

CIRCULAR

Sub: - Agriculture Department – Annual Plan 2019-20- Scheme for Office Automation and IT Infrastructure- e-Office, Establishment of Virtual Classrooms and Mini Computer Lab & Development of Management Information System and Direct Benefit Transfer Components -Working Instructions issued- Reg.,

- Ref :- 1. G.O (Rt) No.663/2019/AGRI, Dated:18.07.2019.
2. This office circular No. ADFW/100011/2019-IT2 dated 03/08/2019.
3. Order No. ADFW/100011/2019-IT2 dated 17/12/2019 of the Director of Agriculture.
4. Order of the Director, Kerala State IT Mission-DDFS/Admin/517/2014-KSITM Dated: 17/02/2019

As per reference cited 1st above, Government of Kerala has accorded Administrative Sanction for the Scheme "Office Automation and IT Infrastructure". Implementation of e-Office at Directorate of Agriculture, Establishment of Virtual Class Rooms and Mini Computer Labs, Cyber Extension, Connectivity, Procurement of Hardware, Development of Management Information System and Direct Benefit Transfer are the major components of the scheme. An amount of Rs.430 lakhs under the Head of Account 2401-00-001-86 (P) is available for the above components for the year 2019-20.

Vide circular read 2nd above, detailed Working Instructions were issued from this office for the implementation of the components e-Office, Cyber Extension, Connectivity and Procurement of Hardware. Vide order referred 3rd above, sanction has been accorded for the Intra component change of the components e-Office, Establishment of Virtual Classroom and Mini Computer Labs and Development of Management Information System and Direct Benefit Transfer. Accordingly, detailed Working Instructions are hereby issued as follows, for the implementation of above components during the year 2019-20.

1. E-Office

Vide circular referred 2nd above, detailed working instructions were issued for the implementation of e-Office in the Directorate of Agriculture. In the working instruction, an amount of Rs.21,40,000/- was proposed for installing 4 numbers of 15 KV UPS in the Directorate of Agriculture. But, the Assistant Executive Engineer, PWD (Electrical) has informed that for establishing 15 KVA UPS, basic wiring of the Directorate should be changed and this need a huge amount and time. Hence the amount earmarked for 4 numbers of 15 KV UPS will be utilized for the procurement of Desktop computers, UPS,

1.1 **Virtual Class Room @ RATTTC's, FTC's**

Sl No	Equipments	Qty	Price/Unit (Rs)	Total (Rs)
1	Camera USB 3.0 PTZ Camera with 12x Optical zoom, 72 Degree FOV, pan range -160 degrees to +160 Degrees, Tilt Range -30 degrees to + 30 degrees, Rs 232 control port, 10 pre-sets	4	1,63,143	6,52,572
2	LED Display 65" Display Brightness 500 Nits, Resolution 3840*2160 With HDMI & VGA Interface with Ceiling Mount Kit	4	3,07,646	12,30,584
3	Floor mount for 65" display	4	37,701	1,50,804
4	Audio DSP with Inbuilt / External Amplifier with 300 Feet operating range, 2 x UHF Handheld wireless microphones and 2 ceiling mount microphones, 2 x 30W speakers with sufficient cable.	4	3,57,243	14,28,972
5	Cables & Connectors Cables and accessories like Active USB 3.0, HDMI, Microphone cable, speaker cables, power cables, Power socket, Connectors. etc	4	62,835	2,51,340
6	Installation charges with one 6U floor mount	4	12,567	50,268
7	One-year Connectivity Charges -FTTH	4	1,25,000	5,00,000
8	Licence Fee and 5 Year AMC	4	50,000	2,00,000
9	Acoustics and Miscellaneous expenses Programming & Installation Charges	4	58,761	2,35,044

Establishment of Virtual Class Room facility aims to raise the training standards to National and International level by creating a network of classrooms thereby enhancing the quality of imparting training on new scientific cultivation practices to Department officials and farmers of Kerala. During the year 2019-20, this facility will be installed at three RATTTCs viz., Kozha, Malampuzha, Thalipparamba and FTC Vengeri. For ensuring compatibility with already established Video Conferencing/Virtual Classroom facility, the work should be entrusted to Total Solution Provider (TSP) M/s. KELTRON, the agency which completed the already established Video Conferencing/Virtual Classroom facilities proposed in 2018-19.

This sub-component will be implemented through the IT Division of the Directorate of Agriculture. Training will be provided to the officials of the training centres. Maintenance and operation of the VC facility will be entrusted to the officers of the respective training centres.

1.2. Virtual Class Room @ chamber of Secretary of Agriculture

An additional Video Conferencing facility is installed in the Chamber of Secretary to Government, Agriculture Department functioning at second floor of Annex-II of Government Secretariat in order to complete the network of VC connecting Directorate, District offices, SFAC and policy makers' offices. As there is a shortage of one licence for the Video Conferencing / Virtual Classroom facilities installed as per annual plan 2018-19, an additional licence needs to be procured for operation of VC facilities.

Sl No	Equipments	Qty	Price/Unit (Rs)	Total (Rs)
1	PTZ Camera with 10x	1	73,467.98	73,467.98
2	Audio Device with 90 dB 4 microphone inbuilt	1	43,980.96	43,980.96
3	Video Conferencing Software Licence with 5-year warranty	2	47,495.00	94,990.00
4	Cables and Accessories	1	4,151.24	4,151.24
5	Installation Charges inclusive of TSP charges	1	20361.86	20361.86
	Total			2,36,952.00

For ensuring compatibility with already established Video Conferencing/Virtual Classroom facility, the work should be entrusted to Total Solution Provider (TSP) M/s. KELTRON, the agency which completed the already established Video Conferencing/Virtual Classroom facilities proposed in 2018-19.

1.3. Additional Cost for Virtual Classroom installed at Directorate, District Offices, O/o. the Hon'ble Minister for Agriculture, Agricultural Production Commissioner and Special Secretary & Other Contingencies

An amount of Rs.5,86,464/- has been earmarked for meeting any additional expenses regarding installation of Virtual Classroom at Directorate, District Offices, O/o. the Hon'ble Minister for Agriculture, Agricultural Production Commissioner and Special Secretary & Other Contingencies.

SL No	Component	No of Units	Total Amount (Rs)
1	Additional Cost for Virtual Classroom installed at Directorate, District Offices, O/o. the Hon'ble Minister for Agriculture, Agricultural Production Commissioner and Special Secretary & Other Contingencies	NA	5,86,464
	TOTAL		5,86,464

1.4. Mini Computer Lab

Sl No	Equipment	Qty	Price/Unit (Rs)	Total (Rs)
1	Computer with accessories -10 Nos	1 unit	335000	335000

etc. for meeting the deficiency of hardware for the implementation of e-office in full swing. The shortage of hardware persists even after utilising the amount earmarked for the hardware purchase sanctioned under this component earlier.

Procurement of hardware will be through CPRCS portal, as per the existing Government Orders / circulars. Manpower recruitment will be done through NICSI. The component will be implemented as per the following Financial Outlay.

Financial Outlay

Sl. No.	Item	Approx. Amount (Rs.)
1	Desktop Computers, Printers, UPS & Accessories (Purchased through CPRCS)	44,50,000
2	High Speed Document Scanner – 2 Nos.	80,000
3	Internal Networking (LAN)	50,000
4	Digital Signature Certificate Cost – 50 Nos.	32,500
5	Software application Support-Support Engineer from NIC for 1 Year @ Rs.33000 per month (inclusive of GST)- 2 Nos.	7,92,000
6	Infrastructural works in Training hall of Directorate & Other Unforeseen Expenses	1,95,500
	TOTAL	56,00,000

2. Establishment of Virtual Classrooms and Mini Computer Labs

This component aims at creating Modern, State of the art, Hi-tech Virtual Classroom using Video Conferencing network connecting various training centres like RTTC, RATTIC's and FTC's of the Department. Virtual Classroom network connecting Directorate with 14 district level Principal Agricultural Offices, Karshika Vivara Sanketham Call Centre of the SFAC, Office of the Honorable Minister of Agriculture and Agricultural Production Commissioner is completed through Total Solution Provider (TSP) M/s. KELTRON: With the commissioning of this infrastructure and connecting with 14 District Level Video Conferencing Studios of Kerala State IT Mission and Other Trainer and Trainee Virtual Class Room locations using the most modern software based High Definition Video Conferencing Solutions, we will be able to provide trainings in the most effective way for imparting new agricultural knowledge, skills and attitude to Department officials and farmers of Kerala. This will help Department to conduct Trainings, Meetings, and Conferences on Video Conferencing Mode. This will enable Human Resource Development in Agriculture Sector utilizing the tools of modern Information and Communication (ICT) technology by linking existing computer training Labs of the Department and IT Mission District Level Video Conferencing Studios and reduce costs of training, travelling and save the time, money and energy of Department Officials and Farmers. During the financial year 2019-20 the component will be implemented as detailed below:

2	Table and Furniture -10 computer chairs and table	1 unit	75000	75000
3	Network Switch, Cabling, Wiring	1 unit	15000	15000
4	3-5 KVA UPS	1 unit	75000	75000
	Total		5,00,000	5,00,000

To create IT Training Infrastructure with computer Labs containing 10 computers at RATTTC, Kazhakkuttam to impart IT and e-Governance knowledge and Skills to Department officials and Master Farmers. Procurement of computer and accessories which are listed in CPRCS portal should be done through the portal. This sub-component will be implemented through RATTTC, Kazhakkuttam.

Abstract of Establishment of Virtual Classrooms and Mini Computer Labs

SL No	Component	No of Units	Unit Cost (Rs)	Total Amount (Rs)
1.1	Virtual Classroom at RATTTC's and FTC	4	11,74,896	46,99,584
1.2	Virtual Classroom at Chamber of Secretary of Agriculture	1	2,36,952	2,36,952
1.3	Additional Cost for Virtual Classroom installed at Directorate, District Offices, O/o. the Hon'ble Minister for Agriculture, Agricultural Production Commissioner and Special Secretary & Other Contingencies	NA	5,86,464	5,86,464
1.4	Mini Computer Lab	1	5,00,000	5,00,000
	TOTAL			60,23,000

3. Development of Management Information System and Direct Benefit Transfer

The Department of Agriculture Development & Farmers Welfare is using various ICT tools for providing services to farming community. There is a strong demand in the Department for the development of a Reporting Module which can cater to the demand of all tiers right from Krishi Bhavans. Integrated Central MIS enable higher level officials in monitoring the scheme progress and expenditure status in real time to take administrative decisions. Duplication of data entry for the same scheme for meeting specific requirements or generating special reports can be avoided for effective and efficient use of human resources and saving time, and efforts. Integrated MIS will help in monitoring and issuing Utilization certificates to the Government of India and Government of Kerala in time.

The AIMS will feature a Reporting module which will help to convert all present-day reporting formats to online formats with automatic aggregation and drill down features for effective supervision, monitoring and control. The System will feature a Profile module for mapping all offices, its staff details, location, and services offered and will enable the officials to enter the basic data on to Crops and Cropping pattern, Soil Fertility, Soil types, Success stories. MIS will be integrated with a **DBT compliant Central Online claim processing Suite module** being developed by NIC for

Agriculture Department. On successful payment to beneficiaries through the **Online claim processing Suite**, system will generate reports for Central MIS, DBT and PFMS modules and upload the details from Block level on receiving authorization from competent officers through web services. These data will be aggregated at different tiers like Krishi Bhavan, Block, District and State level for real time status monitoring. As the system is able to see all the Head of Accounts/ Schemes/ and components its real time status will be available at specific Dash Boards for users at different tiers. The Dashboard will have facility to view the status in numerical and Graphical forms.

A software package **Claim Processing Suite** is being developed with the help of National Informatics Centre (NIC) for processing all schemes online, from online application to Online Auditing. The First scheme under **Claim Processing Suite** FMS-Farm Mechanization System (<http://fms.kerala.gov.in>) is ready for implementation starting from online application and online claim processing and transfer of funds to beneficiary accounts through BiMS. Farmer's data is to be pulled from Farmer Registration database of Agriculture Department. Streamlining process flow in transfer of funds through BiMS is to be enabled by customizing the above software. The module will fetch user data from Farmer Registration portal through web service. The module will also permit the entry of a new farmer not listed in the database along with the authentication of details. The claims processed at the Krishibhavan level will be available to Assistant Director of Agriculture (ADA) for further processing, Bill generation and payment to individual beneficiaries through BiMS. Claim processing can only be done based on the allotment provided through BAMS under each scheme/ Head of Account. Implementation of this component are as detailed below:

a) **Software Development Cost to NIC for second year**

SL No	Item	Amount in Lakhs
1	Cost of Software Development /Man power cost / Cost of Training Module and training Videos etc to NIC	15.00
	Total	15.00

Implementation through IT Division of the Directorate of Agriculture.

2.2) **Cost of engaging Hardware Technician on Contract**

SI No	Particulars	Rate/Month	No	Period	Total Amount (Rs in Lakhs)
1	Hardware Technician	35000/-	1	12 Months	4.20
	Total				4.20

A Hardware Technician with Diploma in Hardware and experience in networking on contract is essential to maintain the systems in good condition and co-ordinate maintenance and repair works. Hardware technician will be stationed at Hardware Maintenance Bay at IT Division of Agriculture Directorate and will be appointed through NICS (National Information Centre Services Inc.)

Implementation through IT Division of the Directorate of Agriculture.

2.3) Manpower cost to NIC for customizing Farmer SMART Database, Online Claim Processing Suite, Training and Maintenance of the Software

An amount of **Rs. 6.96 Lakhs** is earmarked for the manpower cost to NIC for engaging two Programmer Assistants for a period of 12 months Rs 29000/- per month for the Development of Online claim processing suite , AIMS, Farmer Registration, ASHA software, FMS software, customizing BIMS / BAMS and subsidy transfer and to provide technical help, training, maintenance of the software etc to Agricultural Department and will be appointed through NICS (National Information Centre Services Inc.) . The software modification process includes provision and use of digital signature, linking with Farmer Registration software, web services, security of data, forward and backward linkages and data integration with farmer registration portal, BIMS portal and access control application development. In addition to this Development of SMART farmer database at Kerala and Development of Mobile Apps for officials and Farmers for SMART farmer database and online claim processing suite etc

Sl No	Item	Rate (Rs)	Amount (Rs Lakhs)
1	Manpower cost to NIC for engaging two Programmer Assistants for 12 months for customising SMART farmer database and claim processing suite related software clusters and to provide technical help to Agricultural Department officials through phone, e-mail, online chat, remote online help and district wise continuous trainings and meetings to empower field level officers. Inclusive of annual increment/enhancement /GST. Mobile Application Development for farmer database and claim processing suite.	@ Rs. 29,000/- per month for 2 Persons for 12 months with 10% enhancement per year which will be taken from Miscellaneous fund.	6.96000
Total			6.96000

Implementation of this sub-component is through IT Division of the Directorate of Agriculture.

2.4) Providing Digital Signature to officers in charge of e-Payment, e-Procurement, GST, GeM and statutory functions which require a Digital Signature

Digital signature and encrypted e-mails are to be provided to ADA's and other officers engaged in e-payment, e-procurement, GST, GeM and statutory functions which require use of digital signature from Agencies enlisted by Kerala State IT Mission. All ADA's and Officers in charge of e-payment, e-procurement, GST, GeM and other Statutory official obligations which require Digital Signature etc can procure new Digital Signature or renew existing DSC before the end of validity period using this Fund. Officers whose DSC expires during 2019-20 should renew the certificate before the end of validity period for uninterrupted use of DSC for official purposes. An amount of **Rs. 1**

Lakhs is earmarked for this component. Kerala State IT Mission has empaneled M/s. KELTRON as Agency for issuance of Digital Signature from 22-02-2019 to 21-02-2020 as per reference 4th cited above. Officials are permitted to avail the type of DSC based on their official requirements

2.5) Training on Claim Processing Suite, AIMS, Integrated MIS, Farmer Data Base, e-Payment and other Software Clusters.

Capacity building programmes in the use Claim Processing Suite, Integrated MIS, e-Payment, e-procurement, Farmer Registration, integrated agricultural solution, software clusters and other Software is to be organized for Department Officials as well as other stakeholders. An amount of Rs. 14.80 Lakhs is sanctioned for this purpose including the cost software of customization workshops and Training materials, as detailed below:

SI No	Training	Amount (Rs)
1.	District Level Training on Claim Processing Suite, Integrated MIS, e-Payment, e-procurement, Farmer Registration, GST, integrated agricultural solution, software clusters and other Software for Farmer Registration and e-payment for Department officials and other stakeholders @ Rs 30,000/- per district- 14 Trainings at District Level	4,20,000/-
2.	Follow Up training at Block Level 152 numbers @ Rs.5,000/- per block	7,60,000/-
3.	Master Trainers Training, Software Customisation workshops, e-procurement Training, Training and Focus Group Workshops on Claim Processing Suite, Integrated MIS, e-Payment, e-procurement, e-Office, Farmer Registration, integrated agricultural solution, software clusters and other e-Governance initiatives. Need based Problem Solving and Handholding Focus Group Workshops -Food and Refreshment charges @ Rs 2000 per Focus Group and Honorarium @ Rs 750/- per day for experts from NIC and Other Agencies.	2,00,000/-
4.	Training Materials, Software User Manuals and other publications for effective service delivery through ICT and e-Governance Applications	1,00,000/-
Total		14,80,000/-

The following allotment is made to Districts for conducting Software Trainings (Sl. No. 1 & 2) during 2019-20 in consultation with IT Division of the Directorate.

District	District Level Training (Rs. in lakhs) @Rs.30,000/District	Block Level Training (Rs. in lakhs) @ Rs. 5000/Block	Total (Rs. in lakhs)
Thiruvananthapuram	0.30	0.55	0.85
Kollam	0.30	0.55	0.85
Alappuzha	0.30	0.60	0.90
Pathanamthitta	0.30	0.40	0.70
Kottayam	0.30	0.55	0.85

Idukki	0.30	0.40	0.70
Ernakulam	0.30	0.70	1.00
Thrissur	0.30	0.80	1.10
Palakkad	0.30	0.65	0.95
Malappuram	0.30	0.75	1.05
Kozhikode	0.30	0.60	0.90
Wayanad	0.30	0.20	0.50
Kannur	0.30	0.55	0.85
Kasargod	0.30	0.30	0.60
Total	4.20	7.60	11.80

Rs.3.00 Lakhs will be given to SAMETI for conducting the trainings as described Sl. No. 3 & 4 above.

2.6) SMS Support to Software Clusters

SMART farmer database Claim Processing Suite, AIMS, Integrated MIS, EBT software for effecting e-Payment, Farmer Registration, ASHA and other software clusters are to be given provision to send SMS messages to the beneficiaries. This has to be made possible by integrating various software platforms with the mobile platform of Government of Kerala. Information on successful as well as failed transactions can be intimated to beneficiaries through SMS along with scheme information. This facility will be given to farmers free of cost. An amount of Rs. 5 Lakhs is earmarked to meet the SMS charges payable to M/s KELTRON, who is the official supplier of Kerala Government SMS. This sub-component is implemented through IT Division of Directorate of Agriculture.

2.7) Other contingencies and unforeseen expenses

An amount of Rs. 9.8386 Lakhs has been earmarked for meeting the Cost of security Auditing of AIMS (developed by the NIC, Kerala for the department) by empaneled agencies, fuel expenses, other contingencies and unforeseen expenses related to Online Claim Processing Suite, Development of Integrated Management Information System, CDBT, e-payment and Farmer Registration and other central and state Government Software Clusters. In case of changes in GST rates or increase in any item or periodical or incremental increase in man power cost or preparation and publication of user manual, training or any other expenditure in the plan it will be met from contingencies and unforeseen expenses. This sub-component is implemented through IT Division of Directorate of Agriculture.

2.8) Social media for Agricultural Extension

The main objectives of this component are

- To promote Kerala based Social media groups for strengthening cyber extension and to enhance production, productivity and profitability of farming in Kerala. Karshika Vivara Sanketham Whatsapp group, Karshika Vivara Sanketham, Karshika Keralam, e-vipani, FEM @ Mobile Android Mobile apps to be promoted.
- Positive and proactive engagement with Social media for dissemination of modern scientific agricultural innovations to farmers.
- To attract, encourage and motivate the tech-savvy young new generation farmers and professionals to farming in Kerala.
- To disseminate scheme information, support from agricultural department and assistance to group members for the development of agricultural sector in Kerala.

- To provide Training to social media participants to encourage more people to adopt scientific farming in Kerala.
- To form a Digital Sena of experts consisting of NIELIT Trained Department officials, Agricultural Department officials, tech-savvy Master Farmers, Experts, Agricultural Graduates and Postgraduates Students to provide Authentic information for continuous Farmer engagement.
- To bring all the online groups under the umbrella of the Web Portal "Krishi.info" developed for ATMA Call Centre.
- To train Agricultural Department officials in using social and digital media for enhancing the effectiveness of extension and dissemination of information and discuss about trending topics in the field of Agriculture.
- To develop a social media and digital media policy for Agricultural Department.
- To get real time response and feedback of schemes from farmers for effectively planning, implementation and monitoring of schemes.
- To continuously improve the efficiency and effectiveness of service delivery of Agricultural Department with farmer focus by constantly engaging with farmers, consumers, agricultural experts, input dealers, students and all stakeholders of Agricultural Development in Kerala and to solve issues and complaints related to service delivery.
- To help farmers to adopt the best agricultural technologies available in the globe by constant interaction with NRI farmers and international experts in this field and promote crowd sourcing more funding and technology from all over the world.

Agriculture Department has initiated India's first social media call centre **Karshika Vivara Sanketham** at Small and Marginal Farmers Agri Business Consortium, Anayara .www.krishi.info portal is set up along with Toll free Number 1800-425-1661,Whats app No +91 944 705 1661 and Face book Page: fb.com/krishiinfo. Using Face book Live and integrating other social media and call centre infrastructure, Krishi Manthri Vilippurathu Programme, Online Farmers Field School etc are conducted with Farmer's participation. Karshika Vivara Sanketham Whatsapp group, Karshika Vivara Sanketham, Karshika Keralam, , FEM @ Mobile Android Mobile apps are available for extension and e-vipani mobile app for promoting marketing. 25 Agricultural Officers are trained at NIELIT, Calicut for effectively using Social Media for Extension.

SI No	Item	Amount (Rs Lakhs)
1	Support to Karshika Vivara Sanketham for designing of Social Media materials/extension videos/online farmers field school / Conducting workshops / Trainings / development of Krishi Manthri vilippurathu Studio etc	6.85
	Sub-Total	6.85

Funds will be transferred to SFAC for implementation of this sub-component "social media for agricultural extension".

ABSTRACT OF EXPENSES FOR MIS AND DIRECT BENEFIT TRANSFER

Sl No	Item	Amount (Rs. in Lakhs)
2.1	Software Development Cost to NIC for second year	15.0000
2.2	Cost of engaging Hardware Technician	4.2000
2.3	Manpower cost to NIC for SMART /Claim processing suite	6.9600
2.4	Providing Digital Signature	1.0000
2.5	Training (District level, Block level, Master trainers training)	14.8000
2.6	SMS Support	5.0000
2.7	Other Contingencies (including Security Auditing, fuel expenses, etc.)	9.8386
2.8	Social Media for Extension	6.8500
	Sub Total	63.6486

Allotment will be given to Principal Agricultural Officers under the Head of Account 2401-00-001-86-00-99-00 (P) to meet the cost of Training (District level and Block level training), Cost of digital Signature under this component.

Deputy Director of Agriculture (Extension & Training) of the Districts will be in charge of the implementation of the scheme "Office Automation and IT Infrastructure" at the District Level. At the State Level, Additional Director of Agriculture (Extension) will monitor the implementation of the scheme.

The expenditure in this regard will be met from the budget provision available under the Head of Account 2401-00-001-86-00-99-00 (P).


Sd/-
Director
Department of Agriculture Development & Farmers' Welfare

To

Additional Director of Agriculture (Extn)

Additional Director of Agriculture (Planning)

All Principal Agricultural Officers and DDA (E&T)'s (You are directed to communicate the circular to all Assistant Directors of Agriculture, Agricultural Offices and Heads of all other offices under your control)


For Director of Agriculture
ANITHA
Deputy Director of Agriculture
Directorate of Agriculture Development
and Farmers Welfare Department
Vikas Bhavan, Thiruvananthapuram-695 033