken so that productivity and production can be highlighted.
23. Principal Agricultural Officers should assign Agro Ecological Units (AEU) wise targets within the district.
24. Monthly progress report should invariably contain component wise physical and financial targets and achievements 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 show in the monthly progress report.
25. **Rapid Response Team** - In order to tackle the issues that may arise during the harvesting/ procurement of paddy at field level, a district level Rapid Response Team has been constituted in all the districts with the following members.

1	Principal Agricultural Officer	Co-ordinator
2	Deputy Director of Agriculture (WM)	Assistant Co-ordinators
3	Assistant Executive Engineer (Agri)	Assistant Co-ordinators
4	Assistant Director (Marketing)	Member
5	Paddy Marketing Officer	Member
6	Assistant Engineer (Agri)	Member

The issues related to availability / performance of combined harvester during harvesting season, "kizhivu" during procurement of paddy etc has to be tackled by the Rapid Response Team on time. Wide publicity may be given among Paddy farmers regarding the functioning of district level Rapid Response Team and contact phone numbers of Co ordinator and Assistant Co-ordinators are to be shared.

26. **Paddy Royalty** - The registration / updation of applications shall be done within 15 days of start of the crop in the main field and the applications should

be sanctioned within 20 days of applying by the sanctioning authority. The end date for sanctioning of applications shall be fixed by the Principal Agricultural Officer before the start of each crop and intimated to the concerned officers.

27. **Utmost care should be followed while implementing the components at field level. Claims of achievement of components over and above the targets allotted to Krishi Bhavans will not be entertained. Assistant Directors at block level should ensure this regularly, during review meetings.**

Publicity

The major project based programmes with associated norms will be given wide publicity through mass media - audio, visual and print - at State and district levels. The Principal Information Officer, Farm Information Bureau should give maximum coverage to the special achievements in this regard.

Monitoring and Evaluation

At the grass root level, the programme will be implemented and monitored by the Agricultural Officer and Krishi Bhavan staff with the support of registered Padasekhara Samithies. At the block level, Assistant Director of Agriculture will give proper guidance for the successful implementation of the programmes to the farmers and the field level functionaries. At district level, Deputy Director of Agriculture (WM) will be monitoring the progress of achievement of each component of the scheme. At the state level, Additional Director of Agriculture (CP) will be the Project Manager for the Scheme and the project will be implemented before 31/03/2023. The Administrative Sanction accorded for the scheme is inclusive of the amount needed for encashing the queue bills. Expenditure of Rs. 9315 lakh (Rupees Ninety three crore and fifteen lakh only) under the scheme will be met from the H/A 2401-00-102-90 Plan. The Director of Agriculture is also authorized to draw and disburse the above amount .

The following general conditions should be followed wherever applicable.

- i. All rules, formalities and procedures shall be followed for the implementation of the scheme. The norms of financial propriety shall be adhered to.
- ii. The expenditure should be met only from the provisions available under the appropriate head of account
- iii. The fund release will be based on actual requirement and the fund released should not be parked in banks.
- iv. Store purchase rules shall be strictly adhered to for all kinds of purchases.
- v. Tender/ e- Tender and other stipulated formalities shall be followed wherever necessary.

217571/2024


- vi. Post creation and purchase of vehicles are not admissible under the scheme.
- vii. Principal Agricultural Officer shall monitor the implementation of the scheme and ensure that the implementation is as per the existing procedures, rules and regulations.
- viii. Principal Agricultural Officer should prepare and submit an implementation schedule to complete the project in time and send regular progress report on financial and physical progress every month.

sd/-

SEERAM SAMBASIVA RAO IAS**DIRECTOR**

Director of Agriculture

To: 1) All Principal Agricultural Officers



G. ANIMON
PEN : 515043
Deputy Director of Agriculture (CD)
Directorate of Agricultural Development
and Farmers Welfare
Vikas Bhavan, Tvpm - 33

- Copy to:
- 1) TA to Director
 - 2) CA to the Additional Director of Agriculture (CP)
 - 3) CA to the Additional Director of Agriculture (Plg)
 - 4) SW Section
 - 5) IT Cell for publishing in the Web Site
 - 6) All ADAs,
 - 7) All AOs

No:ADFW/5810/2024-TA1

Date:21-05-2024

ANNEXURE I

RICE DEVELOPMENT SCHEME 2024 -25 COMPONENT WISE TARGET

H/A-2401-00-102-90 Plan

I. Assistance for Sustainable Rice Development

District	TARGET	
	Physical (Ha)	Financial (Rs. In Lakh)
Thiruvananthapuram	642.812	35.355
Kollam	414.507	22.798
Pathanamthitta	1047.027	57.586
Alappuzha	14884.344	818.639
Kottayam	6428.128	353.547
Idukki	145.018	7.976
Ernakulam	1555.102	85.531
Thrissur	6625.556	364.406
Palakkad	24412.454	1342.685
Malappuram	2187.622	120.319
Kozhikode	642.812	35.355
Wayanad	2550.666	140.287
Kannur	1565.394	86.097
Kasargode	782.697	43.048
Total	63884.138	3513.628

II. Support for Soil and root health management and productivity improvement through lime application for paddy crop.

District	TARGET		
	Physical (Ha)	Financial (Rs. In Lakh)	Transportation charges (Rs. In Lakh)
Thiruvananthapuram	235.19	12.71	0.090
Kollam	235.19	12.7	0.030
Pathanamthitta	611.494	33.021	0.400
Alappuzha	7012.421	378.671	0.000
Kottayam	3763.038	203.204	0.000
Idukki	282.228	15.24	0.050
Ernakulam	1128.911	60.961	0.320
Thrissur	3787.498	204.525	2.250
Palakkad	3311.475	178.82	0.290
Malappuram	2445.975	132.083	0.990
Kozhikode	705.57	38.101	0.100
Wayanad	442.157	23.876	0.020
Kannur	705.57	38.101	0.048
Kasargode	423.342	22.86	0.000
Total	25090.057	1354.863	4.588

III. Area Expansion**a. Fallow Land Cultivation**

District	TARGET	
	Physical (Ha)	Financial (Rs. In Lakh)
Thiruvananthapuram	0.040	0.01600
Kollam	4.920	1.96800
Pathanamthitta	9.945	3.97800
Alappuzha	35.485	14.19400
Kottayam	17.153	6.86100
Idukki	6.020	2.40800
Ernakulam	60.786	24.31440
Thrissur	41.945	16.77808
Palakkad	11.760	4.70400
Malappuram	56.883	22.75300
Kozhikode	0.000	0.00000
Wayanad	25.328	10.13130
Kannur	9.955	3.98200
Kasargode	14.818	5.92710
Total	295.04	118.01488

VI. Operational support to padashekhara samithies and Paddy Development Agencies

a) Operational support to padashekhara samithies for group farming


District	TARGET	
	Physical Target (Ha)	Financial Target (Rs. In Lakh)
Thiruvananthapuram	418.020	1.50487
Kollam	435.440	1.56757
Pathanamthitta	1282.550	4.61719
Alappuzha	4293.450	15.45642
Kottayam	6913.520	24.88866
Idukki	237.510	0.85504
Ernakulam	1456.520	5.24347
Thrissur	5948.830	21.41580
Palakkad	26600.520	95.76188
Malappuram	4225.390	15.21140
Kozhikode	1235.050	4.44618
Wayanad	2792.610	10.05339
Kannur	818.420	2.94631
Kasargode	350.040	1.26014
Total	57007.87	205.22832

VIII. Foliar Application of Micro Nutrients in Rice

District	TARGET	
	Physical Target (ha)	Financial Target (Rs. In Lakh)
Alappuzha	3847.64	76.9528
Kottayam	681.0365	13.62073
Thrissur	1500	30.00
Palakkad	2580	51.6
Malappuram	382.24	7.6448
Total	8990.9165	179.81833

sd/-
SEERAM SAMBASIVA RAO IAS

DIRECTOR


G. ANIMON
 PEN : 515043
 Deputy Director of Agriculture(CD)
 Directorate of Agricultural Development
 and Farmers Welfare
 Vikas Bhavan, Tvpm - 33