

Annual Report 2022-23

Kerala Agricultural University Participating Institute Unnat Bharat Abhiyan 2.0



KERALA AGRICULTURAL UNIVERSITY DIRECTORATE OF EXTENSION



Mannuthy P.O., Thrissur- 680651

Ph: 0487 2370086 0487 2370150

E-mail: de@kau.in, ubakau.rci@gmail.com

Unnat Bharat Abhiyan is a flagship programme of the Ministry of Human Resource Development, with the intention to enrich Rural India. The knowledge base and resources of the Premier Institutions of the country are to be leveraged to bring in transformational change in the rural developmental process. It also aims to create a vibrant relationship between the society and the higher educational institutes, with the latter providing the knowledge and technology support to improve the livelihoods in rural areas and to upgrade the capabilities of both the public and private organizations in the society. As part of Unnat Bharat Abhiyan 2.0 with the vision of bringing transformational change in rural development processes, Kerala Agricultural University, Thrissur (Participating Institute, UBA 2.0) has selected five-Gram Panchayats *viz*; Mattathur, Nadathara, Pazhayannur, Venkitangu and Sreenarayanapuram panchayats of Thrissur district to impart knowledge and technology support and thereby to improve the livelihood of the people.

Being a PI, KAU also found its major time for the development of the villages selected under UBA. Scientifically assessed programmes and technology transfer were the focused area of KAU. UBA is also associating with other agencies who could act accordingly in such developmental activities and also channelize the funds to ensure more productive action. Some of the major activities held in the year 2022-2023 by KAU majorly in the role of PI were listed.

ACTIVITY 1:

World Environment Day programme on 05.06.2022 at Venkitangu Village

Realizing the importance of World Environment Day, Kerala Agricultural University conducted tree planting programme at Venkitangu Grama Panchayath premises. The officials from the Local Self Government Departments, Scientists from Kerala Agricultural University, Kudumbashree programme coordinators were attended the programme. Different fruit trees were planted in the public premises to improvise the quality of degraded soil and also for reducing the environmental pollution. Each year, a specific theme is decided to mark this day to amplify the important message behind it. This year's theme is 'Only One Earth' which draws our attention towards paying our role effectively while living in perfect harmony with nature- without proving a burden on it. Greenhouse gas emissions due to human activity are raising global temperatures to unsafe levels. Extreme weather events are occurring which might displace countless people and devastate our flora and fauna. Pollution from factories, plastic wastes, deforestation is killing animals on land and seas. World Environment Day highlights the urgent need to take corrective measures to safeguard our planet. The UBA cell of Kerala Agricultural University made interventions to mitigate the problems in the abandoned area by using the assistance from vast areas of expertise scientists in various disciplines to develop strategies for achieving heathy environment in this region. This initiative has facilitated to eliminate the consequences / effects of environmental pollution.



ACTIVITY 2:

Environment day celebration at GLPS Primary school, Kodali in Mattathur Grama panchayat

The best way to celebrate The World Environment Day is at School by making fun, nature centered lesson plans. This day created a platform to raise an awareness that the world is facing the problem such as air pollution, plastic pollution, global warming and sea level increasing day by day. The idea of the theme of 'Only One Earth' is to focus on the world's togetherness in the direction of creating the atmospheric conductive for peace, harmony, prosperity and health by saving the nature and life. Unnat Bharat Abhiyan 2.0 mission committed for a sustainable development by planting 30 Fruit tree saplings in the school compound along with children at GLPS Primary School, Kodali in Mattathur Grama panchayath. Dr. Jayasree Krishnankutty, Regional coordinator, Unnat Bharat Abhiyan made an interaction with children and aware them about the need to protect the nature. The children were felicitated and given prizes in the quiz competition which was held as a part of environment day celebration. It's mankind's responsibility to save the

planet from various harms, most of them originating from relentless human activities. UNEP has also called on individuals, businesses and government to share with the world what they are doing to help the environment. Meanwhile, the Centre has issued an advisory to states and union territories to phase out single use plastic and contribute to improving the environment under the overarching mandate of "Clean and Green".



ACTIVITY 3:

Training programme on 'Sustainable smart farming framework' in Venkitangu Grama Panchayath on 17 August 2022.

UBA cell, KAU in collaboration with the State plan project 'Popularization of KAU technologies have successfully completed half day training programme on Sustainable smart farming framework in Venkitangu Grama Panchayath on 17 August 2022. Chingam 1 is being celebrated as the State Farmers Day in Kerala which considered highly auspicious as most people await the harvest season that arrives with the monsoon and gear up to celebrate Onam that falls in the same period. The Kerala Agricultural University is the pioneer institution for the developmental framework in agricultural sector. In the same manner, the UBA cell under Kerala Agricultural University has been working with the adopted villages of Thrissur district for the upliftment of rural communities. This

programme was planned for popularizing the KAU technologies to the rural population and mitigate the problems by using the knowledge-based system. As part of this programme, we have distributed bio inputs for 100 beneficiaries in Venkitangu Grama Panchayath. We have disseminated the useful and practical information relating to agriculture, including improved seeds, fertilizers, implements, pesticides, improved cultural practices to the desired stake holders. By getting feedback from the target groups about the latest scientific technologies transferred to them through different media and to improve all aspects of the life of the rural people with the framework of the national economic and social policies, involving the population as a whole

Brief Description (Need/Impact/Action/Picture (if any))



ACTIVITY 4:

Independence day celebration on 15 August 2022

The Indian government launched the Azadi ka Amrit Mahotsav to honour and remember the nation's 75 years of independence as well as the illustrious past of its people, culture,

and accomplishments. This Mahotsav is devoted to the Indian people who, in addition to playing a key role in the country's progress to this point, also possess the strength and capacity to realize prime minister Narendra Modi's goal of enacting India 2.0, which is inspired by the spirit of Aatmanirbhar Bharat. All homes, educational facilities, government and semi-governmental institutions in the state hoisted the national flag as part of the Ghar Tiranga, Har Din Tiranga campaign, which seeks to create a sense of pride and love for our nation in the people. Thus, Unnat Bharat Abhiyan cell, Kerala Agricultural Institute hoisted the national flag from August 13 to 15.





ACTIVITY 5

Training programme on Integrated Pest Management in Coconut in Nadathara Grama panchayat on 7^{th} October 2022

A need-based Seminar on Pest Management was conducted at Nadathara Grama panchayat on 7th October 2022. Familiarizing the important cultivation techniques, the combination of many systems and attempts to increase farmer's income using effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices were the sessions covered in this training programme. Integrated Pest Management programs use current comprehensive information on the life cycles of pest and their interaction with the environment. This information, in combination with available pest control methods that is used to manage pest damage by the most economical means and with the least possible hazard to people property and the environment were discussed. Aswathy K K, Assistant Professor, KAU and Aswathy A K, Assistant Professor, KAU discussed about the monitoring, identification and action thresholds that indicate the

pest control and the preventive controls. Thirty farmers participated in the seminar with the aim of realizing the importance of IPM and the different aspects related to it. We distributed an entomopathogenic fungi, *Lecanicillium lecanii* an effective biocontrol resource that can control agricultural pests such as whitefly and aphids to the beneficiaries of the programme









ACTIVITY 6

Training programme on Micronutrient deficiency in vegetables in Mattathur Grama Panchayath on 20 October 2022.

Vegetables constitute a major part in Indian Agriculture in terms of providing food and nutritional security to the Human Being. Providing the needful for farmers and their sustainable development is the major area of UBA cell of Kerala Agriculture University that we are dealing with. So, by the interactions with Panchayat officials and Krishibhavan officers, we have understood that the major problem facing by the vegetable producers are the product loss due to micronutrient deficiency. Thus, higher level of practical knowledge

is required to successfully control the problems faced by the micronutrient's deficiency. Dr. Chinchu V S, Assistant Professor, Kerala Agricultural University handled all the sessions related to the respective topic and cleared all the doubts of farmers during the question-answer session. We distributed our own developed micronutrient mixture called Ayar containing Calcium, Magnesium, Sulpher, Boron and Zinc to thirty farmers who were participated in the seminar.







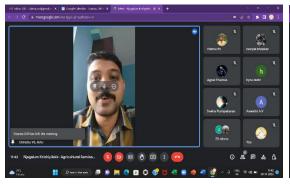


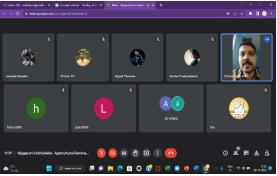
"Njangalum krishiyilekk" programme at Sree Narayana Guru College of Advanaced Studies on 30th October 2022.

'Njangalum Krishiyilekku'is a campaign that ensure the production of safe-to-eat items and control the prices of vegetables in the market. Dr. Chinchu V S interacted with students and said about the steps that would be taken to strengthen the agricultural ecosystem. He highlighted the significance of the 'Njangalum Krishiyilekku' campaign, emphasizing its role of educational institutions in ensuring the production of safe-to-eat agricultural products and stabilizing vegetable prices in the market. He also clarified the doubts of students related to the pest and disease management of several crops and guided them for better yield by the application of organic fertilizers. The campaign aimed to strengthen the agricultural ecosystem in the state with the implementation of various measures by sustainable development.









Training programme on Pest and Diseases in Rice in Pazhayannur Grama Panchayat on 29th November 2022

UBA cell of Kerala Agricultural University organized a training programme on Pest and Disease management in Rice at Pazhayannur Grama Panchayat on 29th November 2022. The training programme mainly focused on the pest and disease management for paddy cultivators in Pazhayannur Gramapanchayath and was designed in such a way that the participants get aware of different stages in rice cultivation and thus proper management. The session was led by Aswathy K K, Assistant Professor, KAU who has experience in respective field and covered several areas such as accurate pest identification, discovering the source, best way to reduce damage and the pest management. Thirty farmers attended the training programme. We have distributed *Ayar* and *Sampoorna*, (micronutrient mixtures) to the beneficiaries of the programme.









Training programme on Pest and Diseases in Rice in Venkidangu Grama Panchayat on 20th December 2022

UBA cell of Kerala Agricultural University organized a training programme on Pest and Disease management in Rice at Venkidangu Grama Panchayat on 20th December 2022. The training programme mainly focused on the pest and disease management for paddy cultivators in Venkidangu Gramapanchayath and was designed in such a way that the participants get aware of different stages in rice cultivation and thus proper management. The session was led by Dr. Berin Pathrose, Associate Professor, KAU who has a wide range of experience in respective field and he organized a special interactive session with farmers and the Rawe students of College of Agriculture. Thirty farmers attended the training programme. We have distributed *Pseudomonas fluorescens*, a group of bacteria that are very effective against disease incited by species of Phytophora, Pythium, Rhizoctonia and Xanthomonas to the beneficiaries of the programme.









Medical Camp at TIES School, Padoor on 22nd December 2022

Every individual has the right to health care, but a lack of quality infrastructure, scarcity of competent medical personnel, and lack of access to essential medicines and medical facilities prevent Indian residents from receiving it. Health camps are effective strategies used by both government and non-governmental organizations, associations, and societies of varying scope and interest. A health camp's main goal and scope are to spread health care facilities in the given area, promote health care, early screening, and detection of disease, reach the unreached community population, and raise awareness of various diseases. Health camps can be organized by health institutions (Private or Government) or NGOs or trusts or profitable organizations. Health forms an Important index of human development and in turn that of the development of any society. It is the fundamental human right. Health, defined as the state of complete physical, mental, social and spiritual well-being and not merely absence of disease and infirmity, proves to be a major contributor to the level of quality of life. Healthy population plays a key role in achieving the developmental activities as health helps to improve the productivity of mankind both directly and indirectly. The health picture of our country is far from satisfactory. The vision of "Health for all by 2000" has not materialized. The situation in rural areas of India, where over two-thirds of our population lives is worse with only rudimentary health care services being available to the masses. All the recent advances in medical science and technology have not reached the majority of the disadvantaged people living in rural India. Poor socio-economic status and poor health status together make a vicious cycle wherein poverty brings inadequate nutrition, unhealthy environment, sickness causing low productivity and hence poverty Several organizations are working alongside the government and NGOs to help relieve the burden on the public health system using mobile technology. When health systems are overwhelmed, both direct mortality from an outbreak and indirect mortality from vaccine-preventable and treatable conditions increase dramatically. More than hundred residents were the beneficiaries of the programme. In these scenarios we organized a meeting with the panchayath officials to know about the status of rural health and we understood that the Padoor village residents are suffering from kidney failures due to some unknown reasons and we, Unnat Bharat Abhiyan in collaboration with Padoor Charitable Kidney Foundation (PCFK) organized a Medical camp which was useful for about hundreds of residents of venkidangu panchayath. We

selected TIES School, Padoor to organize the medical camp and the programme held on $22^{\rm nd}$ December 2022.



Traning programme on Pest and Disease management in Vegetables in Sree Narayanapuram Grama Panchayath on 24/01/2023

The major challenge to vegetable producers is in the area is pest control. High level of management is required to successfully control pests' problems. Successful production of organically grown vegetables requires an even higher level of management for profitability to occur because even fewer control tools are available to producers using this production system. Hence, Kerala Agricultural University has developed our own mechanism for the control of pest and disease in vegetable crops. A training programme on "pest and disease control in vegetables" conducted by Unnat Bharat Abhiyan cell of Kerala Agricultural University was imparted to 30 numbers of farmers on 24th January, 2023 in Sreenarayanapuram Grama Panchayath. Aswathy A K, Assistant Professor, KAU lead an excellent interactive session and cleared all the doubts regarding the pest and diseases in vegetables. We have distributed the Beauveria, which can be used as a biological insecticide to control a number of pests such as termites, whiteflies, and many other insects



TIVITY 12

Biobin Distribution at Pazhayannur Gramapanchayath

Report on selection of beneficiaries availing the Biobin benefit

Unnat Bharat Abhiyan, Kerala Agricultural University has initiated a step towards mitigating the waste management issues of Pazhayannur Grama panchayath in Thrissur District. As part of popularisation of KAU technologies among public, we have started a mission for public who were facing severe issues with confined land area for the waste management. In this manner as a first step, we conducted surveys in collaboration with Panchayath authorities and selected top 10 households who are required the popular KAU technology named 'Smart Bio Bin'. These technologies, currently being used by local bodies, will be useful in waste management, especially at source itself. Bio Bin is an onsite capture and containment system used for organic material processing (starting and composting process) in an odour-free, easily accessible vessel. It improves the quality of air and water by reducing pollution. Based on below criteria the need-based selection was conducted by Kerala Agricultural University.

- All the beneficiaries should under below poverty level
- The area of land should be up to 5 Cents
- Availability of space around the household must have limited area, with poor drainage facility.
- People regularly facing the issue related to waste management will be selected for approval from KAU.
- Deposition of more waste than regular use
- Irregular areas/ households near to roads/ reservoirs shall give high priority
- Top most important criteria of selection are the potential of using Biobin from a community should be in regular basis.



Criteria for selection

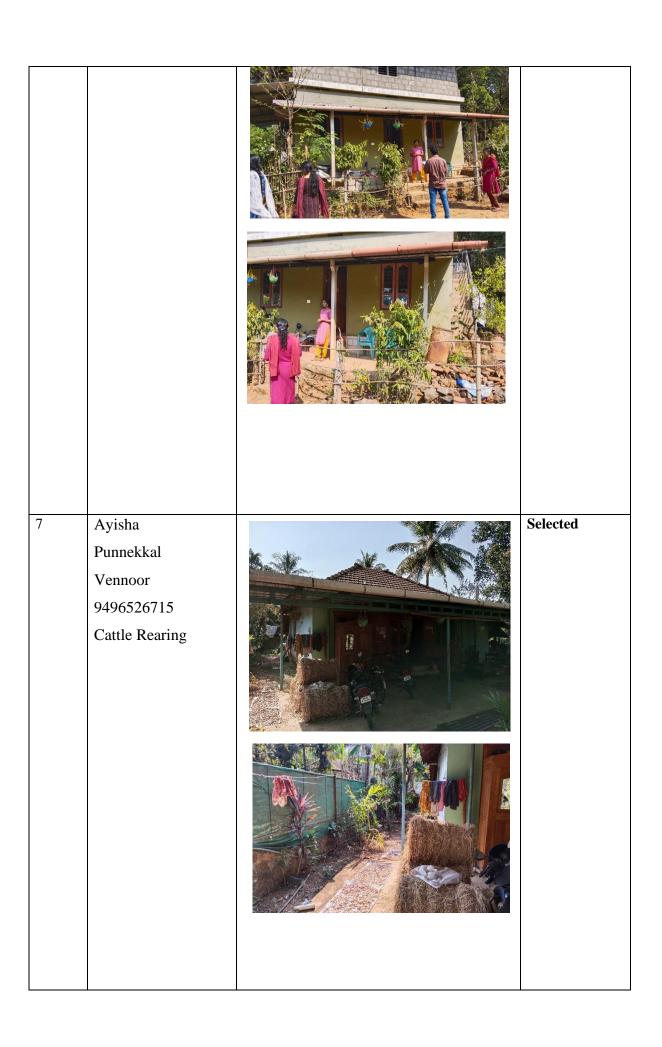
Sl. No	House Hold Details	Images	Result
1	Krishnankutty Chelakkara Kallukulam Colony 9562857182 Dairy Cattle Rearing 3.5 Cent		Selected

2	Rukmini Kaimalamkunnu Kaithakkodu Pazhayannur 4.75 Cent 9747165381	Not Selected

3	Suja	Not Selected
	Koodathil House	
	Puthiruthura	
	9544074142	
	4 Cent	

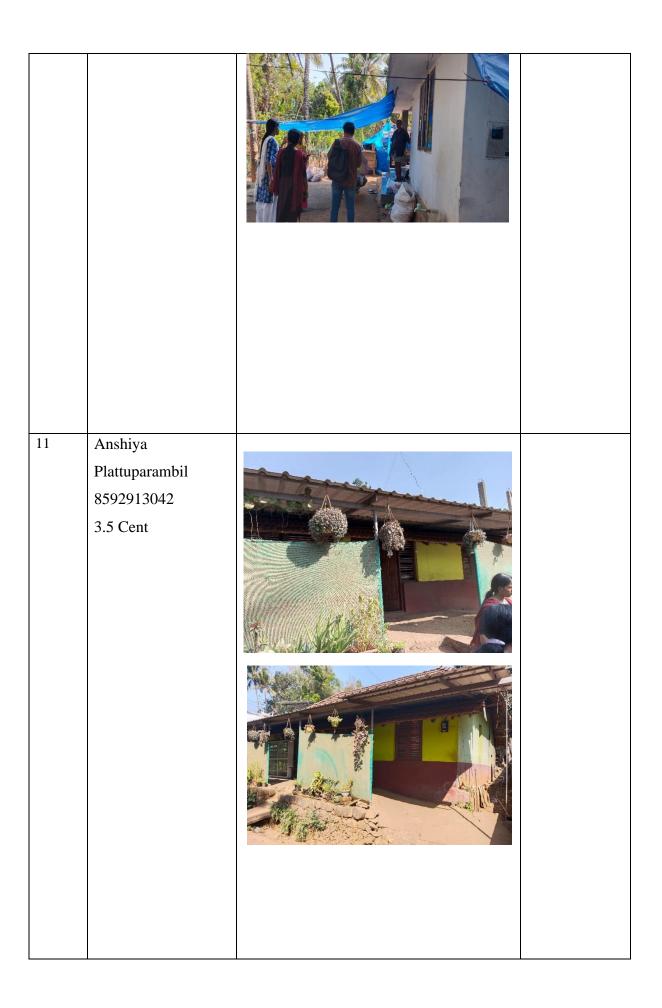
Baby Kamalam Selected Pottathupodi House Vennoor 9947892060 10 Cent Dairy Cattle Rearing Poultry Rearing, Near to forest area.

5	Prabhakaran Koorkkaparambil Vennor 8943800862 4 Cent Goat Rearing	Selected
6	Sheena Kunnath Veedu Vennoor 9947311816 3.5 Cent	Selected
	J.J CEIII	



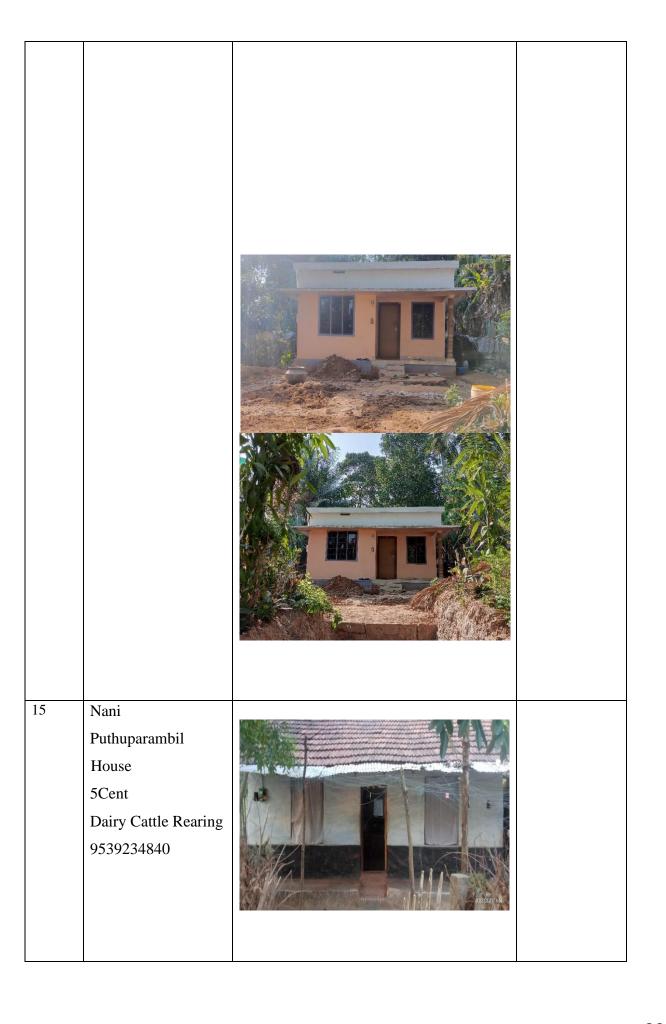
8	Sunitha Mundulli Vennoor 9605101823 9 Cent Cattle Rearing Poultry Rearing	Selected

Jaseela Chengathu Veedu Manjaadi 9946334202 10 Cent 10 Shabna Selected Chakkathiparambu Vennoor 9544950967 4Cent Goat Rearing



12	2	Geetha Radhakrishnan Karakkadu 5Cent Dairy Cattle Rearing	Selected

13	Rafiya	Selected
	Palattuparambil	2010000
	9526425904	
	7 Cent	
	Dairy Cattle Rearing	
	Dun'y cause rearing	
14	Sheeja	Selected
	Plakkal	
	9562971956	
	5 Cent	
	Dairy Cattle Rearing	
	l	



16	Prema Sreedharan Yogyankulangara House 10 Cent Poultry Rearing Ph:9544460701	Not selected
17	Shabina Vettath House Dairy Cattle Rearing 5 Cent Ph: 9072740383	

Report on Pledge for Planet

The 18th Heads of State and Government Summit of the Group of 20 (G20) will take place in September 2023 in New Delhi, India. Under the Indian Presidency, the G20 in 2023 will focus on the theme, 'One Earth, One Family, One Future'. The theme affirms the value of humans, animal, plant, and microorganisms and their interconnectedness on planet Earth and in the wider universe. In this context, the concept of 'Lifestyle for the Environment (LiFE) was introduced by Prime Minister Narendra Modi at COP26 in Glasgow on 1st November 2021 to combat climate change and promote sustainable living to achieve UN sustainable development goals. The mission makes everyone trustees of the environment, responsible for nurturing and preserving it. It aims to change our collective approach to sustainability by nudging individuals to practice environment-friendly actions. C20 LiFE working group is encouraging the Youth to take the 'Pledge for LiFE'. In this scenario, Kerala Agricultural University and the Participating Institutions under KAU actively took a pledge to conserve, protect and care for the planet through LiFE (Life For Environment).



