

CIRCULAR

Sub: Agriculture Department - **Scheme for Development of Vegetables 2017-18** – Green Book Components - Administrative Sanction accorded – Working Instructions issued – Reg.

Ref: G.O. (Rt.) No: 378/2017/AD Thiruvananthapuram Dtd. 04/04/2017

Administrative Sanction has been accorded for the Vegetable Development Programme during 2017-18 Green Book components as per reference with a financial outlay of **Rs. 5793 Lakhs** under the **Head of Account 2401-00-119-85 (P)**.

In the Annual Budget Green Book 2017-18, an amount of **Rs. 5793.00 lakhs** is set apart for the Scheme for various components as listed below. It is targeted to implement the Scheme with cluster approach of Farmer Groups. Required support right from the block level, viz. Technical Support, Input Facilities, Marketing Linkages, Manpower Support and Capacity Building will be provided. The Component wise abstract of Budgetary Provision of **Rs. 5793.00 lakhs** for Vegetable Development Programme 2017-18 is given below: -

Thrust Areas

Major thrust areas identified and provision earmarked for each area are given below:-

| Sl. No. | Components | Rs. in Lakhs |
|--|---|---------------------|
| 1. | Homestead Vegetable Cultivation | 500.00 |
| 2. | Promotion of Urban Clusters and Waste Management | 850.00 |
| 3. | Training, Awareness and Publicity | 50.00 |
| 4. | Cluster Development in Districts | 1848.00 |
| 5. | Technical Support and Contractual Appointments | 102.00 |
| 6. | Development Support to Graded Clusters | 1065.00 |
| 7. | Establishment of Nurseries | 200.00 |
| 8. | Micro Irrigation with Fertigation | 400.00 |
| 9. | Promotion of Zero Energy Cool Chambers for storage of harvested vegetables | 200.00 |
| 10. | Promotion of Mini Polyhouses for vegetable cultivation | 100.00 |
| 11. | Vegetable Producer Companies | 18.00 |
| 12. | On Farm Production of Bio-control Agents (Trichoderma, VAM etc.) for distribution within clusters | 25.00 |
| 13. | Supply of Soil Ameliorants including Micro-nutrients | 270.00 |
| 14. | Promotion of Small Scale Value Addition Units through Clusters | 75.00 |
| 15. | Operational Expenses | 90.00 |
| TOTAL (Rupees Fifty Seven Crores and Ninety Three lakhs only) | | 5793.00 |

I. Homestead Vegetable Cultivation (Rs. 500.00 lakhs)

a) Supply of Seedkits to School Students & Farmers through Krishi Bhavans

Scheme component aims to promote homestead vegetable cultivation by distributing assorted vegetable seed kits free of cost to school students and also to farmers who do not receive the seed supplied through the students, through Krishi Bhavans. It is proposed to distribute **20 lakhs seedkits** worth Rs. 20/- each. An amount of **Rs. 400.00 Lakhs** is earmarked for this purpose. The seed kits will be supplied by VFPCCK.

District wise targets are given below:

| Sl. No. | Districts | No. of Seedkits | | Physical Total | Financial Total (Amount in Lakhs) |
|---------|--------------------|-----------------|-----------------|----------------|--------------------------------------|
| | | Through | | | |
| | | KBs | School Students | | |
| 1 | Thiruvananthapuram | 75000 | 75000 | 150000 | 30 |
| 2 | Kollam | 75000 | 75000 | 150000 | 30 |
| 3 | Pathanamthitta | 70000 | 70000 | 140000 | 28 |
| 4 | Alappuzha | 75000 | 75000 | 150000 | 30 |
| 5 | Kottayam | 75000 | 75000 | 150000 | 30 |
| 6 | Idukki | 75000 | 75000 | 150000 | 30 |
| 7 | Ernakulam | 75000 | 75000 | 150000 | 30 |
| 8 | Thrissur | 87500 | 87500 | 175000 | 35 |
| 9 | Palakkad | 75000 | 75000 | 150000 | 30 |
| 10 | Malappuram | 75000 | 75000 | 150000 | 30 |
| 11 | Kozhikode | 100000 | 100000 | 200000 | 40 |
| 12 | Wayanad | 35000 | 35000 | 70000 | 14 |
| 13 | Kannur | 70000 | 70000 | 140000 | 28 |
| 14 | Kasargode | 37500 | 37500 | 75000 | 15 |
| TOTAL | | 1000000 | 1000000 | 2000000 | 400 |

b) Supply of Vegetable Seedlings

Moreover, **45.45 lakh seedlings** will be supplied to homesteads @ Rs. 2.20 per seedlings utilising an amount of **Rs. 100.00 lakhs**. The seedlings will be produced and supplied by the block Level and panchayat level nurseries established under Vegetable Development Programme and by Department Farms. The quality of seedlings will be certified by the District Level VDP Implementing Committee and monitored by CMD.

District wise targets are given below:

| Sl. No. | Districts | No. of Seedlings (in lakhs) | Amount (in lakhs) |
|--------------|--------------------|--------------------------------|----------------------|
| 1 | Thiruvananthapuram | 4 | 8.8 |
| 2 | Kollam | 3 | 6.6 |
| 3 | Pathanamthitta | 2 | 4.4 |
| 4 | Alappuzha | 3.7 | 8.14 |
| 5 | Kottayam | 3 | 6.6 |
| 6 | Idukki | 3 | 6.6 |
| 7 | Ernakulam | 3 | 6.6 |
| 8 | Thrissur | 5 | 11 |
| 9 | Palakkad | 4 | 8.8 |
| 10 | Malappuram | 4 | 8.8 |
| 11 | Kozhikode | 1 | 2.2 |
| 12 | Wayanad | 6 | 13.2 |
| 13 | Kannur | 2.75 | 6.05 |
| 14 | Kasargode | 1 | 2.2 |
| 15 | HQ | | 0.01 |
| TOTAL | | 45.45 | 100.00 |

The programme will be implemented observing the following general guidelines.

- The Principal Agricultural Officers will place the order for the seedkits with VFPC and VFPC will supply the seed accordingly.
- Principal Agricultural Officers will instruct the Agricultural Officers to finalize the schools for the distribution of seedkits urgently. Krishi Bhavan wise No. of kits to be distributed will be intimated to the agency.
- Once the schools are selected preliminary meetings should be conducted to create awareness about the programme.
- District wise, Krishi Bhavan wise list of schools along with the name of teacher in charge should be submitted to Director of Agriculture.
- Principal Agricultural Officers should make arrangement for raising the crop at the appropriate season and ensure supply of all required inputs at the critical stages of the crop.
- **Once the seeds received, Agricultural Officers should ensure the germination of the seeds before distribution. If the germination is less than 80% the same should be reported to the agencies concerned and to the Director of Agriculture for replacement/proportionate price reduction/imposture of penalty to the supplying agencies.**

- Seed distribution should be entrusted to a teacher in each school. The distribution details should be registered by the teacher-in-charge of the programme and kept in the school for future verification by the Agricultural Officer. Seed distribution details through Krishi Bhavans should also be registered.
- The programme should be given wide publicity and inaugural function should be arranged by involving VIPs like Ministers, MPs, MLAs and representatives of LSGs.
- Students in each selected school should be briefed on the cultivation aspects by the Agricultural Officer/Agricultural Assistant concerned. Interactive DVDs and literature supplied can be used for this purpose. Massive training programme is to be launched in each district for students, teachers, residence associations and rural households.
- It should be ensured through the Head of Institution that the programme is discussed in the school assembly.
- Periodical field verification should be done by Agricultural Assistant concerned with follow up action as and when needed, as per the directions given by the Agricultural Officer.
- The review of field level follow up should be conducted at Panchayath, Block and District level by the Officers concerned. Yield details should be collected and recorded at Krishi Bhavan level and submitted along with Monthly Progress Report.
- The Agricultural Officer and third party evaluation by CMD should report the germination percentage and quality of seedlings, based on which payment will be made to the supplying agencies by the Principal Agricultural Officers.
- A leaflet containing instructions for cultivation, supplied by Farm Information Bureau, shall be given along with seeds/seedlings by the agency. The Agricultural Officer should ensure this before the supply.
- Principal Agricultural Officers Palakkad will take samples from VFPCCK Seed Processing Centers and send for seed testing.
- The amount related to seedkits will be drawn and disbursed by Principal Agricultural Officers to the agency based on the invoice/bill submitted by them and assessment of germination.
- As far as possible 10 % of the kits of seedlings should be distributed to SC/ST students/farmers.

II. Promotion of Urban Clusters & Waste Management (Rs. 850 lakhs)

a) Supply of Growbags for Terrace Cultivation in New Clusters (Rs. 555.00 lakhs)

It is proposed to provide assistance for popularising vegetable cultivation in urban areas, in terraces as well as homesteads. This component will be implemented through residence associations as far as possible. Technical guidance will be provided by the Krishi Bhavans concerned. Agro Service Centres will act as nodal points for providing continued technical support to these urban farmers.

For terrace vegetable gardens **25 nos. grow bags (1 unit)** planted with seedlings of 4-6 major vegetable crops, worth **Rs. 2000/-**, will be supplied to houses in Corporation, Municipal and Panchayat area in a need based manner allowing 75% subsidy ie., subsidy of Rs.1500/- per unit. Growbags will have (40 cm X 24 cm X 24 cm size) 600 gauge, (150 micron thickness) white outer and black inner and should contain 10 to 13 Kg. potting mixture. The potting media combination should be as detailed below.

- | | |
|---|-------------------------------------|
| a) Red soil * | - 8 Kg. |
| b) Coir pith compost | - 1.50 Kg. (pH should be above 5.0) |
| c) Vermicompost/FYM/Other organic manures | - 300 gm |
| d) Bone meal | - 100 gm |
| e) Neem cake | - 100 gm. |
| f) Micronutrient | - 15 gm. |

* In places where there is scarcity of soil for filling the bag, 50-60 % of the soil can be replaced by coir pith compost.

The growbag should contain vegetables seedlings of tomato, chillies, brinjal, cabbage, cauliflower etc. (3 seedlings/bag) along with seeds of cowpea, amaranthus or other varieties. Supply of seedlings of cool season vegetables, if any, should be done in appropriate season. The sample of growbags produced should be subjected to verification by Deputy Director of Agriculture (NWDPPRA) and DDA(YP) before commencement of distribution of each lot. Sample photographs of each lot should also be sent to the Principal Agricultural Office by e-mail.

Principal Agricultural Officers of concerned districts will arrange the supply of growbags with seedlings preferably from Department Farms, or other agencies like VFPC/K/Agro Service Centre/Karmasena/ Kudumbasree units. Quality of growbags, potting mixture and seedlings should be ensured by the supplying agencies as well as the implementing officials before supply. The supplying agencies should do the follow up till the establishment of the seedlings. For arrangements for growbags, preference should be given to Department Farms. It is proposed to supply **37000 grow bag units** under Vegetable Development Programme utilising an amount of **Rs. 555.00 lakhs**.

A random sampling and verification of the quality of growbags, potting mixture and seedlings distributed should be carried out to ensure their adherence to the prescribed quality standards. Such reports should be filed by Officials. Leaflets/booklets explaining cultivation aspects, pest and disease management, irrigation and manure application etc. should be provided along with growbags.

This component may also be implemented in rural areas with space constraints.

DISTRICT WISE TARGETS

| Sl. No. | Name of District | Total No. of Units | Total No. of Growbags 25 Nos./Unit | Amount Required (in Lakhs) |
|----------------|-------------------------|---------------------------|---|-----------------------------------|
| 1 | Thiruvananthapuram | 3000 | 75000 | 45 |
| 2 | Kollam | 3000 | 75000 | 45 |
| 3 | Pathanamthitta | 2500 | 62500 | 37.5 |
| 4 | Alappuzha | 3000 | 75000 | 45 |
| 5 | Kottayam | 3000 | 75000 | 45 |
| 6 | Idukki | 2500 | 62500 | 37.5 |
| 7 | Ernakulam | 3000 | 75000 | 45 |
| 8 | Thrissur | 3000 | 75000 | 45 |
| 9 | Palakkad | 3000 | 75000 | 45 |
| 10 | Malappuram | 3000 | 75000 | 45 |
| 11 | Kozhikode | 3000 | 75000 | 45 |
| 12 | Wayanad | 1000 | 25000 | 15 |
| 13 | Kannur | 3000 | 75000 | 45 |
| 14 | Kasargod | 1000 | 25000 | 15 |
| TOTAL | | 37000 | 925000 | 555 |

b) Support to Existing Urban Clusters (Rs. 150.00 lakhs)

It is proposed to provide assistance for the maintenance of 75000 growbags units established during the previous years (2014-15, 2015-16 and 2016-17) . Kits containing critical inputs as given below will be supplied to the farmers.

1. Seed packet – Rs. 10/-
2. Vegetable Seedlings – Rs. 50/-
3. Organic Pesticides/Bio-control Agents – Rs. 60/-
4. Micro-nutrients – Rs. 30/-
5. VAM – Rs. 50/-

TOTAL - Rs. 200/-

VAM, Bio-pesticides and Bio-control agents produced by Departmental Lab or KAU should only to be supplied to the farmers. Seedkit should be arranged from VFPC/K/Departmental Farm/KAU and seedlings from VDP Nurseries. The beneficiaries will also be given close follow up and training in proper crop management, including manure and fertiliser application, pest and disease management, good agricultural practices etc by the Krishi Bhavans. The assistance under this component will be limited to Rs. 200/-per farmer. An amount of Rs. 150.00 lakhs is set apart for this purpose. During the last three years 107789 no. of growbag units were supplied.

District wise target is as below:-

| Sl. No. | Name of District | Recurring Expenditure for Growbags Supplied in 2014-15, 2015-16 & 2016-17 (in lakhs) | |
|--------------|--------------------|--|------------------|
| | | Physical Target | Financial Target |
| 1 | Thiruvananthapuram | 6000 | 12 |
| 2 | Kollam | 6000 | 12 |
| 3 | Pathanamthitta | 6000 | 12 |
| 4 | Alappuzha | 5000 | 10 |
| 5 | Kottayam | 6000 | 12 |
| 6 | Idukki | 2000 | 4 |
| 7 | Ernakulam | 12000 | 24 |
| 8 | Thrissur | 5000 | 10 |
| 9 | Palakkad | 5000 | 10 |
| 10 | Malappuram | 5100 | 10.2 |
| 11 | Kozhikode | 5100 | 10.2 |
| 12 | Wayanad | 800 | 1.6 |
| 13 | Kannur | 10000 | 20 |
| 14 | Kasargode | 1000 | 2 |
| TOTAL | | 75000 | 150 |

c) Waste Management Linked to Vegetable Production (Rs. 75.00 lakhs)

i. Organic Waste Management (Rs.65.00 lakhs)

In support to Haritha Keralam Programme Domestic Composting Units will be established along with growbag units to manage the domestic waste and to provide necessary organic manure for the cultivation. For this vermi compost units/other composting units will be established with 50% of the total cost of Rs. 5000/- ie. Rs.2500/unit. An amount of Rs. 65.00 lakhs is set apart under this component to establish 2600 units.

| Sl. No. | Name of District | Phy. Target | Fin. Target (in lakhs) |
|--------------|--------------------|-------------|------------------------|
| 1 | Thiruvananthapuram | 100 | 2.5 |
| 2 | Kollam | 100 | 2.5 |
| 3 | Pathanamthitta | 50 | 1.25 |
| 4 | Alappuzha | 200 | 5 |
| 5 | Kottayam | 200 | 5 |
| 6 | Idukki | 300 | 7.5 |
| 7 | Ernakulam | 150 | 3.75 |
| 8 | Thrissur | 300 | 7.5 |
| 9 | Palakkad | 300 | 7.5 |
| 10 | Malappuram | 300 | 7.5 |
| 11 | Kozhikode | 150 | 3.75 |
| 12 | Wayanad | 95 | 2.375 |
| 13 | Kannur | 275 | 6.875 |
| 14 | Kasargode | 80 | 2 |
| TOTAL | | 2600 | 65 |

ii. Waste Water Management (Rs.10.00 lakhs)

A domestic waste water treatment model suitable for both households and flats/ condominiums has to be established for recycling of waste water for enabling vegetable cultivation. For this, an amount of Rs. 10.00 lakhs is set apart for developing a suitable model for this purpose on a project mode through KAU/CWRDM or any other accredited government institutions and also establishing 10 demonstration plots of such models in urban areas.

d) Mini-drip/Wick Irrigation Units (Rs. 45.00 lakhs)

Mini-drip/Wick Irrigation units will be established along with the growbag units to avoid excessive use of water, depletion of soil nutrients and for regular moisture supply to the crops. 50% subsidy to the drip units limited to Rs. 2000/unit will be provided for 2250 units. An amount of Rs. 45.00 lakhs is proposed for this component.

| Sl. No. | Name of District | Phy. Target | Fin. Target (in lakhs) |
|--------------|--------------------|-------------|------------------------|
| 1 | Thiruvananthapuram | 250 | 5 |
| 2 | Kollam | 200 | 4 |
| 3 | Pathanamthitta | 50 | 1 |
| 4 | Alappuzha | 200 | 4 |
| 5 | Kottayam | 200 | 4 |
| 6 | Idukki | 150 | 3 |
| 7 | Ernakulam | 250 | 5 |
| 8 | Thrissur | 250 | 5 |
| 9 | Palakkad | 150 | 3 |
| 10 | Malappuram | 150 | 3 |
| 11 | Kozhikode | 100 | 2 |
| 12 | Wayanad | 100 | 2 |
| 13 | Kannur | 100 | 2 |
| 14 | Kasargode | 100 | 2 |
| TOTAL | | 2250 | 45 |

e) Formation of Haritha Groups (Rs.25.00 lakhs)

Urban vegetable cultivation will be institutionalised by federating urban clusters of various residence associations at ward level to form 50 nos. of “Haritha Groups”. These groups will be registered under the Charitable Societies Act. At least 3 to 5 residence associations should join together to form a Haritha Group. An assistance of Rs.50000/- will be provided per Haritha Group to meet the expenses related to registration and other operational expenses.

An amount of **Rs.25.00 lakhs** is set apart for the institutionalisation of urban vegetable growers into Hariha Groups and also for providing technical support and marketing facilities through local volunteers 'Haritha Mitras' to be engaged for this

purpose. This will open a self employment opportunity for such volunteers. If the requirement of Operational Expense is less than Rs. 50000/- no. of Haritha Group can be increased.

| Sl. No. | Name of District | Phy. Target | Fin. Target (in lakhs) |
|----------------|-------------------------|--------------------|-------------------------------|
| 1 | Thiruvananthapuram | 7 | 3.5 |
| 2 | Kollam | 5 | 2.5 |
| 3 | Pathanamthitta | 2 | 1 |
| 4 | Alappuzha | 1 | 0.5 |
| 5 | Kottayam | 1 | 0.5 |
| 6 | Idukki | 3 | 1.5 |
| 7 | Ernakulam | 5 | 2.5 |
| 8 | Thrissur | 5 | 2.5 |
| 9 | Palakkad | 2 | 1 |
| 10 | Malappuram | 4 | 2 |
| 11 | Kozhikode | 5 | 2.5 |
| 12 | Wayanad | 3 | 1.5 |
| 13 | Kannur | 5 | 2.5 |
| 14 | Kasargode | 2 | 1 |
| TOTAL | | 50 | 25 |

The follow up and management of urban clusters shall be the responsibility of Project Director, ATMA of the district.

III. Training, Awareness & Publicity (Rs. 50.00 Lakhs)

Upgradation of latest technology by the extension personnel is an essential factor for advocating the same to the farming community. This will also help to change the attitude, skill and knowledge of the farmer, which will lead to adoption of technology. This component envisages imparting training to the extension officers, documentation of events and activities taking place in the fields, providing publicity & conducting campaigns for creating awareness among the farming community and for providing training to the farmers on the latest technologies. Activity wise provision of funds is as given below. District Level & State Level Review Meeting/Workshops/Seminars are also envisaged as part of this component. As far as possible, the activities will be linked with the Haritha Keralam programme of Government of Kerala.

a. Publicity/Campaign (Rs. 30.00 Lakhs)

Publicity will be given through print media, electronic media, posters, leaflets, AIR, FM channels, scroll news, video programme, publicity materials and other ways of

publicity by Farm Information Bureau. An amount of **Rs. 16.00 Lakhs** is set apart to FIB.

Successful implementation of any activity depends on Campaigns/Seminars/Workshops/Review Meetings/Inauguration/Harvest Festivals conducted for its promotion. Advertisement will be done at rates approved by PRD. Special media programme will be formulated for serialized telecasting and broadcasting through Doordarshan, AIR and other selected visual media in consultation with the institutions for promotion of success stories on vegetable cultivation. Such Publicity/Campaign activities will be entrusted to FIB. **Farm Information Bureau will submit a detailed plan in this line for the specified amount and Director of Agriculture will sanction the same based on feasibility.**

Publicity at district, block and Panchayat level will also be arranged by PAOs for which **Rs. 14.00 Lakhs** is earmarked. **The success stories of all components of the programme will be given wide publicity through different media.**

b. Training Material (Rs. 7.00 Lakhs)

Technical materials on the cultivation aspects, INM & IPM, Hybrid Cultivation etc. will be prepared both as CD, Leaflets, Booklets, Posters etc. for the use of the cluster farmers and extension personnel as an aid in training. Technical inputs will be sourced from KAU, VFPC, Department of Agriculture etc. and preparation of CDs, Interactive DVDs and Printed Materials will be entrusted with FIB for which an amount of **Rs. 7.00 lakhs** is earmarked. The training materials to be prepared will be submitted by FIB as per the requirement placed by Vegetable Cell and the same will be finalized after discussion with the Director of Agriculture. Record Books for clusters, Minutes Book, Farm Card/Farm Diary format will also be distributed to the clusters. FIB will be entrusted with the preparation of all such training materials. The training material distribution should be completed by July 2017.

c. Training Programmes (Rs. 13.00 Lakhs)

Trainings and Skill Development Programmes for Extension Officers/farmers, schools, homesteads, clusters, municipalities, corporations, residents associations, districts and state level will be provided in each district. An amount of **Rs. 13.00 lakhs** is set apart for this purpose.

An amount of Rs.1,000/- will be paid for each training. The skills required for vegetable cultivation, use of bio-pesticides and its advantages, aftercare and management for terrace cultivation etc. should be explained in detail in such trainings. The training targets given to the sub offices by Principal Agricultural Officer will be reported to the Director of Agriculture in due course. The trainings will be conducted at field level in the field of a good farmer. Involvement of KVK/KAU/Best Performers of Department under VDP must be ensured as far as possible.

Priority will be given to give training on edible, traditionally available leafy vegetables to promote healthy living and supplementing the efforts to achieve self sufficiency in vegetable production.

The details of district wise targets are given below:

| Sl. No. | Name of District | Publicity/ Campaign (Amount in lakhs) | Training Material (Amount in lakhs) | Training Programmes | |
|--------------|--------------------|---|--|---------------------|-----------------|
| | | | | Phy. | Fin. (in lakhs) |
| 1 | Thiruvananthapuram | 1 | - | 100 | 1 |
| 2 | Kollam | 1 | - | 80 | 0.8 |
| 3 | Pathanamthitta | 1 | - | 80 | 0.8 |
| 4 | Alappuzha | 1 | - | 125 | 1.25 |
| 5 | Kottayam | 1 | - | 100 | 1 |
| 6 | Idukki | 1 | - | 125 | 1.25 |
| 7 | Ernakulam | 1 | - | 80 | 0.8 |
| 8 | Thrissur | 1 | - | 120 | 1.2 |
| 9 | Palakkad | 1 | - | 100 | 1 |
| 10 | Malappuram | 1 | - | 100 | 1 |
| 11 | Kozhikode | 1 | - | 80 | 0.8 |
| 12 | Wayanad | 1 | - | 60 | 0.6 |
| 13 | Kannur | 1 | - | 80 | 0.8 |
| 14 | Kasargode | 1 | - | 70 | 0.7 |
| 15 | FIB | 16 | 7 | - | - |
| TOTAL | | 30 | 7 | 1300 | 13 |

IV. Cluster Development in Districts (Rs. 1848.00 lakhs)

a. Clusters (Rs. 750.00 lakhs)

For promoting commercial cultivation of vegetables, minimum 15 farmers will be formed as a cluster to take up cultivation in 5 ha of vegetable crops, either in garden land or wetland, as per availability and suitability. This component will be implemented throughout the state. The cluster members should select vegetable crops and varieties suitable for their locality. It is proposed to organize **1000 Clusters** in all the revenue blocks in the State. This may be on continuous area based approach or on scattered area basis. Assistance will be given @ **Rs. 75,000/- per cluster with a minimum area of 5 ha**. The cluster shall be registered with a President and a Convenor.

Assistance @ of **Rs. 15000/Ha** will be provided for cultivation of vegetables in **1000 clusters** in an area of **5000 Ha**, for which a provision of **Rs. 750.00 Lakhs** is earmarked. It should be ensured that cultivation in clusters is taken up in a minimum of 2-3 seasons, even if assistance is provided only for one season.

The production will be streamlined based on a 52-week production plan and details made transparent through an e-portal mechanism to ensure effective marketing. Pre-season meetings should be conducted from Panchayath level to District level and Action Plan to be prepared.

Poor performing clusters will be delinked from support and new clusters will be formed and assisted.

While forming new clusters, Young Farmers' Clusters (members below 40 years of age) and Students Clusters (NCC/ NSS/Green Cadet Corps etc) will be given priority, considering the key role of youth in grooming the future of Kerala Agriculture.

Space availability in young rubber plantations may also be considered on merit while forming new clusters.

Maintenance of Model Plots within Clusters

One **Model Plot** per block will be maintained within a cluster under the direct supervision of Assistant Director of Agriculture/Agricultural Officer concerned, so as to have a demonstrative value for the programme that can be replicated. In such model plots, all technologies will be adopted and innovations practiced. Activities under ATMA / ATMA plus may be linked with such plots. Preference will be given for establishing demonstrations / FFS under ATMA in model plots. Separate documentation of such model plots will be made at district level.

b. Pumpsets (Rs. 200.00 lakhs)

For ensuring irrigation, assistance will be given to portable/fixed pumpsets (1.5 HP) with accessories @ **Rs. 10,000/unit** (50% cost of pumpset with accessories or Rs. 10,000/unit whichever is less). The cluster member can also avail this assistance and the pumpset should be used for common activities as well. Provision for **2000 pumpsets** with a financial outlay of **Rs. 200.00 lakhs** is earmarked. Assistance will be provided irrespective of the power source. If needed, assistance for pumpsets of 1 HP can also be provided subject to approval by Block Level/District Level Committee for Vegetable Development Programme.

c. Plant Protection Equipments (Rs. 30.00 lakhs)

For effective and timely pest and disease management, availability of plant protection equipments with the cluster members is a must. To ensure this, the cluster member can avail assistance for purchasing knapsack or power sprayers required for the cluster, @ **Rs. 1500/unit**. It is targeted to distribute **2000 Plant Protection Equipments** and for this **Rs. 30.00 Lakhs** is set apart.

d. Haritha Fund (Rs. 10.00 lakhs)

The clusters should be of cohesive in nature and to meet the contingent expenses in cultivation, insitu training, regular interactive sessions, expenses to meet a common issue etc., an amount of **Rs. 1,000/- per cluster** will be provided. The cluster convener is authorized to spend the amount based on the need of the cluster members. **1000 clusters** will be provided with Haritha Fund and for this an amount of **Rs. 10.00 lakhs** is earmarked.

e. Innovation Fund (Rs. 45.00 Lakhs)

An amount of **Rs. 45.00 Lakhs** will be provided as untied fund to districts for taking up innovative activities required in the cluster and to fill any critical gap in the vegetable production programme, including value addition and marketing. A lumpsum provision of Rs. 3 lakhs per district is earmarked for this activity and allocation of funds to the blocks will be made based on their proposal on a priority basis. **The block level proposals will be scrutinized and approved by the District Level Committee and sanction accorded by the Principal Agricultural Officers concerned based on which funds will be released.** An amount of **Rs. 45.00 Lakhs** is earmarked for this component. The Principal Agricultural Officers will submit the list of proposals and obtain the approval. The Committee constituted for the Project Based Cultivation will verify the proposals for giving sanction.

DISTRICT WISE TARGETS

| Sl. No. | Name of District | Cluster @ 0.75/Units | | Pumpsets @ Rs. 10000/- | | PP Equipments @ Rs. 1500/- | | Haritha Fund | | Innovation Fund |
|--------------|--------------------|----------------------|------------------------|------------------------|------------------------|----------------------------|------------------------|--------------|------------------------|------------------------|
| | | Phy. | Fin. (Amount in lakhs) | Phy. | Fin. (Amount in lakhs) | Phy. | Fin. (Amount in lakhs) | Phy. | Fin. (Amount in lakhs) | Fin. (Amount in lakhs) |
| 1 | Thiruvananthapuram | 75 | 56.25 | 150 | 15 | 150 | 2.25 | 75 | 0.75 | 3 |
| 2 | Kollam | 60 | 45 | 140 | 14 | 140 | 2.1 | 60 | 0.6 | 3 |
| 3 | Pathanamthitta | 60 | 45 | 130 | 13 | 130 | 1.95 | 60 | 0.6 | 3 |
| 4 | Alappuzha | 75 | 56.25 | 200 | 20 | 200 | 3 | 75 | 0.75 | 3 |
| 5 | Kottayam | 100 | 75 | 150 | 15 | 150 | 2.25 | 100 | 1 | 3 |
| 6 | Idukki | 65 | 48.75 | 150 | 15 | 150 | 2.25 | 65 | 0.65 | 3 |
| 7 | Ernakulam | 65 | 48.75 | 125 | 12.5 | 125 | 1.875 | 65 | 0.65 | 3 |
| 8 | Thrissur | 80 | 60 | 150 | 15 | 150 | 2.25 | 80 | 0.8 | 3 |
| 9 | Palakkad | 80 | 60 | 140 | 14 | 140 | 2.1 | 80 | 0.8 | 3 |
| 10 | Malappuram | 75 | 56.25 | 150 | 15 | 150 | 2.25 | 75 | 0.75 | 3 |
| 11 | Kozhikode | 60 | 45 | 150 | 15 | 150 | 2.25 | 60 | 0.6 | 3 |
| 12 | Wayanad | 65 | 48.75 | 120 | 12 | 120 | 1.8 | 65 | 0.65 | 3 |
| 13 | Kannur | 80 | 60 | 120 | 12 | 120 | 1.8 | 80 | 0.8 | 3 |
| 14 | Kasargod | 60 | 45 | 125 | 12.5 | 125 | 1.875 | 60 | 0.6 | 3 |
| 15 | HQ | - | - | - | - | - | - | - | - | 3 |
| TOTAL | | 1000 | 750 | 2000 | 200 | 2000 | 30 | 1000 | 10 | 45 |

f. Soil Testing

Soil Testing should be done in all clusters before the cultivation. Soil sample collection in clusters, schools and institutions by Field Assistants should be completed by May 15th. The Principal Agricultural Officer will give instructions to the DSTLS/MSTLS

to complete the analysis from clusters in a time bound manner so as to give the results before June 15th.

In clusters vegetable cultivation should be planned in such a way so that the harvest coincides with festival seasons (Onam, Vishu etc.). Pest and disease forecasting may also be carried out and information on the measures to be taken in advance may be passed on to the clusters in time.

g. Solarisation

Solarisation to be promoted in clusters to reduce disease incidence. Demonstration on solarisation should be conducted in 'A' Grade Clusters utilizing funds given as assistance.

Note: Out of total subsidy per hectare 25% is earmarked for the promotion of inputs for safe food production and for promoting good agricultural practices. Bio-control agents, pheromone traps, area wide IPM and bio-fertilizers will be included in the 25% earmarked amount of the subsidy component. Another minimum 15% will be insisted for lime application. Certificate to this effect should be provided in the claim by the Agricultural Officer.

h. Vegetable Cultivation in Fallow Land (Rs. 300.00 Lakhs)

Suitable area which is kept fallow for the last 3 years is selected and land preparation is done and cultivation of vegetable crop is undertaken. Fallow land, where vegetable cultivation can be done has to be identified. The cultivation can be undertaken through the individual farmers, landless agricultural labourers, farmer groups, youth clubs and any other organizations who are willing to undertake fallow land cultivation. An amount of **Rs. 30,000/- per hectare** will be given as assistance for undertaking one hectare of fallow land cultivation. (**Rs. 25000/ha for cultivators and Rs. 5000/ha for land owners**). The assistance for cultivators will be for the activities from land preparation to harvest. Assistance will be provided to the owners of the land for giving the land for cultivation. In an area of **1000 Ha** of fallow land, vegetable cultivation will be undertaken for which **Rs. 300.00 Lakhs** is earmarked. Vegetable cultivation can be done in fallow either owned by the cultivators or in leased lands. **As far as possible SC/ST Farmers/Groups should be given preference for this programme.**

| Sl. No. | Item | Assistance per Hectare (Rs.) | Area (Ha) | Total Amount Rs. in Lakhs |
|--------------|-------------------------|------------------------------|-------------|---------------------------|
| 1. | Cultivation Assistance | 25000 | 1000 | 250.00 |
| 2. | Lease Value of the Land | 5000 | 1000 | 50.00 |
| TOTAL | | 30000 | 1000 | 300.00 |

The details of district wise targets are given below:

| Sl. No. | Name of District | Phy. Target (Ha.) | Fin. Target (in lakhs) |
|--------------|--------------------|-------------------|------------------------|
| 1 | Thiruvananthapuram | 75 | 22.5 |
| 2 | Kollam | 75 | 22.5 |
| 3 | Pathanamthitta | 75 | 22.5 |
| 4 | Alappuzha | 80 | 24 |
| 5 | Kottayam | 65 | 19.5 |
| 6 | Idukki | 65 | 19.5 |
| 7 | Ernakulam | 50 | 15 |
| 8 | Thrissur | 100 | 30 |
| 9 | Palakkad | 75 | 22.5 |
| 10 | Malappuram | 75 | 22.5 |
| 11 | Kozhikode | 75 | 22.5 |
| 12 | Wayanad | 55 | 16.5 |
| 13 | Kannur | 80 | 24 |
| 14 | Kasargode | 55 | 16.5 |
| TOTAL | | 1000 | 300 |

If the land owner does not avail the lease value of Rs. 5000/Ha, a Written Consent on the same should be obtained from him. This amount can be utilised to bring additional fallow land to cultivation without changing the subsidy rates from Rs. 25000/Ha.

i. Seedkit Distribution through Media (Rs. 120.00 lakhs)

Vegetable seedkits worth Rs. 20/- with assorted seeds will be distributed through publications. It is proposed to distribute **6 lakh kits** under the programme with a provision of **Rs. 120.00 lakhs**.

The following guidelines will be followed while implementing this component.

- Seminars should be arranged in each district and the function should be documented by media.
- The list of schools selected for the supply of seeds should be submitted to the Principal Agricultural Officers and Directorate of Agriculture by Medias
- The list of beneficiaries along with address should be transmitted to Principal Agricultural Officers by the bureau under intimation to VFPCCK
- Remarks of Centre for Management Development regarding last year's scheme should be considered while implementing.
- Documented report should include functions and training sessions arranged in connection with the programme, number and name of schools involved with No. of students along with data on area, production and productivity.
- The programme should be closely monitored by the Principal Agricultural Officers concerned with state level monitoring by Additional Director (Farms, Biogas and Vegetables).
- CMD should monitor the programme and submit reports.

j. Staggered Clusters (Rs. 150.00 lakhs)

Staggered clusters on area/individual basis can be implemented in an area of **1000 ha** with a financial outlay of **Rs. 150.00 Lakhs**. An assistance of **Rs. 15000/ha** will be provided. Staggered Clusters are allotted over and above the Potential Clusters sanctioned vide item 6 (a). **The 5 ha upper limit of clusters will be relaxed** and eligible assistance will be provided to the area cultivated in the clusters. Minimum area of 0.1 ha (25 cents) should be provided. Field Level Officials will identify the areas and achieve the targets in full.

Joint Liability Groups of women /Youth /students can be formed, federated and registered under this component to facilitate direct marketing of their produce with the help of LSGDs.

The details of district wise targets are given below:

| Sl. No. | Name of District | Phy. Target (Ha) | Fin. Target (in lakhs) |
|--------------|--------------------|------------------|------------------------|
| 1 | Thiruvananthapuram | 60 | 9 |
| 2 | Kollam | 60 | 9 |
| 3 | Pathanamthitta | 50 | 7.5 |
| 4 | Alappuzha | 90 | 13.5 |
| 5 | Kottayam | 50 | 7.5 |
| 6 | Idukki | 90 | 13.5 |
| 7 | Ernakulam | 50 | 7.5 |
| 8 | Thrissur | 90 | 13.5 |
| 9 | Palakkad | 90 | 13.5 |
| 10 | Malappuram | 90 | 13.5 |
| 11 | Kozhikode | 70 | 10.5 |
| 12 | Wayanad | 80 | 12 |
| 13 | Kannur | 80 | 12 |
| 14 | Kasargode | 50 | 7.5 |
| TOTAL | | 1000 | 150 |

k. Supply of Vegetable Seed kits through NGOs & Other Groups (Rs. 50 Lakhs)

This component aims at the supply of vegetable seed kits through Krishi Bhavans to Non Governmental Organizations (NGOs) working in the Agriculture sector for an amount of **Rs. 50.00 lakhs (Rupees Fifty lakhs only) @ Rs. 10/- per kit**. The objectives of the programme are:-

- To supply **5 lakh assorted vegetable seed kits** to NGOs to be distributed free of cost to members.
- To popularize the concept of Homestead Vegetable Cultivation.
- To produce safe-to-eat vegetables at homesteads.
- To spread organic farming practices among general public.
- To impart knowledge about vegetable cultivation among young generation.
- To promote the concept of 'Family Farming'.

The project is proposed to be implemented throughout the state. As part of the programme, 5 lakhs vegetable seed kits will be distributed through Krishi Bhavans to NGOs working in agricultural activities free of cost. Number of kits supplied should be based on the membership strength of each group. Seed kits containing seeds of 5-6 types of vegetable commonly cultivated like Bhindi, Amaranthus, Cowpea, Chilly, Bittergourd, Snakegourd etc., in homesteads, at a cost of Rs. 10/- per kit including packing.

Seed kits will be supplied free of cost and other inputs should be procured by the beneficiary himself. Training on vegetable cultivation giving stress to organic methods and seed production should be conducted at Krishi Bhavan level for the members of the organization based on their request. Cultivation can be taken up individually or in groups depending on the availability of land, irrigation facility etc. A Monitoring Committee consisting of Krishi Bhavan Officials, People's and Farmer's representatives should be constituted to evaluate the success of the programme by conducting field visits at random. Agricultural Officers should ensure that duplication of supply of seeds will not happen under different schemes. The field level follow up should be done by the Agricultural Assistant of that area and supervised by Agricultural Officers.

The Principal Agricultural Officer will draw and disburse the cost of vegetable seeds supplied by VFPCCK based on proper claims submitted by them after ensuring quality.

The details of district wise targets are given below:

| Sl. No. | Name of District | Phy. Target | Fin. Target (in lakhs) |
|--------------|--------------------|---------------|------------------------|
| 1 | Thiruvananthapuram | 30000 | 3 |
| 2 | Kollam | 30000 | 3 |
| 3 | Pathanamthitta | 30000 | 3 |
| 4 | Alappuzha | 40000 | 4 |
| 5 | Kottayam | 30000 | 3 |
| 6 | Idukki | 30000 | 3 |
| 7 | Ernakulam | 30000 | 3 |
| 8 | Thrissur | 50000 | 5 |
| 9 | Palakkad | 30000 | 3 |
| 10 | Malappuram | 30000 | 3 |
| 11 | Kozhikode | 27000 | 2.7 |
| 12 | Wayanad | 10000 | 1 |
| 13 | Kannur | 35000 | 3.5 |
| 14 | Kasargode | 10000 | 1 |
| 15 | HQ | 88000 | 8.8 |
| TOTAL | | 500000 | 50 |

I. Production and distribution of seeds of traditional varieties (Rs. 25.00 lakhs)

a. Augmenting seed production of traditional varieties (Rs.20.00 lakhs)

There are many traditional varieties of vegetables in our State which are nutritive, have medicinal value and good for health. It is proposed to multiply and popularise such traditional vegetable varieties of our State to promote their use in our daily life in view of their nutritive value and health benefits and also to prevent chances of their extinction. Some of the traditional vegetable varieties are Vengeri vazhuthana, Onattukara paval, Mararikulam vazhuthana, Anakkombu kothamara, Idukki elachembu, Nithya vazhuthana, Vallicheera, Vallipayar, Chathurapayar etc.

The project aims at the conservation, multiplication and distribution of the seeds of location specific/ ethnic traditional vegetable varieties including local leafy vegetables, so as to popularise their use among the common man for healthy living and reducing susceptibility to diseases. Multiplication of varieties in traditional areas, their use and exchange will be promoted. The programme is proposed to be implemented on a project mode through A grade clusters or other well performing clusters by providing additional assistance of **Rs.25000/- per ha**. The minimum plot size should be 10 cents. The pure seeds available with traditional farmers will be utilized for this purpose. This activity will be taken up by the clusters concerned in addition to their normal activities. It is proposed to implement this programme in an area of **80 ha**. An amount of **Rs.20.00 lakhs** is set apart for this purpose. The department will facilitate procurement and distribution of seeds produced, so as to popularize the use of traditional vegetables.

The details of district wise targets are given below:

| Sl. No. | Name of District | Phy. Target (Ha) | Fin. Target (in lakhs) |
|----------------|-------------------------|-------------------------|-------------------------------|
| 1 | Thiruvananthapuram | 5 | 1.25 |
| 2 | Kollam | 3 | 0.75 |
| 3 | Pathanamthitta | 2 | 0.5 |
| 4 | Alappuzha | 5 | 1.25 |
| 5 | Kottayam | 5 | 1.25 |
| 6 | Idukki | 10 | 2.5 |
| 7 | Ernakulam | 5 | 1.25 |
| 8 | Thrissur | 10 | 2.5 |
| 9 | Palakkad | 6 | 1.5 |
| 10 | Malappuram | 7 | 1.75 |
| 11 | Kozhikode | 5 | 1.25 |
| 12 | Wayanad | 7 | 1.75 |
| 13 | Kannur | 5 | 1.25 |
| 14 | Kasargode | 5 | 1.25 |
| TOTAL | | 80 | 20 |

b. Providing Assistance for Geographic Indication of Traditional Varieties (Rs. 5.00 lakhs)

Geographic indication of traditional varieties will fetch value and popularity to the local produce across the globe. Hence it is proposed to provide assistance for obtaining geographic indication for traditional vegetable varieties of Kerala. An amount of **Rs.5.00 lakhs** is earmarked for this purpose. The details of such varieties will be submitted by the PAOs.

m. Promotion of Nutrition Garden (Rs.25.00 lakhs)

a) Distribution of Saplings (Rs.20.00 lakhs)

Inclusion of perennial vegetables such as bread fruit, muringa, agathy, curry leaves etc in our daily diet can ensure healthy living and reduce the occurrence of life style diseases owing to their nutritive value alongwith palatability. Considering this, it is proposed to popularise such varieties among the masses, by distributing sapling kits of the above varieties to raise nutrition garden in homesteads. A kit containing planting materials of 5- 6 varieties costing Rs.100/- will be distributed to households at 50% subsidy. It is proposed to produce distribute 40000 perennial vegetable sapling kits during 2017-18 through Department Farms, utilizing an outlay of **Rs. 20.00 lakhs**.

The details of district wise targets are given below:

| Sl. No. | Name of District | Phy. Target | Fin. Target (in lakhs) |
|----------------|-------------------------|--------------------|-------------------------------|
| 1 | Thiruvananthapuram | 3000 | 1.5 |
| 2 | Kollam | 2000 | 1 |
| 3 | Pathanamthitta | 2000 | 1 |
| 4 | Alappuzha | 4000 | 2 |
| 5 | Kottayam | 3000 | 1.5 |
| 6 | Idukki | 5000 | 2.5 |
| 7 | Ernakulam | 3000 | 1.5 |
| 8 | Thrissur | 4000 | 2 |
| 9 | Palakkad | 4000 | 2 |
| 10 | Malappuram | 2000 | 1 |
| 11 | Kozhikode | 2000 | 1 |
| 12 | Wayanad | 2000 | 1 |
| 13 | Kannur | 2000 | 1 |
| 14 | Kasargode | 2000 | 1 |
| TOTAL | | 40000 | 20 |

b) Commercial cultivation of perennial vegetables (Rs.5.00 lakhs)

Perennial vegetables such as breadfruit, muringa, agathi, curry leaves, raw papaya, sweet lime, lemon etc form an integral part of the daily diet of common Keralite. However considerable share of our requirement of these vegetables is sourced from outside the State. The fact that such imports are pesticide ridden

poses high health risk to the consumer. Hence it is proposed to promote commercial cultivation of such varieties in our State in appropriate locations in a scientific manner to meet our domestic requirement. This programme is proposed to be implemented through A grade clusters or other well performing clusters by providing additional assistance of **Rs.20000/- per ha**. This activity will be taken up by the clusters concerned in addition to their normal activities. A minimum plot size of 50 cents is proposed for this purpose. An amount of **Rs.5.00 lakhs** is earmarked for implementing this component in an area of **25 ha**.

The details of district wise targets are given below:

| Sl. No. | Name of District | Phy. Target (Ha) | Fin. Target (in lakhs) |
|----------------|-------------------------|-------------------------|-------------------------------|
| 1 | Thiruvananthapuram | 2 | 0.4 |
| 2 | Kollam | 1 | 0.2 |
| 3 | Pathanamthitta | 1 | 0.2 |
| 4 | Alappuzha | 2 | 0.4 |
| 5 | Kottayam | 1 | 0.2 |
| 6 | Idukki | 2 | 0.4 |
| 7 | Ernakulam | 2 | 0.4 |
| 8 | Thrissur | 3 | 0.6 |
| 9 | Palakkad | 2 | 0.4 |
| 10 | Malappuram | 2 | 0.4 |
| 11 | Kozhikode | 2 | 0.4 |
| 12 | Wayanad | 2 | 0.4 |
| 13 | Kannur | 2 | 0.4 |
| 14 | Kasargode | 1 | 0.2 |
| TOTAL | | 25 | 5 |

n. Assistance to Agroservice Centres for establishment of nurseries & support of traditional varieties and nutritional garden (Rs.75.00 lakhs)

Scarcity of skilled labour for agricultural operations is a major constraint facing Kerala Agriculture sector, in both rural and urban areas. Agroservice centres functioning under the department have emerged as an effective solution to this problem. Agroservice Centres are functioning in both rural and urban areas and they have earned the credibility of executing task assigned to them in a time bound manner.

Considering the above facts, it is proposed to entrust promising agroservice centres in the establishment of nurseries, multiplication and distribution of seeds of traditional varieties of vegetables and also of saplings of perennial vegetables for distribution for raising nutrition gardens. An amount of Rs.1.00 lakh per agroservice centre will be provided for setting up nurseries or strengthening existing nurseries, subject to the condition that 25000 planting materials will be produced and distributed to the beneficiaries. Preference will be given to agroservice centres with existing nurseries, based on performance evaluation. The component will be implemented on a project mode

with the approval of the district level sanctioning committee of the department. It is proposed to provide project based assistance to agroservice centres under this component, utilising an amount of **Rs.75.00 lakhs**.

The 'Green Army' constituted under the auspices of the Kerala Agricultural University will be linked with this programme by providing assistance under the scheme - Agroservice Centres and Services Delivery.

The details of district wise targets are given below:

| Sl. No. | Name of District | Phy. Target | Fin. Target (in lakhs) |
|----------------|-------------------------|--------------------|-------------------------------|
| 1 | Thiruvananthapuram | 6 | 6 |
| 2 | Kollam | 3 | 3 |
| 3 | Pathanamthitta | 3 | 3 |
| 4 | Alappuzha | 6 | 6 |
| 5 | Kottayam | 3 | 3 |
| 6 | Idukki | 6 | 6 |
| 7 | Ernakulam | 6 | 6 |
| 8 | Thrissur | 9 | 9 |
| 9 | Palakkad | 6 | 6 |
| 10 | Malappuram | 6 | 6 |
| 11 | Kozhikode | 6 | 6 |
| 12 | Wayanad | 6 | 6 |
| 13 | Kannur | 6 | 6 |
| 14 | Kasargode | 3 | 3 |
| TOTAL | | 75 | 75 |

o. Appointment of Field Assistants on Contract Basis (Rs. 68.00 lakhs)

Fifty One (51) nos. of Field Assistants will be appointed on contract basis under VDP during 2017-18 with a financial outlay of **Rs. 68 lakhs**.

Field Assistants are posted:-

- To provide technical support to Vegetable Development Programme particularly for terrace cultivation, homestead cultivation and district clusters.
- To act as a nodal points in the implementation and follow up of Vegetable Development Programme.

General Guidelines

Field Assistants with VHSE (Agriculture) will be posted in blocks and Corporations on contract basis up to 31/03/2018. They will be provided with phone facilities and their name and phone number should be published for locals to contact. The VHSE (Agri.) hands will be paid remuneration of Rs. 10,000/- per month for the prescribed duration.

The VHSE (Agri.) hands will do the needful field visits for all the components of Vegetable Development Programme especially Urban Clusters, Schools and District Clusters. Arrange inputs, preferably bio inputs and conduct follow up action for all the components of Vegetable Development Programme.

The Field Assistants will be posted by Principal Agricultural Officers concerned through walk-in interview at District Level. The following directions are issued regarding the duties and responsibilities of Field Assistants.

- Field Assistants in general will have a jurisdiction of more than one block. Hence their schedule of attendance in each block and Krishi Bhavans indicating details of field visits should be chalked out well in advance by Principal Agricultural Officers and the same should be communicated to the Assistant Director of Agriculture/Agricultural Officers concerned. The schedule should be followed strictly. Field visit schedules should be prepared and given to Field Assistants and it should be monitored by the ADAs concerned.
- There should be a contract signed by the contract staff on a stamp paper worth Rs. 150/- duly validated by the Appointing Authority
- Field Assistants should undertake follow up action for all components of Vegetable Development Programme with special attention to :-
 - (a) Urban Clusters
 - (b) District Clusters
 - (c) Homestead Cultivation through School Students and
 - (d) Vegetable Cultivation in Institutions.
- Arrange awareness camps in schools and residential associations.
- Arrange inputs like seeds, seedlings, biopesticides etc. under recurring expenditure for Urban Clusters laid out during previous years through rigorous follow-ups and contacts.
- To give leadership in the layout of vegetable gardens in schools and homesteads.
- Organize the farmers for cluster based cultivation.
- Field Assistants should have frequent contacts with Agricultural Officers and Assistant Director of Agriculture concerned.
- The Field Assistants should maintain work diary recording the field visits conducted and get it approved by the Assistant Director of Agriculture concerned on monthly basis.

- They should bring the field problems on time to the notice of the Agricultural Officers concerned. For that necessary field trainings should be arranged at district level with the help of KVK.
- Field Assistants should maintain a register in the respective blocks detailing the field problems identified/reported and remedial measures suggested which should be duly/periodically verified by the supervising officer.
- Problems which need further attention should be brought during the meeting and field visit of Multi Disciplinary Team arranged at district level. A monthly report on field problems identified and solved or referred for MDT should be submitted by the Field Assistant to the DDA (NWDPR) of the district.
- The contact No. of all Field Assistants should be available at District HQ, Blocks and the respective Krishi Bhavans. The same should be communicated to Director of Agriculture for monitoring at State Level.
- Further specific directions regarding the duties of Field Assistants in the respective blocks should be assigned by the Principal Agricultural Officers and periodical review reports on their activities should be furnished to Director of Agriculture without fail.

Financial Assistance

It is proposed to provide technical support as detailed below with a financial provision of **Rs. 68.00 lakhs**.

| Sl. No. | Particulars | Nos. | Rate/Month (Rs.) | Amount (Rs. in lakhs) |
|----------------|--|-------------|-------------------------|------------------------------|
| 1. | Field Assistants attached with Blocks & Corporations for 12 Months | 51 Nos. | 10,000 | 61.20 |
| 2. | Other Allied Expenses like Actual Travel Expenses (Rs. 300/-), Telephone Charges, Tools/Equipments (Rs. 117/-) as per need for 12 Months | 51 Nos. | 417 | 2.55204 |
| 3. | Allied expenses for Field Assistants including EL Surrender and Festival Allowance etc. per year | 51 Nos. | - | 4.24796 |
| TOTAL | | | | 68.00 |

The details of district wise targets are given below:

| Sl. No. | Name of District | Phy. Target (No.) | Fin. Target (in lakhs) | | | Total Amount Allotted (Rs. In Lakhs) |
|--------------|--------------------|-------------------|------------------------|--|---|--------------------------------------|
| | | | Remuneration for FAs | Other Allied Expenses including Monthly TA+Phone Charges | Allied Expenses including EL Surrender and Festival Allowance etc. per year | |
| 1 | Thiruvananthapuram | 3 | 3.6 | 0.15012 | 0.24988 | 4 |
| 2 | Kollam | 4 | 4.8 | 0.20016 | 0.3317 | 5.33186 |
| 3 | Pathanamthitta | 3 | 3.6 | 0.15012 | 0.24988 | 4 |
| 4 | Alappuzha | 4 | 4.8 | 0.20016 | 0.3317 | 5.33186 |
| 5 | Kottayam | 3 | 3.6 | 0.15012 | 0.24988 | 4 |
| 6 | Idukki | 4 | 4.8 | 0.20016 | 0.3317 | 5.33186 |
| 7 | Ernakulam | 4 | 4.8 | 0.20016 | 0.3317 | 5.33186 |
| 8 | Thrissur | 6 | 7.2 | 0.30024 | 0.50303 | 8.00327 |
| 9 | Palakkad | 5 | 6 | 0.25020 | 0.42006 | 6.67026 |
| 10 | Malappuram | 4 | 4.8 | 0.20016 | 0.3317 | 5.33186 |
| 11 | Kozhikode | 3 | 3.6 | 0.15012 | 0.24988 | 4 |
| 12 | Wayanad | 3 | 3.6 | 0.15012 | 0.24988 | 4 |
| 13 | Kannur | 3 | 3.6 | 0.15012 | 0.24988 | 4 |
| 14 | Kasargode | 2 | 2.4 | 0.10008 | 0.16709 | 2.66717 |
| TOTAL | | 51 | 61.2 | 2.55204 | 4.24796 | 68 |

Abstract of Cluster Development in Districts

| Sl. No. | Particulars | No./Unit | Rate (Rs.) | Amount (Rs. in lakhs) |
|---------|------------------------------|--------------|------------|-----------------------|
| a. | Assistance for Clusters | 1000 Nos | 75000 | 750.00 |
| b. | Assistance for Pumpsets | 2000 Nos. | 10000 | 200.00 |
| c. | Assistance for PP Equipments | 2000 Nos. | 1500 | 30.00 |
| d. | Haritha Fund | 1000 Nos. | 1000 | 10.00 |
| e. | Innovation Fund | 14 Districts | LS | 45.00 |
| f. | Soil Testing | | | 0.00 |
| g. | Solarisation | | | 0.00 |

| | | | | |
|--------------|--|-----------------|-------|----------------|
| h. | Vegetable Cultivation in Fallow Land | 1000 Ha | 30000 | 300.00 |
| i. | Seedkit Distribution through Media | 6 lakh seedkits | 20 | 120.00 |
| j. | Staggered Clusters | 1000 ha | 15000 | 150.00 |
| k. | Supply of vegetable seedkits to NGOs | 5 lakh nos. | 10 | 50.00 |
| l. | Production and distribution of seeds of traditional varieties | | | 25.00 |
| m. | Promotion of Nutrition Garden | | | 25.00 |
| n. | Assistance to Agroservice Centres for establishment of nurseries & support of traditional varieties and nutritional garden | | | 75.00 |
| o. | Appointment of Field Assistants on Contract Basis | 51 Nos. | 10417 | 68.00 |
| TOTAL | | | | 1848.00 |

V. Technical Support & Contract Appointment (Rs. 102.00 lakhs)

For ensuring successful implementation of the project activities, technical support is envisaged at District and State level.

a) At Headquarters (Rs. 32.028 lakhs)

In order to have a concurrent evaluation of project implementation, timely follow up, monitoring and reporting sufficient manpower support will be provided to strengthen the Vegetable Cell. For this, services of two personnel with Degree in Agriculture for 12 months will be made available. Also the services of 3 Data Entry Operators will be continued for a tenure of 12 months. The new appointments on contract basis would be done through walk-in-interview. In addition, technical guidance from an Expert Group of scientists from KAU in 5 disciplines viz. Entomology, Pathology, Plant Breeding, Agronomy and Management will be availed. A provision of **Rs. 32.028 Lakhs** for the field visits by Expert Team, operational expenses and documentation is earmarked. This provision is for meeting the expenses in connection with field visits and sitting fee of the expert team. Details are as given below:

| Sl. No. | Particulars | Rate/Month (Rs.) | No. | Period | Total Amount (Rs. in lakhs) |
|--------------|---|------------------|-----|-----------|-----------------------------|
| 1. | Technical Assistants with Degree in Agriculture | 25000 | 2 | 12 months | 6.00 |
| 2. | Allied Expenses to TAs including EL Surrender, Festival Allowance etc. | | 2 | | 0.31 |
| 3. | Operational Expenses | | | | 7.00 |
| 4. | Documentation Expenses (Photocopier/Digi-cam/ PCs and allied Stationery, Office Furniture etc.) | LS | | | 7.551 |
| 5. | Expert Group from KAU @ 10,000/- each for 4 sittings | 10,000 | 4 | | 0.40 |
| 6. | Data Entry Operators – 3 Nos. – Rs. 12500/Month for 12 Months | 12500 | 3 | 12 months | 4.5 |
| 7. | Allied Expenses to DEOs including EL Surrender, Festival Allowance etc. | | | | 0.447 |
| 8. | Balance at HQ | | | | 5.82 |
| TOTAL | | | | | 32.028 |

b) At Districts (Rs. 69.972 Lakhs)

At the district level, a Multi Disciplinary Team (MDT) will be constituted with Scientists and Department Officials in each district for providing technical support to solve field problems. Meeting of the MDT should be conducted prior to each season to decide the technical strategies to be adopted in the district based on the experiences in previous years. Services of 2 Data Entry Operators each will be provided at district level on contract basis for tenure of 12 months. The Data Entry Operators posted in districts during 2012-13 may be continued with a break in service or they can be recruited afresh by a walk-in-interview for 2017-18.

| Sl. No. | Particulars | Rate (Rs.) | No. | Period | Amount (Rs. in lakhs) |
|--------------|---|------------|-----|-----------|-----------------------|
| 1. | MDT (KAU) @ 2 sittings in each district @ 7000/sitting * | 7,000 | 28 | | 1.96 |
| 2. | Data Entry Operators @ 2 Nos. in each district @ Rs. 12500/ month | 12500 | 28 | 12 months | 42.00 |
| 3. | Other Related Expenses ** | LS | | | 4.172 |
| 4. | Balance at HQ | | | | 21.84 |
| TOTAL | | | | | 69.972 |

* No. of sittings can be increased within the limits of the sanctioned amount.

** Related Expenses include Festival Allowance, Leave Encashment and such other expenses.

District wise financial provision is given as given below:

| Sl. No. | Name of District | Amount for MDT (in lakhs) | Amount for DEOs and Related Expenses (in lakhs) | Total (in lakhs) |
|--------------|--------------------|---------------------------|---|------------------|
| 1. | Thiruvananthapuram | 0.14 | 3.298 | 3.438 |
| 2. | Kollam | 0.14 | 3.298 | 3.438 |
| 3. | Pathanamthitta | 0.14 | 3.298 | 3.438 |
| 4. | Alappuzha | 0.14 | 3.298 | 3.438 |
| 5. | Kottayam | 0.14 | 3.298 | 3.438 |
| 6. | Idukki | 0.14 | 3.298 | 3.438 |
| 7. | Ernakulam | 0.14 | 3.298 | 3.438 |
| 8. | Thrissur | 0.14 | 3.298 | 3.438 |
| 9. | Palakkad | 0.14 | 3.298 | 3.438 |
| 10. | Malappuram | 0.14 | 3.298 | 3.438 |
| 11. | Kozhikode | 0.14 | 3.298 | 3.438 |
| 12. | Wayanad | 0.14 | 3.298 | 3.438 |
| 13. | Kannur | 0.14 | 3.298 | 3.438 |
| 14. | Kasargod | 0.14 | 3.298 | 3.438 |
| TOTAL | | 1.96 | 46.172 | 48.132 |

VI. Development Support to Graded Clusters (Rs. 1065.00 Lakhs)

During the current financial year, **Rs. 1065.00 lakhs** is earmarked for the component '**Development Support to Graded Clusters**'. Cluster based development is the key component in the vegetable initiative and strengthening of potential clusters is essential for the evolution of an efficient vegetable scenario in the state. 200 nos. of new clusters will be identified along with the existing 800 clusters.

(a) Support for 100 New 'A' Grade Clusters – Rs. 630.00 Lakhs

100 new 'A' Grade Clusters will be selected for 2017-18 with an outlay of **Rs. 630 Lakhs**. Rate of assistance will be Rs. 6.30 lakhs per Graded Cluster. The clusters established in 2013-14, 2014-15, 2015-16 and 2016-17 will be further graded based on the performance covering group activities, increase in production and productivity, innovative activities, leadership, technology application and cluster dynamics. The best clusters will be graded as 'A' Grade Clusters and special development support will be provided for those clusters covering support for establishing

nurseries, collection centers, pre cooling centers, input centers and other need based project based support.

Objectives

- Effective organization, development & strengthening of graded clusters.
- Empowering the graded clusters for taking up new technologies.
- Improving the cohesion of cluster members.
- Providing proper infrastructure for the development of graded clusters.

Technical Program

The selection criteria prescribed during 2016-17 will be followed this year also for the grading of new clusters. The new 'A' Grade Clusters (50 Nos.) alone will be assisted at the rate of Rs. 6.30 lakhs per cluster. The assistance will be disbursed in 2 equal installments. An MOU will be signed in this line. 'A' Grade clusters will be designated as Lead Clusters (Haritha Leader Sanghom). **Total amount per cluster should not exceed Rs. 6.30 Lakhs.**

The following group of activities is proposed for the grading of clusters.

| | |
|--------------------------|---------------------|
| a. Cluster Dynamics | - 30 Points |
| b. Economic Dimension | - 30 Points |
| c. Technical Dimension | - 24 Points |
| d. Innovative Activities | - 16 Points |
| Sub Total | - 100 Points |

The parameters included under each activity for grading are shown in Table. The grading criteria to be followed for each activity and the parameters to be ranked are shown below:-

| Particulars | | Points | Maximum Points |
|-------------|--------------------------------------|--------|---|
| I | Cluster Dynamics | | |
| a. | Size of Cluster (Nos. of Farmers) | 3 | Less than 25 Members – 2 Points Above 25 – 3 Points |
| b. | Frequency of the Meetings | 5 | 1 Meeting per month for the last year – 5 Points 1 Meeting for 2 months – 3 Points |
| c. | Accounting | 5 | Keeping well maintained Account Books – 5 Points |
| d. | Proximity of the Members | 4 | Located in Contiguous Area – 4 Points |
| e. | Attendance in the Meeting | 5 | More than 90% - 5 Points |
| f. | Good Leadership/ Communication | 8 | If the leader is very good with good communication among cluster members - 8 Points |

| | | | |
|------------|---|---|---|
| II | Economic Dimension | | |
| a. | Infrastructural Facility | 8 | Any infrastructure for the cluster – 8 Points |
| b. | Profitability | 8 | If profitable as per records of the members – 8 Points |
| c. | Marketing | 8 | Regular marketing arrangements made – 8 Points |
| d. | Period of Cultivation in the Locality | 3 | If regularly cultivated for the last 3 years in the same locality - 3 Points |
| e. | Use of Credit | 3 | If availed credit for the group/members – 3 Points |
| III | Technical Dimension | | |
| a. | Use of Hybrids | 4 | If hybrids are cultivated – 4 Points |
| b. | Types of Crops/No. of Crops | 4 | Less than 4 – 2 Points More than 4 – 4 Points |
| c. | Safe to Eat and Organic Production | 8 | Safe to eat/organic mode of production – 8 Points |
| d. | Open Precision Farming/ Protected Cultivation | 8 | Adoption of open precision farming/Protected cultivation in the cluster – 8 Points |
| IV | Innovation and Recognition | | |
| a. | Collective Input Arrangement | 4 | If collective arrangements for inputs – 4 Points |
| b. | Awards | 4 | If any awards received for the cluster – 4 points |
| c. | Innovative Practices/Trials | 4 | Any innovative practices/trials done in the cluster – 4 Points |
| d. | Fund Mobilisation from Members/Others | 4 | Any fund mobilised from members or other organisation other than Department of Agriculture – 4 Points |

(Appropriate marks should be given for other clusters proposed for grading depending on the maximum marks indicated above.)

Grading Criteria

The grading criteria are indicated below.

- ‘A’ Grade - 60 Points and above
- ‘B’ Grade - 50-60 Points
- ‘C’ Grade - Less than 50 Points

The required components can be selected as a cafeteria model provided the assistance is limited to 6.3 lakhs per cluster as done during 2013-14, 2014-15 & 2015-16.

| Sl. No. | Items | Rate (Rs.) | Maximum Amount that can be Spent (Rs. in Lakhs) |
|--------------|---|--------------|---|
| 1 | Setting up of collection centres, infrastructure facilities, computer systems, furniture etc. | | 2.00 |
| 2 | Purchase of bio-control agents, pheromone traps, bio-fertilisers, micronutrient mix etc. | | 0.25 |
| 3 | Procurement/Arrangement of inputs | | 0.30 |
| 4 | Production and distribution of seedlings | | 1.00 |
| 5 | Distribution of curry leaf, papaya, drumstick etc to farmers/homesteads | | 0.25 |
| 6 | Transportation subsidy @ Re. 1 per kg including support to satellite clusters | Re.1 per Kg. | 1.00 |
| 7 | Micronutrient Testing | | 0.20 |
| 8 | To take up new technologies as demonstration | LS | 0.75 |
| 9 | Training programmes to members of clusters and satellite clusters | | 0.30 |
| 10 | For conducting meetings | | 0.05 |
| 11 | Any other innovations | 250 | 0.25 |
| 12 | Other Contingencies including insurance premium of farmers | | 0.20 |
| TOTAL | | | 6.55 |

Each 'A' Grade Cluster selected for assistance should prepare a plan of action for assistance duly approved by Agricultural Officer concerned and the amount could be released to the clusters. A monitoring mechanism should also be introduced by the District Level Committee.

A minimum of three clusters surrounding the lead cluster should join the lead clusters for technical and marketing support. These clusters will be called satellite clusters. Lead clusters should be registered under the Charitable Societies Act. It is preferable to restrict the activities of the lead clusters within a Panchayat. At least 200 farmers should be benefited by the activities of the lead clusters through marketing, distribution of inputs and other technological interventions. Sustainability of the clusters should be ensured.

(b) Revolving Fund for Existing Clusters – Rs. 435.00 Lakhs

In addition to the 100 new 'A' Grade Clusters, an amount of Rs. 435.00 lakhs is set apart for providing need based support for balance clusters developed in previous years in a need based manner. This will be provided **as Revolving Fund @ Rs. 1.00 lakh per cluster**. The entire responsibility of management of revolving funds will be vested

with the clusters. The role of the department officers will be limited to guidance on utilisation of the revolving fund.

District wise financial provision is given as given below:

| Sl. No. | Name of District | Support for 100 New 'A' Grade Clusters | | Revolving Fund for Existing Clusters | |
|--------------|--------------------|--|-----------------|--------------------------------------|-----------------|
| | | Phy. | Fin. (in lakhs) | Phy. | Fin. (in lakhs) |
| 1. | Thiruvananthapuram | 7 | 44.1 | 30 | 30 |
| 2. | Kollam | 5 | 31.5 | 30 | 30 |
| 3. | Pathanamthitta | 5 | 31.5 | 25 | 25 |
| 4. | Alappuzha | 7 | 44.1 | 35 | 35 |
| 5. | Kottayam | 5 | 31.5 | 30 | 30 |
| 6. | Idukki | 8 | 50.4 | 30 | 30 |
| 7. | Ernakulam | 8 | 50.4 | 35 | 35 |
| 8. | Thrissur | 10 | 63 | 40 | 40 |
| 9. | Palakkad | 10 | 63 | 40 | 40 |
| 10. | Malappuram | 10 | 63 | 35 | 35 |
| 11. | Kozhikode | 8 | 50.4 | 25 | 25 |
| 12. | Wayanad | 5 | 31.5 | 25 | 25 |
| 13. | Kannur | 7 | 44.1 | 35 | 35 |
| 14. | Kasargod | 5 | 31.5 | 20 | 20 |
| TOTAL | | 100 | 630 | 435 | 435 |

VII. Establishment of Nurseries (Rs. 200.00 Lakhs)

Objectives

- To ensure supply of quality planting materials of vegetables.
- To enhance the production and thereby income of farmers.
- To teach farmers the importance of using quality planting materials.
- To increase the trust of farmers in the planting materials supplied through Department of Agriculture as of true quality.
- To control unscrupulous practices in private sector in seeds and seedling production of vegetables, avoiding farmers getting cheated.

The project aims at production of sufficient quality vegetable seedlings to cater the demand of the general public. The project involves 2 components programmes, viz. Establishment of Nurseries in Corporation & selected Municipalities and providing Revolving Fund to Block Level Nurseries.

a) Establishment of Small Nurseries in Corporations/ Municipalities/ Panchayath (Rs. 80.00 Lakhs)

With the successful implementation of Vegetable Development Programme there is huge demand for vegetable seedlings in the urban area. Seedlings are largely required for the preparation of growbags and rejuvenation of growbags supplied earlier.

Nurseries of 40 to 400 sq.m area (1 to 10 cents) with insect proof net/ shade net/ rainshelter to protect the seedlings from insects, rain, heat etc. will be established as per requirement to ensure local availability of quality planting materials. Seedlings will be raised in protrays and as far as possible soil less media should be used as the planting medium. Assistance will be provided at the rate of Rs. 1000/- per sq.m for establishing the nurseries and Rs.400/- per sq. m as revolving fund. A total nursery area of 5714 sq.m will be established in the current year, utilising an amount of Rs.80.00 lakhs. Beneficiaries can be individual or groups. Seeds for this purpose can be procured from VFPC/KAU/Departmental Farms and such other agencies.

Institutional support should be provided for nurseries by establishing them preferably with the support of Agro Service Centres, Kudumbasree Units, Clusters etc. so as to make them self sustainable. In Corporations where institutional support is not available, institutional support from Municipalities can be resorted to.

The selection of Municipalities/Corporations for setting up of nurseries should be done by the District Level Committee for Vegetable Development Programme in consultation with the Officers concerned.

b) Need Based Support for Block Level Nurseries (Rs. 50.00 Lakhs)

For resolving critical gaps identified for effective functioning of nurseries in achieving their objective of production of quality planting materials, need based support up to a maximum of Rs. 2.00 lakhs per nursery will be provided as revolving fund on a project mode to 25 Block Level Nurseries established in previous years. A total amount of Rs. 50.00 lakhs is set apart for this purpose. The Assistance Director of Agriculture will submit specific projects to the District Level Committee and should get sanctioned for the project before implementation.

c) Establishment of New Block Level Nursery (Rs. 70.00 Lakhs)

It is proposed to set up 10 new Block Level Nurseries during 2016-17 providing assistance @ Rs. 7.00 lakhs per nursery. Rs. 5.00 lakhs for establishing the nurseries and Rs. 2.00 lakhs for revolving fund.

The entire responsibility of management of revolving fund will be vested with the beneficiaries. The role of the department officers will be limited to guidance on utilisation of the revolving fund.

Implementation & Monitoring

At District Level Scheme will be implemented and monitored by the Principal Agricultural Officer assisted by Deputy Director of Agriculture (NWDPR) with active participation of Assistant Director of Agriculture at the block level. Necessary guidance for the establishment of the nursery would be provided by Assistant Director of Agriculture of the concerned block with technical guidance from Kerala Agricultural University. The AO/AFO will implement the Scheme at the grassroot level. Monitoring,

supervision and support will be provided at the district as well as directorate level based on the report from grassroot level.

The District Level Committee for Vegetable Development Programme should ensure that the Revolving Fund is provided only for those nurseries which are functioning properly and whose performance is ensured by the Agricultural Officer concerned. The Committee will also scrutinize and accord sanction for infrastructure projects.

Additional Director of Agriculture (Farms, Biogas & Veg.) will co-ordinate all the activities of the project at the state level.

Block Level Nurseries can be established as part of a Cluster or as part of Block Level Federated Organisations.

District wise financial provision is given as given below:

| Sl. No. | Name of District | Establishment of Small Nurseries in Corporations/ Municipalities/ Panchayath | | Need Based Support for Block Level Nurseries | | Establishment of New Block Level Nursery | |
|--------------|--------------------|--|-----------------|--|-----------------|--|-----------------|
| | | Phy. (sq.m) | Fin. (in lakhs) | Phy. | Fin. (in lakhs) | Phy. | Fin. (in lakhs) |
| 1. | Thiruvananthapuram | 500 | 7 | 1 | 2 | 1 | 7 |
| 2. | Kollam | 500 | 7 | 2 | 4 | 1 | 7 |
| 3. | Pathanamthitta | 300 | 4.2 | 2 | 4 | 0 | 0 |
| 4. | Alappuzha | 500 | 7 | 2 | 4 | 1 | 7 |
| 5. | Kottayam | 400 | 5.6 | 2 | 4 | 1 | 7 |
| 6. | Idukki | 400 | 5.6 | 2 | 4 | 1 | 7 |
| 7. | Ernakulam | 414 | 5.796 | 1 | 2 | 0 | 0 |
| 8. | Thrissur | 500 | 7 | 2 | 4 | 1 | 7 |
| 9. | Palakkad | 400 | 5.6 | 2 | 4 | 1 | 7 |
| 10. | Malappuram | 400 | 5.6 | 2 | 4 | 1 | 7 |
| 11. | Kozhikode | 500 | 7 | 1 | 2 | 0 | 0 |
| 12. | Wayanad | 250 | 3.5 | 2 | 4 | 1 | 7 |
| 13. | Kannur | 400 | 5.6 | 2 | 4 | 0 | 0 |
| 14. | Kasargod | 250 | 3.5 | 2 | 4 | 1 | 7 |
| 15 | HQ (LS) | | 0.004 | | | | |
| TOTAL | | 5714 | 80.00 | 25 | 50 | 10 | 70 |

VIII. Micro-Irrigation with Fertigation (Rs. 400.00 Lakhs)

a) Promotion of Micro-irrigation and Fertigation Units (Rs.375.00lakhs)

Fertigation is the method of applying fertilizers, soil amendments and other soluble products required by plants during their various growth phases through irrigation water in combination with Drip irrigation system. It forms an efficient method of precisely applying required quantity of nutrients and water directly to the root zone. With Fertigation, water use is reduced, nutrient application is precise and disease incidence is

less as the foliage remains dry. Nutrient use efficiency is increased by reducing loss of nutrients by leaching to ground water. Thus combining irrigation and fertilizer application through 'Fertigation' method will help in the judicious use of these two valuable inputs.

Components of a Fertigation System:-

(i) Drip Irrigation Unit

Consisting of main pipe, laterals, sub-laterals and drippers (emitters). The system is laid out according to the topography of the land, crops cultivated etc. and connected to the irrigation pumpset and perennial water source.

Cost of installing a unit in 0.20 Ha. comes to Rs.40,000/-

(ii) Fertigation Unit Equipments

- **Ventury Injector** - It is a simple and low cost device. A partial vacuum is created in the system which allows suction of fertilizers, prepared solution of which is kept in a container, into the irrigation system through ventury action. Vacuum is created by diverting a percentage of water flow from the mains and passing it through a constriction which increases velocity of flow thus creating a drop in pressure. This pressure drop causes fertilizer solution to be sucked into ventury through suction pipe from tank and from there enters irrigation system. Suction rate of ventury is 30-120 litres/hour. Liquid fertilizers can be ideally used in this equipment. Others may cause clogging of the equipment. Cost of one equipment comes to Rs. 2,500/-
- **Fertilizer Tank** - A part of irrigation water is diverted from mainline and flow through a tank containing fertilizers in a liquid or soluble solid form, before returning to the mainline. Pressure in the tank and mainline is same normally, but a slight dip in pressure is created between off take and return pipes for the tank using a pressure reducing valve. This causes water from main line to flow through tank causing dilution and flow of diluted fertilizer into irrigation stream. With this system, concentration of fertilizer entering irrigation water changes continuously with time, starting at high concentration A 30 litre tank costs Rs. 8,000/-.
Fertilizer tank is made of mild steel with powder coating of more than 70 microns both inside and outside to prevent corrosion and weather effects. Turbulent inlet ensures thorough mixing of chemicals/fertilizers. Separate inlet and outlet valve to control injection rate is provided with provision of strainer on outlet and drain port to flush the tank. Both solid and liquid fertilizers can be used here.
- **Fertilizer Injection Pump** – this equipment is used very small holdings, say 0.10 Ha. or less where water pressure will not be sufficient to suck fertilizers from the container. It is a piston/diaphragm pump which are driven by water pressure of irrigation system such that the injection rate is proportional to the flow of water in the system. Its advantages are that a high degree of control over fertilizer injection rate is possible with no serious head loss and low operating cost. If inflow of water stops, fertilizer injection also stops automatically. It is an ideal equipment for accurate fertigation. Liquid fertilizers are ideal for use here also. Cost of an injection pump comes to Rs. 6,500/-.

Price Rates are arbitrary and changes are likely to occur.

Fertilizers Suitable for Fertigation:-

Only compatible fertilizers containing water-soluble nutrients can be used for fertigation. Others cause precipitation of salts by chemical reaction which clogs irrigation lines and emitters.

N (nitrogen) and K (potassium) nutrients are water soluble. Commonly used N-fertilizers like Urea, Ammonium sulphate, Ammonium nitrate and Calcium nitrate can be used. K-fertilizers like MOP (Potassium chloride), Potassium sulphate, Potassium nitrate are also suitable. Among Phosphorous containing chemicals, only phosphoric acid is suitable. Various NPK complex fertilizers like 19-19-19, 20-20-20, 13-3-43 can also be used. It is cheaper to prepare tailor-made solutions of NPK at farmer's field to find out compatible combinations.

To avoid precipitation of salts by chemical reaction in the fertilizer tank, it is advisable to keep at least 2 tanks, one containing phosphatic and sulphate compounds and the other containing Ca, Mg and micro nutrients.

Objectives

The Scheme proposes to encourage and provide financial assistance for installing Micro Irrigation with Fertigation unit for open vegetable cultivation in plots of unit size 0.2 ha. It is proposed to establish 1400 units in 2016-17.

Assistances Pattern:- (Rs. in Lakhs)

| Sl. No. | Type of Cultivation | Unit Proposed | Components | Cost Involved per Unit | Financial Assistance Proposed/Unit | No. of Units | Total Amount Required |
|--------------|---------------------|---------------|--|------------------------|------------------------------------|--------------|-----------------------|
| 1. | Open Cultivation | 0.20 ha. | Drip Irrigation Unit +Ventury Injector/ Fertilizer Tank/ Fertilizer Injection Pump+Plastic Mulch+Labour Cost | 0.40 | 0.30 | 1250 | 375.00 |
| TOTAL | | | | | | | 375.00 |

Benefits

- Efficient use of fertilizers and irrigation water.
- Maintain soil fertility.
- Avoids leaching and loss of nutrients.
- Pest and disease incidence is reduced as the plant foliage and stem as well as inter row areas remain dry.
- Increase in yield upto 30% is obtained.
- Avoid wastage of water.
- Helps to achieve savings of time, labour and energy.
- Increase farmer's income thereby attracting more people to take up vegetable cultivation.

Operationlisation:-

It is proposed to install Micro Irrigation cum Fertigation Unit in a unit area of 0.20 ha (50 cents) in open cultivation of vegetables. However a minimum of 0.1 ha (25 cents) can also be considered for which corresponding subsidy limited to Rs. 15,000/- can be given. Innovative farmers will be selected from Krishi Bhavan area by Agricultural Officer in consultation with Assistant Director of Agriculture. Implementation and valuation of the fertigation unit will be done by Agricultural Officer of the Krishi Bhavan/ Assistant Director of Agriculture with random field verification by Deputy Director of Agriculture (NWDPR) concerned.

Assistance to the tune of 75% of the total cost limited to Rs. 30,000/- per 0.2 ha size as mentioned above can be sanctioned.

b) Promotion of Family Drip Irrigation System (Rs.25.00lakhs)

It is proposed to promote low cost Family Drip Irrigation System with over head tank and distributors, especially in terraces and condominiums of urban areas and in appropriate locations in rural areas for effective utilization of irrigation water in line with the objective of Haritha Keralam programme. It is proposed to provide 75% assistance limited to Rs.7500/-per unit for setting family drip irrigation units. Beneficiaries will be selected from clusters based on performance evaluation, with the approval of District level Committee. The lay out will be executed by approved agency and subsidy sanctioned, based on plan and estimate approved by the Engineering Wing of the Department. It is proposed to install 333 no.s of family drip irrigation units utilizing a provision of **Rs.25.00lakhs**.

District wise financial provision is given as given below:

| Sl. No. | Name of District | Promotion of Micro-irrigation and Fertigation Units | | Promotion of Family Drip Irrigation System | |
|--------------|--------------------|---|-----------------|--|-----------------|
| | | Phy. (1 unit = 0.2 ha) | Fin. (in lakhs) | Phy. | Fin. (in lakhs) |
| 1. | Thiruvananthapuram | 90 | 27 | 35 | 2.625 |
| 2. | Kollam | 75 | 22.5 | 25 | 1.875 |
| 3. | Pathanamthitta | 50 | 15 | 15 | 1.125 |
| 4. | Alappuzha | 90 | 27 | 40 | 3 |
| 5. | Kottayam | 90 | 27 | 15 | 1.125 |
| 6. | Idukki | 90 | 27 | 15 | 1.125 |
| 7. | Ernakulam | 90 | 27 | 35 | 2.625 |
| 8. | Thrissur | 120 | 36 | 35 | 2.625 |
| 9. | Palakkad | 150 | 45 | 15 | 1.125 |
| 10. | Malappuram | 120 | 36 | 15 | 1.125 |
| 11. | Kozhikode | 90 | 27 | 23 | 1.75 |
| 12. | Wayanad | 60 | 18 | 15 | 1.125 |
| 13. | Kannur | 75 | 22.5 | 35 | 2.625 |
| 14. | Kasargod | 60 | 18 | 15 | 1.125 |
| TOTAL | | 1250 | 375 | 333 | 25 |

IX. Promotion of Zero Energy Cool Chambers (Rs. 200.00 lakhs)

Assistance will be provided for the construction of Zero Energy Cool Chambers for temporary storage of vegetables from clusters. The zero energy cool chamber can be constructed easily with materials like brick, sand, bamboo, straw, gunny bag etc. The chamber can keep the temperature 10 - 15°C cooler than the outside temperature and maintain about 90% relative humidity. Cold storage units can be made useful during periods of glut which necessitate transportation for longer distances for marketing. Amount that can be spent per unit of Zero Energy Cool Chamber is a maximum of **Rs. 15000/- per unit** (Pusa Zero Energy Cool Chamber). An amount of **Rs. 200.00 lakhs** is earmarked for establishment of **1334 units**.

District wise financial provision is given as given below:

| Sl. No. | Name of District | Phy. | Fin. (in lakhs) |
|--------------|--------------------|-------------|-----------------|
| 1. | Thiruvananthapuram | 100 | 15 |
| 2. | Kollam | 70 | 10.475 |
| 3. | Pathanamthitta | 70 | 10.475 |
| 4. | Alappuzha | 100 | 15 |
| 5. | Kottayam | 100 | 15 |
| 6. | Idukki | 100 | 15 |
| 7. | Ernakulam | 70 | 10.475 |
| 8. | Thrissur | 100 | 15 |
| 9. | Palakkad | 125 | 18.75 |
| 10. | Malappuram | 125 | 18.75 |
| 11. | Kozhikode | 100 | 15 |
| 12. | Wayanad | 100 | 15 |
| 13. | Kannur | 100 | 15 |
| 14. | Kasargod | 74 | 11.075 |
| TOTAL | | 1334 | 200 |

X. Promotion of Mini Polyhouses (Rs. 100.00 Lakhs)

a) Establishment of Mini Polyhouses (Rs.75.00lakhs)

In Kerala most of the family, in town and nearby areas are having only 5 to 10 cents of land and only limited area is available for vegetable cultivation. Hence to promote cultivation, assistance can be given for the establishing mini polyhouses for kitchen gardens. Poly kitchen garden and other hi-tech kitchen gardens are designed in such way that it can accommodate maximum plants in limited area and do the cultural operations with minimum drudgery.

Cultivation of crops under controlled atmospheric conditions will help to optimize the production by providing ideal environmental conditions to the plant. Growing plants under a poly kitchen garden of 10m² and 20m² will help to produce completely organic/ safe to eat products for their use. In order to accommodate large number of plants in

limited area multi tier growbags will be used. Selection of plants will be made based on the nutritional requirements and plants will be arranged based on their light requirements.

The major activities of green houses cultivation are construction of greenhouse, preparation of hi-tech seedling production, preparation of multi-tier grow bag, preparation of potting mixture for multi-tier grow bag, seedbed preparation, arrangement of different types plants in the greenhouse, nutrient management inside the poly kitchen garden and other hi-tech kitchen garden, installation of irrigation-fertigation system, pest and disease management inside the greenhouse and good agriculture practices inside the greenhouse for sustainable and economical production of good quality, pesticide free vegetables.

Financial assistance

Total Cost for the construction and establishment of kitchen garden of 10 m² - Rs. 60,000/-

Total Cost for the construction and establishment of kitchen garden of 20 m² - Rs. 80,000/-

Assistance @ 75% of total cost will be given as below.

| Sl. No. | Size of Mini Polyhouses | Total Estimated Cost (Rs.) | Financial Assistance proposed (75% limited to) Rs | Total No. of Units (no.) | Total outlay required (Rs. In lakhs) |
|--------------|-------------------------|----------------------------|---|--------------------------|--------------------------------------|
| 1 | 10 m ² | 60000 | 45000 | 80 | 36.00 |
| 2 | 20 m ² | 80000 | 60000 | 65 | 39.00 |
| TOTAL | | | | | 75.00 |

The Principal Agricultural Officers will submit the list of beneficiaries for approval from the Director of Agriculture.

b) Training (Rs. 25.00lakhs)

Training programme on the construction of mini polyhouses will be conducted by the Kerala Agricultural University at the Hi-Tech Research and Training Unit, Instructional Farm, Velanikkara which is having modern facilities for the conduct of training classes. 8 prototypes of family poly kitchen garden units; 16 no. of greenhouses used for cultivating vegetables, different models of aquaponics & hydroponics, duck-fish-rice-vegetables integrated farming system etc are available in Hi-Tech Research and Training unit. An amount of Rs.25.00lakhs is earmarked for release to Hi-Tech Research and Training Unit of KAU for training and technical support of mini polyhouses including revolving fund based support for the construction of such units. Training should be given before the construction of the polyhouses.

The polyhouses will be established by the trained labour force from KAU and under the technical guidance and supervision of the Hi-tech Research and Training Institute. The Hi-tech Research and Training Unit of KAU will give a district wise list of trained labourers/agencies for constructing the same.

XI. Vegetable Producer Companies (Rs. 18.00 lakhs)

It is proposed to establish vegetable producer companies in major vegetable growing areas for the marketing of vegetables produced by small, marginal and large farmers, linking with A Grade clusters and BLFOs. The component will be implemented on a project mode. IRMA trained management professionals will be engaged as experts for the implementation of Vegetable Producer Companies by paying honorarium @ Rs.75000/-per month. **Two such IRMA graduates will be engaged utilising an amount of Rs.18.00 lakhs.** They will prepare the details of companies after studying the clusters and BLFOs and will submit a detailed project report to the Director of Agriculture. They will be attached to the Vegetable Cell of the Directorate. A total amount of **18.00 lakhs** is earmarked for this component for engaging IRMA consultants.

XII. On Farm Production of Bio-control Agents (Trichoderma, VAM etc.) (Rs. 25.00 lakhs)

a) Support for establishment of onfarm production units of Trichoderma

Trichoderma has been found to be an effective bio control agent against many fungal diseases. Establishing small units of Trichoderma production by vegetable clusters for their own use can meet the local requirements to a very extent. The essential materials required for the unit are the following:

| On-farm Production of Trichoderma at Farm Level | | | | |
|--|--|-----------------|------------------|--------------------|
| Sl. No. | Item | Quantity | Rate (Rs) | Amount (Rs) |
| 1 | Pressure cooker (10 litres capacity)/Autoclave(mini) | 1 | 7000 | 7000 |
| 2 | Incubation chamber for inoculation | 1 | 3000 | 3000 |
| 3 | Stove | 1 | 4000 | 4000 |
| 4 | Plastic trays | 10 | 70 | 700 |
| 5 | Autoclavable bags | 500 nos | 4/bag | 2000 |
| 6 | Absorbant cotton | 1 bundle | 200 | 200 |
| 7 | Non absorbant cotton | 1 bundle | 150 | 150 |
| 8 | PVC pipe pieces for making plugs | | | 100 |
| 9 | Rubberband | | | 100 |
| 10 | Packaging bags | | | 1000 |
| 11 | Spirit lamp/ candle | 1 no | 100 | 250 |
| 12 | Miscellaneous if any | | | 1500 |
| | Grand Total | | | 20000 |

1 test tube of mother culture can be used for inoculating the medium which will develop fully as a green mass within a week. This can be powdered, packed and distributed for large scale multiplication in suitable substratum like cowdung. Depending on the nature of medium used, only Rs.5-20 is required as cost of medium for preparing 1

kg. of Trichoderma 100 % culture. This can be mixed with talc @50g. culture in 1 kg.talc, for producing 20 kg of Trichoderma.

On-farm production unit should be implemented through VDP Cluster. The secretary/Convenor of the samithi will be incharge of the equipments and other assets created. Agricultural officer should conduct periodic verification, give necessary technical guidance and see that the unit is running smoothly.

The following operational guidelines are to be followed

- Mother culture of Trichoderma has to be obtained from KAU / NIPHM /NCRMI
- Never use cultures from any other source without permission.
- Before using a culture the genetic purity of the culture should be studied.Steps are being taken at Directorate to sign MOU with NCRMI for the supply of cultures and for quality analysis of bio control agents produced by farmers at regular intervals.
- Always start mass production of Trichoderma from original mother culture.
- Random checking of the purity of bulked Trichoderma must be done once in four months to confirm the purity of the isolate.
- If the purity of the biocontrol agent is in doubt, then the centre should restart the production only after complete sterilization of the unit is done under the supervision of trained officers.
- Mass multiplied Trichoderma can be distributed to farmers in sorghum grains with or with out powdering. It can also be distributed after enriching it.
- Never “sell” bio control agents after printing MRP on the packet. Instead print “For distribution among the farmers”. As far as possible never distribute using printed packets. A bit notice giving the details such as date of production, source of the mother culture used, method of application ,etc. can be kept inside the packet.
- Bio control agents shall be produced only under the supervision of Agricultural officers who have been trained in onfarm production. Once the trained Agricultural officer is transferred from the Panchayath where a production centre is functioning, then the unit must stop production until the service of a trained officer is ensured to oversee the production.
- Safety precautions to be followed at the production centre should be strictly adhered to. A chart should be prepared and exhibited in all the centre.
- The bio control agent produced should not be stored for more than two months.
- All the production centres should keep a register showing all the details related to production of bio control agents such as name of bio control agent , source of culture, date of production, quantity produced etc.
- A register should be maintained at Krishi bhavan also showing the details of VDP Clusters engaged in on farm production of bio control agents.
- The Agricultural Officers having NIPHM Diploma for the districts will be in charge of establishing the production units in selected Panchayaths.

On Farm production of Mycorrhiza (VAM)

Mass production of Mycorrhiza (VAM) can be taken up by the individual farmer or farmer groups. On farm production makes the economic and environmental benefits of VAM Fungi available to a larger number of farmers covering larger area besides reduced use of chemical fertilisers.

| Expenses for the Mass Production of Mycorrhiza (VAM) | | | | |
|--|--|------------|----------------|-------------|
| Sl. No. | Item | Quantity | Rate (Rs) | Amount (Rs) |
| 1 | Plastic pots of medium size | 100 nos | 50 | 5000 |
| 2 | Starter inoculams | 200 gm | 1000/ 200 gm | 1000 |
| 3 | Seed material of rice/ragi/maize/sorghum | 250 gm | | 100 |
| 4 | Carrier material- vermicompost | 500 kg | Rs 12/kg | 6000 |
| 5 | Labour charges | 10 mandays | Rs 500/ manday | 5000 |
| 6 | Miscellaneous | | | 2900 |
| Grand Total | | | | 20000 |

b) Training (Rs. 3 lakhs)

The trainings will be conducted with the help of NIPHM Diploma holders/KVK/KAU by the Principal Agricultural Officers of the district.

Financial Outlay

| Sl. No. | Name of Bio Control Agent | No. of On – Farm Units | Financial Assistance proposed (Rs) | Total outlay required (Rs. In lakhs) |
|---------|--|------------------------|------------------------------------|--------------------------------------|
| 1. | (Trichoderma/ VAM etc.) | 110 | 20,000 | 22.00 |
| 2. | Training on production of bio control agents | | | 3.00 |
| TOTAL | | | | 25.00 |

District wise target is given below:-

| Sl. No. | Name of District | Support for establishment of onfarm production units of Trichoderma | | Training |
|--------------|--------------------|---|-----------------|-----------------|
| | | Phy. | Fin. (in lakhs) | Fin. (in lakhs) |
| 1. | Thiruvananthapuram | 10 | 2 | 0.3 |
| 2. | Kollam | 10 | 2 | 0.3 |
| 3. | Pathanamthitta | 10 | 2 | 0.3 |
| 4. | Alappuzha | 10 | 2 | 0.3 |
| 5. | Kottayam | 7 | 1.4 | 0.14 |
| 6. | Idukki | 20 | 4 | 0.5 |
| 7. | Ernakulam | 8 | 1.6 | 0.16 |
| 8. | Thrissur | 10 | 2 | 0.3 |
| 9. | Palakkad | 5 | 1 | 0.15 |
| 10. | Malappuram | 5 | 1 | 0.15 |
| 11. | Kozhikode | 5 | 1 | 0.15 |
| 12. | Wayanad | - | 0 | 0 |
| 13. | Kannur | 10 | 2 | 0.25 |
| 14. | Kasargod | - | 0 | 0 |
| TOTAL | | 110 | 22 | 3 |

XIII. Supply of Soil Ameliorants including Micro-nutrients (Rs. 270.00 lakhs)

Based on the soil test data micro-nutrients and other soil ameliorants will be supplied. An amount of Rs. 5400/Ha for lime (75% of the cost of 600 Kg. of lime/dolomite on an average) and Rs. 500/Ha (50% of the cost) for micronutrients will be provided under the component to benefit 4576 Ha.

District wise target is given below:-

| Sl. No. | Name of District | Phy. | Fin. (in lakhs) |
|--------------|--------------------|-------------|-----------------|
| 1. | Thiruvananthapuram | 350 | 20.65 |
| 2. | Kollam | 200 | 11.8 |
| 3. | Pathanamthitta | 200 | 11.8 |
| 4. | Alappuzha | 400 | 23.6 |
| 5. | Kottayam | 300 | 17.7 |
| 6. | Idukki | 476 | 28.084 |
| 7. | Ernakulam | 200 | 11.8 |
| 8. | Thrissur | 450 | 26.55 |
| 9. | Palakkad | 500 | 29.508 |
| 10. | Malappuram | 500 | 29.508 |
| 11. | Kozhikode | 200 | 11.8 |
| 12. | Wayanad | 400 | 23.6 |
| 13. | Kannur | 300 | 17.7 |
| 14. | Kasargod | 100 | 5.9 |
| TOTAL | | 4576 | 270 |

XIV. Promotion of Small Scale Value Addition Units through Graded Clusters (Rs. 75.00 lakhs)

Assistance will be provided for establishing small scale value addition units with the support of KVKs/KAU for empowering the clusters. Project based assistance will be provided to graded clusters/ farmer entrepreneurs recommended by such clusters for this purpose. Assistance to the tune of 75% of the total cost limited to Rs.1.50 lakhs per unit will be provided for this purpose. The projects received through Principal Agricultural Officer, will be scrutinized at the Directorate of Agriculture by the State Level Evaluation Committee chaired by Additional Director of Agriculture (Farms, Biogas & Vegetables) with Joint Director of Agriculture (VC) and Assistant Director of Agriculture (VC) as members. This component will be implemented in a loan linked manner with back ended subsidy. Funds will be released through the Principal Agricultural Officer concerned after the formal sanction of the project proposal. An agreement in this line will be executed with the beneficiaries concerned. It is proposed to establish **47 value addition units** of vegetables utilizing an amount of **Rs.70.50 lakhs**. An amount of **Rs.4.50 lakhs** will be utilized to impart training to enterprising clusters/ farmer entrepreneurs through KVK/KAU. A total amount of **Rs. 75.00 lakhs** is set apart for this component.

District wise target is given below:-

| Sl. No. | Name of District | Phy. | Fin. (in lakhs) |
|----------------|-----------------------------|-------------|------------------------|
| 1. | Thiruvananthapuram | 4 | 6 |
| 2. | Kollam | 3 | 4.5 |
| 3. | Pathanamthitta | 2 | 3 |
| 4. | Alappuzha | 3 | 4.5 |
| 5. | Kottayam | 3 | 4.5 |
| 6. | Idukki | 4 | 6 |
| 7. | Ernakulam | 3 | 4.5 |
| 8. | Thrissur | 5 | 7.5 |
| 9. | Palakkad | 4 | 6 |
| 10. | Malappuram | 5 | 7.5 |
| 11. | Kozhikode | 3 | 4.5 |
| 12. | Wayanad | 3 | 4.5 |
| 13. | Kannur | 3 | 4.5 |
| 14. | Kasargod | 2 | 3 |
| 15 | HQ – Training by KVK/KAU | - | 4.5 |
| TOTAL | | 47 | 75 |

XV. Operational Expenses (Rs. 90.00 lakhs)

TA, POL and other operational expenses including conducting of meetings of Officers, hire charges of vehicles, purchase of computers etc. will be met from this component. Part of the fund will be used for organizing campaigns. An amount of **Rs.10.00 lakhs** will be utilised for the purchase of a vehicle to Vegetable Cell at the

Directorate for monitoring activities at State level. A total amount of **90.00 lakhs** is set apart for this purpose.

| Sl. No. | Items | Amount (Rs. in Lakhs) |
|----------------|----------------------------|------------------------------|
| 1. | Travelling Allowances | 6.00 |
| 2. | POL | 7.00 |
| 3. | Other Operational Expenses | 77.00 |
| TOTAL | | 90.00 |

District wise target is given below:-

| Sl. No. | Name of District | Fin. (in lakhs) | | | |
|----------------|-------------------------|------------------------|------------|--------------------------|--------------|
| | | TA | POL | Operational Exps. | Total |
| 1. | Thiruvananthapuram | 0.38 | 0.45 | 2 | 2.83 |
| 2. | Kollam | 0.38 | 0.45 | 2 | 2.83 |
| 3. | Pathanamthitta | 0.35 | 0.45 | 2 | 2.8 |
| 4. | Alappuzha | 0.4 | 0.45 | 2 | 2.85 |
| 5. | Kottayam | 0.4 | 0.45 | 2 | 2.85 |
| 6. | Idukki | 0.45 | 0.45 | 2 | 2.9 |
| 7. | Ernakulam | 0.48 | 0.45 | 2 | 2.93 |
| 8. | Thrissur | 0.5 | 0.45 | 2 | 2.95 |
| 9. | Palakkad | 0.49 | 0.45 | 2 | 2.94 |
| 10. | Malappuram | 0.49 | 0.45 | 2 | 2.94 |
| 11. | Kozhikode | 0.4 | 0.45 | 2 | 2.85 |
| 12. | Wayanad | 0.35 | 0.45 | 2 | 2.8 |
| 13. | Kannur | 0.38 | 0.45 | 2 | 2.83 |
| 14. | Kasargod | 0.35 | 0.45 | 2 | 2.8 |
| 15. | HQ | 0.2 | 0.7 | 39 | 49.9 |
| TOTAL | | 6 | 7 | 77 | 90 |

Special Agricultural Zones

The Vegetable Development Programme will be additionally focused in Special Agricultural Zones of Vattavada-Kanthalloor of Idukki district, eastern Palakkad, Kanjikuzhi, Cherthala of Alappuzha district, Pazhayannur and adjoining areas of Thrissur district. Separate targets will be assigned for Special Agricultural Zones and issued alongwith working instructions.

Timeline for implementation

| Period | Financial (Rs.in lakhs) | Progress (%) | Physical (Ha) | Progress (%) |
|-----------------|------------------------------------|-------------------------|--------------------------|---------------------|
| April-June | 1160.00 | 20 | 2000 | 20 |
| April-September | 2320.00 | 40 | 4000 | 40 |
| April-December | 3475.00 | 60 | 6000 | 60 |
| April-March | 5793.00 | 100 | 10000 | 100 |

General Operational Guidelines for Vegetable Development Programme 2017-18

- Wide publicity should be given for the programme through various mass media, various farmers committees, through Panchayat Raj institutions etc. Wide publicity has to be arranged both at state level and district level for **identification of beneficiaries for all components**
- The Principal Agricultural Officers of the respective districts would be in charge of the district level implementation of the programme.
- Deputy Director (NWDPR) would be the Nodal Officer.
- The Block level Assistant Directors and Officers of the Krishi Bhavans are in charge of the implementation of programme at the field level. They will submit Monthly Report to PAO which will be consolidated at the district level and submitted to Director of Agriculture.
- The Agricultural Assistants will be in charge of the entire component implemented in their jurisdiction. All field level activities will be supervised and field problems to be reported by them to the Agricultural Officers for advising remedial measures to the farmers.
- The Additional Director of Agriculture (Farms, Biogas & Vegetable) will co-ordinate all the activities of the project at the state level.
- As far as possible, while beneficiary selection for the components, 10% may be earmarked to SC/ST.
- The components were Beneficiary Committees are proposed, the account should be joint and the agreement should be jointly executed by the Chairperson and the Convener in order to avoid allegations against officials in future.

Monitoring and Evaluation


At the block level, the Assistant Directors of Agriculture will monitor the programme and at district level, the Deputy Director of Agriculture (NWDPR) will be the Nodal Officer for the Scheme. The Principal Agriculture Officer will be responsible for the district level scheme implementation. At the state level, the Additional Director of Agriculture (Farm, Biogas & Veg.) will monitor and review the Scheme.

At district level, a Committee headed by the Principal Agricultural Officer and a Block Level Committee headed by the Assistant Director of Agriculture will ensure convergence of activities with all departments and agencies. Constitution is as follows:

| <u>District Level</u> | <u>Block Level</u> |
|--------------------------------|-----------------------------------|
| Principal Agricultural Officer | Assistant Director of Agriculture |
| DDA (NWDPR) | BTM & SMS of ATMA |
| PD, ATMA | Agricultural Officers |
| Representative from KAU/KVK | BLBC, Convenor |
| DM, Kudumba Sree | CDS of Kudumbasree (Selected) |
| DD, SHM | Joint BDO, MGNREGS |
| DM, VFPC | AM, VFPC |
| ADA (M) | |
| MGNREGS | |
| Lead District Manager | |

Sd/-

Director of Agriculture


JEEJA KUMARI.S

Copy to:

- 1) Chief (Agriculture), State Planning Board, Thiruvananthapuram.
- 2) Chief Executive Officer, VFPC
- 3) Director of Research, Kerala Agricultural University, Vellanikkara
- 4) Principal Information Officer, Farm Information Bureau, Thiruvananthapuram.
- 5) All Principal Agricultural Officers
- 6) PA to Director of Agriculture
- 7) CA to Additional Directors of Agriculture
- 8) All Joint Directors of Agriculture at HQ
- 9) State Agriculture Engineer
- 10) All DDAs (NWDPR)
- 11) Executive Engineer (Agri.), Alappuzha, Kozhikkode.
- 12) Assistant Executive Engineers of all districts
- 13) Planning Section/Finance Section
- 14) IT Cell – for uploading in the official website
- 15) Stock File

Joint Director of Agriculture Vegetable Ce
Directorate of Agriculture
Vikas Bhavan Tvp-33