

Driving Agricultural Change: Innovations and Outcomes under Viksit Krishi Sankalp Abhiyan in Kerala

29 May 2025 to 12 June 2025





भाकृअनुप-केन्द्रीय कन्द फसल अनुसंधान संस्थान

(भारतीय कृषि अनुसंधान परिषद्) श्रीकार्यम, तिरूवनन्तपुरम 695 017, केरल,भारत

ICAR-Central Tuber Crops Research Institute

(Indian Council of Agricultural Research)
SREEKARIYAM, THIRUVANANTHAPURAM 695 017, KERALA, INDIA





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ICAR-Central Tuber Crops Research Institute

Sreekariyam 695 017, Thiruvananthapuram, Kerala, India

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From the Director



Indian agriculture has undergone significant transformations since independence, moving from a food-scarce nation to one that is largely self-sufficient and even a net exporter of many agricultural products. A look into the post green revolution transformation and diversification clearly points out that the shift in focus beyond just increasing production, there's a growing emphasis on enhancing farmers' incomes, improving productivity and promoting structural transformation within agriculture and

from farm to non-farm sectors. Greater attention is being paid to small and marginal farmers, in lagging regions (especially Eastern India), and rainfed areas. To further strengthen the resource base and income of the farmers the government of India has come up with a massive programme of Viksit Krishi Sankalp Abhiyan which was launched by Honourable Union Minister of Agriculture and Farmers' Welfare, Shri Shivraj Singh Chouhan, at the ICAR-Central Institute of Freshwater Aquaculture (ICAR-CIFA), Kausalyaganga, Bhubaneswar, Odisha, on 29 May 2025. The roadmap of the programme is well defined with a target to cover over 65,000 villages across 723 districts and to directly engage more than 1.3 crore farmers, fostering the adoption of scientific farming practices and promoting sustainable agricultural growth. I am proud to record that ICAR-CTCRI is a partner in this programme and supports this programme by deputing scientists to be a part of the team along with the KVKs and other line departments. It serves as a platform to have direct linkage with the farmers and vice versa. Farmers were made aware about the Institute technologies and also the facilities which they can avail from the Institute.

I appreciate all the scientists for their excellent work in the farmer's field and the editorial team of this publication for bringing out this valuable compilation.

July 2025
Thiruvananthapuram

G. BYJU Director



Report on Viksit Krishi Sankalp Abhiyan (VKSA) Introduction

The ICAR-Central Tuber Crops Research Institute (ICAR CTCRI) was established during the Third Five Year Plan for intensification of research on tuber crops (other than potato). The Institute started functioning on 01 July 1963 with its headquarters (HQ) at Sreekariyam, Thiruvananthapuram, Kerala. It has one Regional Station (RS) at Bhubaneswar, Odisha. The All India Co-ordinated Research Project on Tuber Crops (AICRPTC) was started in 1968 for testing and popularizing the location specific tuber crop technologies in various parts of India. It has presently 21 centres including ICAR-CTCRI HQ and Regional Station. The Institute is also one of the centres of the All India Co-ordinated Research Project on Pre and Post-Harvest Technology as well as AINPOF. The ICAR-CTCRI is conducting basic, strategic and applied research on various edible tropical tuber crops.

Vision

Root and tubers for ensuring better health, wealth generation and inclusive growth.

Mission

To integrate root and tuber crops as sustainable farming system components to ensure food and nutritional security of the nation and livelihood improvement of rural population

Mandate

- Basic, strategic and applied research on genetic resource management, crop improvement, sustainable production and utilization of tropical tuber crops.
- Co-ordinate research and validation of technologies through AICRP on Tuber Crops.

Mandate Crops

- $1.\,Cassava: \textit{Manihot esculenta}\,Crantz, Euphorbiaceae$
- 2. Sweet potato: Ipomoea batatas (L.) Lam., Convolvulaceae
- 3. Greater yam: *Dioscorea alata* L., Dioscoreaceae
- $4. \ White yam: {\it Dioscorea rotundata} \ Poir., Dioscoreaceae$
- 5. Lesser yam: Dioscorea esculenta (Lour.) Burk., Dioscoreaceae
- 6. Elephant foot yam: Amorphophallus paeoniifolius (Dennst.) Nicolson, Araceae
- 7. Taro: Colocasia esculenta (L.) Schott., Araceae
- $8. \, Tannia: \textit{Xanthosoma sagitti folium } (L.) \, Schott., Araceae$
- 9. Giant taro: Alocasia macrorrhiza (L.) Schott., Araceae



- 10. Swamp taro: Cyrtosperma chamissonis (Schott.) Merr., Araceae
- 11. Chinese potato: Plectranthus rotundifolius (Poir.) Spreng., Lamiaceae
- 12. Yam bean: Pachyrhizus erosus (L.) Urban, Fabaceae
- 13. West Indian arrowroot: Maranta arundinacea L., Marantaceae
- 14. Queensland arrowroot: Canna edulis (Ker-Gawler), Cannaceae
- 15. East Indian arrowroot: Curcuma angustifolia Roxb. Zingiberaceae

Brief on Viksit Krishi Sankalp Abhiyan (VKSA)

The Viksit Krishi Sankalp Abhiyan is a nationwide campaign launched to modernize Indian agriculture through scientific outreach, sustainable practices and farmers empowerment. The Vikasit Krishi Sankalp Abhiyan (Developed Agriculture Resolution Campaign) is a significant nationwide initiative launched by the Government of India, primarily led by the Ministry of Agriculture and Farmers' Welfare in collaboration with the Indian Council of Agricultural Research (ICAR). It aims to modernize Indian agriculture, empower farmers, and contribute to the vision of a "Viksit Bharat" (Developed India) by 2047. It aims to cover over 65,000 villages across 723 districts and is expected to directly engage more than 1.3 crore farmers, fostering the adoption of scientific farming practices and promoting sustainable agricultural growth. It aligns with the vision of making India the "Food Basket of the World" through science-backed, climate-resilient, and farmer-centric agriculture.

Key Objectives and Features:

- Lab to Land Transfer of Technology: A core objective is to bridge the gap between scientific research and its practical application on the ground. Teams of agricultural scientists and experts will visit villages to directly engage with farmers, disseminate modern agricultural technologies, and provide tailored guidance.
- Promoting Advanced Farming Practices: The campaign focuses on educating farmers about advanced farming techniques for major Kharif crops (and likely Rabi crops in subsequent phases) specific to different regions. This includes:
 - Modern technologies for crop production.
 - Optimal use of fertilizers and pesticides.
 - Climate-resilient farming methods.
 - Organic and natural farming practices.
 - Water-use efficiency techniques (e.g., micro-irrigation).
 - Use of modern machinery and digitalization (e.g., drones, AI-based advisories).



- Awareness of Government Schemes: Farmers are informed about various beneficial government schemes and policies related to agriculture, horticulture, animal husbandry, and fisheries, such as:
 - Soil health card scheme.
 - Crop insurance (PMFBY).
 - Direct income support (PM-KISAN).
 - Schemes for farmer producer organizations (FPOs).
 - Support for post-harvest infrastructure.
- Two-Way Communication and Feedback: The Abhiyan emphasizes a two-way communication approach. While scientists share information, they also gather feedback from farmers about their challenges and needs. This feedback is intended to inform future agricultural research and policy decisions, promoting "demand-driven research."
- Empowering Farmers and Increasing Income: Ultimately, the campaign aims to enhance farmers' income by improving productivity, reducing costs, ensuring fair prices for produce, and preventing losses. It also seeks to explore additional income sources beyond traditional farming.
- Nationwide Reach and Participation: The campaign is being conducted across over 700 districts and targets to reach millions of farmers. It involves a collaborative effort of various stakeholders, including:
 - Krishi Vigyan Kendras (KVKs).
 - ICAR Institutes.
 - State Agriculture and Allied Departments (Horticulture, Animal Husbandry, Fisheries).
 - Farmer Producer Organizations (FPOs).
 - Progressive farmers and local governance bodies.

Timeline:

The Viksit Krishi Sankalp Abhiyan was launched on May 29, 2025, and is scheduled to run for 15 days, concluding around June 12, 2025. It is planned to be conducted biannually before the Kharif and Rabi sowing seasons.

In essence, the Viksit Krishi Sankalp Abhiyan is a massive outreach program designed to bring scientific knowledge and government support directly to the farming community, accelerating India's agricultural transformation towards a more developed and prosperous future.



District wise Report on Viksit Krishi Sankalp Abhiyan (VKSA) Kerala state

Kerala state at a glance

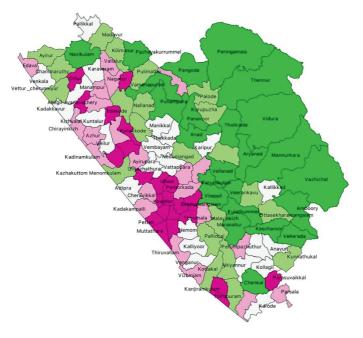


Map of Kerala State

Kerala is situated at the southwestern end of the Indian sub continent. Kerala lies between the Arabian sea in the west and the western ghats (Sahyadris) in the East with an area of 38863 sq.km. Kerala State is situated between 8°18' and 12°48' N latitude and 74°52' and 77°22' E longitude with a geographical area of 38,864 km2. The land stretches north-south along a coastline of 580 km with a varying width of 35 to 120 km. The nature of the terrain and its physical features, divides an east west cross section of the state into three distinct regions. Located in the humid tropics with high rainfall distributed in to 2 monsoon seasons, viz. South west monsoon (June to September) and North east monsoon (October to November) of which South west monsoon is more predominant. About 85% of the annual rainfall receives during the monsoon period between June and November (70% during South west and 15% during the North east monsoon) and the remaining 15% only during the non-monsoon period between December and May as summer showers. Soil types include coastal sandy soil, acid sulphate soil, pokkali soil, kole soil, riverine alluvial soil, red soil, gravelly laterite soil, foredst soil and black soil. Kerala is known for a diverse range of crops, with a significant emphasis on plantation crops and spices. Key crops include coconut, rubber, tea, coffee, pepper, cardamom, and arecanut. Rice, the staple food, is also cultivated, along with tapioca, cashew, ginger, and turmeric.



Profile of the districts in Kerala Thiruvananthapuram



Map of Thiruvananthapuram District

Thiruvananthapuram, the capital of Kerala, uniquely positioned between the Arabian Sea and the Western Ghats, offering a variety of landscapes, from the coastal belt along the Lakshadweep Sea to the undulating midlands and the lush forests of the Western Ghats. These diverse topographical features not only enhance the natural beauty of the region but also contribute to its varied ecosystem. The district is located 8° 17' N and 8° 51' N latitude and 76° 41' E and 77° 17'E longitude. The district stretches along the shores of the Lakshadweep sea for a distance of 73.6 Kms. The district is surrounded by Kollam district on the North, Thirunelveli and Kanyakumari of Tamil Nadu on the East & South respectively. The climate here is tropical. Over the course of the year the temperature typically varies from 74° F to 91° F. Agriculture plays an important role in the economy of the district. More than 50% of the total population depends on agriculture for its livelihood. Still along the midland and highland portions, agriculture has a dominant role and the district has become a fast developing administrative center. The soil of the district are coconut, tapioca, rubber, plantain, paddy, vegetables and pepper.



VKSA Programme at Thiruvananthapuram ICAR Krishi Vigyan Kendra, Mitraniketan, Thiruvananthapuram 29 May to 02 June 2025

1	Team Members	Ms. Manju Thomas SMS(Horticulture) ICAR-KVK, Mitraniketan
		Ms. Bindu R.Mathews
		SMS (Plant Protection)
		ICAR-KVK,Mitraniketan
		Dr.S.S.Veena, Principal Scientist
		ICAR- Central Tuber Crops Research Institute, Sreekariyam,
		Thiruvananthapuram
2	Programmes Organized	29.05.2025
		The VKSA meeting-cum-training on 'Rice cultivation: best practices, pests, diseases, and precautionary measures' was conducted at Kilimanoor, and another meeting-cum-training on 'Integrated management of plantation, tuber, and vegetable crops' was held at Ottasekharamangalam. The MLA, Attingal constituency was the chief guest. All ward members also attended the meeting.
		30.05.2025
		Meeting on "Crop management during South West monsoon" was conducted at Kattakada block, Thiruvananthapuram. Block Panchayat President was the chief guest and Assistant Director of Agriculture, Assistant Professor, College of Agriculture, Vellayani and Agriculture Officer, Vellanad attended the meeting.
		31.05.2025
		Meeting cum interactive session on 'Do's and Don'ts for rainy season cultivation of vegetables and tuber crops' was conducted at Kerala Gandhi Smaraka Nidhi, Thycaud, Pallichal block, Thiruvananthapuram. The President, KGSN was the chief guest. Scientists along with progressive farmers, visited the field and terrace garden of Shri Jayachandran at Kudappanakunnu. Cultivation practices for vegetables, tuber crops and ornamental plants in grow bags were demonstrated.



		01.06.2025 Meeting cum interactive technical session on "Rice:
		cultivation tips and crop management' was conducted at Pulimath, Thiruvananthapuram. Hands on training on "Mushroom cultivation" was conducted in Vellanad. 02.06.2025
		Meeting on 'Sustainable cultivation of vegetables, tuber and plantation crops" was conducted at Vamanapuram, and another meeting on 'Integrated management of plantation, tuber, and vegetable crops' at Nellanad.
3	Major Crops Cultivated	Vegetables, banana, plantation crops, tuber crops and rice
4	Major Problems	• Wild boar and snail pests and diseases in various crops (Rhinoceros beetle, red palm weevil, bud rot, button shedding and mite in coconut; Pseudostem borer and Sigatoka in banana; viral diseases and wilts in solanaceous vegetables; fruit fly infestation in cucurbits; Mealy bug, scale and stem and root rot in cassava; collar rot in elephant foot yam
		Marketing of produce and price fixation by the vendors
		Non availability of fertilizers on time
5	Feedback from Farmers	Free soil testing and guidance on remedial measures
		• Inexpensive and safe repulsion of wild boars
		 Easy access to quality planting material and resistant varieties. Enhanced research on root wilt disease in coconut
		Development of more resistant varieties in major crops
		• Identification of suitable intercrops for rubber plantations
		 Regularization of sale of pesticides and selling of agrochemicals through government stores like medicine sale through Jan Oushadi
		Eco-friendly management of weeds
		• Stability in the price of agricultural produce and more involvement of farmers in price determination.
		• Stability in the price of agricultural produce and more involvement of farmers in price determination.



6 ITKs Documented/ Farmers Innovations

- A mixture of 10 kg of weeds, 1 kg of jaggery, 250 g of tamarind, 250 g of salt, and bioinoculum is prepared and allowed to ferment for one week. The resulting preparation is applied to plants to promote growth and help mitigate pests and diseases.
- The pulp of Aloe vera (4-5 leaves/l), diluted with water, is used as a natural remedy against mealy bugs in vegetable crops.
- Mixing fine or coarsely powdered grains with amaranth seeds and other small vegetable seeds is used to deter ants.
- Mixing jaggery with Beauveria enhances its efficacy.
- Spraying a mixture of fermented rice water, wood ash, and turmeric powder is practiced to manage viral diseases in chilli plants.
- Covering vegetable seeds with coconut shells for three days is practiced to enhance germination

29 May to 02 June 2025

1	Team Members	Ms. Jyothi Rachel Subject Matter Specialist (Agronomy) ICAR-KVK, Mitraniketan Ms. Chithra Subject Matter Specialist (Agricultural Engineering) ICAR-KVK, Mitraniketan Ms. Devika Subject Matter Specialist (Home Science) ICAR-KVK-Mitraniketan Dr. Sheela Immanuel Principal Scientist ICAR-Central Tuber Crops Research Institute, Sreekariyam,
		Thiruvananthapuram



2 Programmes Organized

29.05.2025

A meeting was organized at the Krishi Bhavan, Ulloor. The programme was inaugurated by the Ward Councilor. The activities of ICAR-CTCRI, and the technologies developed by the Institute were discussed and the activities of KVK were also briefed. Farmers interaction was arranged. Farmers needs were identified and also feed back of the farmers were collected. A demonstration on Nano urea was done by a representative from IFFCO.

30.05.2025

A meeting was arranged at Venkavila. The programme was inaugurated by Shri. Sukumaran, Chairman, Farmers Council. The activities of KVK and also about the procedure to take soil sample were discussed. A brief about the activities of ICAR-CTCRI and the latest technologies of the Institute were explained. Farmers needs were identified and also feed back of the farmers were collected

31.05.2025

An awareness campaign was organised at the panchayat hall at Peringamalai. The programme was inaugurated by the Ward Councilor. Three ward members also offered felicitations. The VKSA programme was briefed and also about the implements developed by KVK in collaboration with other institutes were discussed. The ICAR CTCRI technologies were discussed. Famers had interactions with the scientist and their feed back about the programme and ITKs were collected.

01.06.2025

An awareness campaign was organized for the farmers of Nedumancaud. The farmers were made aware about the different government schemes and also given advisories regarding crop management during rains. Mobile advisories were sent to different farmers.

02.06.2025

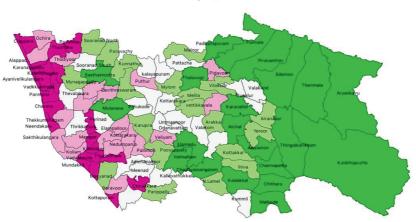
At Pallipuram the meeting was convened in the Anganwadi. The programme was inaugurated by the ward member. Various activities of KVK and ICAR-CTCRI were explained to the farmers. Famers had interactions with the scientist and their feed back about the programme and ITKs were collected.



3	Major Crops Cultivated	Coconut, vegetables (chilies, ladies finger, brinjal), banana, pepper, tuber crops
4	Major Problems	 Crops destroyed by wild animals Leaf curl in chilies Tuber rot in cassava Price fluctuation Rhinoceros beetle in coconut Price fluctuation Less awareness about schemes Non availability of inputs on time Stem borer in banana
5	Feedback from Farmers	 Price for cassava Remedy from wild animal attacks Soil analysis Good quality fertilizers Good quality seeds Training in research organizations Planting material of new varieties Market for value added products Information on government schemes
6	ITKs Documented/ Farmers Innovations	 Using soap solution for mealy bugs Storing of cassava in soil Liquid fertilizer using local ingredients such as cow dung, cow urine, hair, waste etc. Neem leaves are used to ripen bananas Mulching with dried leaves







Map of Kollam District

Kollam is a southern district of Kerala, located 70 km north of the state's capital Thiruvananthapuram. It is flanked by the Arabian sea on the west, Tamil Nadu on the east, Alapuzha and Pathanamthitta districts on the north and Thiruvananthapuram district on the south. The latitude of Kollam, Kerala, India is 8.893212, and the longitude is 76.614143. Kollam is climactically temperate with a generally sunny weather peaking in heat during April-May. The monsoon falls from June to September. The soil is varyingly loamy, laterite and forest at the coastal regions, mainland and the forest areas respectively. Kollam has been the centre of cashew industry and still continues to be the largest processed cashew exporter in India. Major crops are rubber, paddy, tapioca, coconut, arecanut, banana and vegetables. Neendakara and Thangasseri, the two fishing harbours and ports in Kollam, support a thriving marine industry providing a variety of employment and livelihood to people in large numbers.

VKSA Programme at Kollam ICAR Krishi Vigyan Kendra, Kollam 29 May 2025 to 02 June 2025

1	Team Members	Dr. Sarojkumar V
		Assistant Professor(Horticulture),
		Krishi Vigyan Kendra, Sadanandapuram, Kollam Dist.
		Ms. Neeraja C. R
		Subject Matter Specialist
		Krishi Vigyan Kendra, Sadanandapuram, Kollam Dist.



		Dr. Parvathy S.
		Subject Matter Specialist
		Krishi Vigyan Kendra, Sadanandapuram, Kollam Dist.
		Dr. Asha Devi A
		Principal Scientist
		ICAR- Central Tuber Crops Research Institute, Sreekariyam
		Thiruvananthapuram
2	Programmes Organized	29.05.2025
		Pre kharif meeting was organized in 3 Panchayats namely Chadayamangalam, Ittiva and Kadakkal in Chadayamangalam Block of Kollam district. Awareness classes were conducted on 'Scientific cultivation of Tuber Crops', 'Crop management in Coconut', Bio-inputs and monsoon management in Animal Husbandry. Advisories were also given to the farmers. 30.05.2025
		Three panchayats under Vettikkavala Block of Kollam district were covered-Kulakkada, Pattazhy and Inchakkadu. Awareness classes was conducted on 'Scientific cultivation of Coconut', 'Scope of intercropping Tubers in coconut gardens', Bio-inputs for agriculture' and 'Monsoon care in Dairy cattle'. Advisories were also given to the farmers.
		31.05.2025
		Three panchayats under Vettikkavala, Anchal and Kottarakkara Block of Kollam district were covered. Awareness classes were conducted on 'Scientific cultivation of Coconut', 'Scope of intercropping Tubers in coconut gardens', and 'Monsoon care in Poultry'. Advisories were also given to these farmers.
		01.06.2025
		Three panchayats under Ithikkara, Anchal and Kollam Blocks of Kollam districts were covered and the villages included were Chathannoor, Anchalumoodu and Anchal. Awareness classes were conducted on Scientific cultivation of Coconut' and 'Tuber crops cultivation and promising varieties from ICAR-CTCRI'. Advisories were also given to the farmers.
		02.06.2025
		Programs on agricultural practices were conducted for different farmers



3	Major Crops Cultivated	Banana, plantation crops, rice, vegetables, tuber crops and animal husbandry (Dairy and Poultry)
4	Major Problems	 Wild boar attack Pests and diseases in various crops Yellowing of leaves of coconut, dropping of nuts and crackling of the young nuts. Tuber rot in cassava (Arumasa kappa from Kottayam) Climate vagaries Marketing outlets and base rate Processing equipments and small farm implements
5	Feedback from Farmers	 Availability of inputs to farmers at a subsidized rate and ease of availability. Control measures for wild boar attack Quality planting material of various crops Small implements like weeder, starch extraction machines, etc. Organized sales outlet by the government for the farmers to sell their produce easily

03 June 2025 to 07 June 2025

1	Team Members	Dr. Lekha, M (Team Leader), Assistant Professor, ICAR-KVK, Kollam, KAU Dr. Bindu Podikunju, Associate Professor, ICAR-KVK, Kollam, KAU Smt. Shamsiya, A.H., Assistant Professor, ICAR-KVK, Kollam, KAU Dr. Shoji Joseph, Principal Scientist, ICAR-CMFRI Dr. Susan John, K. Principal Scientist, ICAR-CTCRI
2	Programmes Organized	03.06.2025 Meeting was conducted at Mavilayil Auditorium at Perinad/ Chittumala. The guests were ward members, Deputy Manager, VFCK. Classes were on vegetable cultivation with special emphasis on pests and diseases identification and management. Awareness on tuber crops with special emphasis on quality attributes, soil and plant nutrition of tuber crops, nutritional



disorder and their management, pests and diseases of tuber crops, value addition, institute services for public were organised.

Field visit:

Visited tuber crops (tannia, EFY, Yams) and vegetables (cucumber, bhindi, Amaranthus) intercropped banana plot at Keralapuram and gave agro-advisory on agro techniques including water and nutrient management.

Distribution of technical materials:

Distributed technical leaflets and folders on different aspects of tuber crops cultivation, nutrient management, diagnosis and correction of nutritional disorders.

Meeting was conducted at KVK-Kollam at Sadanandapuram. Guest was Head, ICAR-KVK, Kollam. Delivered a lecture on' Need based nutrient management for soil and plant health.

04.06.2025

Meeting was conducted at Pidavoor/Pathanapuram. Guests were Block Panchayat President & Assistant Director of Agriculture, Pathanapuram. Classes on vegetable cultivation with special emphasis on pests and diseases identification and management. Awareness on tuber crops with special emphasis on quality attributes, soil and plant nutrition of tuber crops, nutritional disorder and their management, pests and diseases of tuber crops, value addition, institute services for public, human nutrition and health, fortified rice through PDS of Kerala, were conducted

Field visit:

Visited extensive cassava growing areas (lowland) in Nadutheri village grown completely with ICAR-CTCRI varieties viz., Sree Pavithra, Sree Manna. Noticed cassava stem and root rot in few plants. Gave agro advisory for proper diagnosis and management.

Street Campaign:

Conducted a street campaign near St. Mary's Higher Secondary School, Kizhakketheruvu with students and public and made awareness on tuber crops and vegetables.



Distribution of technical materials:

Distributed technical leaflets and folders on different aspects of tuber crops cultivation, nutrient management, diagnosis and correction of nutritional disorders.

05.06.2025

Meeting was at Aeram/Anchal with the guests namely Panchayat President, Ward Members and District Manager, VFPCK

Classes were held on Introduction about VKSA to create awareness among farmers,

Awareness on tuber crops with special emphasis on quality attributes, soil and plant nutrition of tuber crops, nutritional disorder and their management, pests and diseases of tuber crops, value addition, institute services for public, were conducted.

Distribution of technical literature were also done.

Field visit: Visited cassava affected by cassava stem and root rot at Aeram and took soil samples for analysis to diagnose the problem.

06.06.2025

Meeting was organised at Kareepra/Kottarakkara

Dr. G. Byju, Director, ICAR-CTCRI was the chief guest. Head, ICAR-KVK, Kollam Panchayat president, Ward councilors were also present.

Inaugurated by Dr. G. Byju and felicitations were by ward councilors, panchayat president and Head, KVK, Kollam

Awareness was conducted on tuber crops with special emphasis on quality attributes, soil and plant nutrition of tuber crops, nutritional disorder and their management, pests and diseases of tuber crops, value addition, institute services for public along with distribution of technical literature was also done.

Distribution of planting materials:

Distributed portray raised plantlets of new cassava varieties viz., Sree Annam and Sree Manna, Sree Pavithra, Sree Reksha Vegetable seedling of bitter gourd, cowpea and snake gourd.

Field visit: Visited farmer fields in Kottarakkara panchayat who are growing tuber crops (Cassava, EFY, tannia & yams)



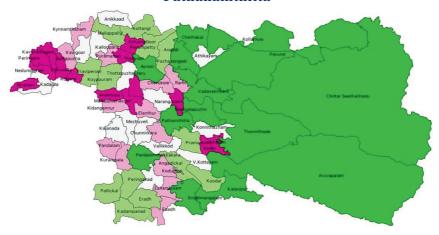
		07.06.2025
		Meeting was arranged at Meekone/ Mukhathala and the guests was Block Panchayat president and Ward Councillors. Awareness on tuber crops with special emphasis on quality attributes, soil and plant nutrition of tuber crops, nutritional disorder and their management, pests and diseases of tuber crops, value addition, institute services for public, was conducted Distribution of literature were also done. Farmers growing tuber crops like cassava, yams, EFY as intercrop in banana and coconut were visited.
3	Major Crops Cultivated	Coconut, tuber crops, vegetables, ginger, turmeric
4	Major Problems	 Wild animals attack especially in tuber crops Non availability of fertilizers on time Unstable market price for tuber crops Non availability of human labour
		 Lack of availability of machines for cultivation Non receipt of soil test results on time Lack of prompt agro advisory service on pests and diseases and nutritional disorder problems in crops Lack of availability of quality planting materials of high yielding varieties of tuber crops
5	Feedback from Farmers	 Need for high yielding pest and disease resistant and climate resilient varieties Low cost eco friendly pesticides and fertilizers Labour saving implements and machineries and energy efficient and water saving irrigation systems Market access and online marketing facilities with good stable price Need for training on agro techniques of high yielding varieties, integrated pest, disease and nutrient management, processing, value addition, entrepreneurship development, government schemes for farmers Demonstration through KVK's research institutes, agricultural universities and line departments on farmer feasible technologies for large scale adoption



		 Government interference in the control of wild animal attack in crops
6	ITKs Documented/ Farmers Innovations	 Planting coloured flower plants as intermittent rows in vegetables to prevent the attack of insect pests
		 Planting of spinned lesser yam to prevent the attack of wild boar
		 Short statured cassava varieties to prevent severe wind damage
		 Application of cartap @ 10g at plant emergence in elephant foot yam to prevent post harvest rot during storage
		 Short duration greater yam of six months duration with good cooking quality to fetch good market price during August-September
		 Planting of cormels instead of mother corms in tannia can prevent soil acidity induced Mg deficiency interveinal chlorosis
		 Planting cormels of EFY and retaining them for two years can result in big sized EFY corms
7	Others	 Nutritional and shelf life potential of arrow root powder made directly through slicing, drying and grinding over traditional method
		 Development of equipments for small scale (quantity) application of pesticides sprayers suited to specific situations (homestead gardens).
		 Short statured cassava varieties with good stem thickness to save from heavy wind and rain
		 Method to diagnose corm rot during harvest as well as in advance while the crop is in the field



Pathanamthitta



Map of Pathanamthitta District

Pathanamthitta District is bounded on the North by Changanassery and Kanjirappally Taluks of Kottayam District and Peerumade Taluk of Idukki District, on the East by the State of Tamil Nadu, on the South by Kunnathur, Pathanapuram and Kottarakkara Taluks of Kollam District and on the West by Chengannur, Mavelikkara and Kuttanad Taluks of Alappuzha District. The climate is generally moderate, the temperature rising from 20 C to 39 C. The south west monsoon from June to September and the north west monsoon from October to November provide fairly good rain. Pathanamthitta is a true tropical diversity adorned with fertile agricultural land, plantations and forest. Paddy, tapioca, varieties of vegetables, fruits like Ramboothan and spices like cardamom, pepper etc. are extensively cultivated. The district also abounds in extensive rubber plantations. Pathanamthitta district in Kerala is characterized by lateritic, alluvial, and forest loam soils, with lateritic soil being the most prevalent. The district's latitude ranges roughly from 9°16'N to 9°29'N.

VKSA programme at Pathanamthitta KVK, Pathanamthitta 29 May 2025 to 02 June 2025

1	Team Members	Dr. Sindhu Sadanandan, SMS
		Dr. Rincy K. Abraham, SMS
		Dr. C. Mohan, Principal Scientist, ICAR-CTCRI
		Dr. K. Sathish Kumar, Senior Scientist, ICAR-CIFT
		Dr. Surya, Senior Scientist, ICAR-CMFRI



2 Programmes Organized

29.05.2025

The programme was inaugurated on May 29 at Pandalam Thekkekkara. The programme was inaugurated by the District Panchayat President Thekkekkara, Grama Panchayat President presided the event. Training on modern technologies and export potential in banana farming was taught. An exhibition of various technological products was also arranged. Officers from Baryer Crop Science introduced the latest technologies. Pamphlets on various agricultural topics were also distributed. Solutions for mealybug control in cassava, root rot and rats problems were raised by the farmers. Training and demonstration on integrated pest control methods in banana were arranged at the event held in Mezhuveli. Panchayat member also participated in the event.

30.05.2025

Campaign was organized at Konni and Malayalapuzha as part of the campaign. The program held at Konni Panchayat Hall was inaugurated by Konni Block Panchayat President and presided over by Konni Grama Panchayat President. The training on the subject of innovative technology in vegetable farming and also fruit tree cultivation was arranged. The campaign held in Malayalapuzha was inaugurated by Panchayat President. Agriculture Officer spoke about the importance of this campaign. The training on the subject of organic farming was arranged and interacted with the farmers, cleared their doubts and gave suggestions.

31.05.2025

Online meeting was conducted on different aspects of tuber crops and other vegetable crops. Advisories were given to the farmers. Feedback of the farmers were collected.

01.06.2025

Online meeting was conducted on different aspects of tuber crops and other vegetable crops. Advisories were given to the farmers. Feedback of the farmers were collected.

02.06.2025

Training also held on the subject of monsoon pest control in vegetable farming in the campaign at Kozhancheri Panchayat Hall. Training was organized on fruit tree maintenance in the campaign held at Omallur Panchayat Hall.



3	Major Crops Cultivated	Banana, paddy, cassava, taro, elephent foot yam, fruits,
4	Major Problems	Wild boar attack, coconut rhinoceros beetle attack, banana pseudostem weevil
5	Feedback from Farmers	 Farmers appreciated the government's effort on VKSA and urged for more support from experts in the field and also from government



Alappuzha



Map of Alappuzha District

Alappuzha is a land mark between the broad Arabian sea and a network of rivers flowing into it. Kuttanad, the rice bowl of Kerala with the unending stretch of paddy fields, small streams and canals with lush green coconut palms was well known. Alappuzha is the smallest district of Kerala having North Latitudes – $9^{\circ}05'$ and $9^{\circ}54'$, East Longitudes – $76^{\circ}17'$ 30" and $76^{\circ}40'$. The climate is moist and hot in the coast and slightly cool and dry in the interior of the district. The average monthly temperature is 25° C. The district also gets the benefit of two outstanding monsoons as in the case of other parts of the state. The average rainfall in the district is 2763 mm. Sandy, peaty, alluvial and laterite soil cover the whole area of the ditrict. The major crops grown are paddy, vegetables, banana, pineapple, and tubers. Coconut, arecanut, and pepper are also significant crops, along with some cultivation of rubber.

VKSA programme at Alappuzha KVK, Alappuzha 29 May 2025 to 02 June 2025

1	Team Members	Dr. Asha KI, Principal Scientist, ICAR-CTCRI
		Dr. Ashalatha, Principal Scientist, ICAR-CIFT
		Rajeev MS and Lekha G (Coordinators), ICAR-KVK, Alappuzha
		Seena SM, ORARS, Kayamkulam
		Anoop Krishnan, ORARS, Kayamkulam
		Jyothilekshmi S, ORARS, Kayamkulam
		Dr. Jyothi Sara Jacob, MSSRRS, Moncompu



2 Programmes Organized

29.05.2025

Meetings for Bharanikkavu Block was held at the Block Panchayat Hall, Charumoodu, Alappuzha in two sessions on scientific cultivation of tuber crops and other crops. Topic on fish processing were also included. The event was inaugurated by Block Panchayat President. The session was attended by farmers from Thamarakulam and Chunakkara, while another session was arranged for farmers from Valikunnam and Bharanikkavu.

30.05.2025

Session for Mavelikkara Block was held at Chennithala and Agricultural Officer, Chennithala inaugurated. Topics covered were scientific cultivation of tuber crops and other crops. Topic on fish processing were also included.

Session was held at Kurathikkad where, Assistant Director of Agriculture, Mavelikkara and farmers attended the meeting.

31.05.2025

For Muthukulam Block, the session was held at KV Sanskrit Higher Secondary School, Muthukulam, where agriculture officers from Muthukulam and Arattupuzha participated along with farmer groups from both areas. Topics covered were scientific cultivation of tuber crops and other crops. Topic on fish processing were also included.

Another session on same topic was conducted at the KVK Training Hall, Krishnapuram, was organized for farmers from Krishnapuram and Kayamkulam Krishi Bhavans. The meeting was inaugurated by Dr. G. Byju, Director, ICAR-CTCRI, and presided over by Dr. P. Muralidharan, Principal Scientist and Head, KVK – Alappuzha.

01.06.2025

Due to severe bad weather and continuous heavy rain, field activities were suspended. However, awareness initiatives were actively carried out through various social media platforms to maintain outreach and engagement with the farming community.

02.06.2025

In response to persistent adverse weather conditions, the two sessions were initially conducted online for the Upper



		Kuttanadu region. The ADA and Agriculture Officers from five Krishi Bhavans participated. After the meeting, interactive discussions were held with farmer groups at Koikkal Karaima and Perungala while in the later session interaction with farmer groups of Chettikulangara and Kannamangalam villages was conducted.
3	Major Crops Cultivated	Rice, coconut, banana, vegetables, tuber crops (cassava, yams, aroids), turmeric, ginger etc
4	Major Problems	 Increased diseases and Pests mainly of coconut, vegetables and banana (bunchy top of banana, root wilt in vegetables etc.) Attach by wild animals mainly of wild boar. High labour wages and labour shortage. Climate vulnerability like erratic rainfall, frequent floods and high temperature. Lack of irrigation, machinery, storage and marketing facilities. Fragmentation of agricultural lands. Rise in input cost (fertilizers, pesticides etc.). Low market for the agriculture produces. Shortage of high quality seeds and recurring decline of production.
5	Feedback from Farmers	 Provision for free soil testing services along with expert recommendations for corrective actions. Suitable methods for the prevention of attack by wild animals. Timely availability of quality planting materials. Intensified research efforts on root wilt disease affecting coconut plantations. Streamlined regulation of sales and distribution of pesticides and agrochemicals. Ensuring price stability for agricultural produce and increasing farmer participation in the process of price determination.



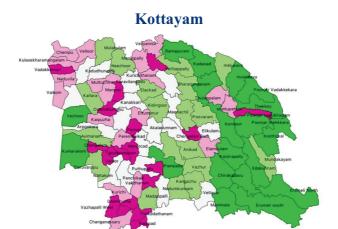
09 June to 12 June 2025

1	Team Members	Dr. P. Muralidharan, Head, ICAR-KVK, Alappuzha
		Ms. Lekha G, SMS (Plant Protection), ICAR KVK, Alapuzha
		Ms. Jissy George, SMS (Home Science), ICAR-KVK, Alappuzha
		Dr. M.L. Jeeva, Principal Scientist, ICAR- CTCRI, Thiruvananthapuram
		Shri. K. Sajanath, SMS (Soil Science), ICAR-KVK, Alappuzha
		Dr. T. Sivakumar, SMS (Entomology), ICAR-KVK, Alappuzha
		Shri. Rajeev M.S, SMS (Entomology), ICAR-KVK, Alappuzha
2	Programmes Organized	09.06.2025
		Meeting was organized in Cherthala, Ambalappuzha and Chenganur. Awareness was created on production, protection and value addition in tuber crops, coconut and banana. AO, Thanneermukom, Cherthala, Alappuzha and ADA, Alappuzha district attended. Meeting on agricultural crops grown that area was attended by Municipal Chairperson and standing committee chairperson, ward councilor and farmers.
		10.06.2025
		Meeting was conducted at Punnapra, and in Mararikullam. AO Punnapra attended. Awareness was created on production, protection and value addition in tropical tuber crops, coconut and banana.
		11.06.2025
		Meeting was conducted at Ambalapuzha village and in Karuvatta and Purakad. AO, Karuvatta and Purakad attended. Classes were conducted on advance technologies in tuber crops, and coconut.
		12.06.2025
		Meeting was organized at Bothanur, Pattanakad, Mannar, Chenganur, Puliyoor, and Thiruvandoor on Crop management. Assistant Director of Agriculture, Chenganur; AO, Boothanur; Pattanakadu and Mannar attended.



		Department staff and People Representatives: Arogya Vidhyabyasa, Standing committee chairperson and ward members participated.
3	Major Crops Cultivated	Paddy, banana, coconut, cassava, EFY, yams, turmeric, ginger, vegetables, Mango, jack
4	Major Problems	 Water stagnation, pseudostem weevil in banana, rhinoceros beetle, button shedding, cassava mosaic disease, marketing, crop protection treatment in coconut and poor quality of organic manures.
5	Feedback from Farmers	 Need support for planting materials, biopesticides and fertilizer.
		Need short duration varieties in coconut
		 Marketing facilities for vegetables
		Timely soil test report
		 Quality control for products
		 Follow up of coconut seedlings distributed.
		Chemical fertilizer shops under Krishibhavan.
6	ITKs Documented/ Farmers Innovations	 Collecting dried leaves in net under tree by tying in poles, sprinkle water when drying. The decomposed leaves will be collected as powder
		 Soaking groundnut cake five days in water, mix with ash and applying to plants
		 Cut little tuber as disc, keeping rat poison inside and plug with cut tuber, and applying small onion crush around that portion
		 Green chillies (Kanthari cultivar) extract (20g)+ Garlic (20g)/Asafoetida (20g) mix and using for pests and disease
		 Tobacco extract (soak 20g per litre water overnight and using next day)





Map of Kottayam District

Kottayam is located in Central Kerala. Bordered by the lofty and mighty Western Ghats on the east and the Vembanad Lake and paddy fields of Kuttanad on the west, Kottayam is a land of unique characteristics. Panoramic backwater stretches, lush paddy fields, highlands, hills and hillocks, extensive rubber plantations, Kottayam, Kerala, India, is located between 9°15' and 10°21' North latitude and 76°22' and 77°25' East longitude. The major crops grown in Kottayam include rubber, paddy, coconut, arecanut, banana, vegetables, and spices. The soil of the district is generally classified as alluvial, peaty and laterite.

VKSA programme at Kottayam KVK, Kottayam 29 May 2025 to 2 June 2025

1	Team Members	Dr. Asha V Pillai, Assistant Professor, KVK, Kottayam Dr. Hafeef Roshan, Assistant Professor, KVK, Kottayam
		Dr. Jeena Mathew, ICAR-CTCRI, Thiruvananthapuram
2	Programmes Organized	29.05.2025
		The meeting was conducted at the Ettumanoor Block Hall and was attended by farmers from Ettumanoor, Neendoor and Athirumbuzha. The programme included lectures on scientific rice cultivation and Integrated pest management in rice. Another sensitization workshop for the farmers of Kumarakam Panchayat at the KVK Hall was held. A rathyathra was conducted for creation of awareness on VKSA



programme among the farming community.

30.05.2025

The training programme for the farmers of Maravanthuruthu was held at SNDP Hall Maravanthuruthu and was attended by farmers. An interactive session on IPM in banana and scientific cultivation of tuber crops was held. In another meeting farmers of Vechoor panchayath were taught about the the importance of soil testing for sustainable crop production. The queries from the farmers were addressed. A class on integrated weed management in rice was also conducted.

31.05.2025

The meet was organized at the SCB Hall Manimala. The session on the cultivation of exotic fruits, integrated nutrient management for sustaining crop production were also held.

The training programme for the farmers of Erumeli panchayath was also held at the Erumeli panchayath hall. The farmers raised queries concerning the pest damage of crops such as exotic fruit crops, vegetables, banana, coconut and tuber crops.

01.06.2025

The farmers' training programme on scientific cultivation of freshwater fishes was held at the KB hall, Kuravilangad. The training on fisheries and a session on scientific cultivation of banana was also held.

02.06.2025

An interactive workshop on "Need for scientific management practices for sustaining crop productivity" for the farmers of Mutholi panchayat was held. Sessions on banana cultivation and vegetable cultivation, scientific management of coconut and nutrient deficiency symptoms and management of tuber crops were arranged.

The interaction cum training program for the farmers of Manarcad panchayath was held at the KB hall Manarcad. The programme was inaugurated by the President Manarcaud Grama Panchayath. Sessions on soil acidity, nutrient deficiency and integrated nutrient management and the cultivation practices of vegetables were arranged. The scientists addressed the queries of the farmers.



3	Major Crops Cultivated	Rice, banana, coconut, cassava, elephant foot yam, exotic fruits
4	Major Problems	Weed problem in rice
		 Pseudo stem borer in banana, rhinoceros and red palm weevil in coconut, cassava stem and root rot, rat and pig menace in tuber crops
		 Delay in getting soil test results
		 Fruit drop of exotic fruits
		Boron deficiency in crops (Banana, cassava, coconut)
5	Feedback from Farmers	Short duration cassava varieties
		 New technologies should be made available to farmers timely
		 Rapid availability of soil test results
		 Scientific methods for the control of wild boar and rat menace in cassava cultivation
		Green techniques for pest management in horticultural crops
6	ITKs Documented/ Farmers Innovations	 Coconut seedlings with long leaf thread will perform well in the field
		Planting karinochi can deter rats
		• Use of wood ash for enhancing the yield of sweet potato
		 Planting thorny bushes in fence can prevent wild boar menace

03 June 2025 to 07 June 2025

1	Team Members	 Dr. G. Jayalekshmi, Head, ICAR-KVK, Kumarakom Dr. Manuel Alex, SMS (Horticulture) Dr. Saravanan Raju, Principal Scientist, ICAR-CTCRI Dr. Geetha Sasikumar, Principal Scientist, ICAR-CMFRI Dr. Smitha Ravi, SMS (Plant Protection) Dr. Greeshma, Senior Scientist, ICAR-CIFT Dr. Chandrasekar, Scientist, CMFRI Dr. Asha, SMS (Agronomy) Dr. Hafeef Roshan, SMS (Fishries) MS. Chris, SMS (Soil Science. and Agricultural Chemistry)
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2 D		02.07.2025
2 Program	mes Organized	O3.06.2025 A meeting was conducted on Production technologies and other CTCRI technologies at Kangazha. The Chief Guest was the President, Kangazha Panchayat. Farmers had interaction with the scientists about their problems. Another meeting was conducted on Cultivation aspects of tuber crops at Vellavur, Valzhoor Block, Kottayam. Panchayat office and the Chief Guest was President, Valzhoor Panchayat. 04.06.2025
		Meeting was conducted on Tuber crops cultivation and recent varieties of ICAR-CTCRI at Placeeliyanoor Grama Panchayat, Uzhavoor Block, Kottayam. Awareness campaign was conducted on tuber crops cultivation and recent varieties of ICAR-CTCRI at Ramapuram, Kottayam and the Chief Guest was President, Grama Panchayat
		05.06.2025
		Awareness meeting was conducted on Tuber crops technologies & protection of environment at SN College, Kumarakom and the Chief Guest was Mr. Sasikumar, Sec. management committee, SN college.
		Meeting was conducted on CMD management at Vellavur, Kottayam & Malarikkal village, Kumarakom (Fish farming problems).
		06.06.2025
		Meeting on latest varieties and production practices of tuber crops was conducted at Kumarakom, Kottayam and the Chief guest was President, Nature Club, Kumarakom. Interactive meeting was conducted on production technologies of tuber crops at Thidanad, Kottayam and the chief guest was President, Grama Panchayat.
		07.06.2025
		Meeting on Production technologies of tuber crops was conducted at Poonjar, Kottayam and the Chief guest was Grama Panchayat Predident.
3 Major Ci	rops Cultivated	Coconut, rubber, pepper, paddy, exotic fruits (Rambutan & Mangosteen), cassava and vegetables



4	Major Problems	Soil acidity
		Water logging & nutrient leaching
		Pest/disease incidence in crops
		Marketing of farm produce
		Wild animal damage
5	Feedback from Farmers	 Farmers urged that scientific research must be closely linked with grassroots realities to deliver effective, locally relevant solutions to agricultural challenges.
		 There is a strong demand for increased awareness and capacity-building programs focused on credit availability, market access, and value addition techniques for major horticultural crops.
		 Farmers requested on-field demonstrations of eco- friendly pest and disease management methods, particularly biocontrol strategies and disease-tolerant crop varieties.
		 A recurring concern was the need for immediate and practical measures to control wild animal intrusion, which is causing significant crop losses and farmer distress.
6	ITKs Documented/ Farmers Innovations	 Cassava is planted on raised mounds or ridges to ensure good drainage
		 Farmers apply wood ash to the cut ends of cassava stem cuttings before planting
		 A traditional practice involves placing a mix of cow dung, neem cake, and wood ash in the planting pit.
		 Young yam plants are covered with dry coconut leaves or banana sheaths to protect from direct sunlight.
		• A handful of common salt is applied around the plant base to deter termite and slug infestation.
		 Planting of Kaempferia galanga as border plants to repel wild boars.



Idukki



Map of Idukki District

Idukki is one of the 14 districts of Kerala state, India. Idukki district in Kerala, India, is located between 9°15' and 10°21' North latitude and 76°37' and 77°25' East longitude. This beautiful High range district of Kerala is geographically known for its Mountainous Hills and Dense Forests. Idukki which lies in the Western Ghats of Kerala is the second largest district in area but has the lowest population density. Idukki has a vast forest reserve area; more than a half of the district is covered by forests. The urban areas are densely populated whereas villages are sparsely populated. Idukki is also known as the spice garden of Kerala. Idukki's soil types include laterite, forest loam, and alluvial soil. Major crops grown here in order of economic importance are rubber, vegetables, tubers, plantains, coffee, tea, coconut, cocoa, and other spices such as ginger, cloves and turmeric.

VKSA programme at Idukki KVK, Idukki 29 May 2025 to 02 June 2025

1	Team Members	Ms. Manju Jincy Varghese, SMS
		Ms. Ashiba, SMS
		Dr. Harish ER, Senior Scientist, ICAR-CTCRI
		Dr. Tincy Varghese CIFT, Senior Scientist, ICAR-CIFT



2	Programmes Organized	29.05.2025
		The meeting was held at Chellithodu Community Hall, Adimali, Idukki. The program was inaugurated by Panchayat President. Awareness was created on important tuber crop technologies and cultivation technologies of other important crops like banana. Another session was conducted at Vellathooval grama panchayat, Idukki.
		30.05.2025
		The meeting was conducted at Panchayat Hall, Pallivasal, Idukki. The program was attended by Panchayat President and Chairman panchayat standing committee. A farmers scientist interaction meetings on important cardamom technologies, tuber crop technologies, cultivation technologies of other important crops like banana and fish production technologies was organized. 31.05.2025
		Meeting was conducted at Municipal Hall, Thodupuzha, Idukki. The program is inaugurated by ADA (i/c). There were farmers scientist interaction meetings on important crop management technologies, tuber crop technologies, and fish production technologies. Another session was conducted at Panchayat Hall, Manacaud, Idukki. The program was inaugurated by Agriculture Officer Ms. Cimoni. There was farmers scientist interaction meetings on important crop management technologies and fish production technologies. 01.06.2025
		Meeting conducted at Rajakumary panchayat office, Idukki, was inaugurated by Agricultural Officer. There was farmers scientist interaction meetings on crop and fish production technologies.
		02.06.2025
		Meeting was conducted at Karimannoor block panchayat office, Idukki. The program was inaugurated by Panchayat president. Farmers scientist interaction meetings on crop and fish production technologies was held. Another session at Udumbannoor, Idukki was inaugurated by AO.
3	Major Crops Cultivated	Cassava, cardamom, nutmeg, banana, rice, coconut, pepper,

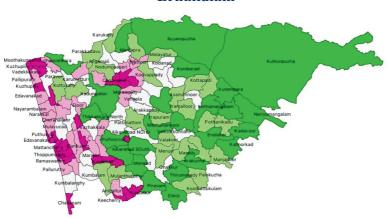
ginger



4	Major Problems	 Cassava root rot, cardamom wilt, banana pseudostem weevil, coconut rhinoceros beetle attack, marketing problem
5	Feedback from Farmers	 Farmers appreciated the government's effort on VKSA and urged for more support from experts in the field and also from government
6	ITKs Documented/ Farmers Innovations	Effect of trailing in sweet potato for improved tuberization







Map of Ernakulam District

The Ernakulam district is bordering the district of Thrissur in the north, Idukki in the East, Alapuzha and Kottayam in the south, and Lakshadweep Sea in the west. Ernakulam lies at latitude: 9°57′ N; Longitude 76°15′ E North. The district's primary soil types are lateritic, hydromorphic, and alluvial. Major crops grown include coconut, rubber, tapioca, pepper, and arecanut. Other significant crops are paddy, vegetables, banana, pineapple, and various spices. The district is also known for rubber cultivation, being the second-largest producer in Kerala, and for coconut production.

VKSA programme at Ernakulam KVK, Ernakulam 29 May 2025 to 2 June 2025

1	Team Members	Dr. Rahana S.N., Scientist, ICAR-CTCRI, Thiruvananthapuram Dr. F.Pushparaj Anjelo, Senior Scientist, KVK Ernakulam Dr. Shoji Joy Edison, Senior Scientist, KVK Ernakulam Dr. Robin Bilam, Scientist, KVK Ernakulam Dr. Rekha, Principal Scientist, ICAR CMFRI Dr. Faisal Peeran, Senior Scientist, ICAR IISR, Kozhikode
2	Programmes Organized	29.05.2025 Meeting was organised at Thirumarady village, Ernakulam Dist., Kerala and the chief guest was President, Thirumarady Grama Panchayath. Classess were held on the advanced technologies in agriculture including fisheries.



3	Major Crops Cultivated	Rice, rubber, nutmeg, clove, pepper, arecanut, rambutan, vegetables, banana, cassava, yams, pineapple, ginger
4	Major Problems	Pest and diseases of rice and vegetables
		Water logging
		 Lack of processing facility
5	Feedback from Farmers	 Lack of bulk marketing facilities
		 Non availability of quality planting material
		 Post-harvest losses of fruits especially pine apple
6	ITKs Documented/ Farmers Innovations	 A plant named Chethikoduveli as fence crop to keep away the wild bore attack

03 June 2025 to 07 June 2025

1	Team Members	Dr. B.G Sangeetha, Senior Scientist, ICAR-CTCRI		
		Dr. D. Prema, Principal Scientist, ICAR-CMFRI		
		Dr. Remya. S, Senior Scientist, ICAR-CIFT		
		Dr. Mukesh Sankar, Scientist, ICAR-IISR		
		Dr. Vikas. P.A, Senior Scientist, ICAR-CMFRI, Ernakulam		
		Dr. K. Smitha Sivadasan, SMS-KVK, Ernakulam		
		Sri. Shoji Joy Edison, SMS-KVK, Ernakulam		
		Sri. P. Thirumoorthy, SMS-KVK, Ernakulam		
		Sri. F. Pushparaj Angelo, SMS-KVK, Ernakulam		
2	Programmes Organized	03.06.2025		
		The VKSA meeting cum farmer scientist interaction session on tropical tuber crops cultivation, spices cultivation, fish farming practices was conducted on 03 rd June 2025 at Rajiv Gandhi, Community Hall, Cheranallur, Ernakulam. The President, Cheranallur Grama Panchayat, Ernakulam was the chief guest. 04.06.2025		
		Meeting cum farmer scientist interaction session on tropical tuber crops cultivation, spices cultivation, fish farming practices was conducted at Karumaloor Grama Panchayat, Ernakulam. Dr. Raghavendhra Bhatta, DDG (Animal Sciences), ICAR, New Delhi was the chief guest. Dr. V. Venkatasubramanian, Director, ICAR-ATARI, Bengaluru, Dr. George Nainan, Director, ICAR-CIFT, Ernakulam, Dr. Grinson George, ICAR-CMFRI, Ernakulam also attended the meeting.		



Farmer interaction	session	by Dr.	Raghavendhra	Bhatta,
DDG(Animal Science	es), ICA	R, New I	Delhi was organiz	zed.

05.06.2025

Meeting cum farmer scientist interaction session on tropical tuber crops cultivation, spices cultivation, fish farming practices was conducted at Parish Hall, Manjapra, Ernakulam. The President, Manjapra, Grama Panchayat was the chief guest. Agriculture Officer, Vice President, Manjapra and Grama Panchayat attended the meeting.

06.06.2025

Meeting cum farmer scientist interaction session on tropical tuber crops cultivation, spices cultivation, fish farming practices was conducted at Keezhmadu Panchayath, Ernakulam. The President, Keezhmadu Grama Panchayat was the chief guest. Vice President, Keezhmadu Grama Panchayat and Ward member attended the meeting.

07.06.2025

Meeting cum farmer scientist interaction session on tropical tuber crops cultivation, spices cultivation, fish farming practices was conducted at Puthenvelikara panchayat Hall, , Ernakulam. Vice President, Puthenvelikara Grama Panchayat was the chief guest. President, Puthenvelikara Grama Panchayat also attended the meeting and agriculture officer attend the programme.

3 Major Crops Cultivated

Paddy, banana, snake gourd, salad cucumber, ridge gourd, tapioca, sweetpotato, coconut, nutmeg, ginger, turmeric, arecanut, rubber, bhindi, bittergourd, elephant foot yam, colocasia, pappaya, chilly,

Other farming practices

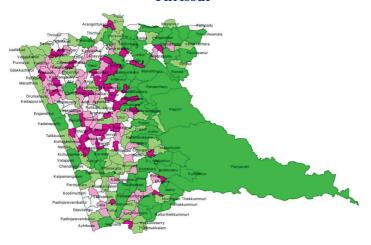
- Cage fish farming
- Pearlspot fish seed production
- Drying of fish products by post harvest techniques
- Integrated farming
- Ornamental fish culture unit
- Aquaponics
- Fish farming- Varal, Tilapia, Pearlspot, Kalangi,



4	Major Problems	 Soil salinity Cassava stem and root rot Early fruit fall of nut meg Foot rot of pepper Lack of government schemes for fish farming of giant gourami Leaf fall in nutmeg Lack of soil testing facility Non-tuberization of sweet potato
5	Feedback from Farmers	 Lack of soil testing facility Requirement of planting material of tubercrops viz tapioca, sweetpotato, arrowroot, elephant foot yam Due to cassava stem and root rot incidence farmers shifted to paddy cultivation Need for soil testing facility Requirement of planting material of spices crops viz nutmeg, pepper Need for training for making value added products from tuber crops, spices and fish products
6	ITKs Documented/ Farmers Innovations	 Black turmeric cultivated by farmer. The inhalation of scent of freshly broken black turmeric rhizome (<i>Curcuma caesia</i>, commonly referred to as black turmeric) is used as a remedy for relief from cold. The inhalation is believed to reduce nasal congestion, ease breathing, and speed up recovery from cold symptoms An early-maturing tapioca with six month duration, red tuber sheath called raman kappa. An early-maturing tapioca with six month duration, red tuber sheath called kochu raman. Smoking in nutmeg plantations to prevent leaf fall Application of gypsum to prevent softrot in ginger One farmer using water from their well with high copper content named (chembalan water) for irrigation which is considered as growth promoter for their agricultural crops







Map of Thrissur District

Thrissur district of Kerala is situated in the central part of that state. Thrissur district is bordered by the districts of Palakkad and Malappuram to the north, and the districts of Ernakulam and Idukki to the south. The Arabian Sea lies to the west and Western Ghats stretches towards the east. It is situated in southwestern India (10.52°N 76.21°E) and is in the central part of Kerala. The primary soil types are lateritic, brown hydromorphic soil, greyish Onattukara soil, riverine and coastal alluvium, and forest loam. Lateritic soil is the most widespread, covering the midland and hilly areas. Brown hydromorphic soil is found in valleys and low-lying coastal areas. Alluvial soil is present along the riverbeds and coastal areas. In Thrissur, common crops include paddy (rice), coconut, arecanut, banana, and various vegetables. The district is also known for its kole lands, which are used for rice cultivation. Additionally, crops like tapioca, pepper, nutmeg, and other spices are grown.

VKSA programme at Thrissur KVK Thrissur 29 May 2025 to 02 June 2025

1	Team Members	Dr. Mary Regina F, Programme coordinator, KVK, Thrissur	
		Dr. Smitha KP, Assistant Professor (Agl. Extension), KVK, Thrissur	
		Dr. Shimi GJ, Assistant Professor, KVK, Thrissur	
		Dr. Shirly Raichal Anil, Principal Scientist, ICAR-CTCRI, Thiruvananthapuram	



		Dr. Rajesh N, Senior Scientist, CMFRI, Kochi
		Dr Anju C, Assistant Professor Plant Pathology, KVK, Thrissur
2	Programmes Organized	29.05.2025
		The meeting of farmers of Ollur, Avinissery, Koorkancherry, Paralam panchayats was held in Cherpu block Panchayat Hall. The topics covered were net, machineries, value addition and about the Techno-incubation centre CIFT. A class on tuber crops technologies was also included. Advisories about starting fish farming were alos given. IFFCO representative talked about the nano fertilizer. Government Schemes and the facilities available at Directorate of Extension and ATIC at KAU were briefed. There was a discussion with farmers also.
		30.05.2025
		The farmers meeting of Panacherry, Madakkathara and Puthur Panchayat was held in Ollukkara Block Panchayat Hall in the morning and Nadathara, Ollukkara, Vilvattom and Thrissur panchayats was held in the same hall in the afternoon. Mr. Suresh Gopi, MP and Hon. MOS inaugurated the meeting and farmers discussed their problems with the minister. Dr Jacob John, DOE, KAU and Dean, KAU were present. All the resource persons took classes and farmers shared their concerns with the scientists.
		31.05.2025
		The farmers meeting of Irinjalakkuda, Porattissery panchayat was held in the morning session at Irinjalakkuda town Hall. The scientists briefed about their activities. The AO coordinated and moderated the discussion with farmers.
		02.06.2025
		The farmers-Scientist interaction meeting of Alagappanagar, Nemanikkara, Pudukkad, Thrikkur panchayats was held at Kodakara Block Hall in the morning session. The Scientists briefed about their technologies followed by discussion with farmers.
3	Major Crops Cultivated	Paddy,banana,coconut,tuber crops like Chinese potato, cassava, sweet potato



4	Major Problems	• Water hyacinth as a main weed in paddy fields.
		 Rice variety Uma is the acceptable variety in rice among farmers. Farmers need a variety which is comparable to variety Uma. They are not very much satisfied with varieties Punya and Aadya
		 Mechanization not effective as big machines are not effective in small farms. When they hire machines from nearby states these are expensive and grain wastage is more. Hence the farmers need small machines for small farms.
		Wild boar and elephantattack has become threat to agriculture and human life
		• Immature flower fall in mango and nut meg
		Leaf curling in capsicum
		Leaf and fruit fall in Rambutan
		 Post harvest management and value addition facilities for jack fruit and mango. The farmers has to sell off the jack fruit at very nominal price or they get spoiled
5	Feedback from Farmers	 Solar fencing is a must. Support for that is requested by farmers.
		• Govt. has to take initiative for clearing the channels, removal of silt and sand from rivers were suggested by farmers to avoid frequent floods during rainy season.
		 White fleshed sweet potato was not preferred by farmers and very big size tubers also were not preferred for daily use.
6	ITKs Documented/ Farmers Innovations	 Water hyacinth problem in water bodies can be solved only if appropriate technology is generated for extraction of fibres from this weed which can be used for bag making. They suggest that if bag making technology from fibres obtained from this weed is standardised and commercialised, there will be demand for this weed so that this will be removed from their fields.
		• Cassava planted in cow farm yard was bitter. Cassava planted in cashew plantation was also bitter.
		 Silage store bins in farms will relieve dairy farmers of their drudgery and gives them leisure time to do other activities like value addition of milk and milk products to increase income.



6 ITKs Documented/ Farmers Innovations • Cow dung mixed with coir pith or coffee seed shell as a waste can be mixed with neemcake and Trichoderma be used as manure.

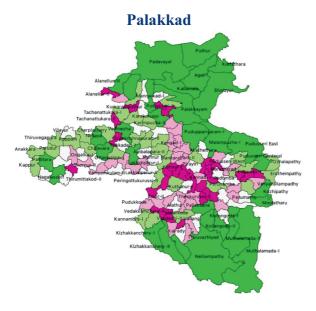
29 May 2025 to 02 June 2025

	27 May 2023 to 02 June 2023		
1 Team	Members	Dr. Anju C, SMS, KVK, Trichur Dr. Ambili John, SMS, KVK, Trichur Dr. Sajeev MS, Principal Scientist, ICAR-CTCRI Dr. Sajeev, M.V Principal Scientist, ICAR-CIFT, Kochi Dr. Rajesh, Senior Scientist, ICAR-CMFRI, Kochi	
2 Progra	ammes Organized	29.05.2025 The meeting was held at Oorakam State Co-operative Bank Auditorium, Cherpu Block, Trichur. Awareness was created on scientific soil and plant health management and organic farming practices of the important crops, various agrl related schemes of Govt. agencies for fisheries and agricultural sector, promising varieties of tuber crops, scientific cultivation practices, plant protection measures and value addition technologies in tuber crops. Along with the team members, representatives from Canara Bank, Kerala Bank, Union Bank and IFFCO were also participated in the campaign to explain about various schemes offered by them. 30.05.2025	
		The meeting was conducted at Panchayat Hall, Ollukkara. It was inaugurated by Shri Suresh Gopi, Honourable Minister of State for Petroleum and Natural Gas and the Minister of Awareness was created on scientific soil and plant health management and organic farming practices of the important crops, plant genetic resources of NBPGRI, various agrl related schemes of Govt. agencies for fisheries and agricultural sector, promising varieties of tuber crops, scientific cultivation practices, plant protection measures and value addition technologies in tuber crops. 31.05.2025 Two campaign programmes were organized in Irijalakuda Blocks. In the morning, the meeting was held at Parappookara Grama Panchayath Hall, Nandikara, Irinjalakuda Block, Trichur. In the afternoon, the meeting was held at Cooperative Bank Hall, Karalam, Irinjalakuda Block.	



		Awareness was created on scientific soil and plant health management and organic farming practices of the important crops, plant genetic resources of NBPGRI, various agrl related schemes of Govt. agencies for fisheries and agricultural sector, promising varieties of tuber crops, scientific cultivation practices, plant protection measures and value addition technologies in tuber crops. Asst Director of Agrl and Agrl officer were also present. 102.06.2025 The meeting was held at Moonnumuri, Mattathara Krishibhavan, Kodakara Block. Awareness was created on scientific soil and plant health management and organic farming practices of the important crops, plant genetic resources of NBPGRI, various agrl related schemes of Govt. agencies for fisheries and agricultural sector, promising varieties of tuber crops, scientific cultivation practices, plant protection measures and value addition technologies in tuber crops. Along with the team Members, Agrl. Officers of Kodakara and Mattathara were also present.
3	Major Crops Cultivated	Coconut, rice, banana, spices, tuber crops,
4	Major Problems	 Lack of value addition facilities, losses due to natural calamity like excess rain and drought, lack of marketing facilities, timely availability of quality seeds and planting materials, procedural delay in getting deserved subsidies, delay in getting procurement prices of paddy
5	Feedback from Farmers	• The VKSA programme was well appreciated by the farmers.
6	ITKs Documented/ Farmers Innovations	 For getting good germination of paddy seeds, use of curcuma leaves in the wet seed bag Planting of yams around coconut trees to reduce trailing cost





Map of Palakkad District

The district is bounded on the north by Malappuram district, in the east by Coimbatore district of Tamil Nadu, in the south by Thrissur district and in the West by Thrissur and Malappuram district. Its Latitude. 10°20'00" N and 11°14'00" N; Longitude. 76°20'00" E and 76°54'00" E. Palakkad district in Kerala has diverse soil types, with sandy clay loam to clay being predominant, along with sandy loam. These soils support various crops including paddy, coconut, rubber, banana, tapioca, and vegetables. Additionally, black cotton soils in Chittur taluk are suitable for coconut, sugarcane, cotton, chilly, pulses, and vegetables.

VKSA programme at Palakkad KVK, Palakkad 03 June 25 to 07 June 2025

1	Team Members	Dr. K.Sunilkumar, Principal Scientist, ICAR-CTCRI Dr. Rema Mathu, Principal Scientist, ICAR-CMFRI Dr. Lakshmy, P. S, SMS, KVK Mrs. Praveena, K.K., SMS, KVK
2	Programmes Organized	03.06.2025 Farmers Training and Farmer-Scientist interface meeting, were conducted at Puthuppariyaram, Malampuzha and Akathethara.



		04.06.2025
		Farmers Training and Farmer-Scientist interface meeting was conducted at Peringottukurissi, Kuzhalmannam and Kottayi KB.
		05.06.2025
		District level VKSA was inaugurated by DDG (AS), Dr. Bhatta and Director ATARI, Dr. V. Venketasubramanyam were the chief guests and Block President presided over the meeting at Thrithala Block panchayath hall. Training on improved production technologies, precision farming of vegetables were organised. Farmers training and farmer-scientist interaction was held at Kappur.
		Farmers training and farmer-scientist interaction at Anakkara, Chalisseri and Thirumittacode were organised.
3	Major Crops Cultivated	Rice, coconut, arecanut, banana, tuber crops
4	Major Problems	• The support price of paddy is not received in time.
		• The crop insurance amount is pending for 2 years.
		 All three required Fertilizers viz. Urea, Super phosphate and MoP are not available in market when it is needed for the crop.
		• The procurement amount for paddy is given as loan in the name of farmers . it affects the CIBIL score of farmers which is not at all justifiable. The amount is due to farmers on account of paddy procured. It should not be treated as loan
		 A rice variety with reduced duration and less height is required to be made available in place of the present popular variety Uma
5	Feedback from Farmers	 Farmers should be given right to control wild boar coming to crop field
		 The support price of paddy need to be hiked as per local production costs
		 The central share of support price of paddy may be directly given to farmers account instead of routing through state govt and causing inordinate delays in disbursement
		 All three important fertilizers must be made available in time at affordable cost



5	Feedback from Farmers	• The crop insurance amount may be disbursed in time for taking up next crop in season
6	ITKs Documented/ Farmers Innovations	• Special technique of storing Chinese potato tubers till next crop season
		 Value addition of paddy for arts and crafts through special processing of panicles and storage

08 June 2025 to 12 June 2025

1	Team Members	Dr. J. Suresh Kumar, Scientist, ICAR-CTCRI, Thiruvananthapuram.
		Dr. Laxmi, ICAR-CIFT, Kochi.
		Dr. Lakshmy, P.S, SMS, KVK
		Dr. Smijisha Prashob, SMS, KVK
2	Programmes Organized	08.06.2025
		Farmers training and Farmer-Scientist interface meeting as a part of VKSA, Thachampara, Palakkad and Farmers training and Farmer-Scientist interface meeting as a part of VKSA, Kannambra, Palakkad on different aspects of rice cultivation and other crops. 09.06.2025
		Farmers training and Farmer-Scientist interface meeting as a part of VKSA, Karakurissi, PalakkadFarmers training and Farmer-Scientist interface meeting as a part of VKSA, Karimpuzha, Palakkad. Farmers training and Farmer-Scientist interface meeting as a part of VKSA, Vellinezhi, Palakkad.
		10.06.2025
		Farmers training and Farmer-Scientist interface meeting as a part of VKSA, Kadambhazhipuram, Palakkad. Farmers training and Farmer-Scientist interface meeting, Ambalapara, Palakkad. Farmers training and Farmer-Scientist interface meeting as a part of VKSA, Cherupulassery, Palakkad.
		11.06.2025
		Farmers training and Farmer-Scientist interface meeting as a part of VKSA, Kottoppadam,, Palakkad. Farmers training and Farmer-Scientist interface meeting, Alanallur, Palakkad. Farmers training and Farmer-Scientist interface meeting as a part of VKSA, Mannarkkad, Palakkad



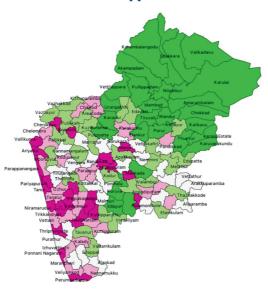
		12.06.2025
		Farmers training and Farmer-Scientist interface meeting as a part of VKSA, Palakkad district HQs in DD ATMA premises. Farmers training and Farmer-Scientist interface meeting, Elavanchery, Palakkad.
3	Major Crops Cultivated	Rice, coconut, arecanut, banana, cassava, elephant foot yam
4	Major Problems	 Wild animals; especially wild boar, elephant, pea cock, monkey, African snails. Farmers are ready to leave farming if no action or special act made for management of wild boar, peacock.
		• The support price of paddy is insufficient comparing the cost of cultivation.
		• The support price/bonus of paddy is not received in time.
		• The crop insurance amount is pending for 3 years.
		 All three required Fertilizers viz. Urea, Super phosphate and MoP are not available in market when it is needed for the crop.
		• The procurement amount for paddy is given as loan in the name of farmers. It affects the CIBIL score of farmers which is not at all justifiable. The amount is due to farmers on account of paddy procured. It should not be treated as loan.
		 A rice variety with reduced duration and less height is required to be made available in place of the present popular variety Uma.
5	Feedback from Farmers	 Farmers should be given right to control (may permit to kill if required) wild boar coming to crop field.
		 The support price of paddy need to be hiked as per local production costs.
6	ITKs Documented/ Farmers Innovations	 Value addition of paddy for arts and crafts through special processing of panicles and storage



7	Others	 Researchable issue based on visits: Wild Animals and mini farm machines.
		• Learning from the visits: No great area of cultivation. Mainly due to high production cost over returns.
		 Suggestion: May link MGNREGS like schemes for addressing labour shortage.
		 Government may give inputs at subsidy and may add bonus to the produce.
		• Encourage FPOs for processing of the farm produce for storage and for higher returns







Map of Malappuram District

Malappuram district is composed of portion of the erstwhile Palakkad and Kozhikode districts. Malappuram district comprises a vast wildlife collection and a number of small hills, forests, little rivers and streams flowing to the west. The location of Malappuram District is 75° E-77° E longitude and 10° N - 12° N latitude, in the geographical mark. The climate is generally hot and humid; the range of temperature varying between 30° C and 20° C the average annual rainfall is 290 mm. The district features a varied topography, with lowland areas near the coast, midlands, and highlands towards the east. The major crops grown are paddy, arecanut, cashewnut, pepper, ginger, pulses, coconut, banana, tapioca, and rubber plantations. The soils are primarily alluvial, laterite and forest loam, with variations in depth and composition across the different regions.

VKSA programme at Malappuram KVK, Malappuram 29 May to 02 June 2025

1	Team Members	Dr. Jasna VK, SMS, KVK
		Dr. Prakash P, Scientist, ICAR-CTCRI
		Dr. T. M. Najmudeen, Principal Scientist, ICAR-CMFRI
		Mr. Adarsh S, KVK



_	D 0 1 1	20 07 2027
2	Programmes Organized	VKSA meeting cum training on improved agricultural technologies including fisheries and existing government schemes was organized on 29th May 2025 at Vattamkulam village and another meeting was held at Kallady village in Ponnani block of Malappuram district. 30.05.2025 VKSA meeting cum training on latest agricultural technologies and government schemes including fisheries was organized at Alankode village and another meeting was held at Veliyamkode village in Perumpadappu block of Malappuram district.
		31.05.2025
		VKSA meeting cum training on latest agricultural technologies and government schemes including fisheries was organized at Kuttipuram village and another meeting at Edayur village in Kuttipuram block of Malappuram district.
		01.06.2025
		VKSA meeting cum training on latest agricultural technologies and government schemes including fisheries was organized at Kalpakancheri village and another meeting at Valanchery village in Valanchery block of Malappuram district.
		02.06.2025
		VKSA meeting cum training on latest agricultural technologies and government schemes including fisheries was organized at Thanur village and another meeting at Niramaruthur village in Thanur block of Malappuram district.
3	Major Crops Cultivated	Cassava, banana, rice, coconut, pepper, arecanut, tuber crops, vegetables
4	Major Problems	 Banana pseudostem weevil, coconut rhinoceros beetle attack, marketing problem, less price for the produce, severe wild animals attack, non availability of planting materials/seed, lack of access to biopesticides developed by CTCRI
5	Feedback from Farmers	Urgent solution for wild animals attack
		 Arrangements of planting materials/seed/biopesticides through KVKs/Department

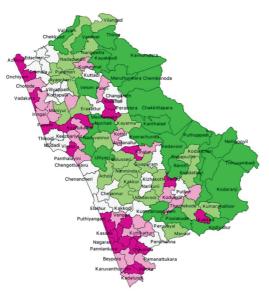


6 ITKs Documented/ Farmers Innovations

- A mixture of neem cake powder and sand is used against Rhinoceros beetles in coconut trees. It is applied to the base of the inner three leaves in the crown to kill the beetles.
- Locally prepared vermicompost which include cowdung, urine, hair and other waste and used as manure.
- Neem oil with soap solution is used for management of pests and diseases of crops.
- Fish amino acid is used as good fertilizer for both soil and spoilage as it enhances crop growth. The materials included are fish trash and jaggery.



Kozhikode



Map of Kozhikode District

Kozhikode District is 38.25% urban and is bordered by Kannur district to the North, Wayanad to the East, and Malappuram to the South. To the West, lies the mighty Arabian Sea. The district is situated between latitudes 11° 08'N and 11° 50'N and longitudes 75°30'E and 76°8'E. Kozhikode district in Kerala features diverse soil types, primarily laterite and sandy coastal soils. The district's topography includes coastal plains, midlands with lateritic formations, and hilly regions. A variety of crops are cultivated, with perennial crops like coconut, arecanut, fruit trees, tubers and rubber dominating, alongside seasonal crops such as banana, tapioca, yams and vegetables.

VKSA programme at Kozhikode KVK, Kozhikode 03 June 2025 to 07 June 2025

1	Team Members	Dr. Abdul Haris A., Principal Scientist, ICAR-CPCRI, Kayamkulam
		Dr. H. Kesava Kumar, Senior Scientist, ICAR-CTCRI, Thiruvananthapuram
		Dr. V. Murugadas, Senior Scientist, ICAR-CIFT, Kochi Dr. Akhilesh K.V., Scientist, ICAR-CMFRI, Kozhikode



		Dr. Jayakumar, KVK, IISR-Kozhikode
		Dr. P.S. Manoj, KVK, IISR-Kozhikode
		Dr. K.K. Aiswarya, KVK, IISR, Kozhikode
		Dr.P. Nideesh, Asst. Prof., College of Agriculture, Padannakkad
2	Programmes Organized	03.06.2025
		The meeting was arranged in the panchayat hall of Kunnamangalam. Sessions on the technologies of ICAR-CPCRI, agrotechniques & protection technologies of spices production and fish processing. Another meeting was held in the panchayat hall of Peruvayal. Peruvayal Panchayat president inaugurated the meeting. All the experts interacted with the farmers in their respected field of expertise.
		The third meeting was held in the panchayat hall of Mavoor. All the experts interacted with the farmers and answered their queries
		queries.
		04.06.2025
		The meeting was arranged in the community hall of Changaroth Perambra panchayat. Assistant Director and Agriculture Officer attended the meeting. Sessions on cultivation aspects of coconut & arecanut, technologies of ICAR-CTCRI., ornamental fish farming, post harvest processing of fishes and novel techniques of pepper cultivation. Another meeting was held in the panchayat hall of Perambra. All the experts interacted with the farmers in their respected field of expertise. The third meeting was held in the panchayat hall of Chakkittapara. The event was inaugurated by President of Chakkittapara Grama Panchayat. The technical sessions were led by the experts.
		05.06.2025
		The meeting was arranged in the panchayat hall of Unnikulam. Vice President, Unnikulam Panchayat inaugurated the meeting. Sessions were on the technologies of ICAR-CPCRI, agrotechniques & protection technologies of tuber crops, overview of inland fish farming, processing techniques of fishes and cultivation aspects of spices.
		The second meeting was held in the panchayat hall of Balussery All the experts interacted with the farmers in their respected field of expertise.

The third meeting was held in the panchayat hall of Ulliyeri,



		Balussery block. The event was inaugurated by the president Ulliyeri Grama Panchayath. Special sessions were led by the different experts. 06.06.2025
		The first meeting was arranged in the panchayat hall of Thiruvallur, Thodannur block. The President, Thiruvallur Panchayat inaugurated the meeting. Sessions were held on the production and protection techniques of ICAR-CPCRI, the novel techniques in tuber crops ,overview of ornamental fish farming, post harvest processing of fishes and the production aspects of spices.
		The second meeting was held in the panchayat hall of Ayanchery. The President of Ayanchery Panchayat inaugurated the meeting. All the experts interacted with the farmers in their respected field of expertise.
		07.06.2025
		A visit was undertaken to a farmer's field in Balussery block and soil samples were collected and plant samples were collected. Had interaction with both the farmers, learnt their persistent problems and offered viable solutions.
3	Major Crops Cultivated	Coconut, arecanut, pepper, tapioca, elephant foot yam, taro, yams, sweet potato, tomato, cucumber, brinjal, turmeric, paddy, banana, mango, jack fruit
4	Major Problems	 Wild boar, porcupine and peacock damage in tuber crops Lack of value chain for value added products of tuber crops Nut shedding in coconut Rhinoceros beetle, white fly and red palm weevil damage in coconut Deleterious impact of MSC ELSA 3 Ship wreckage on fishes & coastal ecosystem
		Sudden tilapia fish mortality



5	Feedback from Farmers	Immediate addressable of wild boar problem
		 Follow-up required from officials for implementation of subsidized schemes of the government
		 Drone technology should be made available for spraying of coconut trees
		 Availability of quality planting materials of coconut/ tuber crops to farmers
		Mobile soil testing facility for farmers at panchayat level
		 Specific training on use of new technologies for coconut/ tuber crop and fishery farmers at nearest institutes/ KVKs
		Assistance in FPO formation
		No insurance coverage for wild animal damage to crops
6	ITKs Documented/ Farmers Innovations	 Ayurvedic decoction for recovering of wilted plants. For land reclamation, a pH neutralizing solution using botanicals.

08 June 2025 to 12 June 2025

1	Team Members	Dr. Madhu, Principal Scientist, ICAR-CMFRI, Kochi, Kerala Dr. C. Pradeepika, Scientist, ICAR-CTCRI, Thiruvananthapuram Dr. Alfiya, Scientist, ICAR-IISR, Kozhikode Dr. K.K. Aishwarya, Subject Matter Specialist (Pathology), ICAR-KVK, Kozhikode, Kerala Dr. K. Prakash, SMS (Horticulture), ICAR-KVK, Kozhikode, Kerala Dr. Deepthi, Subject Matter Specialist (Home Science), ICAR-KVK, Kozhikode, Kerala
2	Programmes Organized	08.06.2025 The field visit on 08th June 2025 was conducted at Kolakkad. 09.06.2025 First VKSA program 09.06.2025 was conducted at Chemancheri Freedom frighter's hall, Chemancheri, Kozhikode. Second VKSA program 09.06.2025 was conducted at Panchayat Hall, Koyilandy, Kozhikode district



and third VKSA program was conducted at Panchayat Hall, Moodadi Panchayat, Kozhikode district. The program is inaugurated by Panchayat President. There were farmer's scientist interaction meetings on important spice crops technologies, tuber crop technologies, marine fisheries culture, processing technologies of other important crops like banana and fish. 10.06.2025 VKSA program was conducted at Thikkodi service cooperative bank hall, Thikkodi.and Payyoli at Payyoli Municipality Hall. The program was inaugurated by Panchayat President. There were farmers scientist interaction meetings on important crop production and processing technologies of tuber crop, spice crop technologies and marine fish production technologies. 11.06.2025 VKSA program was conducted at Community Hall, Nadapuram, Block Panchayat Hall, Tuneri and Community Hall, Purameri .The program was inaugurated by Panchayat President. There were farmers scientist interaction meetings on important crop production and processing technologies, tuber crop processing technologies, spice crop technologies and marine fish production technologies. 12,06,2025 VKSA program was conducted at Krishi Bhavan Azhiyoor, Community Hall, Eramala and Muncipal town Hall Vatakara in the AN. The program was inaugurated by Panchayat President. There were farmers-scientist interaction meetings on important crop production and processing technologies, tuber crop processing technologies, spice crop technologies and marine fish production technologies. Major Crops Cultivated Coconut, banana, nutmeg, turmeric, ginger, tuber crops and rice



4	Major Problems	Wild boar and snail
		 Pests and diseases in various crops (Rhinoceros beetle, red palm weevil, soft rot, bud rot, button shedding and mite in coconut; pseudostem borer and Sigatoka in banana; viral diseases and wilts in solanaceous vegetables; Mealy bug, scale and stem and root rot in cassava; collar rot in elephant foot yam
		Marketing of produce and price fixation by the vendors
		Non availability of fertilizers on time
		Non availability of tuber crops materials
5	Feedback from Farmers	Quality planting materials
		 Inexpensive and safe repulsion of wild boars
		 Easy access to quality planting material and resistant varieties Enhanced research on root wilt disease in coconut
		 Regularization of sale of pesticides and selling of agrochemicals through government stores like medicine sale through Jan Oushadi
		 Stability in the price of agricultural produce and greater involvement of farmers in price determination.
6	ITKs Documented/	Use of cabbage leaf to ward off snail problem
	Farmers Innovations	 Mixing jaggery with Beauveria enhances its efficacy.
		 Spraying a mixture of fermented rice water, wood ash, and turmeric powder is practiced to manage viral diseases in chilli plants.
		 Covering vegetable seeds with coconut shells for three days is practiced to enhance germination.



Wayanad



Map of Wayanad District

The name 'Wayanad' is derived from 'Vayal Nadu' which means the land of paddy fields. It is a picturesque plateau situated at a height between 700 meters and 2100 meters above the mean sea level nested among the mountains of the Western Ghats on the Eastern portion of North Kerala and on the sides of Tamil Nadu and Karnataka States. Located between the North Latitude 11°27' and 15°58' and East Longitude 75°47' and 70°27', district of Wayanad is on the southern tip of the Deccan plateau. Wayanad district in Kerala is known for its laterite soil, brown hydromorphic soil, forest loam, and riverine alluvium. The area is famous for its coffee and spice plantations, with major crops including coffee, pepper, tea, cardamom, arecanut, and rubber. While paddy cultivation has declined, it's still grown in some areas, particularly in the lowlands, along with other crops like plantain and vegetables.

VKSA programme at Wayanad KVK, Wayanad 29 May 2025 to 02 June 2025

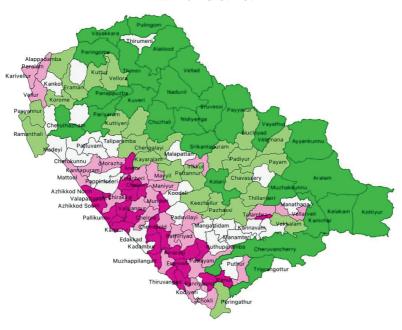
1	Team Members	Dr. Arularasan G S, Professor, KVK, Ambalavayal
		Dr. P. Sethuraman Sivakumar, Principal Scientist, ICAR-CTCRI, Thiruvananthapuram
		Dr. Aniesrani Delfiya, D.S, Scientist, ICAR-CIFT, Cochin
		Shri. Anas K K, Scientist, ICAR-CIFT, Cochin



2	Programmes Organized	29.05.2025 Scientist-farmer interaction at KVK Hall, Gudalur village, Ambalavayal, Wayanad was conducted on 29.05.2025. Scientist-farmer interaction was conducted at Cheeral village. 30.05.2025 Scientist-farmer interaction at KVK Hall, Ambalavayal, Wayanad. 31.05.2025 VKSA Scientist-farmer interaction at KVK Hall,
		Ambalavayal Chief guest was Ms. Hafsath C K Interactive session was arranged with the farmers on tuber crops. 01.06.2025
		Interaction with farmers at multiple villages namely Irunbupalam (Kattikulam) and Valliyurkaviu (Manandhavadi).
		02.06.2025
		VKSA Scientist-farmer interaction meeting at Kottathara village. Agricultural department officials participated and farmers participated.
3	Major Crops Cultivated	Paddy, pepper, ginger, coconuts, coffee, tea, cassava, yams
4	Major Problems	 Damage by wild pig, forest goat and peacock in tuber crops – 60-80% yield loss and monkey in coconut, fruits. Collar rot in elephant foot yam – 30-40% yield loss
		Cassava mosaic disease – Not specified
5	Feedback from Farmers	Need for providing quality planting materials of improved varieties of tuber crops
		 Need for viable solution to prevent wild-life attack on crops



Kannur district



Map of Kannur District

Kannur district in Kerala, India, lies between latitude 11°40' and 12°48' North and longitudes 74°52' and 75°56' East. It's bordered by the Western Ghats to the east, Kozhikode and Wayanad districts to the south, the Lakshadweep Sea to the west, and Kasaragod district to the north. Kannur district primarily has lateritic, alluvial, and coastal alluvial soil types. Paddy, coconut, pepper, cashew, tapioca, arecanut, and plantation crops like rubber are the major crops cultivated. The area under paddy cultivation is declining, while rubber cultivation is increasing.

VKSA programme at Kannur KVK, Kannur 03 May 25 to 07 May 2025

1	Team Members	Dr. Parvathy A, SMS
		Dr. Manju KP, SMS
		Dr. T. Krishnakumar, Scientist, ICAR-CTCRI
		Dr. Binsi P. K, Senior Scientist, ICAR-CIFT
		Dr. Shinoj P, Principal Scientist, ICAR-CMFRI



2 Programmes Organized

03.06.2025

Meeting at Kannur district was inaugurated at Mattannur Community Hall, Iritty block, Kannur district. The program was inaugurated by Municipality Chairman. There were farmer's scientist interaction meeting on important tuber crop technologies such as varieties and value addition and fish processing technologies. The afternoon session was conducted at Koodali grama panchayat, Iritti block. Another session was inaugurated by President, Koodali. Farmers interactive meeting was arranged.

04.06.2025

Meeting was conducted at Panchayat Hall, Keezhoor, Iritty block, Kannur. The program was inaugurated by Panchayat President. There were farmer's scientist interaction meetings on important coconut technologies, tuber crop technologies, processing technologies of other important crops like banana and fish.

05.06.2025

Meeting was conducted at Panchayat Hall, Aralam, Iritty Block, Kannur district. The program was inaugurated by Panchayat President. There were farmers scientist interaction meetings on important crop production and processing technologies, tuber crop processing technologies and fish production technologies.

06.06.2025

Awareness meeting was conducted at Panchayat Hall, Mangattidam, Kuthuparamba Block, Kannur district. The program was inaugurated by Mangattidam Panchayath President. There were farmers scientist interaction meetings on important crop production and processing technologies,

07.06.2025

Interaction meeting was conducted at Sreekandapuram Municpal Panchayat office, Irikkur block, Kannur district. The program was inaugurated by Municipal Chairperson. There were farmers scientist interaction meetings on crop and fish production and processing technologies. The afternoon session was held at Mayill grama panchayath office, Irikkur block, kannur district. This program was inaugurated by Panchayath president. Interactive session was arranged with the farmers.



3	Major Crops Cultivated	Pepper, banana, paddy, cassava, ginger, turmeric, cardamom
4	Major Problems	• Wild boar & elephant attack, coconut rhinoceros beetle attack, banana pseudostem weevil, marketing problem
5	Feedback from Farmers	• Farmers appreciated the government's effort on VKSA and urged for more support from experts in the field and also from government

29 May 2025 to 02 June 2025

1	Team Members	Dr. Manju, Assistant Professor, KVK Kannur
		Dr. Parvathy, Assistant Professor, KVK Kannur
		Dr. Sharon Aravind, Senior Scientist, ICAR-IISR, Kozhikode
		Dr. Ramya Abhijit, Senior Scientist, ICAR-CMFRI, RC, Kozhikode.
		Dr. Subramanian, Principal Scientist, ICAR-CPCRI- Kasaragod
		Dr. R. Muthuraj, Principal Scientist, ICAR-CTCRI, Thiruvananthapuram
2	Programmes Organized	29.05.2025
		The meeting conducted at the Thalipparamba Block Hall was attended by farmers from Thalipparamba, Manna and Chenragiri. The programme included lectures on scientific rice cultivation and cultivation aspects of plantation crops and integrated pest management in rice. A procession of scientists, officials and farmers were conducted for creation of awareness on VKSA programme among the farming community.
		30.05.2025
		The training programme for the farmers of Cheruphazham was held at Cheruphazham Krishi Bhavan Hall. An interactive session on Improved production technologies on tuber crops. Scientific cultivation aspects of species crops, and fishes rearing, details about marine fisheries culture and details of crab cultivation were arranged.



In the afternoon, farmers of Kankol-Alappadamba Krishi Bhavan, Payyanur panchayath assembled at Alappadamba hall. Lecture on the importance of tuber crops and details on Improved production technologies on tuber crops for sustainable tuber crops production, details on coconut cultivation aspects and Cultivation aspect of other plantation crops. The queries from the farmers were addressed. Session on different types of agriculture's schemes and details of different farming activities of KVK, Kannu were explained.

31.05.2025

The farmers' meet as part of VKSA programme was organized at the KVK, Kannur The session on the cultivation of plantation crops, Improved production technologies on tuber crops, a session on integrated nutrient management in species for sustaining crop production were held. The farmers raised queries concerning the pest damage of crops such as exotic fruit crops, vegetables, banana, coconut and tuber crops.

01.06.2025

The farmers' training programme on Improved production technologies on tuber crops was held at the Muyyam village, Kurumathur panchayat, Thalipparamba block. The training on Improved production technologies on tuber crops, details of minisetts techniques on tuber crops, demonstration on minisetts techniques on yams and planting material of greater yam variety were done. Sree Nidhi was distributed to farmers. The session on scientific cultivation of vegetables, scientific cultivation of banana was also arranged. Field visit was arranged to the participant to the elephant foot yam field.

02.06.2025

An interactive workshop on the topic: Need for scientific management practices for sustaining crop productivity" for the farmers of Azeekkode panchayath, Kannur block. The training on Improved production technologies on tuber crops, scientific management of spices, Fishes rearing, details about marine fisheries culture aspects and details of crab cultivation were taught.

The interaction cum training program for the farmers of Pallikunnu panchayath was held at the KB hall Pallikunu. Sessions on soil acidity, nutrient deficiency and integrated



3	Major Crops Cultivated	nutrient management, and fishes rearing, details about marine fish culture aspects and details of crab cultivation aspects were arranged. The scientists addressed the queries of the farmers. Rice, banana, coconut, cassava, elephant foot yam, exotic fruits
4	Major Problems	 Wild boar menace in tuber crops Weed problem in rice Pseudo stem borer in banana, rhinoceros and red palm weevil in coconut, cassava stem and root rot, rat and pig menace in tuber crops Delay in getting soil test results Fruit drop of exotic fruits Boron deficiency in crops (banana, cassava, coconut)
5	Feedback from Farmers	 Supply of quality planting material on tuber crops Planting material of pepper requirement at planting time Short duration cassava varieties with bitter taste New technologies should be made available to farmers timely Supply of quality planting material on tuber crops Rapid availability of soil test results Scientific methods for the control of wild boar and rat menace in cassava cultivation Green techniques for pest management in horticultural crops
6	ITKs Documented/ Farmers Innovations	 Coconut seedlings with long leaf thread will perform well in the field Treating elephant foot yam in cowdung slurry Use of wood ash for enhancing the yield of sweet potato Planting thorny bushes in fence can prevent wild boar menace in tuber crops







Map of Kasaragod District

Kasaragod district, which is located at the northern end of Kerala and in the east the district is Kodagu and Dakshina Kannada districts of Karnataka, the Arabian Sea in the west, and the Kannada District of Karnataka in the north. The district is bounded by the Kannur district. Kasaragod district in Kerala, India, is situated between 12°12'00" N and 12°48'00" N latitude, and 74°52'00" E and 75°26'00" E longitude. Kasaragod district in Kerala has primarily laterite, red, and sandy soils. The main crops cultivated in the district are coconut, arecanut, cashew, and rubber. Other crops grown include pepper, banana, vegetables, yams, and pineapple.

VKSA programme at Kasaragod KVK, Kasaragod 29 May 2025 to 02 June 2025

1	Team Members	Dr. Manojkumar, Head, ICAR-KVK, Kasaragod
		Dr. Sarita Hegde, SMS (Home Science)
		Dr. V. Ramesh, Principal Scientist, ICAR-CTCRI
		Dr. Renuka, Senior Scientist, ICAR-CIFT
		Dr. Suresh Babu, Principal Scientist, ICAR-CMFRI
2	Programmes Organized	29.05.2025
		Meeting was held at Uduma and the Soil health management and CTCRI technologies. Chief Guest was the President,



Major Crops Cultivated

Major Problems

Uduma Panchayat. Another programme on Soil health management was held at Ajanoor, Mangalpady gramapanchayat, Manjeshwar block and the Chief Guests were two ward members 30.05.2025 Meeting was held at Narampady, Karadukkam block on Soil health management and recent varieties of ICAR-CTCRI. Another session was on Soil health and fertilizer governance with special emphasis to liming practices at Kayar where the chief guest was a Lead farmer. 31.05.2025 Field visit was arranged to Kuduveri farm, at Paivalika Panchayat in the Chipper village Chief Guest was Lead farmer Mr. Viswakesava, K. 01.06.2025 Meeting was conducted at Enmakaje, Sheni, Manjeshwar block and the session was on latest varieties and production practices of tuber crops Field visit to farmers field (Raveendra Naik, Sudhakar) on water and input management and high density planting program of horticultural crops in Maniyampare was arranged. 02.06.2025 Meeting was at Meenja panchayat office and the chief guest was Panchayat president. Session was on Integrated approaches of soil and crop management and liming practices. Another session was on ICAR-CTCRI tuber crops varieties and value addition technologies at SC community Hall, Bejja and the chief guest was Ward member Coconut, arecanut, pepper, cashew, paddy, vegetables Soil acidity Water logging & nutrient leaching • Low productivity in cashew, arecanut due to pest/disease incidence

Marketing of farm produce Wild animal damage



5	Feedback from Farmers	• Link the importance of scientific research to grassroots
)	reedback from ranners	practice to solve the local issues
		 More awareness on credit and marketing aspects and training on value addition aspects of major horticultural crops
		 Demonstrate practices like biocontrol measures and varieties tolerant to diseases
		• Urgent remedial solutions for wild animal control
6	ITKs Documented/ Farmers Innovations	• Durunga structures for effective water conservation in farming
		 Innovative spraying solutions in clove cultivation for ground fall without any labour involvement to climb and pick.
		Carambolla oil as anti inflammatory agent in humans
		Sweet potato germplasm collection at Narampady

03 June 2025 to 07June 2025

1	Team Members	Dr. Benjamin Mathew, SMS, ICAR-KVK, Kasaragod Dr. V.S.Santhosh Mithra, Principal Scientist, ICAR-CTCRI Dr. M.N.Pradeed, Senior Scientist, ICAR-CMFRI, Kochi Dr. P.K.Sajeesh, Senior Scientist, ICAR-IISR, Kozhikode Dr. Sajeesh, College of Agriculture, Padannakkad, KAU and Dr. Sainamol, College of Agriculture, Padannakkad, KAU
Valiyaparamba of meeting was inaug grama panchayat. I farmers on smart fa		03.06.2025 Farmers meeting was held in the Panchayat office Valiyaparamba of Neeleshwaram block, Kasaragodu. The meeting was inaugurated by the president of Valiyaparamba grama panchayat. Interactive meeting was arranged with the farmers on smart farming and cultivation of vegetable crops. 04.06.2025
		Farmers meeting was held in the EMS Memorial Conference Hall, Cheruvathoor, Neeleshwaram block, Kasaragodu. The meeting was inaugurated by the president of Cheruvathoor grama panchayat. Another farmer's meeting was held at the Grama Panchayat Meeting Hall, Padanna Grama Panchayat, Neeleshwaram block, Kasaragodu. The meeting was



		inaugurated by the President. Interactive meeting was arranged with the farmers on smart farming and cultivation of vegetable crops. 05.06.2025 Farmers meeting was held in the PJ Hall, ICAR-CPCRI, Kasaragod. The meeting was inaugurated by the president, District Panchayat, Kasaragod. Interactive meeting was arranged with the farmers on smart farming and cultivation of vegetable crops 06.06.2025 Farmers meeting was held at in the Community Hall, Palayi, Neeleshwaram block, Kasaragod. The meeting was inaugurated by Chairperson, Neelesharam Municipality. Interactive meetings and discussion were held with the farmers. 07.06.2025 Online meeting of the FPO scientist interface meeting was held. The scientists explained the activities of their institutes. Field visit was conducted in the Yenmakaje Yenmakaje Village, Mancheswaram Block, Kasaragod. It was a coconutbased farm of about 4 acres, with some fruit plants such as avocado, dragon fruits etc as intercrops. Some cassava plants also were in the farm. Coconuts were of 4 year. Another field of different varieties of jackfruits of 2 acres also was visited. In another field adult coconut palms were fallen due to severe
		infestation of red palm weevil.
3	Major Crops Cultivated	 Vegetables, banana, coconut, arecanut, tuber crops, rice and mussel farming
4	Major Problems	 Sea water intrusion to farmland in coastal areas Wild boar, porcupine, peacock and monkey menace for crops in many areas Pests and diseases in various crops (Rhinoceros beetle, red palm weevil, bud rot, button shedding and mite in coconut; pseudostem borer and Sigatoka in banana; viral diseases and wilts in solanaceous vegetables; fruit fly infestation in cucurbits. Non availability of fertilizers, lime etc on time



5	Feedback from Farmers	 An urgent solution is required to mitigate the wild animal menace, particularly from porcupines, which are causing significant damage to crops.
		• Farmers urged that compensation be provided for crop losses not covered under the existing crop insurance schemes.
		There was a strong demand for training in scientific methods for mussel cultivation to improve productivity and sustainability.
		 Farmers emphasized the need for widespread adoption of smart farming practices to enhance profitability and efficiency in agriculture.
		 It was suggested that agriculture be integrated into the school curriculum to foster interest in farming among younger generations.
		 Farmers recommended the utilization of labour under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) for agricultural operations to address both profitability and the prevailing labour shortage in the sector.
		 Setting up cassava-based industries in Kerala was proposed to encourage and support cassava cultivation in the state.
		 The establishment of paddy straw processing units to convert straw into cattle feed was recommended as a value addition initiative.
		 A reliable weather forecasting and dissemination system was called for to help farmers, especially rice growers, protect their crops from unexpected rainfall and other adverse weather events.
		 The proliferation of wild rice was identified as a major threat to paddy cultivation, and an immediate solution was requested.
		• The potential of Joint Liability Groups (JLGs) in implementing agricultural extension programmes at the panchayat level was highlighted.
		 Farmers also called for the development of a faster mechanism to access soil test results to support timely and appropriate nutrient management.
6	ITKs Documented/ Farmers Innovations	• Cultivation of turmeric as border plants to counter wild boar attack.

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Researchable issues in tuber crops

- Enhancement of shelf life of tuber cassava for better market price
- Nutrient rich value added products from tuber crops
- Management of cassava root rot
- Boron management in cassava
- Production of disease free quality planting materials of cassava
- Varieties resistant to weevil in sweet potato
- Effect of trailing in sweet potato for improved tuberization
- Short duration cassava varieties.
- Integrated management for mealy bug, scale and stem and root rot in cassava and collar rot in elephant foot yam
- Eco friendly management of weeds in tuber crops
- Small implements like weeder, starch extraction machines, etc.
- Need for high yielding pest and disease resistant and climate resilient varieties
- Low cost eco friendly pesticides and fertilizers for tuber crops
- Nutritional and shelf life potential of arrow root powder made directly through slicing, drying and grinding over traditional method
- Development of equipments for small scale (quantity) application of pesticides suited to specific situations (homestead gardens).
- Short statured cassava varieties with good stem thickness to withstand heavy wind and rain
- Method to diagnose corm rot on harvest well in advance while the crop is in the field
- Scientific methods for the control of wild boar and rat menace in cassava cultivation
- Short duration cassava varieties with bitter taste
- Smart farming practices in tuber crops to enhance profitability and efficiency in agriculture
- Setting up of cassava-based industries in Kerala was proposed to encourage and support cassava cultivation in the state.



Benefits of the programme

Understanding Farmer Needs and Challenges

We had the opportunity to interact directly with farmers and farm women, which was crucial in understanding their specific needs and the technological, social, and financial problems they face. We also identified significant environmental and marketing issues. These interactions brought to light many researchable issues that can inform and modify the research priorities of scientists, leading to more targeted studies in diverse areas to address the challenges farmers encounter.

Training and Collaboration

We documented the training needs of farmers, which will allow us to organize relevant training programs in their villages or at research organizations. Farmers also learned about the collaborative roles of various departments working for their welfare. This initiative fostered a strong link between scientists, extension personnel, and the farming community.

Impact and Future Directions

While many farmer problems are common, some are unique. It was evident that government schemes have positively impacted farmers' livelihoods and food security. Most farmers expressed keen interest in visiting research organizations to gain more knowledge about advanced technologies. The one-on-one interactions boosted their confidence and motivated them to adopt new technologies for improved yields and income.

We recognized the importance of giving special emphasis to the problems reported by farmers and ensuring timely interventions to minimize their challenges. Farmers showed great enthusiasm for the program, appreciating that scientists came to their villages to help bring about positive changes in their farming practices. This experience was also incredibly beneficial for the scientists, providing a significant opportunity to engage with the farming community and observe their activities firsthand.

Acknowledgement

Indian Council of Agricultural Research, New Delhi ICAR-ATARI, Bengaluru ICAR Institutes, Kerala KVKs, Kerala Farmers and other stakeholders

Line departments of Kerala



Annexure I: Summary sheet of VKSA conducted in Kerala by KVKs, ICAR Institutes and line departments

Details	Number
Scientists deputed	25
Programmes organized	915
Districts covered	14
Villages covered	1163
Farmers participated	162053
Farm women participated	94464
Total beneficiaries	256517



Annexure II: Glimpses of VKSA Programme









KVK, Kollam









KVK, Alappuzha











KVK, Idukki









KVK, Kottayam











KVK, Kozhikode









KVK, Kasaragod











KVK, Pathanamthitta









KVK, Kannur











KVK, Malappuram









KVK, Ernakulam











KVK, Thiruvananthapuram









KVK, Thrissur











KVK, Wayanad









KVK, Palakkad



Annexure III: Media coverage about VKSA programme



ചന്ദ്രിക

കാർഷിക വികസന മാന്നേറ യജ്ഞത്തിന് ഇന്ന് താട്ക്കം



വികസിത കൃഷി സങ്കൽപ് ക്യാംപെയ്ൻ



കൃഷി സങ്കൽഷ് ക്യാമ്പയിൻ സംഘടിഷിച്ചു

വും സുസ്ഥിവേള ഡന്റ്വികെ പ്രദേശ് ഉദ് റയി കർഷക നേ ചെയ്തു.



ഭരണിക്കാവ് ബ്ലോക്കിലെ കാർഷികവികസന മുന്നേറ്റയ ര് പഞ്ചായത്ത് പ്രസിഡന്റ് എസ്. രജനി ഉദ്ഘാടനം ചെയ്യുന്നു ചാരുംമൂട് ► ജില്ലാ കൃഷി വി ന്റ് ജി. പുരുഷോത്തമൻ അധു ജ്ഞാനകേന്ദ്രവും കൃഷിവകു പും ചേർന്ന് ഭരണിക്കാവ് ബ്ലോ

ലതാനകേന്ദ്രവും കൃഷിവകു ക്ഷനായി. പൂം വേർന്ന് രണിക്കാറി ഒയ്യാ ക്കിൽ കാർഷികവികസന മു നേറ്റയലങ്ങം (വികസിത കൃഷി സകല്ല് അഭിയാൻ) ത്യടങ്ങി. മയ്യോക്ക് പഞ്ചായത്ത് ഫ്ര സിഡന്റ് എസ്. രജനി ഉദ്ഘം കൃഷി ഓഫീസർ ദിവ്യശ്രി എന്നി ടനം ചെയ്യു. വൈസ് പ്രസിഡ







വികസിത് കൃഷി സങ്കല്ല് അഭിയാൻ

പിലാത്തറ > കാർഷിക മേഖല യിലെ സമഗ്ര വികസനത്തിന് കേന്ദ്ര സർക്കാർ നടപിലാക്കുന്ന കേന്ദ്ര സർക്കാർ നടു കാർഷിക വികസന കാർഷിക വിക്സന നയങ്ങടം ചർച്ച ചെയ്യുന്നതിനും നൃതന സാരേതിക വിദ്യക്കാ പ്രചരിപ്പി കുന്നതിനും നൃതന സാരേതിക വിദ്യക്കാ പ്രചരിപ്പി കുന്നതിനും വേണ്ടെ കാംബത് ചെറുതാഴം പഞ്ചാ യത്തിൽ നൈനു്. ഇന്യൻ കാർഷിക ശവേഷണ കൗൺസിലിൽ കീഴിലുള്ള കൂരി വിജ്ഞാസി കേര്യം. വരിഷനിസ് വകുപ്പു. കൃത്യം ഇന്ദ്ര വര്ഷക്കാരം ബാങ്ക് ആടം അവയ സ്ഥാപനങ്ങളിലെ വിദ്രേശ്ധവം ശാസ്യമ്മത്ത്വം പങ്കെടും പ്രത്യക്കാര്യം വര്യമാര്യക്കാര്യം പങ്കെടും പങ്കെടും പങ്കെടും പ്രത്യക്കാര്യം പരിച്ചും പ്രത്യക്കാര്യം പരിച്ചും പ്രത്യക്കാര്യം പരിച്ചും പരവരിച്ചും പരിച്ചും പരവരിച്ചും പരിച്ചും പരിച്ചും പരവരിച്ചും പരിച്ചും പരവരിച്ചും പരിച്ചും പരിച്ചും പരിച്ചും പരവരിച്ചും പരിച്ചും പരിച്ചും പരിച്ചും പരിച്ചും പരവരിച്ചും പരവരിച്ചും പരിച്ചും പരിച്ചും പരിച്ചും പരിച്ചും പരവരിച്ചും പരവരിച്ചും പരിച്ചും പരിച്ചും പരവരിച്ചും പരവരിച്ചും പരവരിച്ചും പരവരിച്ചും പരിച്ചും പരവരിച്ചും പരവരിച്ചും പരവരിച്ചും പരിച്ചും പരവരിച്ചും പരവരിച്ചും പരിച്ചും പരിച്യുന്നും പരവരിച്ചും പരവരിച്ചും പരിച്ചും പരിച ചർച്ച ചെയ്യുന്നതിനും ന്യാരന സാരാങ്ങിലെ വിദ്യാരം വ്യചാര്യിച്ച ക്യുന്നതിനും വേണ്ടി നടത്തുന്ന കാപെത്ത് ചെയ്യാരം പഞ്ചാ സബിത, സിലിസിആർ ഐ യത്തിൽ നടന്നു. ഇന്ത്യൻ കാട് അനോസിയോട് പ്രെഫസാർ ത്രീര്വള്ള കൂർ വിഷാതാൻ കേ ത്രം, വരിങ്ങൻൽ വക്യപ്പ്, ഉഷി ക്യോ പ്രത്യാര്യത്തെ പര്യാര്യത്തിൽ സോരം കെ.പ്. ടണ്ടു. എന്ന പരക്ഷണം ബാര് ത്യട്ട കീവിപ് സൗജ്യ കൃഷി അന്യ സാര്യം ഗാസ്ത്രടത്തും പരങ്ങള് പ്രമാർ, കൂർ ചിരാപ്പ്നർ ജയ തുത്രിയത്തുടെ അത്രത്തെ സാര്ഷ്ട്രം സര്വര്യത്തിൽ സം തുത്തിവിര് ക്ഷര്യർ പേയർമാർ

ടി.വി. ഉണ്ണികൃഷ്ണൻ ഉദ്ഘാടനം ചെയ്യു കണ്ണൂർ കൃഷി വിജ്ഞാൻ കേന്ദ്രം അസോസിയേറ്റ് പ്രൊഫ സർ ഡോ. പി. പാർവതി അധു ക്ഷയായി.





Annexure IV: List of scientists participated



भाकृअनुप – केन्द्रीय कन्द फसल अनुसंधान संसथान श्रीकार्यम, तिरूवनन्तपुरम ६९५ ०१७, केरल ICAR – CENTRAL TUBER CROPS RESEARCH INSTITUTE SREEKARIYAM, THIRUVANANTHAPURAM 695 017, KERALA



F.No. ESS/Viksit Krishi/2025

Date 22.05.2025

OFFICE ORDER

The following scientists are deputed to attend duty at their respective Krishi Vigyan Kendras (KVKs) for the successful conduct of the 'Viksit Krishi Sankalp Abhiyan- Pre Kharif 2025' from 29 May 2025 to 12 June 2025.

1	Dr. K.I. Asha, Principal Scientist			
	Di. K.i. Asha, Finicipal Scientist	29 May to 02 June 2025	KVK, Alappuzha	
2	Dr. M.L. Jeeva, Principal Scientist	08 June to 12 June 2025		
3	Dr. H. Kesava Kumar, Senior Scientist	03 June to 07 June 2025	KVK, Kozhikode	
4	Dr. C. Pradeepika, Scientist	08 June to 12 June 2025	_	
5	Dr. S.N. Rahana, Scientist	29 May to 02 June 2025	KVK, Ernakulam	
6	Dr. B.G. Sangeetha, Senior Scientist	03 June to 07 June 2025		
7	Dr. E.R. Harish, Senior Scientist	29 May to 02 June 2025	KVK, Idukki	
8	Dr. R. Muthuraj, Principal Scientist	29 May to 02 June 2025	KVK, Kannur	
9	Dr. T. Krishnakumar, Scientist	03 June to 07 June 2025		
10	Dr. V. Ramesh, Principal Scientist	29 May to 02 June 2025	KVK, Kasaragod	
11	Dr. V.S. Santhosh Mithra, Principal Scientist	03 June to 07 June 2025	_	
12	Dr. A. Asha Devi, Principal Scientist	29 May to 02 June 2025	KVK, Kollam	
13	Dr. K. Susan John, Principal Scientist	03 June to 07 June 2025		
14	Dr. Jeena Mathew, Senior Scientist	29 May to 02 June 2025	KVK, Kottayam	
15	Dr. Saravanan Raju, Principal Scientist	03 June to 07 June 2025		
16	Dr. P. Prakash, Scientist	29 May to 02 June 2025	KVK, Malappuram	
17	Dr. K. Sunilkumar, Principal Scientist	03 June to 07 June 2025	KVK, Palakkad	
18	Dr. J. Suresh Kumar, Scientist	08 June to 12 June 2025		
19	Dr. C. Mohan, Principal Scientist	29 May to 02 June 2025	KVK, Pathanamthitta	
20	Dr. C. Visalakshi Chandra, Senior Scientist	03 June to 07 June 2025		
21	Dr. M.S. Sajeev, Principal Scientist	29 May to 02 June 2025	KVK, Thrissur	
22	Dr. Shirly Raichal Anil, Principal Scientist	29 May to 02 June 2025	1	



23	Dr. S.S. Veena, Principal Scientist	29 May to 02 June 2025	KVK,
24	Dr. Sheela Immanuel, Principal Scientist	29 May to 02 June 2025	Thiruvananthapuram
25	Dr. P. Sethuraman Sivakumar,	29 May to 02 June 2025	KVK, Wayanad
	Principal Scientist		

22.05.2025 Sreekariyam



G. Byju

Director

Copy to

- The Director, ICAR-ATARI, Bengaluru for information please
 HODs/SICs for circulation among scientists please
 SIC, PME Cell/ SAO/SFAO for information please

- 4. PS to Director for information please

One Nation, One Agriculture, One Team...









