



KVK TIMES

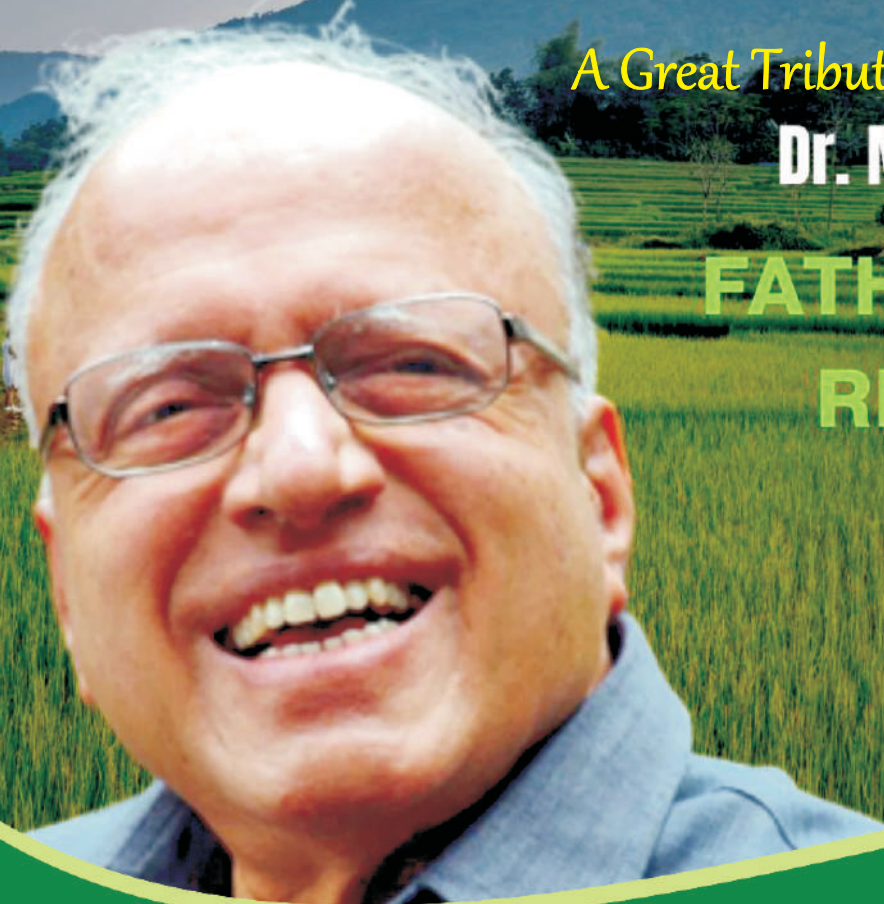
A WINDOW TO KVK'S OF ICAR-ATARI, ZONE-XI, BENGALURU



A Great Tribute to

Dr. M.S. Swaminathan

**FATHER OF GREEN
REVOLUTION**



**ICAR-KRISHI VIGYAN KENDRA
BENGALURU RURAL DISTRICT**



M.S. SWAMINATHAN

Architect of India's Green Revolution

Dr. Mankombu Sambasivan Swaminathan, the legendary agricultural scientist and a key architect of the Green Revolution, and popularly known as "Father of the Green Revolution in India" for his leadership and efforts in introducing and developing high-yielding varieties of wheat and rice in India.

Dr. M. S. Swaminathan was born in Kumbakonam on August 7, 1925 to M.K. Sambasivan, a surgeon, and Parvati Thangammal. Like his father, he too had urge to study and pursue the field of medicine. But the out-break of Bengal Famine and its consequences relented him to choose and pursue academics in agricultural sciences to achieve food security of the nation. He obtained two undergraduate degrees, one from the Agricultural College, Coimbatore (now, Tamil Nadu) and another from Maharaja's College in Trivandrum, Kerala. On obtaining a post-graduate degree in cytogenetics in 1949 from the Indian Agricultural Research Institute (IARI), New Delhi, he earned a Doctor of Philosophy degree from the Cambridge. He did his post-doctoral research at the University of Wisconsin.

In 1954, Dr. M. S. Swaminathan joined as Scientist at Central Rice Research Institute (CRRRI), Cuttack and later, IARI. In July 1966, he became IARI Director, the post he held till 1972. He worked closely with two Union Agriculture Ministers, C. Subramaniam (1964-67) and Jagjivan Ram (1967-70 & 1974-77) for the success of the 'Green Revolution' a programme that paved the way for quantum jump in productivity and production of wheat and rice.

Dr. Swaminathan headed International Rice Research Institute at Philippines from 1982 to 1988. By the time he returned to India in 1988, he founded the M.S. Swaminathan Research Foundation (MSSRF) and received the First World Food Prize. The Foundation accelerates use of modern science for sustainable agricultural and rural development. In addition to the World Food Prize, Swaminathan had received many more awards and honors' both in India and outside viz., Padmashri (1967), Ramon Magsaysay (1971) Padmabhushan (1972), Golden Heart Presidential award of Philippines (1987) and Padma Vibhushan (1989) for instrumental role in Green Revolution in India.

In November 2004, the Union government made Dr. Swaminathan as chairman of the National Commission on Farmers. Popularly known as the Swaminathan Commission, He was also a nominated member of Rajya Sabha from 2007-13. He was the first recipient World Agriculture Prize, initiated by Indian Council of Food and Agriculture.

The Father of Green Revolution and Economic Ecology, Dr. M. S. Swaminathan took his last breath on 28th September, 2023 but he will be remembered and dwelled in the hearts of millions of farmers and Agricultural fraternity.

This publication has brought out in the fond remembrance of the Father of Green Revolution Dr. M. S. Swaminathan.



In this 1965 photo Norman Borlaug (third from left) selects strains of high-yielding wheat, along with S.P. Kohli, M.S. Swaminathan (second from left) and V.S. Mathur, in New Delhi in 1965.



Union Agriculture Minister Rao Birender Singh, then Prime Minister Indira Gandhi, Chairman of the National Organising Committee, Dr. M.S. Swaminathan and President of the World Genetics Congress are seen during the 10th World Genetics Congress at New Delhi on December 12, 1983.



President R. Venkataraman presents the Padma Bhushan award to Dr. M.S. at an investiture ceremony in the Rashtrapati Bhavan in New Delhi in 1989.



M.S. Swaminathan at the Wheat Breeding Research Station of IARI in Wellington.



The then Prime Minister Atal Behari Vajpayee presents the Millennium Award to Dr. Swaminathan at the 88th Session of the Indian Science Congress in New Delhi.

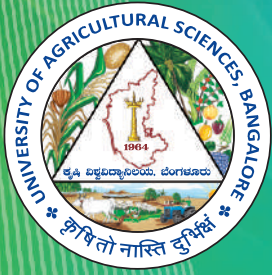


Dr. Swaminathan arrives with his wife Mina Swaminathan in the Parliament. He was a Rajya Sabha member from 2007 to 2013.



Dr. Swaminathan receives World Agriculture Prize from Vice President M Venkaiah Naidu at the 11th Global Agriculture Leadership Summit in New Delhi.





University of Agricultural Sciences Bangalore



Dr. S. V. SURESHA
Hon'ble Vice Chancellor

PREFACE


The ICAR-ATARI Zone XI, Bengaluru, is releasing an online fortnightly e-magazine "KVK Times" which showcases the activities of Krishi Vigyan Kendras (KVKs) in Karnataka, Kerala, and Lakshadweep, highlighting their efforts in adopting and sharing new agricultural technologies. KVK Times is a creative initiative aimed at consolidating and sharing the new technologies and initiatives implemented by various KVKs.

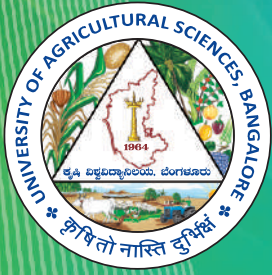
ICAR-KVK Bengaluru Rural District, established in 2006, has been actively promoting agricultural innovations in its region. The center houses an IFS model unit, offering hands-on experiences to visitors, including extension workers and farmers.

KVK Bengaluru Rural District is also involved in the "ARYA" network project, aiming to engage and retain youth in agriculture. They emphasize eco-friendly practices like organic manures, bio-fertilizers and bio-control agents, benefitting both the environment and human health. Soil and water testing facilities help provide valuable soil health cards and advisory services to farmers.

Further, the multidisciplinary experts assist farmers in adopting suitable technologies. They are at the forefront of introducing advanced mechanization and digital tools like drones to the farming community. Recognized for their outstanding work and strong farming community connections, KVK Bengaluru Rural District received "Zonal Best Krishi Vigyan Kendra Award -2012" and "National Best Krishi Vigyan Kendra Award- 2014."

The responsibility for publishing the 2nd Vol, 6th issue of KVK Times in September 2023 has been entrusted to KVK Bengaluru Rural District, reflecting their dedication, commitment to agricultural development and knowledge dissemination. I extend my best wishes to KVK Bengaluru Rural District for their future endeavors. May they continue to ascend to new heights in their agricultural outreach and make a lasting impact on the farming community.


(S. V. SURESHA)
Vice Chancellor



University of Agricultural Sciences Bangalore



Dr. V. L. MADHUPRASAD
Director of Extension

MESSAGE

The Krishi Vigyan Kendra's (KVKs) are crucial for disseminating the technologies from laboratories to farmers' fields effectively and act as a knowledge hub in this process. Additionally, KVKs are like one stop shops in the extension system catering the needs of the line department, farmers and other extension functionaries.

KVKs play a significant role in improving the income and livelihood security of the farming community through a frontline extension that focuses on crop diversification, increased production and productivity, reducing postharvest losses, processing and value addition. In addition to farmers sustenance, KVK's are keenly working in transforming farmers into entrepreneurs.

KVK TIMES is an excellent way to highlight the distinct activities of KVKs, by opening the door for cross-learning across KVKs, and acting as a single point of reference to learn about the different events of various KVKs within ATARI Zone XI, Bengaluru. The concept of gathering information from the 48 KVKs of ATARI Zone XI's is unique and novel. The process of dissemination of recent technologies through innovative approaches to the farming community and documenting the success stories will motivate other KVKs to perform in a better way.

My best wishes to all the KVKs for serving the farming community in their respective jurisdictions with much more enthusiasm and dedication to improve the livelihood of the farming community.

I am glad that KVK, Bengaluru Rural District has taken responsibility to edit and compile this issue of 'KVK TIMES' for the period 16th -30th September, 2023.

(V. L. MADHUPRASAD)
Director of Extension



ICAR-Agricultural Technology Application Research Institute Zone-XI, Bangalore



Dr. V. VENKATASUBRAMANIAN

Director

PREFACE

Krishi Vigyan Kendras are playing pivotal role in handholding of farmers through technological backstopping for enhancing the productivity of crops and enterprise keeping in mind profitability and sustainability. 'Believing through seeing' and 'Learning by doing' is most appropriate to the KVKs, as the Scientists and farmers are jointly involved in implementing KVK mandated activities to reach the mission of enhancing the farmers income. KVKs are expanding the horizon from elite extension to innovation, market linkage, FPOs, processing and value addition. 48 KVK's in Zone XI of ATARI placed in states of Kerala, Karnataka and Lakshadweep Union Territory has immensely contributed in enhancing agriculture productivity and farmer income thus ensuring sustainable social and livelihood security of farm families.

A first of its kind virtual platform, KVK TIMES which documents fortnightly activities of each of the 48 KVKs of Zone-XI is gaining a real momentum. The news items covered in issues made an impact that is long lasting. Most of the news items published in the TIMES has got the potential of cross learning among KVKs and worth reading. This should boost the morale of all of us and many such noteworthy efforts of our fraternity in the zone.

I am happy that KVK Bengaluru Rural District is bringing up the 6th issue of second volume of KVK TIMES covering the 2nd fortnight of September, 2023. I congratulate the KVK fraternity of Zone XI specially Dr. Hanumantharaya B. G., Senior Scientist and Head and his team of KVK, Bengaluru Rural District for bringing out this unique edition of KVK Times.

(V. VENKATASUBRAMANIAN)

Director



ICAR-KRISHI VIGYAN KENDRA BENGALURU RURAL



Dr. HANUMANTHARAYA, B. G.
Senior Scientist and Head

ACKNOWLEDGEMENT

I feel extremely happy and privileged to compile and edit 6th issue of Vol II of KVK times. It is essentially a cross learning experience that helps each KVK to fine tune their activities.

I sincerely thank Dr. S. V. Suresha, the Hon'ble Vice-chancellor of the University of Agricultural Sciences, Bangalore, for his invaluable advice and unwavering support in carrying out KVK's activities.

It's my honor to place on record, my honest gratitude to Dr. V. L. Madhuprasad, Director of Extension, University of Agricultural Sciences Bangalore for his relentless support and leadership in enabling KVK, Bengaluru Rural District, to cater service to the needs of farming community.

I extend my earnest gratitude to Dr. V. Venkatasubramanian, Director, ATARI Zone XI, Bengaluru, for his valuable support, inspiration, and encouragement, all of which have helped us to work more effectively and with greater focus. I would also like to thank Dr. M. J. Chandregowda, Principal Scientist, ATARI and Nodal Officer, KVK, Bengaluru Rural District for his valuable guidance and encouragement.

I thank all 48 KVKs of Zone XI for sharing their activities and achievements during this period for compilation in KVK times.

I take this opportunity to express my heartfelt gratitude and appreciation towards the vibrant team at KVK, Bengaluru Rural District for their sincere and whole hearted co-operation and involvement in every activity of KVK. I feel fortunate to be a part of this team.


(HANUMANTHARAYA, B. G.)

Senior Scientist and Head

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KVK, ALAPPUZHA

District level Extension officials – Scientist interphase

A technology interphase meeting of the extension officials and Scientists of Alappuzha district was organized by KVK–Alappuzha on 21st September, 2023 in collaboration with ATMA, Dept. of Agriculture and Kerala Agricultural University (KAU). A total of 55 persons including Project Director and Staff of ATMA, Asst. Directors of Agriculture and Agricultural Officers of Alappuzha district and resource persons from ICAR-CPCRI, KAU and KVK-Alappuzha attended the day-long sessions in which the extension officials presented field level problems and the resource persons responded with technological solutions. Detailed discussions on pests, diseases, weeds and soil management with respect to crop production of the district was carried out and technology interventions on different aspects were highlighted by KVK. Based on the deliberations, a crop advisory will be prepared and circulated to all the Agricultural officers of the district for field level implementation.

- (P. Muralidharan, Head and G. Lekha, SMS)



Californian Mastitis Test (CMT) campaign at operational villages of Muhamma and Thanneermukkom

Sub clinical mastitis is a severe, hidden disease of dairy animals which leads to huge economic loss to the farmers. But the farmers are in general unaware about this disease which would not be identified in the early stage and by the time they notice it during the later stage of acute condition, severe economic loss is occurs. In the operational villages of Muhamma and Thanneermukkom, there are about 700 farmers, solely depending on dairy farming activities for livelihood and supplying around 1750 liters of milk daily to 7 Primary Co-operative milk societies. In order to create awareness to these dairy farmers on this malady, CMT demonstration campaigns were conducted as part of the FLD on “Management of subclinical mastitis in dairy cows” in these two villages on 14th and 20th September, 2023 in collaboration with the primary co-operative milk societies. This is a simple test which farmers could do themselves and the result obtained in less than a minute. Four campaigns were conducted in Varanad, Sreekandamangalam, Muhamma (South) and Muhamma (North) societies. Following the method demonstrations, CMT kits were issued to 30 partner farmers. A total of 78 farmers and farm women attended these programmes and were convinced about the test.



- (S. Ravi, SMS)

KVK, BAGALAKOTE

Visit by Principal Scientist and Nodal Officer of ATARI, Bengaluru

Dr. Chandregowda, M.J, Principal Scientist and Nodal Officer, ATARI, Bengaluru visited KVK Bagalkote on 01.09.2023. During the time, he visited the Demo units, Bio control lab, Vermi compost unit, Seedhub unit, Nursery and crops field of KVK Bagalkote and reviewed the KVK activities. Dr. Sudha S, Scientist (Plant Pathology), Dr. Siddappa C. Angadi, Senior Technical Officer, Mr. Basavaraj Naglikar, SMS (Agrometeorology), Mr. Sunil Lamani, Agromet Observer and supporting staff of KVK interacted with nodal officer. Field visit was organized to Andinni Village along with KVK Scientists and staff.



Participation in Krishi Mela at UAS, Dharwad



KVK Bagalkote participated in Krishi Mela organized by UAS, Dharwad from 09.09.2023 to 12.09.2023. In a four days event, exhibited the stall to showcase live models, specimens, information charts, value added products and demonstrations for the benefit of farmers and farm women visiting the KVK stall.

Shri Siddaramaiah, Hon'ble Chief Minister of Karnataka, Shri N. Cheluvarya Swamy, Minister of Agriculture, Karnataka, Shri Santosh Lad, Minister of Labour Department and other state ministers along with Dr. P. L. Patil, Hon'ble Vice Chancellor, UAS, Dharwad, Dr. S. S. Angadi, Director of Extension, UAS, Dharwad, Dr. Shripad Kulkarni, Nodal Officer (KVKs), UAS, Dharwad other dignitaries visited KVK Bagalkote stall and interacted with KVK Scientists. Dr. D. N. Kambrekar, Senior Scientist and Head and other staff participated in the Krishi Mela. More than one lakh farmers visited to KVK stall and got benefit from the Exhibition.

SRP-KVK attachment Closing Ceremony

The closing ceremony programme of Student Ready Programme (SRP) with KVK was held on 29.09.2023. The programme was presided over by Dr. D. N. Kambrekar, Senior Scientist and Head, Krishi Vigyan Kendra, Bagalkote. Dr. S. B. Patil, Assistant Professor (Seed Science) and Head, Agricultural Research Centre, Konnur were the chief guests. Dr. Siddappa C. Angadi, Senior Technical Officer, Mr. Basavaraj Nagalikal, SMS (Agro Meteorology) and Students, Agricultural College, Vijayapura were present.

The programme started with the prayer and ICAR song. Later, the students welcomed the dignitaries by offering flowers. After the welcome speech, dignitaries and guests spoke about the activities of the Krishi Vigyan Kendra. Later, representative of the students, Spoorthi Naduvinahalli, briefed the activities they had done in one month at the Krishi Vigyan Kendra to the dignitaries and guests. Later students Swati G. S. And Suyoksha Kulkarni shares her experiences during their one month stay in KVK. This program was conducted by Varsha Ghanteppagola.



KVK, BELAGAVI - I

Animal husbandry entrepreneurship development for farm women

ICAR-BIRDS Krishi Vigyan Kendra, Belagavi-1 conducted awareness and training programme for 23 farm women of different age group belonging to different SHG's on 4th of September, 2023. The training program included awareness of available opportunities of successful enterprise in Animal Husbandry viz. backyard Poultry, sheep & goat

rearing, vermicomposting and cow/buffalo rearing. Farm women visited azolla, hydroponics, silage, fodder, kitchen garden, vermicompost demo cum production units. Vermicomposting unit and its economics were discussed with farmers and were advised to compost the trash scientifically. Finally created use of waste decomposer through demonstration to them.



KVK, BELAGAVI - II

Beeja Mela

ICAR-KLE Krishi Vigyan Kendra, Mattikopp organized Rabi Beeja Mela and awareness programme on 'Carbon Credit in Agriculture' on 28.09.2023 at KVK Campus. The programme was presided over by Shri. B.R. Patil, Chairman, KLE KVK, Mattikopp. During his presidential remarks, felt that the farmers are incurring financial loss due to low yield of local varieties. Hence, KVK has taken initiation in providing quality seed materials of high yielding varieties of Bengal gram (BGD-111-1), Rabi Jowar (SPV-2217), Wheat (UAS-304 and DWR-162) and Safflower (A-1 and A-2020) through seed production programme in farmers participatory mode. The main aim is to provide seed material on time to the farmers to facilitate timely sowing with a vision to enhance the productivity and income of the farmers. The programme was inaugurated by Dr. Parashuram Patil, Agricultural Economist, NMML Fellow, Government of India, New Delhi and advised farmers to adopt organic and natural farming to increase organic carbon content in the soil. Dr. N. Shashidhar, Seed Production Officer, UAS, Dharwad highlighted about

improved varieties released by UAS, Dharwad and also imparted knowledge on seed treatment. Mr. Sarjesh Gupta, Founder and Lead, C-Gem, Ahmadabad expressed that, carbon farming provides farmers an opportunity to earn carbon credits through carbon storing or reducing greenhouse gas emissions on their own land. The emissions can be offset by selling the carbon credits to the Government nominated authority. Mrs. Sridevi B. Angadi, Senior Scientist & Head, KLE KVK, Mattikoppa emphasized that making availability of recently released varieties which are not available elsewhere in the district is made available at the Beeja Mela looking into the potentiality of the variety and also urged farmers to share the seeds for the next season with the fellow farmers for making availability of improved varieties of seeds in the district. Before providing it to the fellow farmers ensure germination percentage either at the KVK or by sowing 100 seeds in their farm to ensure the germination. Around 800-1000 farmers attended the Beeja Mela. On the occasion 14 stalls were exhibited by leading companies of seeds, fertilizers and pesticides.



Vocational training programme on Soil to rural youths

A certificate course on 'Soil Health Management' to under graduate students of KLE Lingaraj College was designed and organized at KVK campus during 22-30th September, 2023. S.M. Warad, Scientist (Soil Science) & Course Co-ordinator, delivered and interacted with students on Soil: Introduction, Definition, Importance and components of Soil –Soil air, Soil water, mineral and Organic matter, Soil testing: Importance, soil sampling method and application of fertilizers based on Soil test results, Soil Formation: Weathering, Factors influencing Soil formation and study of Soil profile, Soil fertility: meaning, importance and factors affecting soil fertility, Methods of Fertilizer application to the Crops, Micro nutrients : Importance and application types, Organic Manures: Classification, Properties and role of these manures in maintaining the soil fertility, Green manure, Vermicompost, poultry manure, goat manure, etc and Problematic Soils and their management: Causes, properties, management of Acid, Saline, Sodic/alkaline soils, Drainage systems for reclamation and agronomic practices for Saline and

alkaline soils. G.B. Vishwanath, Scientist (Agronomy) explained straight, complex and mixed fertilizers and liquid fertilizers and Dr. Praveen Goroji, Senior Technical Officer, KVK, Dharwad briefed on Fertilizers: Definition, classification, Nitrogenous, phosphorus and potash fertilizers, their characters and chemical changes in soil. Vinoda M. Kochi, Technical Officer, KLE KVK, Mattikopp conducted practical classes on soil sampling and estimation methods of pH, EC, OC, major & micronutrients.

During the valedictory session held on 30.09.2023, Mrs. Sridevi B. Angadi, Senior Scientist & Head, KLE KVK, Mattikopp expressed that soil is an important natural resource in food production and management of its health is need of the hour. Hence, the course was organized to train the youths and suggested the students to use the knowledge they acquired in the course for maintaining healthy soils. Dr. C. Mallanna, Assistant Professor, Dept. of Geography, KLE Lingaraj College co-ordinated the course.



Training on Drudgery Reducing equipments

Mrs. Sridevi B. Angadi, Senior Scientist & Head conducted training on Use of location specific drudgery reducing equipments to Sangala, Hanumapur, Hulkund and Chachadi villages of Savadatti taluk on 27.09.2023. She expressed that 80 per cent of women are involved agriculture activities. These activities are strenuous one such as seedling transplantation, weeding, application of fertilizers, harvesting of crops. Where the women needs to be in bending and squatting position which leads to health hazards. To overcome these problem, simple drudgery reducing equipments can be used such as vegetable seedling transplanter, use of nipping machine in Bengal gram, use of conoweeder, cycle weeder and twin wheel hoe weeder for weeding in Paddy, Cotton and Bengal gram, respectively which reduces the drudgery and improves the work efficiency of the farmwomen.



Special Campaign 3.0 on Swatch Bharat Abhiyan

Swachhata pledge and cleanliness drive was also taken up by KVK staff and students, at office premises, KVK instructional farm, dairy unit and seed unit, training programmes. Awareness programme was conducted for students and Safai Karmacharis on solid and liquid waste management. KVK also organized speech competition for students of Lingaraj College, Belagavi at KVK campus.



KVK, BELLARY

Demonstration of Soybean an alternate cash crop under limited irrigation system at Ballari Taluk

ICAR-KVK Ballari scientists introduced soybean crop, as an alternate crop to cotton and chilli at Y-Kaggal village of Ballari Taluk. Progressive farmer S. Doddabasappa Samudraraj S/o S Viruppanna, demonstrated "On farm testing" trail by introducing soybean varieties like DSB-21 and KDS 753. He was initially persuaded of the advantages of short duration and low-cost expenditure soybean crop over the already-existing cotton and chilly crops. In accordance with the UAS Raichur package of practices, the farmer

successfully sowed the corresponding soybean types on July 20, 2023. he successfully cultivated the crop under protected irrigation conditions using the need-based pesticides and fertilizer. Honourable Vice Chancellor Dr. Hanumathappa, M., UAS Raichur and KVK Ballari team visited the demonstration field and interacted with farmer on crop economics and marketing applicability. Other farmers were also encouraged to spread beneficial crop technology for the benefit of rural communities.



KVK, BIDAR

Extending farm knowledge to krishi sakhis

The impactful training program was organized by ICAR - KVK Bidar for Krishi Sakhi's of Basavakalyan Taluk of Bidar District. The training programme consists of comprehensive curriculum focused on Natural Farming technologies, Soil & Water Conservation practices, Seed & Varieties of Different crops, Plant Protection measures, Horticulture & Livestock Entrepreneurship.

This programme was in collaboration with different organizations such as ICAR, KVK Bidar, RKVY (Government of Karnataka) and District NRLM department of Zilla Panchayat, Bidar. The active participation of Dr. Sunilkumar N. M and Dr. Jaganath Murthy, highlights the importance of collective efforts in promoting sustainable agriculture practices and empowering women in agriculture.

It's evident that the program not only imparted theoretical knowledge but also taken participants to demonstration units at Progressive farmers' plots as a part of practical exposure. This hands-on experience is invaluable for the participants and can significantly contribute to the enhancement of their agricultural skills.

The inclusion of topics related to the importance of Women in Agriculture and agri-based rural entrepreneurship indicates a thoughtful approach, acknowledging the vital role women play in the agricultural sector and encouraging their active participation in entrepreneurial activities related to agriculture.

Overall, the initiative has been well-organized and executed, aiming to benefit both the participants and the agricultural community in Bidar District. Such initiatives are essential for the empowerment of women and overall development of the agricultural sector.



KVK, CALICUT

Exposure cum exploration trip to an innovative black pepper cultivation field at Aluva

KVK Subject Matter Specialist Dr. K.M. Prakash and Dr.P.S. Manoj visited an innovative black pepper field of Mr.Peter Joseph, Punchaputhussery (H) at Aluva, Ernakulam district. The field demonstrates an intensive mono cropping system of black pepper cultivation on concrete poles established by the farmer in an area of about one acre with 800 pepper plants. The initial growth and yield performance of vines at the age of two and half years is very impressive. The vines have reached a height of 8 m on concrete pole standards which are 9 m long buried in narrow holes of one metre depth dug with earth augers. He has used "Pepper Thekken" variety grafted on *Piper colubrinum* rootstocks and also rooted cuttings at the rate of two grafts at the rate of one rooted cutting per standard. A spacing of 6.5' x 7' is followed accommodating 800 standards per acre. He has followed overhead mist and basal drip irrigation with a weed mat lining over the field for weed control. A basal manuring of 12 kg neem cake + 12 kg bone meal + 30 kg FYM + 30 kg goat manure is applied in the trenches before planting which the farmer claims to be sufficient for almost twelve years. He follows three times drenching of *Panchagavya* at the base of the vines. He is anticipating a yield of 10 t of dry pepper per acre in the 4th year. It is a different system of pepper cultivation on dead standards practised by the farmer.



View of innovative black pepper field

(Authors: Dr. K. M. Prakash, SMS
Dr. P. S. Manoj, SMS and
Dr. P. Ratha Krishnan, Head
KVK, Kozhikode, Kerala)



Swachhta Pledge



Collection of plastic waste and cleaning of office premises

Swachhta Hi Seva Campaign organized at KVK

As a part of Swachhta Hi Seva Celebrations, Krishi Vigyan Kendra, IISR, Kozhikode has organized seven programmes till 30.09.2023. In addition to daily Swachhta programmes to clean the office premises, Swachhta Pledge, special campaigns for the collection and disposal of plastic waste from the campus were organized. An awareness programme for extension workers on the importance of Swachhta was conducted on 28.09.2023 and about 25 persons participated in the programme. On site Swachhta campaign was also conducted at the farmers' field at Kothode for cleaning and land preparation to carry out Millets and green gram cultivation.

(Authors/editors: Mr. C. K. Jayakumar, Technical Officer (PA, Computer)
and Dr. P. Ratha Krishnan, Head, KVK, Kozhikode, Kerala)

KVK, CHAMARAJANAGARA

National Nutrition week 2023

National Nutrition week 2023 was observed by ICAR KVK Chamarajanagara from 1st to 7th September with the theme “**Healthy diet, going affordable for all**” at KVK premise, Kadahalli and Mariyala villages for farm women and school students. Dr. Deepa, J., Scientist (Home Science) briefed on importance of the programme and she explained balanced diet which helps in maintaining physical and mental fitness, to prevent degenerative diseases and helps to lead a healthy life. Also, she highlighted about the food groups and it's Recommended Dietary Allowances (RDA) for individuals. The information regarding importance of consumption of millets and its value-added products and establishment of nutrition garden at household level was shared among the participants. In total, 134 farm women and school students participated in the programme.



KVK, CHIKKABALLAPURA

ICAR-Krishi Vigyan Kendra, Chintamani organized six days training programme for Krishi Sakhis from 25.9.2023 to 30.09.2023. Training was inaugurated by Dr. Papireddy, Senior Scientist and Head. Different technical sessions like Soil health management, types of seeds, seed treatment, cropping systems, nutri-garden, balanced diet, communication skills, participatory rural appraisal techniques, integrated farming system, organic farming, integrated pest management etc., were conducted. Participants were taken for exposure visit to progressive farmers' fields. 37 Krishi Sakhis participated in the programme.

Off campus training on integrated management of leaf roller and bihar hairy caterpillar in mulberry was organized at Appegowdanahalli village of Sidlaghatta taluk. Dr. Swathi, Scientist (Plant pathology) explained about symptoms and integrated management practices for leaf roller and bihar hairy caterpillar in mulberry.

Dr. Praveenakumar R. Scientist (Horticulture) participated as resource person in training programme organized by Coromandal International Ltd. at Achepalli village of Bagepalli taluk and delivered a lecture on integrated crop management practices in tomato and potato. 52 farmers participated in the programme.



Krishi Sakhi Training programme



Training on integrated crop management practices in tomato and potato



Off campus training on integrated management of leaf roller and Bihar hairy caterpillar in mulberry

Papireddy M., Tanweer Ahmed, Praveenakumar and Swathi B

Two days Capacity building programme on Scientific Beekeeping

ICAR, Krishi Vigyan Kendra, Chikkamagaluru, has organized **Two days Capacity building programme on Scientific Beekeeping** at KVK, Chikkamagaluru on September 25 and 26, 2023.

Dr. Suchithra Kumari, M.H, Scientist (Plant Protection), KVK, Chikkamagaluru has given introductory remarks that, this is the platform to learn about on importance of beekeeping in as a source of income as an enterprise one can involve in commercial activities and further briefed about the capacity development programmes, skill training programmes, FLDs, OFTs which are conducting by the KVK.

Dr. Krishnamurthy, A. T., Senior Scientist and Head, KVK, Chikkamagaluru, in his presidential remarks briefed about the importance of beekeeping, District was known for its horticulture crops and bees play a significant role in pollination of crops and increases the yield by 15-20%. Further briefed that KVK, Chikkamagaluru encouraging the rural youths to come forward and become beekeeping entrepreneurs by engaging in the activities like production of honey, bee-pollen, bee wax, bee venom and processing, branding and marketing.

Sri. Suresh Horahatti, Progressive Honey bee farmer practically demonstrated the Honey bee colony, honey extraction process and about the economics and marketing of Honey products. Second day on 26.09.2023 there were two technical sessions were organized, Sri. Haluvalli Chandrashekar, Progressive farmer and Honey Bee entrepreneur, Kalasa, delivered the lecture on scientific beekeeping on Stingless Bee and their economics. Further live demonstrated domesticating of transferring of natural colony of stingless bee.

Sri. Suresh Chandra Datta, Honey Bee entrepreneur, Mudigere explained briefly on Scientific cultivation of Honey bee and various pollinators and nectar producing plants.

Dr. Suchithra Kumari, M.H., Scientist (Plant Protection), KVK, Chikkamagaluru enlightened about the incidence of pests and diseases to honey bee colony and their integrated management practices.

Total 35 participants participated and got benefit out of it.



(Dr. Krishnamurthy, A.T., Sr. Scientist & Head) (Mrs. Shabnum, PS., SMS (Agromet.)

KVK, CHITRADURGA

Training programme for Krishi Sakhi (I Batch)

A six days training programme for community resource persons of NRLM project on environment friendly agricultural practices was organized at ICAR-KVK, Chitradurga from 11-09-2023 to 16-09-2023 in collaboration with K.S.L.P.S. - Sanjeevini, Zilla Panchayath, Chitradurga.

The programme was inaugurated by Dr. R.C. Jagadeesha, Honorable Vice Chancellor, KSNUAHS, Shivamogga. During his inaugural speech he discussed about the problems faced by the farmers in field. In earlier days Agriculture Assistants were appointed by the Department of Agriculture, to address the gross root level problems, but now due to the lack of staff in the department the Krishi Sakhi's are being appointed to carry out the role of Agriculture Assistants. The selected Krishi Sakhi's have to participate actively in the training programme and get the information from various trainers and should get aquent with more knowledge pertaining to agriculture and allied subjects which will be helpful to address the field problems.



Dr. K.T. Gurumurthy, Director of Extension, KSNUAHS and Shivamogga presided over the programme and during his presidential address he briefed about aims of NRLM project and also suggested the participants to take more information from the resource persons regarding improved agriculture and allied technologies and disseminate the same information to farming community and should act as bridge between the university and farming community.

Dr. Kumara O., Senior Scientist and Head, KVK during his introductory speech discussed in detail about aims of NRLM project to appoint Krishi Sakhi, Pashu Sakhi, Udyoga Sakhi etc. the major focus of the project is to improve the livelihood of rural people. He also discussed that the 6 days training programme covers various agriculture and allied topics by utilizing the services of experts. The selected candidate need to learn with good interest and utilize the knowledge acquired at gram Panchayath level to train the farmers. The Krishi Sakhi's have to work with department of Agriculture in a similar way as that of Asha workers for health department.

All the senior officials of KSNUAHS, Shivamogga, Scientists and Technical officers of KVK, Officials from Zilla Panchayath and 33 Krishi Sakhi participants were present during the programme.

Training programme for Krishi Sakhi (II Batch)

A six days training programme for community resource persons of NRLM project on environment friendly agricultural practices was organized at KVK, Chitradurga from 25-09-2023 to 30-09-2023 in collaboration with K.S.L.P.S.- Sanjeevini, Zilla Panchayath, Chitradurga.

The programme was inaugurated by Dr. S.U. Patil, Special officer (Seed), KSNUAHS, Shivamogga inaugurated the programme and during his inaugural speech, Krishi sakhis should act as representatives of the University at field level and need to support the farmers in selection of crop, cropping pattern, value addition, pest and disease management and marketing aspects. He also suggested the participants to participate actively in the training programme gain better knowledge regarding agriculture and allied subjects.

Dr. Suresh D. Ekabote, ADR, ZAHRS, Babbur Farm, participated as Chief guest and suggested the participants to collect the contact numbers of all the resource persons and get the information as and when needed.

Dr. O. Kumara, Senior Scientist and Head, KVK in his address discussed about the outline of six days training programme. During the training the topics regarding agriculture, Horticulture, Sericulture, Veterinary, Apiculture etc will be covered and participants should involve in actively in the sessions and extract more information from the resource person that would help them to address the field problems.

Dr. Prasanna Kumar, Deputy Director, KSSOCA, Dr. Bala Chandan Gowda, Area Manager, NSP, all scientists and technical officers of KVK along with 32 participants were present.



Training Programme on Fish Farming as a profitable venture

ICAR-Krishi Vigyan Kendra, Chitradurga organized three days training programme on Fish farming as a profitable venture from 20th September 2023 to 22nd September 2023. The programme was inaugurated on 20th September 2023. In Inauguration programme, Dr.O.Kumara., Senior Scientist and Head, KVK addressed the gathering about the importance of fish farming as a subsidiary and profitable venture. Dr. Suresh.D.Ekabote., Assistant Director of Research, ZAHRS briefed that fish farming is a good source of income along with agriculture and Horticulture crops. Totally 32 farmers enrolled and participated in the training programme.

Sessions on important aspects of Fish farming were covered. Dr.Preethi, Scientist (Ag.Extn) gave a lecture on Fish and Fisheries of Indian Scenario. Dr.Vijay kumar, Scientist (Fisheries) gave an information on commercially important fish species suitable for culture. Dr. Harsha Nayak, Scientist (Inland Fisheries) delivered a lecture on Water Quality management in fish culture and Dr.Sruthisree.C., Scientist (Inland Fisheries) conducted a session on Fish diseases management and its control and Mr.Manjunath, ADF, department of Fisheries, Hosadurga Taluk shared the information on Fisheries Department schemes and facilities available to fish farmers. Farmers queries were answered by the resource persons. Feedback was taken from the trainees about the training programme and got good feedback about the training programme. Valedictory and certificate distribution of training programme was organized on 22nd September 2023.



KVK, DAKSHINA KANNADA

Implementation of FLD on “Integrated Piglet Management”

(Contributors: Dr. Shivakumar, R. Scientist and T. J. Ramesha, Head)

The ICAR-Krishi Vigyan Kendra, Dakshina Kannada organized Capacity Development Programme under the FLD on ‘**Integrated Piglet Management**’ at Vagga village, Bantwala Taluk, Dakshina Kannada district on 12.09.2023. Dr. Shivakumar, R., Assistant Professor, ICAR-KVK, Dakshina Kannada briefed about the management of sow during the pregnancy and farrowing as well as from birth to till they attain the age of two months for better survival, body weight and income. About 32 farmers were benefitted from this programme. Ten beneficiary farmers were selected and provided with critical inputs.

(Dr. Shivakumar, R. Scientist and Dr. T. J Ramesha)

As part of Swachatha Action plan programme **Microbial based agricultural waste management using Vermicompost** the KVK Scientists visited the adopted village of Koila in Kadaba taluk where the Farmer Prashant Rai is taking up vermicompost production on entrepreneurship mode. Harish Shenoy Asst. Prof of Agronomy KVK, Mangaluru visited the unit and gave information on use of compost culture for enhancing the compost process in vermicompost. He also gave information about enrichment of vermicompost with addition of Trichoderma. Shri Prashnath Rai and his family members were present on the occasion.

(Contributors: Dr Harish Shenoy and Dr. T. J Ramesha)



KVK, DAVANAGERE

Follow up field visit to the FLD plots

Implemented the FLD – Integrated crop management in Foxtail millet at Kalledevrapura, Jagalur taluk. Mr. Mallikarjuna B.O., SMS (Agronomy) visited the FLD plots and observed the crop status suffering from moisture stress and long dry spells of 32 days. Suggested the farmers to give protective irrigation to the crop, as the crop is at grand growth phase. Follow up field visit to the FLD Maize + Redgram plots at Kattegehalli, Jagalur taluk. Crop are drying due high temperature with long dry spells of 45 days.

[Mallikarjuna B.O. SMS (Agronomy)]



Training for Input dealers



Mr. Mallikarjuna B.O., SMS (Agronomy) delivered lecture on the improved production technology for the Rabi crops for DAESI- students. The program was organized by department of agriculture in collaboration with MYRADA, Holalkere. Interacted with the input dealers regarding present the incidence of fall army worm in maize and finger millet due to long dry spells. Suggested to harvest the crop for fodder purpose.

[Mallikarjuna, B.O. SMS (Agronomy)]

Integrated Crop Management in Onion

Field Day on “**Integrated Crop Management in Onion**” crop was conducted at Kalledevarapura village of Jagalur Tq. by ICAR-Taralabalu Krishi Vigyan Kendra, Davanagere. Dr. Devaraja T.N., Senior Scientist and Head inaugurated the Field Day and informed the farmers about the value addition, grading, and processing of vegetables. By following Integrated Crop Management practices farmers can able to obtain good productivity. Horticulture Scientist Mr. Basavanagowda M.G. gave detailed information about the benefit of cultivating Bhima Super onion variety, seed treatment with Trichoderma, use of Micro nutrient foliar spray, use of yellow and Blue sticky traps for managing the insect load and soil test based nutrient application. Mr. Thotaiah T., Senior Assistant Director of Horticulture, gave information about schemes like MNREGS, NHM, PMKSY will help the farmers in getting self-sustainability in income. Agronomist Mr. Mallikarjuna B.O., Bidarakere TAFPC President, Mr. Manjunatha, Vice President, Mr. Sannagowda, Director, Mr. Krishnamurthy and 30 farmers participated in the Field Day.



Mr. Basavanagowda M.G., SMS (Horticulture)

KVK, DHARWAD

Participation in Krishi Mela – 2023

University of Agricultural Sciences, Dharwad organized State level Krishi Mela-2023 from 9-12 September, 2023 under the theme “Millets for Sustainable Agriculture”. In this Mela, Exhibition on Agricultural inputs, Farm machinery, Seed Mela, Hi-Tech Horticulture, Fruit and Flower show and amazing insect world and livestock exhibition are organized. ICAR-KVK, Dharwad participated and exhibited the KVK technologies. Shri Gurudatta Hegde, District Collector and District Magistrate, Dharwad and Dr. P. L. Patil, Vice Chancellor, UAS, Dharwad visited the stall and interacted with scientists. Around 10.65 lakh farmers participated in this four-days



Visit of Brazil Scientist to ICAR-KVK, Dharwad

Dr. Jose Geraldo Eugenio de Frances from Federal Rural University Campus of Serra Talhada, PE, Brazil (UFRPE, Brazil) visited various Department of UAS, Dharwad to discuss Research, Extension and Entrepreneurial collaboration with UFRPE, Brazil and possibility for making MoU with UAS, Dharwad. Dr. Jose Geraldo along with Dr. S. S. Angadi, Director of Extension, UAS, Dharwad, Dr. S. A. Gaddanakeri, Director of Extension, UAS, Dharwad, Dr. S. N. Jadhav, Head, Staff Training Unit, UAS, Dharwad, Dr. A. Bhimappa, Professor of Ag. Extension, UAS, Dharwad visited ICAR-Krishi Vigyan Kendra, Dharwad on 14.09.2023 and visited Nutri Garden under Precision Farming unit and Millet Crop Cafeteria demonstration unit established in the KVK premises. The Brazil Scientist was happy with demonstrations and appreciated the work done by KVK which is very much required in present day farming to reduce labour requirement and obtain higher productivity with minimum inputs (water and fertilizers).



Village Seminar of ARS scientists at Pudakalakatti village

Newly recruited six ARS scientists as part of their Field Experience Training (FET) was attached to ICAR-KVK, Dharwad from 4-22 September, 2023 as its flagship programme of 113 Foundation Course for Agricultural Research Service (FOCARS). Village Seminar was organized at Pudakalakatti village of Dharwad taluka on 20.09.2023 by ARS Scientists. Dr. S. S. Angadi, Director of Extension, UAS, Dharwad presided over the function and addressed the farmers about effective utilization of information by the expert scientists and different technologies from the UAS, Dharwad which helps in reducing the cost of cultivation, use of pest and disease resistant varieties/seeds. Dr. S. N. Jadhav, Head, Staff Training Unit, UAS, Dharwad, delivered lecture on pest and disease management in cotton, soybean, chickpea, wheat etc. Dr. N.A.Vijay Avinashilingam, 113 FOCARS Director, Principal Scientist & Professor, ICAR-NAARM, Rajendranagar, Hyderabad addressed the gathering about importance of FET programme at village level. Dr. M. S. Biradar, Senior Scientist and Head, ICAR-KVK, Dharwad told about different KVK activities taken at Pudakalakatti village. Dr. Jayashree Pattar, Scientist (Animal Science), ICAR-KVK, Dharwad addressed the farmers about awareness about Lumpy Skin Disease. ARS Scientists Dr. Ramesh and Dr. Vinayaka presented the PRA tools, social and technology map of the Pudakalakatti village during village seminar. Dr. Airadevi P. Angadi, Scientist (Horticulture), ICAR-KVK, Dharwad were present during the occasion. Around 70 farmers including Gram panchayat chairman & members were participated in the programme.



Institute Seminar of ARS scientists at ICAR-KVK, Dharwad

Institute Seminar of newly recruited ARS scientists as part of their Field Experience Training (FET) attached to KVK Dharwad as its flagship programme of 113 FOCARS held at ICAR-KVK, Dharwad on 21.09.2023. Dr. B. D. Biradar, Director of Research, UAS, Dharwad presided over the function and discussed and gave suggestions to include the evolution of agriculture and allied farming from the ancient to new era, adoption of organic and natural farming, reason for decline in dairy farming. Dr. N.A.Vijay Avinashilingam, 113 FOCARS Director, Principal Scientist & Professor and monitoring faculty from ICAR-NAARM, Rajendranagar, Hyderabad in his introductory remarks, he said that the FOCARS is designed to primarily equip the newly recruited scientists with the necessary competencies to plan, manage and communicate need based research to meet the current and emerging challenges of Indian Agriculture. Field Experience Training (FET) has been a core component of FOCARS. The six ARS scientists presented their field experience and village survey information along the problems and technologies adopted and alternate solutions for the Pudakalakatti village. Dr. M. S. Biradar,

Senior Scientist and Head, ICAR-KVK, Dharwad welcomed the guests and gathering. Dr. Nagaratna Biradar, Principal Scientist and Head, IGFRI, Dharwad, Dr. B. S. Patil, Principal Scientist and Head, IARI RRC, Dharwad, Dr. S. L. Patil, Principal Scientist and Head, IIPR, RC, Dharwad along with Scientists participated and gave valuable suggestions to ARS probationers. Dr. Jayashree Pattar, Scientist (Animal Science), ICAR-KVK, Dharwad co-ordinated the 19 days FET programme. Dr. Airadevi P. Angadi, Scientist (Horticulture), ICAR-KVK, Dharwad presented vote of thanks.



Visit of Director of Extension, UAS, Dharwad to ICAR-KVK, Dharwad

Dr. S. S. Angadi, Director of Extension, UAS, Dharwad visited ICAR-KVK, Dharwad along with Dr. S. N. Jadhav, Head, Staff Training Unit, UAS, Dharwad on 22.09.2023. Reviewed about ongoing OFTs, FLDs, CFLDs, farm trials, projects and discussed about the staff position. Demonstrations plots/ units/ farmers hostel were visited and staff meeting was conducted. The suggestions were made for improvement and smooth conduct of KVK activities.



KVK, ERNAKULAM

Fish Seed Sales mela conducted

As a part of the Ernakulam KVK's programmes to supply quality farming inputs to the farmers, a Pearlsport fish seed sales mela was organized at Athani near Ernakulam on 7th September 2023. The programme was done in collaboration with Kerala Agro Industries Corporation (KAICO). The fish seeds were produced by the Pearlsport Breeders Association, Karumaloor under the technology backstopping of KVK. Seeds packed in oxygen-filled polythene bags 2500 in numbers were distributed. Dr.P.A Vikas, SMS (Fisheries) explained seed caring, acclimatization, stocking, feeding, and other management aspects to the farmers.

Swachhata Hi seva: Cleaning drive conducted at Fish seed production ponds

As part of the Swachhata Hi seva 2023, ICAR-KVK Ernakulam conducted a cleaning drive at its Satellite fish seed production ponds at Puthukkad, Karumaloor. The seed production farmer group members and KVK staff participated. Dr. P.A. Vikas, SMS (Fisheries) conducted an orientation session on significance of cleaning the ponds and maintaining water quality to enhance survival percentage of hatched out fish fry.



KVK, GADAG

Training on cashew crop and distribution of agriculture inputs to SC farmers

ICAR-Directorate of Cashew Research, Puttur and ICAR-K.H.Patil KVK, Gadag jointly organised a programme for provision of agricultural inputs to the SC farmers on 26-09-2023 at KVK Campus. Dr. Rajashekar H, Scientist (Plant Pathology), ICAR-DCR, Puttur inaugurated the programme and provided information on various aspects of Cashewnut cultivation and then provided details of inputs to be provided mainly Tarpaulins, Nutri-garden seed kit and Arka Vegatable Special (Micronutrient mixture). Dr.Manjunath G.N., Scientist (PMA&S), ICAR-DCR, Puttur said that ICAR-K.H.Patil KVK, Gadag has played a vital role in area expansion of cashew crop in the District and farmers have been successfully getting higher profit from this crop. Dr.Veena G.L, Scientist (Fruit Science), Directorate of Cashew Research, Puttur advised farmers to prepare value added products from cashew apples to increase their income. Dr.Sudha Mankani, SMS (Home Science) spoke on importance of nutri-garden and insisted on consuming fresh and chemical free vegetables by establishing nutri garden. The agriculture inputs were provided to 100 SC farmers.

[Dr. Sudha V. Mankani, Senior Scientist and Head (I/c.), ICAR-KVK, Gadag] & Smt. Hemavati R.H., SMS (Horticulture), ICAR-KVK, Gadag]



One day training programme for board of directors of FPO

ICAR-K.H.Patil KVK, Gadag in collaboration with Priyadarshini Self Employment Training and Rural Service Centre, Ron organized one day technical training to Board of Directors of Somalingeshwar FPO of Ron Taluk. Shri.S.H.Adapur, Retd.SMS (Agricultural Extension) conducted a technical session on "Formation and modus operandy of FPOs" and explained the role of farmer members in successful functioning of FPOs. Dr. B.M.Murgod, Programme Assistant (Animal Husbandry), ICAR-K.H.Patil KVK, Gadag engaged a session on Dairy Farming and





thrown light on importance of Dairy enterprise and Sheep & Goat rearing enterprise in developing an FPO as a farmer friendly business model. Dr. Vinayaka Niranjan, SMS (Ag. Engg.), ICAR-K.H.Patil KVK, Gadag introduced various improved agricultural equipment to the trainees and explained the functioning of Agricultural Machinery Custom Hiring Service Centres. Totally 16 Directors of FPO participated in the training programme.

Dr. B.M.Murgod, Programme Assistant (Animal Husbandry),
&
Dr. Vinayaka Niranjan, SMS (Ag. Engineering)

Training and interaction programme of gadag sericulture FPO

Gadag Sericulture FPO and ICAR-K.H.Patil KVK, Gadag jointly organised training cum interaction programme at KVK campus on 27-09-2023. The programme was inaugurated by Shri. Mahesh Waghe, Deputy Director of Sericulture, Gadag and in his inaugural address he encouraged to develop the Sericulture FPO as a model in the entire country. Shri C.H.Mudgal, Assistant Director of Sericulture, Gadag briefed about expansion in sericulture area in Gadag District off late and gave information on various schemes of sericulture available from the Department. Shri Vishwanath Gaddad, President of Gadag Sericulture FPO thrown light on achievements of the FPO and hailed the contributions of farmer members in smooth functioning of FPO. Shri. S.K.Mudlapur, Retd.SMS (Plant Protection), ICAR-K.H.Patil KVK, Gadag talked about pest and disease management in mulberry crop. Shri.F.G.Veerangouda, Progressive Sericulture Farmer and Retired Assistant Director of Sericulture conducted a session on Novel Methods and Techniques of Silk Worm Rearing. Shri. Madan Gopal, Project Assistant, Varsha Resource Society spoke about Development of FPOs and gave insights on innovative methodologies to be adopted to tackle the price fluctuations in the market. About 240 farmers of Gadag District participated in the programme.



Dr. Vinayaka Niranjan, SMS (Ag. Engineering) and Shri N.H.Bhandi, SMS(Soil Science)

KVK, HASSAN**Siridhanya Bele- Arogya Siri**

On the eve of International year of millets-2023 ICAR-KVK Hassan in collaboration with AICRP on small millets, UAS, Bangalore, Agriculture Department, Hassan, Sri Sharada High School, Byadrahalli, Sneha Seva Samsthe and C.R. Patna organized the Millet Mela (**Siridhanya Bele- Arogya Siri**) at Sri Sharada High school, Byadrahalli, C. R. Patna taluk on 26-09-2023.

Dr. Rajegowda, Senior Scientist and Head, KVK, Hassan during his introductory speech addressed the history of millets cultivation, status of malnutrition, benefits of millet consumption and possible ways to promote millet production and consumption. Dr. T. E. Nagaraj, Professor and Head, AICRP on small millets, UAS, Bangalore, has inaugurated the programme and highlighted the importance of millets in nutrition and health, its uses and improved agronomic practices. He also spoke about new varieties released by University of Agricultural Sciences, Bangalore, processing and marketing aspects of millets.

Mrs. Komala, President, Gram Panchayath, Byadrahalli chaired the programme and during her

presidential remarks she mentioned the importance of millets to achieve nutritional security. During the programme, the participants prepared mouthwatering recipes. An effort was made to create awareness in people about the nutritional importance of pseudo cereals, the benefits of consuming them, the method of preparing value added products and displayed several dishes viz., navane payasa, navane laddu, navane palav, saame laddu, navane, haaraka, saame and ragi mixture and chakkuli, ragi dosa, ragi shavige, ragi halwa, ragi laddu, ragi uppittu, ragi flour, ragi paddu, pakoda and idli.

Mrs. Pallavi, Agriculture Officer, C. R. Patna taluk, Dr. Shrinivas Deshpande, Scientist (Agril. Engineering), Dr. Sanketh, C. V. Scientist (Agril. Extension), KVK, Hassan, Mr. Chakrapani, Director of Sneha Seva Organization, Channarayapatna, teachers and students of Sri Sharada High School, Byadrahalli were participated in the programme and involved in farmers scientist interaction during the programme. Totally 193 farmers and farm women participated in the programme.



KVK, HAVERI

Training Program on Mushroom Cultivation

“Training Program on Mushroom Cultivation” was organized on 30.09.2023 at KVK, Haveri (Hanumanamatti) to farming community of Haveri district. Dr. J. S. Hilli, Dean (Agri) and Campus Head, Agricultural College, Hanumanamatti inaugurated the programme and in his inauguration speech he opined that mushrooms have many elements required for good health and it can be cultivated by landless farmers also. Further, he added that by utilising the leisure time, women/housewives can grow this in less space and earn better income. Dr. Guruprasad G. S., Senior Scientist and Head of KVK, Hanumanamatti during his introductory speech briefed that mushroom farming is a less laborious activity with very low investment and can fetch higher income in 20-25 days. He also said that Mushroom cultivation recycles *agricultural wastes into an easily digestible protein source* that enriches the human diet. Then Dr. Noor Nawaz A.S., Assistant Professor (Department of Microbiology), College of Agriculture, Hanumanamatti gave lecture on oyster, button, milky and paddy straw mushroom cultivation. Dr. Santhosh H.M., Scientist (Horticulture) informed the farmers about sources of seed availability, marketing aspects and post-harvest handling of mushroom. Smt. Basavannemma Chalavadi and Smt. Renuka from Nagavanda village of Rattihalli taluk who are involved in mushroom cultivation shared their experience in mushroom cultivation. Method demonstration on Oyster mushroom cultivation was also carried out after the technical session. About 50 farmers from Haveri district participated and received participation certificates.



Poshan Abhiyaan training programme

On the Eve of Poshan Abhiyaan, KVK Haveri organized on-campus training programme on “Importance of nutri garden and millets for sustainable livelihood” in collaboration with Department of Women and Child Development, Ranebennur on 16.09.2023. Dr. Guruprasad G. S, Senior Scientist and Head, KVK, Hanumanamatti presided over the training program. He emphasized on the importance of millets in the daily diet as highly nutritious which in turn helps in reducing malnutrition and staying healthy for long years.

Dr. Parvathi Hundekar, Child Development Project Officer, Ranebennur called all the Anganwadi workers for actively participation in the programme and make it a great success. She explained about the healthy daily meals for pregnant women, children and adolescents. Home Scientist Smt. Vidya V Sangannavar explained the importance of Poshan Abhiyan programme and concerned about anemic and malnourishment in pregnant women, lactating mothers and teenagers.

In this program, scientists of the KVK, Dr. Shivamurthy D highlighted the importance and cultivation of millet crops. Dr. Mahesh Kadagi briefed about the importance of milk, milk products and eggs in the daily diet. Dr. Shantaveerayya highlighted the importance of climate in cultivation of crops in kitchen garden and Mr. Chandrakant Kotabagi narrated the Jalandolan portal of Poshan Abhiyan and importance of Poshan tracker apps. Dr. Laxmi Patil highlighted cultivation of horticulture crops in kitchen garden. In this program more than 100 Anganwadi workers including Poshan Abhiyan Coordinator, Senior Supervisors and Supervisors were participated.



KVK, IDUKKI

Conducted various tribals sub plan schemes in different villages of idukki district

People of different tribal groups live in Idukki district. The 1991 census listed the population of 30 different tribal groups in Idukki. However, 16 of these groups have less than 100 people. The largest tribes are the Mala Arayan, Muthuvan, Mannan, Urali, Ulladan, Paliyan and Mala Pulayan. Mala Vedan and Mala Pandaram are also found in Idukki, but their population is much smaller than that of the other groups. The Muthuvan, Mannan, Paliyan and Mala Pulayan are culturally related to groups in Tamil Nadu. The Urali, Ulladan and Mala Arayan appear to have migrated to Idukki from other parts of Kerala. Tribal group population of Muthuvan 10,633, Mannan 6,888, Mala Arayan 15,379, Urali 5,843, Ulladan 2,943, Mala Pulayan 2,106, Paliyan 1,442 Mala Vedan 1,235 and Mala Pandaram 712. The major livelihood activity of the tribal people is agriculture.

ICAR KVK Idukki organized **various** tribal sub plan programs in different villages of Idukki district. As part of TSP scheme 2023-24, off campus training on cultivation aspects of Arka Sarath French Bean Variety in Kanthalloor, off campus training on Package of practices to control kids mortality in Kanthalloor, supply of Chitralada Tilapia Fish fingerlings in Kunjipettykudy, transplanting of paddy in Korangatty area, off campus training of Khethi Rakshak against monkeys, method demonstration of seed treatment of Arka French beans seeds using trichoderma, soil test campaigns and supply of fingermillet bio-fortified seeds to tribal farmers. Dr. R Marimuthu, Senior Scientist and Head, Dr. S. Jayababu, SMS (Animal Husbandry), Ms Manju Jincy Varghese, SMS (Soil Science), Mr. Sudhakar Soundarajan, SMS (Plant Protection), Ms. Ashiba A, SMS(Agronomy) and Preethu K Paul, SMS (Agricultural Extension) ICAR- Krishi Vigyan Kendra, Idukki, Kerala coordinated these schemes effectively.



Ms. Preethu K Paul, SMS Agricultural Extension

KVK, KALABURAGI - I

Training Programme on organic farming Diagnostic field visit by KVK Scientists

A diagnostic field visit and inspection was conducted by ICAR-Krishi Vigyan Kendra in collaboration with ZARS and Department of Agriculture, Kalaburagi to the Sugarcane and Sunflower affected fields of Chowdapur, Karajagi, Ganagapur, Guddewadi, Kirasawalagi villages of Afazalpur taluka of Kalaburagi district on 15.09.2023. The chaffyness was observed in few sunflower head and seed setting, pollination up to 30% observed in

many fields. In sugarcane field observed deficiencies of zinc and iron nutrients and also observed sucking pest, wilt and root grub infestation in Redgram fields and remedy given to the farmers. In team, Dr. Yusufali Nimbaragi, KVK, Scientist (Agronomy), Dr. Rachappa Haveri, Professor (Entomology), Dr. Mallikarjun Kenganal, Assistant Professor (Pathology), ZARS, Sri. Gadaginamani, ADA, Afazalpur, RSK, Atnoor Agriculture Officer, Saifuddin Mulla, Afazalpur Agriculture Officer, Anand, ATMA staff and 30 farmers were present and benefitted.



Training Programme on organic farming

ICAR-Krishi Vigyan Kendra, Kalaburagi-I in association with Sri Dharmasthala Manjunatheswra, NGO, Gogi village, Shahapur Dist. Yadagiri and Sri Dharmasthala Manjunatheswra, NGO, Hasargundagi Tq. Afazalpur Dist. Kalaburagi organised one day exposure visit to KVK and training programme on Importance of Organic Agriculture and Agril. Employments to the farm women of Shahapur and Afzalpur on 26th and 30th, September, 2023 respectively. During the programme, Dr. Shreenivas, B. V., Scientist (Soil Science) explained about the KVK



mandates, facilities and services available at the KVK. Further, he discussed about importance of soil and water testing in Agriculture and soil and water conservation methods. Dr. Zaheer Ahamed, Scientist (Pathology) interacted with participants on integrated disease management in field crops. Dr. Yusufali Nimbaragi, Scientist (Agronomy) provided information about integrated crop management of Rabi crops and Dr. Vasudev Naik, Scientist (Horticulture) explained about scientific technologies of Horticulture crops and importance of Nutri and Terrace Garden. After the programme, participants visited to different method demonstration units of the KVK like, compost, vermicompost, hydroponics, azolla unit, poultry unit, nursery, medicinal & aromatic plots, soil testing labs, organic inputs demo, museum, terrace garden and dairy farm. A total of 50 farm womens from Gogi and Hasargundagi village of Shahapur and Afzalpur taluk respectively were actively participated and benefitted from the training.



Authors

Dr. Raju G. Teggelli

Senior Scientist and Head

Dr. Shreenivas B V

Scientist (Soil Science)

Dr. Vasudev Naik

Scientist (Horticulture)

Dr. Zaheer Ahamed

Scientist (Pathology) and

Dr. Yusufali Nimbaragi

Scientist (Agronomy)

KVK, KALABURAGI - II

Diagnostic field visit of Chilli crop by ICAR-KVK, Kalaburgi-II (Raddewadgi) scientist at Andola Tq. Jewargi on 21-09-2023

Dr. Chethan T, Scientist (Horticulture) visited chilli crop at Andola village Tq. Jewargi on 21-09-2022. The crop is damaged by invasive black thrips, *Thrips parvispinus* in the farmer's field. It was recommended that

- Sowing of border crops like maize, bajara, sorghum which act as barrier and trap for the thrips.
- Installation of yellow sticky traps, 35 No.s/ acre
- Application of neem cake 200kg/ac to induce resistance
- Foliar application of *Verticillium lecanii* and *Beauveria bassiana* @ 2g/lt
- Foliar application of fipronil 5% SC @ 0.5 ml/lt or diafenthuron 1.0g/lt or spinetoram 11.7% SC @ 1.0 ml/lt of water



And suggested improved scientific production practices of chilli to enhance the productivity of chilli crop. To induce immunity, spraying of macro and micro nutrients was suggested.

Awareness about cleanliness under Swachhta hi seva program

ICAR-Krishi Vigyan Kendra, Kalaburgi-II (Raddewadgi) organised Swachhta hi seva program at Hannikera Tq. Chittapur Dist. Kalaburgion “**Awareness about cleanliness**” dated 26-09-2023. During the event Dr. Chethan T., Scientist (Horticulture) highlighted the importance of cleanliness with respect to agriculture and in daily life. Smt. Farzana M.K, Sr. Technical officer (Soil Science) has briefed about management of soil health by practicing good agricultural practices. Finally, all the farmers and staff took oath on swachhata. More than 32 farmers benefited by the program.



KVK, KANNUR

Transfer of technology for the production of Entomopathogenic Nematode (EPN)

EPNs such as *Steinernema* and *Heterorhabditis* are proven and recommended bio-agents against the major crop pests in Kerala. KVK Kannur also implemented several OFTs and FLDs to assess the efficacy of EPNs, including an OFT on the effectiveness of different EPN formulations on pumpkin beetle management and FLD on the eco-friendly management of tomato fruit borer with EPN Kalpa solution. EPNs have been shown to be highly efficient bio-agents against these pests. CPCRI Kasargod produces EPN Kalpa solution, but they are unable to meet the huge demand for EPNs. Due to shortage of supply, demand for EPNs is not being met. Also, due to the low shelf life of these EPNs, they can't be brought from faraway places. Hence, to meet market demand and ensure timely supply of EPNs such as *Steinernema* and *Heterorhabditis*, mass production of such bio-agents locally is necessary in Kannur district. Taking this into account KVK Kannur has purchased the technology for production of EPN Kalpa solution from CPCRI Kasargod, Kerala. Exchange of MoA on technology utilization was done by Shri. K. B. Hebbar, Director, ICAR-CPCRI to Dr. P. Jayaraj, Programme Coordinator and Dr. Manju K. P., Assistant Professor (Entomology), KVK Kannur in a function held at CPCRI on 2nd September 2023.



KVK, KASARGOD

Participation in Block Level Kisan Mela organized by Department of Agriculture Development & Farmers' Welfare (Kerala)

ICAR-KVK, Kasargod participated in two exhibitions of Block level Kisan Mela in connection with Bharithiya Prakrithi Krishi Vikas Yojana (PKVY) at Manjesar and Karaduka blocks of Kasaragod district on 25/09/2023 and 29/09/2023 respectively. In these exhibitions, KVK exhibited technological products related to organic cultivation practice of coconut, arecanut and paddy which includes controlling pest and diseases using bio-agents and production of bio-inputs like vermicompost and coir pith compost, mushroom spawn etc. Around 950 farmers and 48 extension personals visited the exhibition stall and benefitted on maintaining their farms in a sustainable model. Dr Benjamin Mathew, SMS-Horticulture, ICAR-KVK, Kasaragod had a technical session on the topic “**Organic Farming**” in connection with Bharithiya Prakrithi Krishi Vikas Yojana (PKVY) during Kisan Mela organized by Nileshwar block of Kasaragod district. Around 145 farmers attended the session.



KVK, KODAGU

Training programme on packing and labelling of value-added products

One-day training programme on packing and labelling of value-added products was conducted for 25 members of Maldare and Bittangala Farmers producers' organization of ODP (NGO) on 22nd September 2023. The importance and objective were highlighted by Mr. John, coordinator of the ODP-NGO, Mysore. Mr. Prabhakar, Head (I/c), KVK interacted with the trainees on reducing the gap between the producer and consumers for quality food production and consumption through scientific processing and value addition interventions. Smt. Rashmi Bhanuprakash, an entrepreneur participated as resource person and educational participants on processing and value addition of important crops, different packing technique and food grade plastic, tin materials used for packing of foods, proper labelling with nutritional content, recipes of food preparation, putting lot no., expiry date, MRP and importance of FSSAI procedures to avail the unique code for proper marketing of packed and value-added food.



KVK, KOLAR

Drought survey by KVK Scientists

A scientific team involving Scientists from ICAR-Krishi Vigyan Kendra Kolar, Assistant Professor from College of Sericulture, Chinthamani and Officials from Department of Agriculture visited the farmers field of Kolar and Bangarpete taluk on 15.09.2023 and 16.09.2023 to assess drought effects on major crops of the district such as Ragi, Groundnut, Redgram, Maize, Field bean and other important crops like Minor millets, Horse Gram, Green gram, Black gram, Sesame, etc and assessed the probable crop loss.



Farmer Field School on "Organic cultivation of mulberry for quality leaf and cocoon production"

ICAR-KVK, Kolar organized Farmer Field School on "Organic cultivation of mulberry for quality leaf and cocoon production" at Beechagondanahalli village, Kolar taluk on 15.09.2023. Sri Y. T. Thimmaiah, Joint Director of Sericulture, Bangalore division inaugurated the FFS first session. Dr. Shashidhar K. R., Scientist (Sericulture), KVK, Kolar briefed on essential elements and steps in conducting farmer field school. Dr. Anilkumar, S., Scientist (Soil Science), KVK Kolar explained about importance of organic farming and soil fertility management in mulberry garden and conducted method demonstration on scientific method of soil sampling in mulberry garden. Around 25 interested sericulture farmers participated in the programme.



One day capacity Development program on High tech Horticulture Nursery for disease free quality planting materials

ICAR-KVK, Kolar organised one day capacity development program on High-tech Horticulture Nursery Techniques for production of disease-free quality planting materials at KVK, Kolar on 20.09.2023 & 22.09.2023. Dr. Shivanand V. Hongal, Senior Scientist and Head, detailed about various nursery techniques in vegetable crops. Dr. Asha, K. M Scientist (Horticulture) briefed about the nursery management techniques including different methods of propagation in fruit and flower crops. Around 90 farmers from all 6 taluks of Kolar district participated and benefited from the programme.



Workshop on scientific sandalwood cultivation

ICAR-KVK Kolar in association with Hasirunadu Shreegandha FPO organized a workshop on scientific sandalwood cultivation on 21.09.2023 at KVK, Kolar. Dr. Shivanad V. Hongal, Senior Scientist & Head inaugurated the event. Dr. M.V. Dorai, Scientist D, ICFRE- Institute of wood Science and Technology delivered a lecture on Plantation management techniques in Sandalwood. Dr. B.N. Divakara, Scientist F, ICFRE- Institute of wood Science and Technology discussed about Heartwood estimation and Economics of Sandalwood. Around 90 farmers from kolar and chikkaballapur benefited from the programme.



KVK, KOLLAM

Popularization of Millets in Kollam District

Climate change is a big threat to agriculture. It is time that we should think of climate resilient crops suitable for the region without compromising the nutritional security. “Millets” - the small seeded cereal crops are better candidates as they are climate resilient, less managed, drought resistant, even referred to as “pest free crops” and are ready to be harvest within a short period of time. Considering the nutritional value of the millets, the Government of India has notified millets as ‘Nutri-cereals’ in April, 2018 as they are rich in Proteins, Fiber, Minerals, Iron, Calcium and have a low glycemic index. To create domestic and global demand and to provide nutritional food to the people, Government of India and the United Nations declared 2023 as the International Year of Millets (IYoM-2023).

To commemorate the International Year of Millets, ICAR- Krishi Vigyan Kendra Kollam, initiated programmes for the popularisation of our ‘Majestic Millets’ in the district. Capacity development programmes have been provided to farmers and exhibitions were conducted as an initial step, followed by popularization of Small Millets especially, Proso Millet (*Panicum miliaceum*), Kodo Millet (*Paspalum scrobiculatum*), Foxtail Millet (*Setaria italica*) and Little Millet (*Panicum sumatrense*) under Block Level Agricultural Knowledge Centres (BLAKC) including nearly 50 farmers of Vettikkavala Block of Kollam district. This has brought back these small seeded millets to the fields. In addition, it has been disseminated to other blocks of the district too. The ‘Millet Park’ established at KVK Kollam, also displays these millets in fields. During 2023-24, KVK Kollam has initiated its On-farm Trial on Finger Millet (Ragi) varieties and the programme is on-going. During 2022-23, KVK has succeeded in popularizing the millets among the farming community as well as school students of the district and



KVK, KOPPAL

Field day on Biofortified Bajra Hybrid VPMH-14

Micronutrient malnutrition because of iron and zinc deficiencies is a serious public health problem in low- and mid-economy countries worldwide. Iron deficiency causes varying degrees of impairment in cognitive performance, and learning ability, lowered work capacity, and pregnancy complications (e.g., maternal mortality, and babies with low birth weight). Zinc deficiency in children causes stunting, vulnerability to diarrhoea, pneumonia, and can lead to death from these infections. Crop biofortification, which refers to the breeding of cultivars with higher levels of micronutrients, is increasingly being recognized as a cost-effective and sustainable approach to overcome these deficiencies in the food chain. ICAR-Krishi Vigyan Kendra, Koppal conducted field day of biofortified bajra hybrid VPMH-14 in Bandryal village on 21-9-2023. Dr. Kavitha Y. Ullikashi Scientist (Home Science) explained about the importance of biofortified cereals in the diet. Also explained that Bajra hybrid VPMH-14 is high yielding with high Fe (70 ppm) and Zn (45 ppm) content. Dr. Jyothi R. Scientist (Horticulture) narrated about the role of biofortified cereals in alleviating the malnutrition. Shri Vireshappa, progressive farmer shared his experience in cultivation of biofortified bajra hybrid VPMH-14



KVK, KOTTAYAM

Campaigns conducted by KVK Kottayam under Swachhata Hi Sewa

African snail eradication campaign, rodent management campaign and training on weedy rice management has been conducted in Thalayolaparambu and Vellor Krishi Bhavans in Kottayam district under Swachhata Hi Sewa. The programme chaired by the Panchayath President and Agricultural officer welcomed the meeting. Almost 50 farmers and public representatives participated in the event. Dr. Jayalekshmi G. Programme Coordinator, KVK Kottayam, Dr. Bindhu P S. Assistant Professor (Soil Science and Agricultural Chemistry), Dr. Asha V. Pillai, Assistant Professor (Agronomy) instructed farmers on various strategies to be adopted for the management of the above problems.



KVK, MALLAPURUM

Receiving Technology of Trichoderma Coir Pith Cake

In a significant stride towards enhancing coconut crop health and productivity, the Central Plantation Crops Research Institute (CPCRI) based in Kasaragod successfully transferred the technology of Trichoderma coir pith cake production to Krishi Vigyan Kendra (KVK) Malappuram. This innovative approach aims to tackle the persistent challenge of bud rot disease, a prevalent threat to coconut cultivation in the region. During a formal ceremony at the CPCRI campus, the Director of CPCRI, Dr. Balachandra Hebbar, presented the technology to KVK Malappuram, represented by Dr. Najitha Ummer. The transfer of technology was a testament to the collaborative efforts between research institutions and agricultural extension centres to mitigate plant diseases and improve crop yields.

The Trichoderma coir pith cake technology involves cultivating Trichoderma, a fungus with proven antifungal properties, within coir pith, a by-product of coconut processing. This blend serves as an effective biocontrol agent against bud rot disease. The coir pith not only acts as an ideal substrate but also promotes sustainable use of coconut industry by-products.

The event also included an informative session where experts from CPCRI elaborated on the production process, application techniques, and advantages of utilizing Trichoderma coir pith cake in bud rot disease management. The knowledge transfer was designed to empower KVK Malappuram with the skills and know-how needed to implement this cutting-edge solution effectively.

The partnership between CPCRI Kasaragod and KVK Malappuram exemplifies the collaborative spirit in the agricultural research community, striving to address pressing agricultural challenges and benefit the farming community at large.



Training cum distribution of agricultural inputs to SC farmers

Based on the need assessment through visits made to SC farmers' fields by KVK team, capacity development programmes and distribution of relevant inputs were made at Puzhakkaattiri and Vellanchey under Perinthalmanna and Ponnani blocks, respectively. Various technological inputs were supplied for paddy, vegetables, banana and animal husbandry. Capacity development programmes on cultivation practices for banana and paddy, nutrient management of soil and economic feeding practices for dairy cows were informed by KVK Scientists Akhil Raj BC (Horticulture), Sruthy KT (Agronomy) and Dr. C. Ibraheem Kutty (SMS Animal Science), respectively.



Demonstration of integrated management practices for goat kids

As part of front-line demonstration on integrated management practices for enhancing body weight gain of kids, twenty goat farms were visited in Ponnani block for assessment of the management practices. Advices were given better management practices including housing, feeding and health care measures. Anthelmintic drugs for the young stock and bypass fat feed supplement were provided. Kids of less than 1 month were enrolled for distribution of kid starter and body weight were assessed to compare the weight gain before and after the



KVK, MANDYA

Krishi sakti programme

SANJEEVINI-Karnataka State Rural Livelihood Promotion Society, Department of Skill Development, Entrepreneurship and Livelihood, GoK and in collaboration with University of Agricultural Sciences, Bangalore, the ICAR-KVK Mandya organized skill training programme on Agro-ecological practices for community resource persons (30 Krishi sakhis). Objective of this training was to develop and prepare 'Krishi Sakhi' as a progressive farm woman and also community resource persons at their Gram Panchayath level. It's a platform for Krishi sakti's to enrich their agricultural knowledge and know about facilities and schemes regarding agriculture sector. Mr. Sanjeevappa, Project Director, Zilla Panchayath, Mandya briefed the role of women in agriculture and also highlighted their role in diffusing the technologies to farming community.

Dr. Naresh, N.T, Senior Scientist and Head, wished Krishi Sakti's to enrich their agriculture knowledge and to make use of the expertise of KVK in their routine works after the training.

Dr. Suresh, D. K, Project Coordinator explained the idea behind the conceptualization of Krishi Sakti training programme in better use of local resource to diffuse farm technologies from lab to land effectively. Other Scientists of the KVK, V.C. Farm, Mandya participated in the programme.



KVK, MYSORE

Method demonstration on use of paddy power weeder in paddy fields at ICAR JSS KVK Suttur

ICAR- JSS KVK, Suttur organized method demonstration on use of paddy power weeder in paddy fields of Suttur village, Nanjangud taluk on 27th September 2023. Shracchi company engineer Shri Balakrishna briefed about the use of paddy power weeder in paddy fields and shared technical information to paddy farmers. About 34 farmers participated in the method demonstration. KVK Scientist Shri Shamaraj explained about non-availability of women labours for manual weeding and more use of weedicides in paddy resulting in soil health problems and higher cost of weed management, mechanical weeding using paddy power weeder is less drudgery and eco-friendly management provided row/line sowing or row planting in paddy and also ensure sufficient water in paddy fields. Front and back powered rotary demonstration also conducted in fields for effective weed management in orchards and earthing up operation in sugarcane.



National Seed Corporation sponsored capacity development program to FPO/ PF/input distributor under National Livestock Mission

ICAR JSS KVK in collaboration with NSC, Mysuru conducted training programmes to FPO members, Progressive farmers and Agri input distributors under National Livestock Mission on 27th September at ICAR JSS KVK Suttur. The training programme inaugurated by Sri. Aravind Kumar Chouhan, Assistant Senior Manager, NSC Mysuru. Smt H.V, Divya, Senior Scientist and Head (I/C) gave information about the KVK activities, seed production, seed storage and facilities available for seed production at KVK under creation of pulse seed hub project. Sri. Subbireddy, Assistant Manager, NSC gave detailed information on NSC new varieties, activities and seed production. Dr. Rashit Raj UM, Animal Scientist, ICAR JSS KVK gave information on subsidy schemes under NLM. Mahesh K.G, officer from e Naam app explained about the app and its uses for the better marketing of the agriculture produce. More than 80 farmers/farmwomen participated and took benefit from the programme.



Valedictory of tailoring program

ICAR JSS KVK in collaboration with JSS Janashikshana, Mysuru conducted three- and half-month tailoring programmes for two batches at KVK Suttur and one batch at Jeemaralli, Nanjangud under ASCI programme. Valedictory function was organized at ICAR JSS KVK, Suttur and Jeemaralli, In this programme trainees shared their experience. Sri. Ramesh, Director, JSS Janashikshana samsthe addressed the trainees and gave information about the schemes and opportunities after the training programmes. H.V. Divya, Senior Scientist and Head (I/C) motivated the trainees with her sportive words. Farm women can lead a dignified life by earning additional income by working during their free time at home. Senior Scientist and Head (I/C) congratulated the three trainees who already started the tailoring shops. Guests distributed certificates to 60 trainees.



KVK, PALAKKAD

Inauguration of Front-Line Demonstration of Fodder bank for dairy farmers

As part of FLD programme 2023-24 of KVK Palakkad, demonstration of fodder bank for dairy farmers for year around fodder production was inaugurated at Lakkidi Perur Panchayath of Palakkad district on September 8th. The beneficiaries of the programme were ten numbers of selected dairy farmers; forty percent of farmers were from SC community. All the beneficiaries were given seeds of multicut sorghum variety, Stylosanthes hamate, Hedge lucerne and the cuttings of Mulberry along with Hybrid Napier. The FLD programme was inaugurated by the Panchayath president in the presence of panchayat members. The beneficiaries were also provided with goat manure enriched with Trichoderma.

Dr. Smijisha A.S, Assistant professor, KVK Palakkad



Inauguration of Front-Line Demonstration of Management of subclinical mastitis in dairy cattle

As part of FLD 2023-24 of KVK Palakkad, the FLD on management of subclinical mastitis in crossbred cattle was inaugurated at Mannur Panchayath of Palakkad district on 26/09/2023. Forty percentage of selected dairy farming beneficiaries belong to SC category. All the beneficiaries were given teat protect solution to spray on teats after milking to avoid mastitis and a kit was also provided for checking the milk for somatic cell count. The function was inaugurated by the Honorable Panchayath president and several members were also present. The animal science SMS of KVK, Dr. Smijisha A.S has delivered a talk on preventive methods of mastitis.

Dr. Smijisha A.S, Assistant professor, KVK Palakkad



Linkage with IIHR – Tribal Sub plan

The ICAR-Indian Institute of Horticultural Research Institute (IIHR), Bengaluru, initiated tribal sub-plan scheme (TSP) at Dhanyam ooru in Puthoor panchayat in Attappady. The program was jointly organized by KVK Palakkad, IIHR and an NGO (Agricultural Development and Farmers Welfare Department Agali, and Thampu). The TSP scheme is a government initiative to promote agricultural development among tribal communities in India. The aim of the program is to help tribal farmers adopt sustainable agricultural practices and increase their income. The scheme aims to provide training, inputs, and support to tribal farmers to help them improve their livelihoods. The



event was presided over by Thampu President Shri. Rajendra Prasad and inaugurated by Agali Block Panchayat Member Smt. Karthyayani. Dr. Sumiya K.V., Programme Coordinator KVK Palakkad welcomed the gathering. Scientists from IIHR, Dr. Ranjitha and Dr. Kalaivanan, delivered a talk on beekeeping, vegetable cultivation, and processing. Smt. Selvi, an Assistant Director of Agriculture, Dr. Rashmi, village head, Shri. Marimuthu, Shri. Ramu, and Shri. Raju extended their greetings. Under this scheme, 80 bee boxes containing bee colonies, vegetable seed kit, Arka microbial consortium, and Arka vegetable special were distributed to tribal farmers. Around 80 tribal farmers were participated.



Dr. Sumiya K.V, Programme Co-ordinator, KVK Palakkad

Training on processing of different fruit and vegetable beverages

Krishi Vigyan Kendra Palakkad conducted a training program on processing methods for different fruit and vegetable beverages. Dr. Lakshmy P.S, Assistant Professor, KVK Palakkad served as a resource person. The training took place on September 13, 2023, and was attended by 30 enthusiastic farmers from the area. The main objective of this program was to empower farmers with the knowledge and skill required for the preparation of various beverages like squash, crush, ready-to-serve (RTS) drinks, nectar, and vegetable squash. The training program was designed to provide participants with practical insights into the



processing methods of diverse fruit and vegetable beverages. It aimed to enhance the participants' understanding of value addition to their produce and to explore the market potential of these products. Participants were actively engaged in various activities, from selection of raw materials to processing and packaging of the final products. The importance of quality control, packaging, and marketing strategies for selling the beverages profitably were also taught. The gained practical knowledge and skill of beverage production would significantly contribute for their income generation and promote the utilization of surplus fruits and vegetables.



Dr. Lakshmy P.S, Assistant professor, KVK Palakkad

KVK, PHATANAMTHITTA

KVK promotes Farmer Producer Organisation

Erath Farmer producer Organisation promoted by ICAR-KVK, Pathanamthitta and funded by NABARD stamps its presence at Erath Panchayat of Pathanamthitta district on 15th Sep 2023. The main objective of the FPO is to carry on the business of production, harvesting, procurement, grading, pooling, handling, marketing, selling of Agricultural products and also to carry of business in allied sectors like dairying, poultry farming, Goat rearing, bee keeping and value addition. The FPO was inaugurated by Shri. P. Prasad, Minister for Agriculture, Govt. of Kerala at Erath Panchayat in the presence of Shri. Santhosh Chathannupuzha, President, Erath grama Panchayat. On the occasion Dr. C.P Robert, Senior Scientist and Head, ICAR-KVK, Pathanamthitta delivered a Key note address. Smt. Geetha Alexander, Principal Agricultural Officer, Pathanamthitta district sensitized the State govt schemes and support for FPOs. While Mr. Reji Varghese, DDM, NABARD gave insight on the role of NABARD for FPO development. FPO has more than 150 Shareholders. The certificates of shares were also handed over to 50 Shareholders of the FPO. The FPO has unveiled the Solar run EcoShop for marketing of residue free vegetables is a noteworthy and replicable marketing initiative.

KVK initiates the nutrigarden programme 2023-24

ICAR-KVK, Pathanamthitta initiates the Nutrigarden programme of Indian Council of Agricultural Research (ICAR), Govt. of India for the year 2023-24 at various Anganwadies in KVK's in two cluster panchayats viz. Mallapally and Anicad in Mallapally block of Pathanamthitta district covering 37 Anganwadies and benefitting 44 children. The programme aims to sensitize farm women and others stakeholders on various aspects of nutrition to address malnutrition by bringing change in the food systems through different interventions. The programme at Mallapally panchayat was inaugurated by Smt. Bindu Mary Thomas, President, Mallapally Grama Panchayat on 25th Sep 2023. On the occasion planting materials of Nutri rich crops were also distributed among Anganwadies by Shri. John Thomas, Vice President, Mallapally grama panchayat. Dr. C.P Robert, Senior Scientist and Head, ICAR-KVK, Pathanamthitta delivered the Keynote address. Dr. Shana Harshan, SMS (Home science), ICAR-KVK, Pathanamthitta created awareness on the significance of coloured pigments and nutritive value of various pigment rich fruits and vegetables. The nutri kits were distributed to Anganwadies consist of planting materials of various coloured fruits and vegetables unlike typical nutrigardens.

Authors: Dr. C.P Robert, Senior Scientist and Head, Dr. Sindhu Sadanandan, SMS (Agril. Extension), Dr. Shana Harshan, SMS (Home Sc.)



KVK, RAICHUR

Training on High Density and Closer spacing in Cotton

A training programme on high density planting system (HDPS) in cotton was organised at Adavikhanapur village of Raichur on 17.08.2023 by ICAR-Krishi Vigyan Kendra, Raichur in collaboration with SIMA-CD & RA. At the outset, Mr. Madhu, Programme Officer of SIMA-CD & RA welcomed scientists and farmers who were participated this programme. This training programme was conducted under NFSM-Cotton sponsored by Central Institute Cotton Research, Nagpur.

Dr. S. N. Bhat Scientist (Soil Science), ICAR-KVK, Raichur, delivered a speech on importance of closer spacing and nutrient management in cotton. Further, he advised the farmers to give more impetus on residue incorporation so as to sustain yield and to reduce the dependency on chemical fertilizers.

Dr. Shreevani, G. N., Scientist (Entomology), ICAR-KVK, Raichur gave a detailed information on management of sucking pests and pink bollworm in cotton by eco-friendly approach and if need be, chemicals usage. Dr. Shreevani called up on the farmers to go for Integrated Pest Management approach to manage pest infestation in cotton.

About 50 farmers were participated in the programme and beneficiaries of projects were provided with some critical inputs for canopy management and for management of pink bollworm in cotton.



KVK, RAMANAGARA

On eve of International Year of Millets-2023 ICAR-Krishi Vigyan Kendra, Ramanagara organised Millet recipe competition for farm womens at Nallahalli village of Kanakapura taluk. On this occasion, Dr. Lata R. Kulkarni, Senior Scientist and Head emphasized the importance of Millets, their utilization and health benefits. Nowadays, traditional cooking is disappearing and due to changed food habits and lifestyle many health-related problems such as blood pressure, diabetes, heart disease, obesity, constipation, anemia are faced by the public. She also highlighted that food are the primary source of health and Millets are the panacea for these problems, women should consume more and more millets as they are rich in fibre, protein, salts, 'B' complex, vitamins, essential amino acids, folic acid and vitamin 'E' and are more nutritious and also to use more of locally available fruits, leafy vegetables in their daily diet. Dr. Sowjanya, S., Scientist (Agricultural Extension) said that these days the new generation peoples are consuming more junk foods so this recipe program is mainly organised to create awareness among women that healthy and tasty dishes can be prepared from the millets as well. Ramanagara district Sanjeevini program incharge Mr. Vinod Kumar expressed that, these types of dishes should not be limited to only today but should be adopted in daily diet. Mr. Rajasekhar, Karthavya Foundation, Kanakapur said that first time this kind of program has been organized for women in this village and it has made women very happy. More than 50 women participated in this program and more than 30 people prepared a variety of nutritious millet based dishes like ragi based mudde, roti, kodubale, cake, shavige, malt, bonda, chakkuli, Navane based palav, payasa, laddu, Barfi, Same Akki based Idli, curdrice, Baragu based Palav, Idli, curdrice, Sajje Roti, millet Malt, millet Dosa etc.. Mrs. Sridevi, Headmistress, Nallahalli Higher Primary School, Mrs. Jayarathamma, Sanjeevini, Gram Panchayat level onion, Mr. N. K. Nagegowda, President, Uyyambali Hobali Sheep and Wool Producers Cooperative Society, Mr. Devendrappa, Canara Bank Training Institute Harohalli, Mr. Vandane Swami Patrick Pinto, Mrs. Kalpana and the staff members of the Krishi Vigyan Kendra Mr. Srinidhi, N. and Mr. Hariprasad, D.K. participated in this program. The top five participants who prepared the best recipes were selected and were honoured with certificates and prizes.



KVK, SHIVAMOGGA

Agro Ecological Practice for Livelihood – Vocational training for community Resource persons (Krishi Sakhi)

Six days vocational training programme on **Agro ecological practice for livelihood to community Resource persons (Krishi Sakhi)** was arranged in ICAR, Krishi Vigyan Kendra, Shivamogga in association with Zilla panchayath, Sanjeeveni K.S.R.L.P.S from **11.09.2023 to 16.09.2023**. The programme was inaugurated by **Smt.Nandhini**, Project Director, N.R.L.M Krishi Sanjeeveni in her inaugural address, the main purpose of this training programme is to transfer the technologies in agriculture regarding new varieties, Integrated farming system, subsidiary enterprises and marketing channels to the farming community of rural areas. The Krishi Sakhi should work as a link between farming community and state Department to transfer the technology and Government schemes through the community resource persons (Krishi Sakhi). Dr. Hanumamthaswamy, Associate Director of Extension, expressed that the farmers should practice Scientific method of cultivation and integrated farming system for increasing the farmer's income. During the programme training is given on 20 different topics related to Agriculture, Horticulture, value addition, IFS, organic farming, Dairy, Bee keeping, integrated pest and disease management in agriculture and horticulture crops, poultry and sheep rearing. Exposure visits were also arranged for the trainees to the progressive farmer and awardee farmer Vijendra Bhat at Hosanagara. Total of 31 community resource person were participated and got benefitted from this training programme. The programme was associated by all the scientist and staff members of KVK.



KVK, THRISSUR

One day Farmers' training programme - Karshakadinam 2023

A One day Training programme for farmers, sponsored by NABARD (Karshadinam 2023) was conducted at ICAR -Krishi Vigyan Kendra, Thrissur on 11/09/2023. Apart from farmers, eminent scientists from Kerala Agricultural University and top-level officials of the state agricultural department also graced the occasion. ATMA Project Director, Sri. M P Anoop welcomed the gathering. The programme was inaugurated by Smt Usha Mary Daniel, Principal Agricultural Officer, Department of Agriculture Development and Farmers Welfare, Kerala. The forenoon sessions were on Millets: Crop production and Value addition and Entrepreneurship scope in the Animal Husbandry sector. Subject matter specialists of KVK, Dr Aneena E R, Associate Professor (Community Science), Dr Ambili John, Assistant Professor (Animal Husbandry) and Smt Raji S Prasad, Assistant Professor (Agronomy) handled these sessions.

Monthly technology advice

A farmer scientist interface along with monthly technology advice of September was also arranged on 11/09/2023 to address the queries and technical doubts raised by the participants. Dr Latha A, Professor and Head, Agricultural Research Station, Mannuthy and Associate Director of Research, KAU, Dr. Gleena Mary, Dr. Smitha K John, Dr. Smitha Ravi, Dr. Savitha Antony and Dr. Indhulekha, Assistant Professors, College of Agriculture Vellanikkara handled this session communicating effective solutions to the manifold field problems posed by the farmers.

Management of invasive weeds

On 11/09/2023, the afternoon session began with a very relevant topic on "Invasive Alien Weeds of Kerala" presented by Dr C T Abraham, Professor (Rtd) and Former Dean, College of Agriculture, Vellanikkara. In continuation with this awareness building session, Dr. P Prameela, Professor and Head, Department of Agronomy and AICRP on Weed Control, College of Agriculture Vellanikkara continued with Integrated Weed Management in Rice and effective strategies were presented. Dr. Deepa James, Assistant Professor, KVK Thrissur delivered the vote of thanks.

Exhibition at KVK

An impressive exhibition arranged in KVK premises on 11/09/2023 added to the practical utility of the training programme. Diverse value-added items produced by entrepreneurs trained by KVK, Thrissur highlighted the event. Novel products from Cocoa Research Station and Cashew Research Station under KAU invited wide attention as well. All the teaching / non-teaching staff and farm labourers of KVK, Thrissur actively participated in this training programme and made this mega event a grand success. The programme was given due publicity over many social media platforms, print media and audio-visual aids. The support rendered by the Director of Extension, KAU, Dr Jacob John and DGM, NABARD had helped immensely to make the event successful.





KVK, THIRUVANANTHAPURAM

Effectiveness of drone use for rice production in Thiruvananthapuram District

Spraying nutrients and fertilizers on crops with drones is safer and economical. With use of drones spraying capacity, in terms of area covered, is five times larger than traditional methods. To demonstrate the drone's effectiveness, KVK coordinated with Chenkal Agricultural Department for Drone based foliar application of nutrients in paddy at Keezhammakam Padashekharam covering 22 ha of farm land.

The programme was inaugurated by Honorable MP Dr. Shashi Tharoor by flying a drone spraying KAU Sampoorna over the crop. Shri.K.Ansalan, MLA of Neyyattinkara constituency, visited Padashekharam, interacted with paddy farmers and viewed the demonstration. Block Panchayat President Shri. Ben Darvin and Panchayat Representatives participated in the programme.

Padashekharam committee members acknowledged the support and services of KVK for implementing UAV technology in the paddy field. Prior to spraying of micronutrients, a surveillance drone was used to map the paddy field by taking high-resolution pictures for diagnosis of crop health.

Combined operation of mapping and spraying helped in rectifying crop issues and enhancing crop productivity to a great extent.

Dr. Binu John Sam, SS&H, KVK remarked that the KAU micronutrient mixture, which was sprayed at 45 DAT, was a good solution for crop growth. Engineer Chithra informed that the Hexacopter drone, with payload capacity of 10 liters, covered 1 acre field in 6 minutes indicating high field capacity with minimum operation cost. The drone demonstration was a great hit with farmers as it was useful and supportive for paddy farmers as acknowledged by Agricultural Officer, Smt.Ancy R J.

Crop productivity is a measure of effectiveness of using a drone. From the field where drone spraying was demonstrated, Bumper yield was recorded after harvesting using combine harvester. Farmers' feedback was positive with, less labour being required for spraying and the major one being that the spraying was uniform over the crop. Crop damage was nil in the demonstration unlike in conventional methods where the plants will be trampled. Additionally, using a drone can reduce the water used for chemical mixing by 10 times as well as prevents wastage of the nutrient solution as well. Lastly, using a drone avoids spraying the nutrients on the same area twice, as drone flies by precise GPS system.



KVK, TUMAKURU - I**Millet's recipe contest**

ICAR Krishi Vigyan Kendra, Tumkur-I, organized millets recipe contest at Paruvagondanahalli village of Tiptur taluk on 16 september 2023 in association with Agriculture department on the occasion of celebration of International Year of Millets. Dr. V. Govinda Gowda, Senior Scientist and Head KVK Tumkur-I create the awareness on production and consumption of millets. Dr. Nithyashree, K. Scientist (Home science) heightened the importance of millets value added products and its health benefits. During this programme more than 30 farm women were participated and exhibited different millet products. Top five women were selected among participants and distributed certificates. Kvk scientists were presented in this programme.

Demonstration of ICM in mango (var. Alphanso) for enhancing productivity

ICAR Krishi Vigyan Kendra, Tumkur-I initiated Frontline demonstration on ICM in mango (var. Alphanso) for enhancing productivity at Ippadi Village of Kunigal Taluk. Dr. Keerthi Shankar, Scientist (Horticulture), mentioned that there is Poor canopy management, Alternate bearing, poor nutrient management, fruit dropping, Fruit fly (25-30%) & Powdery mildew incidence (18%) leads poor performance of mango productivity and It is necessary to demonstrate canopy pruning, application of Paclobutrazol, NAA growth regulator and mango special to enhance the higher yield. Totally 15 demonstrations were taken up in farmer field and given necessary critical inputs

Training Programme on Bee Keeping under SCSP Programme

ICAR Krishi Vigyan Kendra, Tumkur-I organized one day workshop on Bee Keeping at Thadsuru Village under SCSP Programme. Dr. V. Govinda Gowda, SS&H, KVK Tumkur-I inaugurated the training programme and addressed the audience regarding importance of Bee Keeping. Mr. Manoj, H., Scientist (Plant Protection) explain the types of honey bee and its characteristics. Mr. Shankar Narayan, Technical assistant, Department of Apiculture, GKVK, Bangalore demonstrated on all aspects of bee keeping, from understing the basics to managing a successful honey bee colony, identify the disease and pest and marketing honey and other bee products by the end of the programme. Totally 62 farmers were participated & benefited



KVK, TUMAKURU - II

National Seeds Corporation Ltd. Chikkaballapura under Regional office Bengaluru in collaboration with ICAR-KVK Hirehalli Tumakuru has conducted FPO's /Progressive Farmers/ Dealers Orientation Training Program under National Livestock Mission (NLM) Scheme on 15.09.2023 at ICAR-KVK Hirehalli, Tumakuru. The programme was inaugurated by Dr. N.Loganandhan, Principal Scientist & Head, KVK Hirehalli, Tumakuru, Shri. Karthik, Asst. Manager (Marketing), RO, NSC Bengaluru, Sri. Chandrashekar, Tumakuru Milk Union Limited. In the training program following officials delivered the lectures. Mrs.Usha.B.R, Jr. Officer II (Agri), NSC, Chikkaballapura



had explained about NLM scheme and linkage of Farmers, FPO's and dealers with NSC; Dr. Somashekhar, Subject Matter Specialist - Plant Breeding, Hirehalli, Tumakuru had explained about Importance of Fodder Crops and Cultivation; Shri. Ashok, SCO, KSSOCA, Tumakuru had explained about KSSOCA- a Profile, Fodder seeds Certification Procedures; Shri. K. G. Mahesh, State Coordinator, e-NAM Representative had explained about Linkage of Farmers, FPO's and Dealers with e-NAM; Dr. Ranjeet Singh Rajpoot, Deputy Director (PDF), SFAC New Delhi had explained about Knowledge sharing on Credit guarantees linkages for infrastructure development/ production/ processing and value addition activities in convergence with various government flagship schemes (Central/ State) virtually; Shri. Priya Sharma, FPO Project Coordinator, SFAC, New Delhi had virtually explained about FPO Formation and Promotion activities; Shri. Himamshu Rai, NPMA, New Delhi had virtually explained about Learning Management System (LMS) of FPO's; Shri. J.K.Saini and Associates, CA and Partner had explained about Accounting, Book Keeping, Business Plan, FPO Compliances virtually. Total 56 Farmers and 8 FPO's were participated in the training program. The programme was coordinated by K.N.Jagadish, Agricultural Extension, KVK,Hirehalli, Tumakuru

KVK, UDUPI

Stingless honeybee cultivation training

Keladi Shivappa Nayaka University of Agriculture and Horticultural Sciences, Iruvakk, Shivamogga; Indian Council of Agricultural Research – Krishi Vigyana Kendra, Brahmavara, Udupi District and Zonal Agriculture and Horticultural Research Station, Brahmavara jointly organized two-day capacity building program on “Stingless honeybee cultivation” from 11.09.2023 to 12.09.2023. The training program was inaugurated on 11.09.2023 by Dr. Vijaya Kumar, Head, AICRP (Honeybee and Pollinators), GKVK, Bangalore. He emphasized on the conservation of honey in order to get sustainable economic products from honeybee. Chief Guest, Dr. Sudhir Kamath K. V., Principal, Diploma College of Agriculture, Brahmavara, mentioned about various

medicinal values of honey, and their role in maintenance of good health. Another chief guest, Dr. Revanna Revannanavar, Professor of Agriculture Entomology, ZAHRS, Brahmavara spoke that if we conserve honeybee, it will conserve us. Progressive honeybee keeper, Mr. Suresh Karkera briefly explained about properties of stingless honey bee and their honey. Dr. Lakshmana, Associate Director of Research, ZAHRS, Brahmavara presiding over the function said, it is high time to understand the market of honey bee and accordingly value add honey in order to achieve higher profits. Head of KVK Brahmavara, Dr. Dhananjaya B, welcomed the gathering with introductory talk, Dr. Acharya, S., delivered vote of thanks and Dr. Sachin S., compeered the program.

Improved cultivation practices in vegetables

Off Campus training programme on improved cultivation practices in vegetables (ತರಕಾರಿ ಕೃಷಿಯಲ್ಲಿ ಸುಧಾರಿತ ಬೇಸಾಯ) was organized on 13.09.2023, at Mooduvaranasi, Cherkadi. Farmers were guided about Scientific vegetable cultivation, importance of seed treatment, Availability of different improved varieties, cultural practices and plant protection measures. After the training the farmers visit to nearby vegetable plots and identified the existing pests & diseases in the field and control measures were given. Dr. Raviraja Shetty G, Scientist, served as resource person. Identified farmers were provided with vegetable seeds & other inputs for implementation of FLD on Demonstration of IIHR cucumber variety Arka Veera.

Training programme on conservation of medicinal plants

Off campus training programme on conservation of medicinal plants and establishment of herbal garden was conducted in association with SMS college, Brahmavara on 15.09.2023. Dr. Raviraja Shetty G conducted the programme and served as Resource person. The student were made aware of

importance of medicinal plants and their conservation. A herbal garden of important medicinal plants was established at SMS college Brahmavara with active participation of students. Principal and physical education teacher of SMS college were present during the programme.

Nutrient management in Coconut and Arecanut

Off campus programme on nutrient management in Coconut and Arecanut was organized in Association with Padukone Agricultural co-operative society at Nada guddeyangadi on 16.09.2023.

Dr. Raviraja Shetty. G and Dr. Jayapraksh S. M served as resource persons. The farmers were told about crop management in Coconut and Arecanut with respect to nutrition, irrigation and pest and diseases. Prakash Chandra Shetty progressive farmer, Kambadakone, Rajeev Poojary, Society president, Padukone were present in the programme.

Training programme on Jasmine cultivation

On campus training programme on Jasmine cultivation was conducted on 25.09.2023 at KVK, Brahmavar for the benefit of Jasmine growers of Hiriyadka village of Udupi. The participants were explained about the importance of jasmine as livelihood crop for women in Rural areas. The scientific management, integrated crop management and plant protection, There were 45 farmers participated in the programme Dr. Raviraja Shetty G, scientist (Horticulture) organized the programme.



KVK, UTTARA KANNADA

Pest surveillance in Uttara kannada district

A team of plant protection scientists from KVK and COF, Sirsi along with KSDA officials made a roving survey in Sirsi, Yellapur, Mundagod, Haliyal, Siddapur, Kumta and Honnavar taluks of Uttara Kannada district to know the effect of drought on incidence of insect pests, disease and its impact on growth and yield aspects in Paddy and Maize crops. Observations were made on severe infestation of leaf folder, *Cnaphalocrocis medinalis* and blast disease in Paddy. The infestation of leaf folder was to the tune of 90 per cent in Haldipur village of Honnavar taluk. For leaf folder management, Profenophos 50 EC @ 2 ml per l or Fipronil 5 SC @ 1.0 ml per l or Chlorantraniliprole 18.50 SC @ 0.2 ml per l was suggested. Passing thorny branch over the crop is mandatory for effective management of leaf folder. Foliar spray of Tricyclazole 0.6 g to 1.0 g based on severity or Propiconazole 1.0 ml or Tebuconazole 1.0 ml per l of water was suggested for blast management in paddy. Cent per cent damage of Fall army worm, *Spodoptera frugiperda* was noticed in Maize in Kantraji village of Sirsi tq. To prevent the entry of FAW larve into cobs insecticides viz., Chlorantraniliprole 18.5 SC @ 0.2 ml per l or Spinotoram @ 0.5 ml per l or Emamectin benzoate @ 0.2 g per l of water were suggested.



Galaxy A14 5G

KVK, VIJAYAPURA - I

Participation in International Millet Conference and Exhibition

JAIN (Deemed-to-be University), Bengaluru collaboration with ICAR - Agricultural Technology Application Research Institute Zone-11, (ATARI) Bengalure organized a millet conference and exhibition on 12th and 13th September 2023 in Jain university, Bengaluru.

In that ICAR-KVK Vijayapura I, Shweta A. Mannikeri, SMS (Home Science) along with two millets based agro entrepreneurs were participated in conference. Agro entrepreneurs who took training and technical guidance from KVK Vijayapura I, started their new journey in production of millet-based value-added products. Based on their potential and future needs KVK promoting them and provided a opportunity to exposure the millet conference and exhibition. They were exhibited 23 different millet value added products. Their participation helps to upgrade agro entrepreneurs' knowledge on different millet products, packaging, labeling, marketing and the role of millets for healthy and sustainable life style.



Celebration of Poshan Abhiyan



ICAR-KVK Vijayapura I collaboration with ICDS, Vijayapura celebrated Poshan Abhiyan in Mangoli village at Anganwadi center of Basavan Bagwadi taluk. In that event, Shweta A. Mannikeri SMS (Home Science) explained importance of food, balance diet, different macro & micro nutrient deficiencies in children (0-6 years), pregnant women and how to overcome from those deficiencies. The role and importance of millet in diet to eradication of malnutrition in children and pregnant women. A total 33 children and 12 pregnant women were participated. Millet based bajra laddu and fruits as a snack enjoyed by the children.

KVK, VIJAYAPURA - II

Demonstration of Arka Citrus Special in Lime

ICAR-KVK, Vijapura II (Indi) Soil Scientist Dr. Savita B. follow up field visit to FLD on Bahar Management and use of Arka Citrus special in Acid Lime. Out of fifteen demonstration five demonstration were taken up in Mulasavlagi village of Devarahippargi taluka of Vijayapura district. It is recommended to use arka citrus special from September to January month.

Method to use

Use 75g arka citrus special for 15 liters of water along with one shampoo sachet plus one lime fruit juice or use of 1 kg of arka citrus special for 200 liters of water along with 10 shampoo sachets and 10 lime fruit juice (5 g per liter water arka Citrus special). It is recommended to take up 6 sprays for one acre in Acid lime (use 1 kg each spray) also recommended to use Lihocin spray 2ml per liter of water to manage bahar management in lime so that farmers will get higher yield and good quality fruit size and colour. Hence, farmers will get higher price and net returns



KVK, WAYANAD

Exposure visits from Payyanur block, Kannur district to KVK Wayanad

Thirty-five farmers from Payyanur Block, Kannur District in association with Agriculture Farmer Welfare Department visited KVK Wayanad. One day training / awareness programme was arranged in connection with the visit. Classes were dealt on 'Introduction of protected cultivation and importance of organic farming' and 'Mushroom cultivation' by scientists of KVK Wayanad. The working of various units of KVK were also demonstrated for the farmers. Mass multiplication of biocontrol agents, VAM production, mushroom production, value addition unit, nursery units, goatery units etc were visited in detail in the one-day exposure programme.



Training programme on Nutrigarden under Tribal subplan



ICAR KVK Wayanad in association with Kudumbashree mission had conducted one day awareness and training programme on Nutrigarden in households as part of Tirunelly Tribal Sub plan at Kattikulam, Mananthavady. The programme was named Urineeru meaning "Sweat" in which vegetable seedlings were distributed to the tribal families. Tirunelli panchayath President did the welcome speech of the programme. KVK Senior Scientist and Head, Dr. Safia N.E did the presidential address. The programme was inaugurated by Sri. O. R Kelu , Mananthavady MLA.

KVK, YADGIR

Bimonthly meeting of KVK and line departments

The bi-monthly meeting of Surpur taluk was conducted on 20.09.2023 at KVK, Kawadimatti. Deputy Director of Agriculture and Assistant Director of Agriculture were present during the meeting. Dr. Jaiprakash Narayan, SS&H explained about importance of horticulture crops in doubling farmer's income and disease control measures in pomegranate and guava. Dr. Kumarswamy Hiremath, Professor of Agronomy, CoA, B- Gudi briefed about recent technologies in paddy cultivation to extension workers. He also emphasized to encourage DSR technology and bore well recharging. Dr. Shankar Murthy, Assistant Professor of Entomology explained about the pest control methods and drone usage in agriculture. Dr. Raja, Scientist (Plant Pathology) discussed about Pink Boll Worm in cotton. The functionaries were briefed about crop insurance and urged to encourage the farmers for enrollment of crop insurance.



Capacity development programme on water budgeting and sustainable agriculture

The programme was organized for KBJNL engineers on 21.09.2023 at KVK, Kawadimatti on eve of Sir M Visvesvearaya birth anniversary. The programme was inaugurated by Honorable Minister Shri Sharanabasappa Darshnapur and highlighted the importance of engineers for irrigation projects, food security and sustainable development of farmers. Dr. Jaiprakash Narayan, SS&H explained the importance of crop diversity and cropping plans for effective utilization of water to reach the tail end farmers and economic sustainability to farmers. He also explained more crop per drop and the important technologies released from UAS, Raichur to be adapted in command area to achieve water use efficiency and increase in productivity of cropping area. The programme was presided by Dr. Prakash H Kuchanur, Dean (Agri.), College of Agriculture, Bheemarayanagudi and addressed the gathering and emphasized on importance of forestry crops and how secondary agriculture will help in sustainable agriculture. Dr. Raja Chauhan Scientist (Plant pathology) briefed the importance of KVK in the district and its activities to farmers of Yadgir district.



KVK, BENGALURU RURAL**Millet recipe contest by KVK – Bengaluru District**

The year 2023 is declared as 'International Year of Millets' with the aim to create awareness and to increase production and consumption of millets. ICAR KVK, Bengaluru Rural organized millet recipe contest at Thyamagondlu in Nelamangala Taluk on 06.09.2023. The aim and main purpose of the recipe contest is to understand the diversities in food habit in village level, Women's creativity in food making and knowledge variability on cooking and processing to promote food based micro-enterprises.

The programme was inaugurated by Smt. Anjana, Agriculture Officer, Thyamagondlu. In her inaugural speech, she addressed the importance of processing in millets to get high income. She also informed about different schemes of department related to millets for the farmers. Smt. Vijayamma, Anganawadi Teacher, explained about the nutrients present in millets and their health benefits.

The millet recipes prepared and exhibited by the participants were evaluated by three-member panel comprising of Smt. Anjana, AO, Smt. Vijayamma, Anganawadi Teacher and Smt. Munirathna, SDA. Recipes like laddu, halwa, roti, upma, bisibelebath, dosa, pongal, payasa etc., were prepared from different millets. After the evaluation process, five recipe contestants were selected as best millet knowledge ambassador of the 'Millet Recipe Contest'. Smt. Manjula winner of the recipe contest expressed her happiness for participating in millet recipe contest and shared her experience of using millets as staple food from her childhood days. 65 women participants from different SHG's attended and benefitted from the programme.

**Training programme for Extension Functionaries on the eve of National Nutrition Month**

As a part of National Nutrition Month, the ICAR – Krishi Vigyan Kendra, Bengaluru Rural District in collaboration with Department of ICDS, Doddaballapura organized a training programme for Anganawadi Teachers on 14.09.2023. Smt. Anitha Lakshmi, District Programme Officer in her inaugural speech highlighted the importance of eating a balanced diet rich in nutrients for good health. Sri. Ravi Kumar, CDPO, Bengaluru Rural addressed the role of Anganawadi Teachers in combating malnutrition among pre-school age children's. Dr. Venkate Gowda, J., Senior Scientist and Head (I/c), KVK, Bengaluru Rural, briefed the importance of consuming fruits and vegetables in daily diet to reduce the incidences of malnutrition. Smt. Meghana, S. V., Scientist (Home Science) explained the theme of National Nutrition Month 2023 that, everyone should have access to a healthy diet, regardless of their income or social status. Totally 30 Anganawadi Teachers were benefited from the programme.







KVK TIMES

A WINDOW TO KVK'S OF ICAR-ATARI, ZONE-XI, BENGALURU



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Patron

Dr. Venkatasubramanian

Director, ICAR – ATARI Zone XI, Bengaluru

Compilation and Editing

Dr. Hanumantharaya, B. G.

Senior Scientist and Head
ICAR-Krishi Vigyan Kendra, Hadonahalli
Bengaluru Rural District

Dr. Sagar S Pujar

Scientist (Agril. Extension)
ICAR-Krishi Vigyan Kendra, Hadonahalli
Bengaluru Rural District

Dr. Venkate Gowda, J.

Scientist (Agronomy)
ICAR-Krishi Vigyan Kendra, Hadonahalli
Bengaluru Rural District

Dr. Veeranagappa, P.

Scientist (Soil Science)
ICAR-Krishi Vigyan Kendra, Hadonahalli
Bengaluru Rural District

Dr. H. V. Ramegowda

Scientist (Crop Physiology)
ICAR-Krishi Vigyan Kendra, Hadonahalli
Bengaluru Rural District

Dr. Dharshini, G. M.

Scientist (Plant Protection)
ICAR-Krishi Vigyan Kendra, Hadonahalli
Bengaluru Rural District

Smt. Meghana, S. V.

Scientist (Home Science)
ICAR-Krishi Vigyan Kendra, Hadonahalli
Bengaluru Rural District

Sri. Jagadeesh N

Farm Manager, ICAR-Krishi Vigyan Kendra
Hadonahalli, Bengaluru Rural District

Smt. Manjula B V

Programme Assistant (Lab)

Smt. Sukanya G V

Programme Assistant (Computer)

Dr. D. V. Kolekar

Scientist, ICAR-ATARI, Zone- XI, Bengaluru

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Dr. M. J. Chandregowda

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Senior Scientist and Head

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