

UNNAT BHARAT ABHIYAN

(A Flagship Program of Ministry of Education, Government of India)

Annual Progress Report 2022-23

(Northern Kerala Region)

Regional Coordinating Institute (RCI)
Indian Institute of Technology Palakkad



**Sustainable
Agriculture
Systems**



**Water Resource
Management**



**Artisans,
Industries,
and Livelihood**



**Basic Amenities
(Infrastructure
& Services)**



**Rural Energy
Systems**

Regional Coordinating Institute (RCI)
Unnat Bharat Abhiyan
Indian Institute of Technology Palakkad
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IIT Palakkad as the Regional Coordinating Institute

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IIT Palakkad as the Regional Coordinating Institute

1.1 IIT Palakkad - KILA Regional Workshop, April 2022

IIT Palakkad in collaboration with Kerala Institute of Local Administration, organised the regional level Unnat Bharat Abhiyan workshop on 23-04-2022 (Saturday) at KILA Campus, Thrissur. The clientele group consisted of UBA Participating Institute Coordinators of the region, Local Self Government Institutions (LSGIs) representatives, LSGD departments representatives (Annexure 1 attached).

Dr. Rajesh K, Senior Urban Fellow welcomed all the participants and gave a brief introduction to the workshop. Dr. Joy Elamon, Director KILA, in his inaugural address discussed the importance of the collaboration between Higher Education Institutions (HEIs) and LSGIs. He has talked about the present challenges faced by the LSGIs and the role of an academic support system for tackling those challenges. He also mentioned that the Grama Panchayat can be considered as incubation centers for the HEIs, where the problem statements and real world challenges come from.

Dr. Athira P, Assistant Professor, IIT Palakkad & Regional Coordinator of UBA, in her presentation discussed the objectives, context and need of an academic support system for the LSGIs. She mentioned that there is a lack of proper mechanism to enable linking between LSGIs and HEIs. She has also discussed the efforts taken in this direction to develop an institutional mechanism. She has shared the benefits of the HEIs in participating in the UBA program. She concluded her presentation with the best practices of UBA Participating Institutions in the region.

Dr. Rajesh K, cited examples of the activities that can be taken up by the HEIs and LSGIs. He mentioned that HEIs can look into the areas of Impact evaluation, Innovation/Solution/ Idea Generation, Action Research Projects, Baseline studies and DPR Preparation, Voluntary Human Resources etc.

Later on, all the participants were engaged in a group activity. District-wise groups of HEIs and LSGIs were formed, and a selected list of thematic areas and activities were distributed to the groups (Annexure 3 attached). The group members interacted with each other effectively and came up with a list of activities that can be taken up together. Each participant was very enthusiastic during the activity and shared their inputs to the respective group. The group representatives from each district presented their discussion summary (Annexure 4 attached) at the end of the session.

The afternoon session started by Prof. Jiju P Alex, Member Kerala State Planning Board. He stated that Kerala has a strong decentralised governance system and almost all the developmental activities/sectors are being addressed by the LSGIs. He noted that considering the peculiarities of Kerala State, UBA has to modify its mode of action to get tangible results.

The infusion of Science & Technology and State of Art Knowledge is required from the HEIs to bring development of LSGIs. He cited the example of IIT Delhi Rural Technology Center contributing to technological solutions to the problems faced by the rural society. He also mentioned that, based on the expertise available, the HEIs can intervene in the process of local government plan formation by bringing new ideas in solving problems. He also stated that HEIs can support the LSGIs in preparing the status report of various developmental sectors. He shared that the proposed 14th five year plan guidelines has given freedom for the LSGIs to adopt new technologies, to experiment with innovations in the process of program planning with a major emphasis on increasing production and productivity, in all the sectors. He requested the HEIs to formulate projects on entrepreneurship and skilling to generate more employment opportunities for the public.

Later on the day, Smt. Sarada Muraleedharan IAS, Additional Chief Secretary, LSGD and Dr. Joy Elamon joined the discussion. Dr. Rajesh K and Dr. Athira P shared the status of the workshop and the problem statements enlisted. Smt. Sarada Muraleedharan suggested that HEIs through their assessments can come up with innovative growth opportunity projects in the areas such as cyber spacing, coding, artificial intelligence, high end technologies, communication design and suggest such projects/initiatives to the LSGIs. She added that LSGIs may not be in a position to suggest or propose such kinds of projects. She has also suggested taking up projects such as Management Information System for the micro management of drinking water schemes, Carbon Neutrality innovations, Smart Building materials, etc. She suggested involving HEIs expertise (Researchers, Faculty) into the working groups of LSGIs for the plan preparation and to get acquainted with the operations of Panchayati Raj Institutions. HEIs can conduct hackathons by collecting problem statements from the LSGIs.

All participants submitted that the workshop was fruitful and agreed to work for the suggested plan of action.

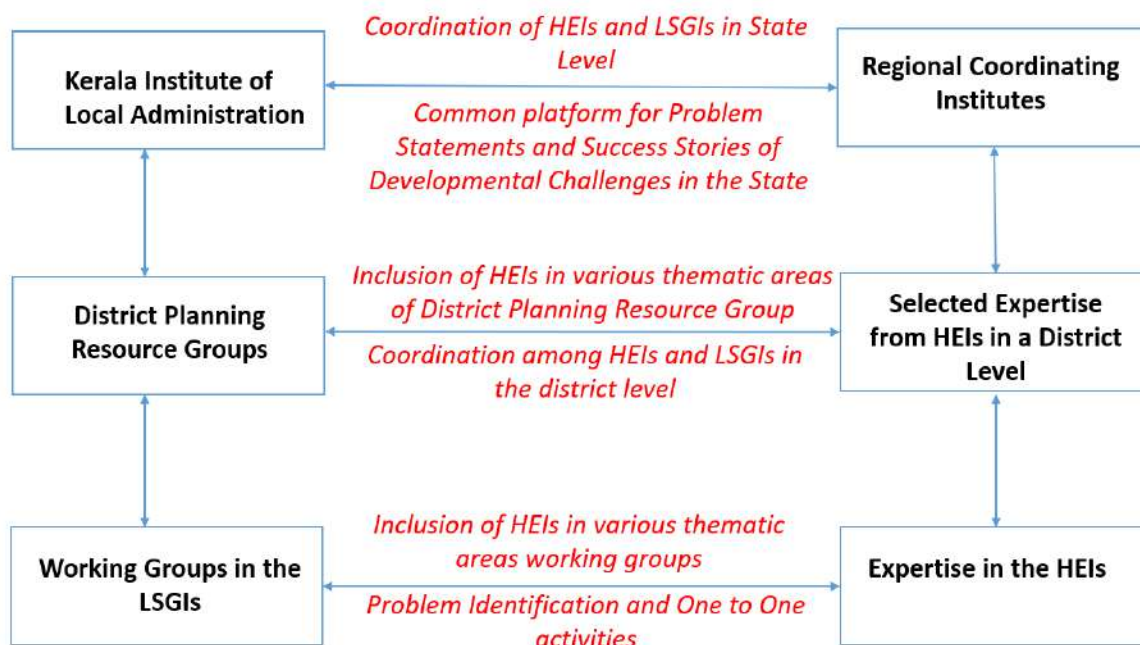
Suggested Plan of Action:

1. UBA Participating Institutes and LSGIs have to have a one-to-one meeting and make a list of the major issues/problems faced by them. The scope of involving HEIs expertise in the working groups of LSGIs needs to be considered. The HEIs which are not part of the UBA framework can also be encouraged to do this activity.
2. District-level workshops involving all the interested HEIs and LSGIs will be conducted to discuss the district-level problem statements and solutions. KILA will facilitate the workshops. The scope of involving HEIs expertise in the District Resource Groups needs to be considered.
3. The UBA Regional Coordinating Institute will consolidate the problem statements and expertise available in each district. A regional level workshop will be planned after the district level workshop to consolidate and formulate actions at the regional level.

Framework for LSGI-HEI Interaction

The UBA Regional Coordinating Institutes and KILA together will coordinate the LSGI-HEI interaction in the State. The RCI-KILA collaboration will act as a platform for sharing the problem statements and success stories of developmental challenges in the State. The HEI-LSGI interaction on a district level will be made possible through the District Planning Resource Group(DPRG). The experts from HEIs will also be members of the DPRG in different thematic areas, and they will coordinate the HEI-LSGI interaction at the district level. The developmental challenges in the grass root level will be tackled by the LSGI and HEIs in the Panchayat. The representatives from HEIs will be a part of the local government Working Groups in different thematic areas and contribute to the development of each grama panchayat. The problem statements which need combined efforts have to be shared in the common platform.

Proposed Framework for HEI-LSGI Partnership



ANNEXURE 1

Participants List

Sl No	Name	Designation	Institution
1	Smt. Sarada Muraleedharan IAS	Additional Chief Secretary	LSGD
2	Dr. Joy Elamon	Director	KILA

3	Prof. Jiju P Alex	Member	Kerala State Planning Board
4	Elsy Joy	President	Thavinjal GP
5	Laiji Thomas	Development Standing Committee Chairperson	Thavinjal GP
6	Rajika	President	Sreekrishnapuram GP
7	Girija M	Development Standing Committee Chairperson	Sreekrishnapuram GP
8	Bindu K	Councilor	Mukkam Municipality
9	Saritha A	President	Karuvattoor GP
10	Sindu V P	Development Standing Committee Chairperson	Karuvattoor GP
11	Sunitha Ananthakrishnan	President	Akathethara GP
12	Manju Murali	Development Standing Committee Chairperson	Akathethara GP
13	Rathi Gopi	Welfare Standing Committee Chairperson	Muriyad GP
14	Ranjith		Mavoor GP
15	Appukuttan		Mavoor GP
16	A V Sandhya	President	Chalissery GP
17	Hussain Pulianinjalil	Development Standing Committee Member	Chalissery GP
18	Praseetha N	President	Puduserry GP
19	Saradha A	Development Standing Committee Chairperson	Puduserry GP
20	Vidhya S S	Assistant Professor	Vimal Jyothi Engineering College Kannur
21	Alan Joy	Social Work Coordinator	St.Joseph's College
22	Dr.Jayapal G	Assistant Professor	Dept.of Geography, Kannur University
23	Dr.Abdul Gafoor C V	Assistant Professor	Arabic NAM College, Kannur
24	Sebin Sunny	Assistant Professor	Sreepathy Institute of MGMT & Technology

25	Vignesh V	Assistant Professor	Ahalia School of Engineering and Technology, Palakkad
26	Dr.Rejith P P	Assistant Professor	Dept. of Physics SES College, Sreekandapuram
27	Ratheesh S	SAPM-AH	Kudumbashree State Mission, TVM
28	Ubaidulla K V	Project Associate	IIM, Kozhikode
29	Dr. Sony T L	NSS Programme Coordinator	University of Calicut
30	Savyan P V	UBA Coordinator	Govt Engineering College Sreekrishnapuram, Palakkad
31	Shameera P	Assistant Professor	MAMO College, Mukkam
32	Ansa Abraham	ICDS Supervisor	Muriyad GP
33	Krishnachandran V N	Assistant Professor	NSS College of Engineering Palakkad
34	Aparna Rajan	Assistant Professor	Govt College for Women, TVM
35	Arun Balakrishnan	Assistant Professor	Govt College of Irinjalakuda
36	Hareesh K P	Assistant Professor	Govt Victoria College, Palakkad
37	Dory Dominic	Chemist	College of Engineering, Irinjalakuda
38	Arun Augustine	Chemist	College of Engineering, Irinjalakuda
39	Sreeram R	Assistant Professor	Govt Engineering College, Wayanad
40	Dr Seetha Kokath	Assistant Professor	DRTS, Kannur University
41	Dr. Athira P	Assistant Professor & Regional Coordinator UBA	IIT Palakkad
42	Dr. Sahely Bhadra	Assistant Professor & Institute Coordinator UBA	IIT Palakkad
43	Nikhil R R	Project Coordinator UBA	IIT Palakkad

44	Dr. Rajesh K	Senior Urban Fellow	KILA
45	Smt. Vineetha M	Faculty in Women & Child Development	KILA
46	Deepak K D	Assistant Training Coordinator	KILA

ANNEXURE 2



ANNEXURE 3

Suggested lists of thematic areas

1. Agriculture, Animal Husbandry and Fisheries
2. Local Economic Development
3. Innovation and Entrepreneurship
4. Data
5. Climate and Environment
6. Water
7. Waste
8. Health
9. Education
10. Energy
11. Transportation
12. Tourism

13. Food Security

Suggested list of activities

1. Fallow land categorisation
2. Micro Irrigation
3. Waste Management
4. Green Technology
5. Animal Husbandry
6. Watershed/ River basin plan
7. Subject wise teacher training
8. Entrepreneurship models/support
9. Local history
10. Biodiversity register
11. Energy Audit
12. Water testing
13. Health register
14. Food technology
15. Drainage audit
16. Energy Conservation
17. Grama Panchayat GDP Calculation
18. Hamlet Plan/ Micro Plan preparation
19. Data Analysis
20. Office automation
21. Environment Impact Assessment
22. Climate/Disaster related initiatives
23. Trainings
24. Action Research Projects
25. Microplan, Detailed Project Report

ANNEXURE 4

Group Discussion suggested activities

1. Wayanad
 - Soil Testing
 - Elderly Care Programs
 - Man- Animal Conflict
 - Support Government Programs
2. Kannur

- Awareness Program
- Statistical Studies
- MSME Development

3. Kozhikode

- Biofog related activities
- Fisheries
- Agriculture Marketing
- Soil Analysis
- Volunteering Activities
- IEC material for children
- Awareness Campaigns

4. Palakkad

- Desilting of water resources
- Agriculture Productivity enhancement
- Water bodies rejuvenation
- Well recharging
- Asset Register Preparation
- Human- Wildlife Conflict

1.2. Compilation of Problem Identified by the Participating Institutions in their adopted villages

1.2.1 St. Joseph's College (Autonomous) Devagiri, Calicut, Kerala

Name of the Grama Panchayat: Pulpally (Wayanad).

Date of the meeting: 18-01-2022

Problem Identification

Sl no:	Problems/Issues identified	Expertise available for the concerned problem.	Proposed Plan if any for the identified solution.
1	Man- Animal Conflict		
2	High dropout rate among tribal students.		· Conducting awareness programs

			Provide free education to the qualified SC ST students in our institution
3	Problems related to agriculture – like lack of storage facilities and mechanization.		
4	Ignorance about government schemes		Conducting awareness campaigns in the villages with the help of students and government officials.
5	Lack of public outdoor hangout areas like grounds and parks etc.		Submit project proposals to panchayat and raise funds by linking them with the various company's CSR activities.
6	Issue of alcohol dependence among tribes.		Awareness programs and classes through various educational institutions in the villages.

Name of the Grama Panchayat: Noolpuzha (Wayanad)

Date of the meeting: 18-01-2022

Problem Identification

SI no:	Problems/Issues identified	Expertise available for the concerned problem.	Proposed Plan if any for the identified solution.
1	Man- Animal Conflict		

2	high dropout rate among tribal students.		Conducting awareness program Provide free education to the qualified SC ST students in our institution
3	problems related to agriculture, like lack of storage facilities and mechanization.		
4	Ignorance about government schemes		Conducting awareness campaigns in the villages with the help of students and government officials.
5	Lack of public outdoor hangout area like grounds and parks etc.		· Submit project proposals to panchayat and raise fund through linking them with the various companies CSR activities.
6	Issue of alcohol dependence among tribes.		· Awareness program and classes through various educational institutions in the villages.

Inclusion in the Grama Panchayat Working Group

SI No:	Working groups available in the Grama Panchayat	Suggested Faculty/ Researcher (Name & Designation)
1	Watershed Management	Dr. Vineesh P. J, Assistant Professor Department of Zoology
2	Local Economic Development	Dr. Asha Mathew, Assistant Professor Department of Economics

3	Poverty Reduction including housing	Dr. Asha Mathew, Assistant Professor Department of Economics
4	Development of Scheduled Castes	Dr. Asha Mathew, Assistant Professor Department of Economics
5	Development of Women and Children	Dr. Raichel John, Assistant Professor Department of English
6	Health	Dr. Raichel John, Assistant Professor Department of English
7	Water Supply and Sanitation including Solid Waste Management	Dr. Vineesh P. J, Assistant Professor & Dr. Rekha Jose, Assistant Professor
8	Education, Culture, Sports and Youth	Dr. Rekha Jose, Assistant Professor
9	Infrastructure	Dr. Raichel John, Assistant Professor Department of English
10	Social Security including care of the aged and disabled	Dr. Raichel John, Assistant Professor Department of English
11	Energy	Dr. Vineesh P. J, Assistant Professor
12	Governance Plan	Fr. Bony Augustine, Administrator

1.2.2 Ahalia School of Engineering and Technology

Name of the Grama Panchayat: Elappully

Date of the meeting: 10/05/2022

Problem Identification

Sl no:	Problems/Issues identified	Expertise available for the concerned problem (Yes/No). If Yes, Please share the expertise available in your institute	Proposed Plan if any for the identified solution.
1	Lack of technical assistance in the agricultural field.	Yes. Department of Agriculture and Real estate of Ahalia Group will associate	Installation of Hydroponic system
2	There is no follow-up in rainwater harvesting techniques	Yes. Ahalia is the leader in the water conservation activities in Kerala	Follow-up with the help of students
3	Skill oriented educational systems were not introduced to the people.	Yes. Ahalia School of Engineering and Technology is a Centre for skill development programs under PMKVY of Government of India and C-apt of Government of Kerala	Skill development classes for the students of economically and socially backward group.
4	Insufficient roads to remote villages (Nayadi colony)	Yes. Faculty of Civil Engineering department of Ahalia School of Engineering and Technology have expertise	Survey with the help of students to find the space availability for construction of roads.

5	The advancement in well recharging techniques were not identified	Yes. The Principal of Ahalia School of Engineering and Technology has been consultant to over a dozen water conservation projects in the District under technology mission and Jala Nidhi Mission of Government.	Awareness classes about well recharging to the people and Implementation of the techniques and follow-up with the help of the students
6	Lack of health awareness	Yes. Ahalia campus is having four major super specialty Hospitals, one exclusively for Women and Children	Conduction of health awareness camps like eye camps, nutrition needs, immunization, personal hygiene, menstrual health awareness for girls, life style diseases, etc. in the village
7	Lack of Green initiatives	Yes. Ahalia School of Engineering and Technology is having a Nature Club and National Service Scheme unit actively involved in nature conservation. In addition our's is the largest sustainable campus in Kerala, self sufficient in Energy and Water	Implementation of green initiatives like rain shelter, green houses, vertical gardens etc.
8	Not aware about the efficient utilization of energy	Yes. ENSAV: The Energy Saving Club of Ahalia School of Engineering and Technology is actively involved in promoting energy conservation techniques and equipment.	Safe and optimum use of LPG, Electricity, Awareness of the use of the solar energy

9	Alcoholism and drug addiction	Yes. Youth Against Alcohol and Drugs: YAAD movement in Ahalia School of Engineering and Technology is already working in the field of awareness creation on alcohol and drug abuse. The speaker ok Kerala Legislative Assembly associated with us and offered all support. The excise department of the Government is associating with all our programs.	Organize awareness activities with the help of students about the counter effects of alcohol and drugs.
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Inclusion in the Grama Panchayat Working Group

SI No:	Working groups available in the Grama Panchayat	Suggested Faculty/ Researcher (Name & Designation)
1	Watershed Management	Ms. Neethu John, Assistant Professor, Department of Civil Engineering
2	Local Economic Development	Ms. Bindu Valoor Manager -Academics Outreach, Ahalia Group
3	Poverty Reduction including housing	Prof. Kripa K. M. HoD, Department of Civil Engineering
4	Development of Scheduled Castes	Dr. Balamurugan V Professor & HoD, Department of Electronics and Communication Engineering

5	Development of Women and Children	Ms. Preeja V, Assistant Professor, Department of Science and Humanities
6	Health	Ms. Rinsy, Counseling Psychologist Ahalia Group
7	Water Supply and Sanitation including Solid Waste Management	Dr. P. R. Sreemahadevan Pillai, Principal, Director, Ahalia Group Academic Institutions, India
8	Education, Culture, Sports and Youth	Prof. Roshan Sanu NSS Programme Officer, Assistant Professor, Department of Computer Science Engineering
9	Energy	Dr. G. Murugananth Professor & HoD, Department of Electrical and Electronics Engineering

1.2.3. Mary Matha Arts & Science College, Mananthavady

Name of the Grama Panchayat: Mananthavady Municipality

Date of the meeting: 06-05-2022

Problem Identification

Sl no:	Problems/Issues identified	Expertise available for the concerned problem (Yes/No). If Yes, Please share the expertise available in your institute
1	Survey to identify the needs of the differently-abled.	Yes. NSS and NCC
2	Literacy programs in tribal colonies.	Yes. NSS and NCC
3	Programs to protect and promote tribal arts.	Yes. NSS and NCC
4	Soil Testing.	No
5	Water purity test.	Yes. Chemistry Department

Inclusion in the Grama Panchayat Working Group

Sl No:	Working groups available in the Grama Panchayat	Suggested Faculty/ Researcher (Name & Designation)
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1	Water Supply and Sanitation including Solid Waste Management	Dr Sanu V F Assistant Professor Department of Zoology
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1.2.4. Vimal Jyothi Engineering College

Name of the Grama Panchayat: Eruvessy

Date of the meeting: 1/05/2022

Problem Identification

SI no:	Problems/Issues identified	Expertise available for the concerned problem (Yes/No). If Yes, Please share the expertise available in your institute	Proposed Plan if any for the identified solution.
1	Technical help in the shopping complex construction at chemperi under grama panchayath	YES, The Civil engineering Department.	A discussion was conducted over the phone and planned to visit the site.
2	Different panchayat level surveys	YES, Man power [College NSS unit Statistical study CSE department]	Discussions going on.
3	Digital literacy among common people	YES, CSE department	Planned for a single interface for common applications demanded by the common people and its training.

4	Water testing	YES, the Civil department has an authorized water testing lab.	
5	Soil testing	NO , Currently no lab facilities for soil testing.	

Inclusion in the Grama Panchayat Working Group

A request has been forwarded to the grama panchayat to include two faculty members as a permanent members in planning committees and waiting for the reply from Panchayath.

1.2.5. Government Engineering College, Palakkad

Name of the Grama Panchayat: Sreekrishnapuram Grama Panchayat

Date of the meeting: 13/04/2022 FN

Problem Identification

Sl.No	Problems/Issues identified	Expertise available for the concerned problem (Yes/No). If Yes, Please share the expertise available in your institute	Proposed Plan if any for the identified solution.
1	Generate an accurate geographical road map for the panchayat which marks different types of roads	Yes. Civil and Computer Science and Engineering department	Mapathon
2	How to provide the information about medical support details(Vaccination etc) to the village people up to date?	Yes. Computer Science department	Information system app
3	How to manage e-waste and wastes like glass bottles, Presently the waste is sent to Kanchikode.	No	

4.	How to improve energy efficiency within the village	Electrical Engineering	
5.	How to prepare a plan(Civil and electrical) for housing works	Civil Engineering and Electrical Engineering	Software based systems
6	Classification of land	Civil Engineering	Soil test

Sl.No.	Working groups available in the Grama Panchayat	Suggested Faculty/ Researcher (Name & Designation)
1.	Watershed Management	Nil
2.	Local Economic Development	Dr Rajesh PN
3.	Poverty Reduction including housing	Mr Sandeep MN
4.	Development of Scheduled Castes	Nil
5.	Development of Women and Children	Nil
6.	Health	Nil
7.	Water Supply and Sanitation including Solid Waste Management	Nil
8.	Education, Culture, Sports and Youth	Dr Bimal Lazer

Sl.No.	Working groups available in the Grama Panchayat	Suggested Faculty/ Researcher (Name & Designation)
1.	Watershed Management	Nil
2.	Local Economic Development	Dr Rajesh PN
3.	Poverty Reduction including housing	Mr Sandeep MN
4.	Development of Scheduled Castes	Nil
5.	Development of Women and Children	Nil
9.	Infrastructure	Mr Sandeep MN
10.	Social Security including care of the aged and disabled	Mr Soni P, Dr Silpa Sangeeth
11.	Energy	Mr. Abdul Kareem, Mr Muhammedali Shafeeqe K
12.	Governance Plan	Nil

1.2.6. Kannur University

Name of the Grama Panchayat: Edavaka

Date of the meeting: 13.05.2022

Problem Identification

Sl no:	Problems/Issues identified	Expertise available for the concerned problem (Yes/No). If Yes, Please share the expertise available in your institute	Proposed Plan if any for the identified solution.
1.	Climate change related issues	Yes (Expertise available in the Department of Botany, Department of Zoology, Department of Environmental Studies and Department of Rural and Tribal Sociology)	1. Carbon Neutral Project 2. Bio Diversity conservation Programmes 3. Maintaining and updating the People's bio diversity register
2.	Poor living condition of the Scheduled Tribe People.	Yes (Department of Rural and Tribal Sociology)	1. <i>Uyarum Njan Nadakea</i> is proposed for a holistic development of Tribal people 2. Linking tribal Art and performance with Tourism
3.	Service Delivery Mechanism	Yes (Department of Management Studies and Department of Information Technology)	
4.	Issues related to Waste Management	Yes (Department of Environmental Studies)	

1.2.7. IIM KozhikodeName of the Grama Panchayat: **Mavoor**

Date of the meeting: 17.05.2022

Problem Identification

Sl no:	Problems/Issues identified	Expertise available for the concerned problem (Yes/No). If Yes, Please share the expertise available in your institute	Proposed Plan if any for the identified solution.
1	Flood		
2	Waste Management – Clean Mavoor Project		
3	Town Development – Need a comprehensive plan	No	
4	Industrial Development – Effective use of Gwalior Ryon's 300+ acres of land	Prof Anubha Shekhar and her team looking at the current status.	It is very complicated problem. Our Project is in understanding stage. After the problem is understood from the multiple stakeholders perspective, a plan of action shall be drafted accordingly.
5	Lack of strategy for selling value-added products for Banana and Jackfruit		Annexure III
6	Eco-Tourism Plan		Annexure IV
7	Entrepreneurship plan for Persons with Disability	Prof Anubha Shekhar	
8	All in one digital survey of Panchayat demography		
9	Developmental plans for SC/ST residential area		

Inclusion in the Grama Panchayat Working Group

SI No:	Working groups available in the Grama Panchayat	Suggested Faculty/ Researcher (Name & Designation)
1	Development of Women and Children	Prof Anubha Shekhar
2	Social Security includes care for the aged and disabled	Prof Anubha Shekhar

1.2.8. GEC Wayanad

Name of the Grama Panchayat: Thirunelly Grama Panchayat

Date of the meeting: 05/05/2022

Problem Identification

SI no:	Problems/Issues identified	Proposed Plan if any for the identified solution.
1	Man - Animal Conflict	Protection of wildlife is an important activity of the Forest Department. This projects aims at equipping the Forest department to protect the wildlife in an efficient way. The project is originated from a request made by the divisional forest officer for designing a surveillance system for Begur reserve project. Through this pilot study, we are trying to demonstrate the usefulness of automatic surveillance system for protecting forest area. Manual monitoring of the video recording is tedious and inefficient. Hence the automation will be very useful and helps to get maximum usage of the surveillance system. The nature of the video recorded depends on the area under surveillance and the key issues to be detected automatically is also specific to the area. The system should be developed using relevant recorded data. The project provides a valuable resource for those interested to study the wildlife related issues. Once we are able to demonstrate the usefulness of the system, the same can be used with suitable modifications to provide surveillance solutions for similar environment. The implementation of the project will help the forest department to protect the valuable resources available in our precious forest land

Inclusion in the Grama Panchayat Working Group

SI No:	Working groups available in the Grama Panchayat	Suggested Faculty/ Researcher (Name & Designation)
1	Man - Animal Conflict	Prof. Anas M M

1.2.9. NSS College of Engineering

Name of the Grama Panchayat: Akathethara

Date of the meeting: 17-05-2022

Problem Identification

SI no:	Problems/Issues identified	Expertise available for the concerned problem (Yes/No). If Yes, Please share the expertise available in your institute
1.	Development of quarry at Kunnumpara, near Kallekulangara into a tourist destination	YES
2.	Waste management system blade repair and CCTV making	
3.	Akathethara PHC to FHC upgradation and renovation	YES

Inclusion in the Grama Panchayat Working Group

SI No:	Working groups available in the Grama Panchayat	Suggested Faculty/ Researcher (Name & Designation)
1	Watershed Management	
2	Local Economic Development	Prof.Sanjeev G
3	Poverty Reduction including housing	Prof.Sanjeev G
4	Development of Scheduled Castes	Prof.Krishnachandran
5	Development of Women and Children	Prof.Deepthi S Nair
6	Health	
7	Water Supply and Sanitation including Solid Waste Management	Prof.Krishnachandran
8	Education, Culture, Sports and Youth	Dr. Rajesh CB
9	Infrastructure	Dr. Biju MS

10	Social Security including care of the aged and disabled	Prof.Krishnachandran
11	Energy	Dr. Jyothisankar

1.3. Tech4Seva Regional

As directed by the Unnat Bharat Abhiyan National Coordinating Institute (NCI) IIT Delhi, IIT Palakkad in the capacities of Regional Coordinating Institute (RCI) of UBA organised *Tech4Seva* at the regional level to shortlist 3 technologies from the region to be sent to NCI IIT Delhi for the National Level event.

RCI IIT Palakkad invited technologies that have application in rural areas of the country in accordance with the following UBA themes.

- ❖ Sustainable Agriculture Systems
- ❖ Water Resource Management
- ❖ Rural energy Systems
- ❖ Artisans, Industries and Livelihood
- ❖ Basic Amenities (Infrastructure, Education, Healthcare etc).

The communication email regarding Tech4Seva was sent to all the Participating Institutions of UBA in the region and a regional online meeting was held to encourage participation from the Institutions.

The Regional Tech4Seva event organised by RCI IIT Palakkad was conducted on 18-07-2022, Monday in google meet. Mr. Nikhil R R, Project Coordinator, UBA welcomed the participants and gave a brief overview of the Tech4Seva event. The details of the presentations of the shortlisted technologies is summarized below.

SI No	Title of the Technology	Description of the technology and its operation	Organization
1	Robotics	Developing a lower limb robotic suit for people with lower limb disabilities. (www.astrekinnovations.com)	Astrek Innovations Pvt .Ltd (Start up)
2	Hydrosense	The project is designed to develop a manual and automatic irrigation system which switches the pump motor ON/OFF on sensing the moisture content of the soil and each crop's CWR.	Government Engineering College, Sreekrishnapuram, Palakkad (UBA PI)
3	Real-time Water Level Monitoring for Dams and Rivers	The system uses LoRaWAN communication to transmit real-time data to the cloud server. The device is a controller-based sensor column which monitors different parameters like water	Sreepathy Institute of Management And Technology(UBA PI)

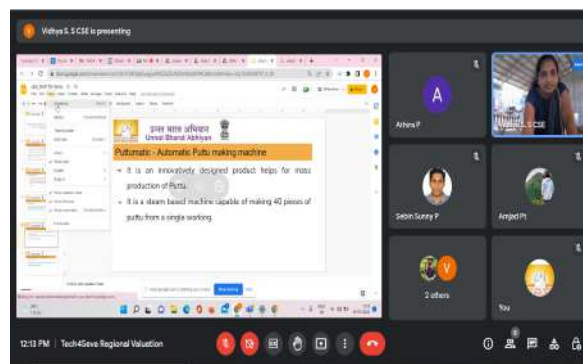
		level, atmospheric temperature and humidity. The local body officials can monitor the well water levels and groundwater table with the help of a dedicated web/android application.	
4	Raspberry Pi Computers	A public maker space for children with low-cost Raspberry pi computers, To make computer science education accessible to all children in rural parts of India, To familiarize children in future technology domains, To provide a platform for HEIs to support the local community.	Sreepathy Institute of Management And Technology (UBA PI)
5	Puttumatic - Automatic Puttu making machine	This machine is used to make the food item puttu. An array of multiple puttu moulds are fixed above a water container. Two gas burners are placed at the bottom of this water container. This moulds are fixed on a rolling plate so that it can move out from the steam once it gets cooked. An air pump is used to push the putt to the container placed under the molds.	Vimal jyothi engineering college (UBA PI)
6	Low-cost Egg Hatchery Unit.	This unit is built with temperature isolating expanded polystyrene containers. The temperature and humidity control system is used to control humidity and temperature inside the box. The surface where the eggs are placed is designed to be rotated clockwise to uniformly distribute light to the egg. The number of days taken to complete a cycle will depend on the egg we use (Hen:- 21 days, Duck:- 28 days, Kada:- 18 days). During this period a humidity of 65 to 85%, and a temperature of 37.5C is to be maintained inside the incubator.	Vimal jyothi engineering College (UBA PI)

7	Water Level Monitoring system for pools	The project aims to implement a water level monitoring system for the rainwater harvesting pool in our college. The system allows to remotely analyse the water levels and other parameters like amount of rain water used, harvested amount of water and average water used for a month using IOT technology. * The system consists of a waterproof ultrasonic sensor that measures the water level. The ultrasonic sensor is connected to a nodemcu esp8266 microcontroller that uses wifi to upload the data collected by the ultrasonic sensor to a MySQL database. * The data recorded in the application is processed by an application specifically developed for the purpose the create the required outputs	Government Engineering College, Sreekrishnapura, Palakkad (UBA PI)
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The presentation and submission were examined by Dr. Athira P, UBA Regional Coordinator. She appreciated the work of the participants and urged the Participating Institutes to develop technology that would offer sustainable solutions to the problems that were discovered at the grassroots level through the Unnat Bharat Abhiyan's convergence strategy (UBA).

After careful consideration, RCI IIT Palakkad has shortlisted the following 3 technologies to be nominated for the National Level Tech4Seva event.

- *Real-time Water Level Monitoring for Dams and Rivers by Sreepathy Institute of Management And Technology.*
- *Low cost Egg Hatchery Unit by Vimal Jyothi Engineering College.*
- *Hydrosense by Government Engineering College, Sreekrishnapuram, Palakkad.*



1.4 Catch the rain awareness campaign

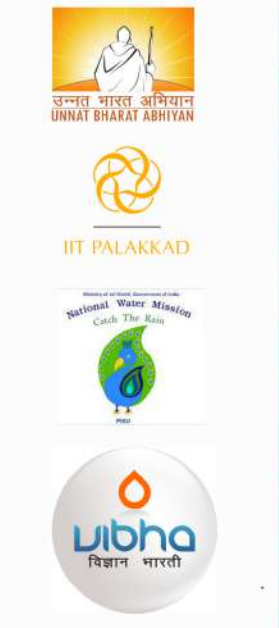
Catch the Rain is an initiative of the NWM under the Jal Shakti Abhiyan. It was launched by Shri Narendra Modi, Hon'ble Prime Minister on the occasion of World Water Day, March 22, 2021, with the objective of nudging states and stakeholders to create appropriate rainwater harvesting structures before monsoon with the active participation of people. The initiative aims at enumerating all water bodies in a district and removing encroachments throughout the country.

Unnat Bharat Abhiyan collaborated with the NWM and VIBHA on June 5, 2021, to support 'Catch the Rain' mission activities around four focus areas:

1. Awareness on field implementation of water conservation projects
2. Ground water recharging projects
3. Projects for maximizing surface water usage
4. Promotion of sustainable agricultural activities

As a first step towards spreading awareness among the masses, we are launching a campaign "Selfie to Save."

About the campaign: The campaign is about clicking selfies with water bodies or locally existing structures for conserving water. These will be uploaded on social media with a view to create awareness and draw the attention of concerned stakeholders towards the water body/ conservation structure.



#Selfietosave

പിന്തുടരേണ്ട നടപടികൾ

- നിങ്ങളുടെ മൊബൈലിൽ പ്ലേസ്റ്റോറിൽ പോയി ജിയോടാഗിംഗ് ആപ്പ് ഡൗൺലോഡ് ചെയ്യുക
- ജിയോടാഗിംഗ് ആപ്പ് തുറന്ന് ലൊക്കേഷൻ ഉള്ള സെൽഫിയിൽ ക്ലിക്ക് ചെയ്യുക, അങ്ങനെ ജലാശയത്തിന്റെ സ്ഥാനം ലഭിക്കും
- ജലാശയത്തിന്റെ നിലയ്ക്ക് അനുസൃതമായി നിങ്ങൾക്ക് പുഞ്ചിരിയോ സങ്കടകരമായ മുഖമോ ഉപയോഗിച്ച് ക്ലിക്ക് ചെയ്യാം
- ഡാറ്റയ്ക്കൊപ്പം ചിത്രം ഗൂഗിൾ ഫോമിൽ അപ്ലോഡ് ചെയ്യുക
<http://tinyurl.com/selfietosave>
- കൂടാതെ, Twitter, Facebook, Instagram എന്നിങ്ങനെ എല്ലാ സോഷ്യൽ മീഡിയ പ്ലാറ്റ്ഫോമുകളിലും ഹാഷ്ടാഗുകൾ ഉപയോഗിച്ച് അപ്ലോഡ് ചെയ്ത് ഞങ്ങളെ കാൾ ചെയ്യുക

1.5 Orientation Program for New UBA Participating Institutes

RCI - IIT Palakkad organized an online orientation program on Unnat Bharat Abhiyan for the newly added Participating Institutes (PIs) under its RCI - IIT Palakkad. The newly joined PIs included Holycross Institute of Management and Technology, Palakkad, KTN College of Pharmacy, Palakkad, Vimal Jyothi Institute of Management and Research, and Navajyothi College, Cherupuzha Kannur.

The orientation program was conducted by Dr. Athira P, Regional Coordinator, RCI - IIT Palakkad and Dr. Sahely Bhadra, UBA Institute Coordinator. They provided comprehensive guidance and information about the Unnat Bharat Abhiyan program to the participating institutes during the online session.

1.6 G- Ex Kerala 2023 Conclave

Representing Unnat Bharat Abhiyan Cell of IIT Palakkad Mr. Anurenj P Kumar, Project Coordinator participated in the G- Ex Kerala 2023 Conclave - A Global Expo on Waste Management Technologies at Marine Drive in Kochi. The conclave was inaugurated by Mr. Pinarayi Vijayan, Chief Minister of Kerala in the presence of Mr. VD Satheeshan, Leader of Opposition in Kerala Legislative Assembly, Mr. P Rajiv, Minister of Finance and Mr. MB Rajesh, Minister of Local Self Government, Government of Kerala on 4th February 2023. The conclave was organized by the Local Self Government Department of the Government of Kerala in association with Suchitwa Mission, Government of Kerala, Kerala State Pollution Control Board, Clean Kerala Company Limited, Kerala State Waste Management Project and other line departments.



The G-Ex Kerala 2023 Conclave served as a valuable learning and discussion platform on waste management, aiming to raise awareness about its importance. The expo brought together technologies, various types of machinery, and experts in the field of waste management under one roof. Distinguished attendees included representatives from Local Bodies, members of Haritha Karma Sena, Government officials, Civil Society Organisations, and other stakeholders.

During an informal focus group discussion, the UBA Project Coordinator highlighted the pivotal role of Higher Education Institutes (HEIs) in waste management and the significance of upskilling the Haritha Karma Sena Community across the State.



HEIs can lead the way in implementing behavioral change communication programs, providing technological support to professionalize waste collection, assisting in organizing swap shops, and taking up repair works of electronic devices. Moreover, HEIs can play a crucial role in empowering Hariitha Karma Sena members to evolve from mere waste collectors to environmental solution providers at the local level.

1.7. Meeting with Dr. Rajesh K, Sr. Urban Fellow, KILA

Mr. Anurenj P Kumar, the Project Coordinator of UBA, had a meeting with Dr. Rajesh K, Senior Urban Fellow from the Kerala Institute of Local Administration (KILA) in Thrissur. The primary agenda of the meeting was to discuss the implementation of the UBA Institutional Framework in Palakkad district as a pilot study.

During the meeting, Dr. Rajesh K recommended consulting with the KILA District Facilitator and their team in Palakkad for valuable insights and support in carrying out the pilot study effectively.

1.8 A talk on Menstrual Hygiene Management

On 12th January 2023, a Talk on Menstrual Hygiene Management was organized with Smt. Anju Bisht, the Founder of Saukhyam Reusable Pads, as the esteemed resource person. The talk aimed to raise awareness about the importance of menstrual hygiene and the adverse effects of using synthetic menstrual pads. Smt. Anju Bisht highlighted the significance of transitioning to reusable and eco-friendly menstrual pads for both women's health and environmental reasons.



During the talk, Smt. Anju Bisht encouraged the Participating Institutes (PIs) to collaborate with Saukhyam in their Unnat Bharat Abhiyan (UBA) activities. By doing so, rural women groups would have the opportunity to get involved in the manufacturing process and sales of these reusable pads. Such an association with Saukhyam would not only promote sustainable menstruation practices but also empower rural women economically.

The online event witnessed active participation from UBA Coordinators and faculties of the participating institutes. The engaging talk provided valuable insights into menstrual hygiene management and emphasized the role of eco-friendly options in promoting better health and environmental sustainability. The participants were inspired to consider the integration of sustainable menstrual practices into their UBA initiatives, benefiting both women's health and the community as a whole.



1.9 Consultative Workshop on Local Disaster Management Plan Using GIS

The Unnat Bharat Abhiyan Regional Coordinating Institute - IIT Palakkad has organized a Consultative Workshop on Local Self Government Disaster Management Plan using GIS on 4th March 2023. In the previous year, the UBA Cell has organized a Community Driven Mapping Project for Pudukkottai Grama Panchayat using Open Mapping GIS technologies and resulted in hosting a web interface ([OGD IIT Palakkad](#)) and the preparation of cartography based maps of the ward, land use pattern, farmland, and water resources using the gathered data. As a follow-up of the project, the UBA Cell is assisting Pudukkottai Grama Panchayat in preparation of a Local Self Government Disaster Management Plan using GIS. The workshop was designed as an initial discussion with the Ward Members of the Panchayat about disaster history in their wards, gathering suggestions and sensitizing the use of the GIS map in future planning. Official handing over of the Open GIS Mapping Project was also held along with the workshop. Dr. Divya PV, Associate Professor handed over the printed maps to Smt. Praseeda, President, Pudukkottai Grama Panchayat. Officials from various Government Departments and Civil Society Organisations like the Kerala State Disaster Management Authority (KSDMA), Kerala Institute of Local Administration (KILA), Socio Economic Unit Foundation (SEUF) and Open GIS Community also attended the workshop.



workshop's goals and objectives to all the participants.

The main resource person for the workshop was Mr. Jaisan Nedumpala, the Secretary of Thamarassery Grama Panchayat, and a dedicated GIS enthusiast. Mr. Nedumpala began his session by sharing his personal journey into the field of GIS and discussing its applications in Local Self Governance and disaster management planning. He emphasized the importance of



Open GIS and its relevance for the future. The session was followed by a question and answer segment, allowing participants to engage with Mr. Nedumpala and gain further insights.

Next, Mr. Manoj Karingamadathil, representing the Open GIS Mapping Community, shared his experience regarding the Community Based Mapping exercise and presented a video showcasing the process. Additionally, he highlighted the significance of regularly updating GIS maps for accurate and up-to-date information.

In an open discussion platform, the Panchayat Members actively participated, sharing information about past disasters that affected their respective wards. They also addressed various development issues that the UBA Cell could potentially intervene in and work towards resolving.

The Pudukkottai Panchayat sought assistance from the Unnat Bharat Abhiyan Cell of IIT for solid waste management solutions. Mr. Saji Sebastian, Executive Director, Socio Economic Unit Foundation, emphasized waste management's significance in disaster planning and response. He assured support from his organization in the solid waste management plans of UBA and Pudukkottai GP.



Mrs. Susmy Sunny, Hazard Analyst from the Thrissur, Kerala State Disaster Management Authority, appreciated the UBA Cell's initiative in assisting Local Self Governments in preparing Local Disaster Management Plans. She highlighted the crucial role of local self-governments as first responders during disasters.

Mrs. Asha VK Menon, the Disaster Management Plan Coordinator of Kerala Institute of Local Administration, presented the disaster management planning report prepared by KILA in 2020 for Pudukkottai. She explained the contents of the disaster management plan template prepared by KILA and suggested updating the details of the report.

1.10 UNNATI Mahotsav

RCI - IIT Palakkad actively participated in the UNNATI - Unnat Bharat Abhiyan Networking for National Atmanirbhar Technological Mahotsav 2023, held in March 2023 at the Indian Institute of Technology Delhi, Hauz Khaz. The UNNATI Mahotsav & Expo was a technology demonstration and conference organized by the Unnat Bharat



Abhiyan National Coordinating Institute - IIT Delhi on 17th and 18th March 2023.

The event was inaugurated by Dr. Subhas Sarkar, Minister of State for the Ministry of Education, Government of India, in the presence of Prof. VK Vijay, National Coordinator- UBA and Prof. Rangan Banerjee, Director, Indian Institute of Technology Delhi. RCI - IIT Palakkad showcased three innovative technologies from institutes in the region.



The technologies demonstrated in the expo representing RCI -IIT Palakkad were as follows:

1. Real-time Water Level Monitoring for Dams and Rivers by Sreepathy Institute of Management And Technology, Palakkad.
2. Low-cost Egg Hatchery Unit by Vimal Jyothi Engineering College, Kannur.
3. Hydrosense by Government Engineering College, Sreekrishnapuram, Palakkad.

Each institution was represented by their a three member group consisting of a Faculty member, student member and a village representative. The two-day event included technology demonstrations and presentations, providing a valuable platform for knowledge exchange and networking.

The team representing RCI - IIT Palakkad were Mr. Anurenj P Kumar, Project Coordinator, UBA, Mr. Savyan P.V, UBA Coordinator, Government Engineering College Palakkad, Mr. AMJAD P T, Btech student, Government Engineering College Palakkad, Mr. HARIDASAN C, Sreekrishnapuram Grama Panchayat Member, Government Engineering College Palakkad, Mr. Sugesh MS, Assistant Professor, Sreepathy Institute of Management and Technology, Palakkad, Mr. Arun KA, Sreepathy Institute of Management and Technology, Palakkad, Mr. Sebin P SUNNY, Sreepathy Institute of Management and Technology, Palakkad, Mrs. Vidhya SS, UBA Coordinator, Vimal Jyothi College of Engineering, Kannur, Fr. Babu Varghese, Social Worker, Vimal Jyothi College of Engineering, Kannur and Mr. Alan Jyothis Thomas, Btech student, Vimal Jyothi College of Engineering, Kannur



Major Activities of Participating Institutes in the Region

1. INDIAN INSTITUTE OF TECHNOLOGY PALAKKAD

1.1 Proposal for Water Resilience in Pudussery Grama Panchayat using Blue-Green Infrastructure Pilot Project- Velancheri watershed, Kannode ward (Ward no: 04)

The UBA Cell has submitted a CSR Grant Proposal to Kotak Mahindra Bank for Water Resilience study project on improving the water resilience of a sub watershed within Pudussery Grama Panchayat on a pilot scale.

The proposed study focuses on improving the water resilience of a sub-watershed within the Panchayat on a pilot scale. The catchment area of the Velancheri sub-watershed is around 10 km² and it drains to the Walayar River downstream. The upstream catchment area of the watershed is a part of the Western Ghats. There are a number of storage structures/ponds with in the drainage area. The agricultural activities in the region during rabi and summer seasons are completely dependent on the water present in these structures. The major crop in the sub-watershed is Paddy. Paddy cultivation in the 'Padasekharam' Kadukampallam and Chellankavu is not at its full potential due to the lack of availability of water. The capacity of these storage structures have significantly reduced after the 2018 flood in Kerala and consequent landslides due to silt deposits. The study will focus on desilting, and rejuvenating these natural structures. The vegetation-based solutions will be introduced into the drainage system for better soil and water conservation. The interlinking of these structures will help in better storage of water and improve groundwater recharge. Hence interlinking of the existing structures will also be a part of the intervention planned in the study. These interventions will become sustainable only by the people's participation and their ownership of the infrastructures. The planning and implementation of the project will be done by incorporating the 'Padasekhara Samiti' and other farmers. The effectiveness of the structures implemented in the field needs to be analyzed periodically for improving the system. The project will establish a system for monitoring the groundwater level, evapotranspiration, water yield, and water quality in the selected watershed.

The approximate budget for the project is nearly 10 lakhs. We are awaiting their response.

1.2 Meeting with the Chief Executive Officer of Zewa Ecosystems Pvt Ltd.

An online meeting was held with Mr. Nikhil Mulakkal, Chief Executive Officer of Zewa Ecosystems Private Limited to discuss the possibility of collaboration in UBA activities in the waste management related activities. His company is involved in reducing food waste by converting it into high quality sustainable animal and fish feed and nutritious organic manure for

your kitchen garden. They utilize black soldier fly farming to convert organic waste into sustainable protein feed for livestock farmers.

He suggested that his company can collaborate with UBA in organic waste management projects in our adopted villages.

1.3 Creation of selected geospatial open data set for Pudussery Grama Panchayat using Community Participatory Mapping Cartography

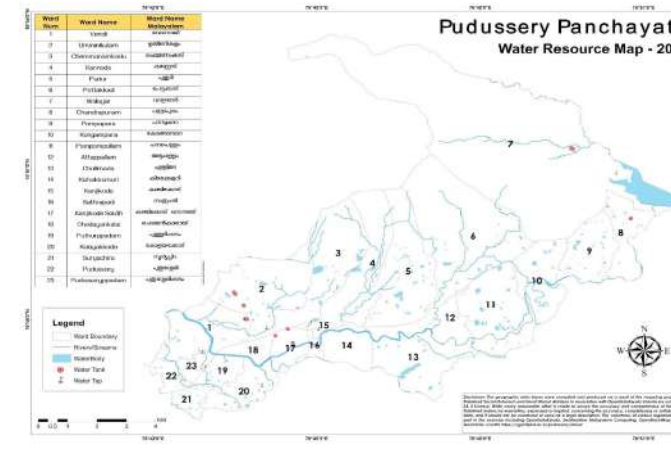
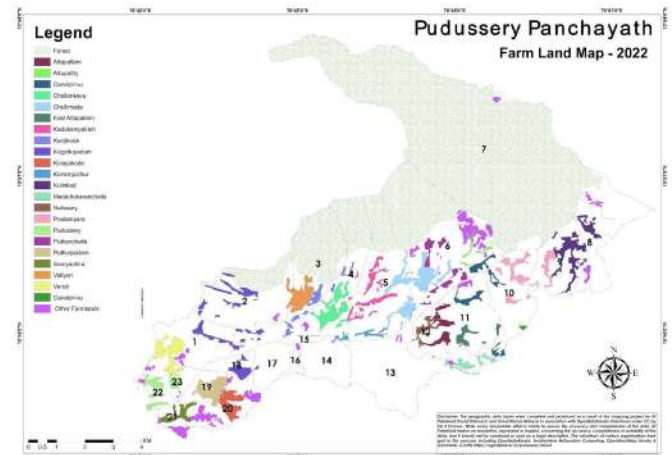
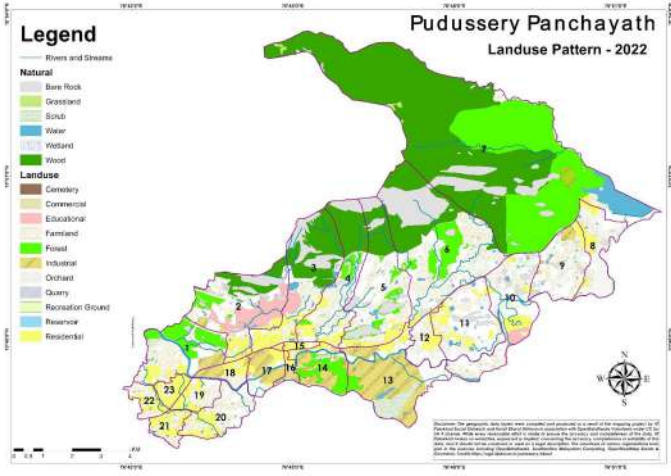
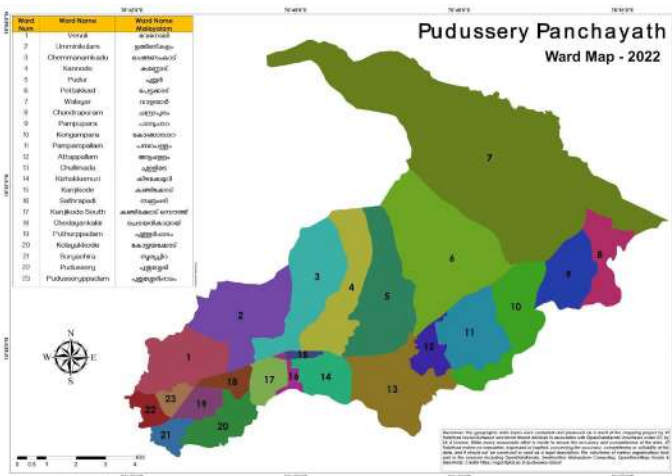
Maps are the primary tool for the representation of geodata. Maps summarise the long tabular (or any other form) information into a piece of information which can be understood at a glance. In the era of the digital world, people face the problem of information overload. Contents are created in Tera bytes and Peta bytes. Naturally, people spent less time on each content. The average time spent on digital content by a person is very less. Thus conveying the information in a very limited time to the person is very important. Maps are faster and easier to follow. We see a lot of data visualization on maps daily. Even before all these maps were used for visualising and documenting the geographical features for the purpose of administration, navigation, engineering needs etc. In any study of a city, urban planning is impossible without a proper map.

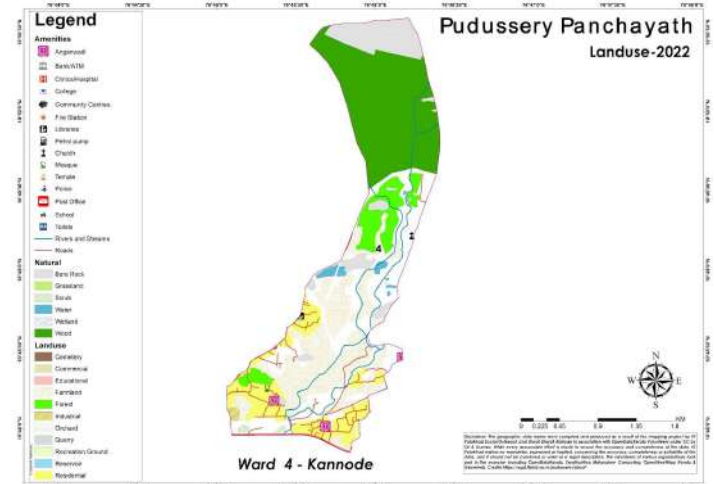
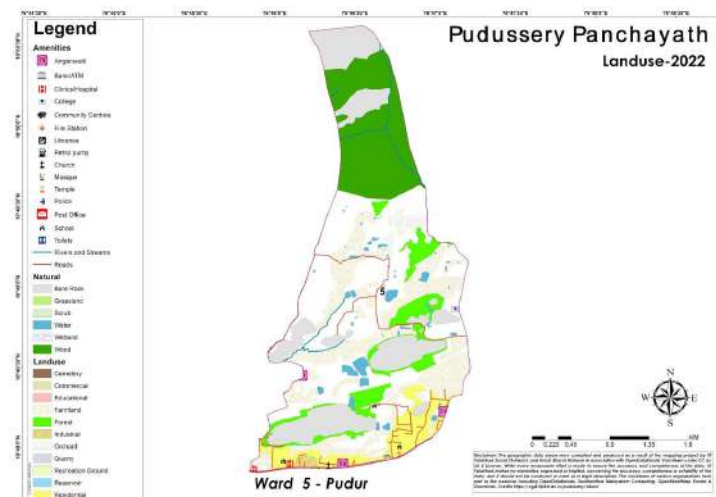
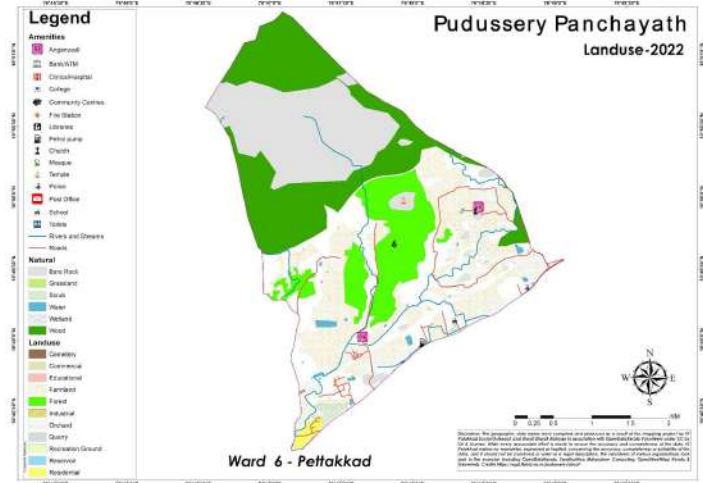
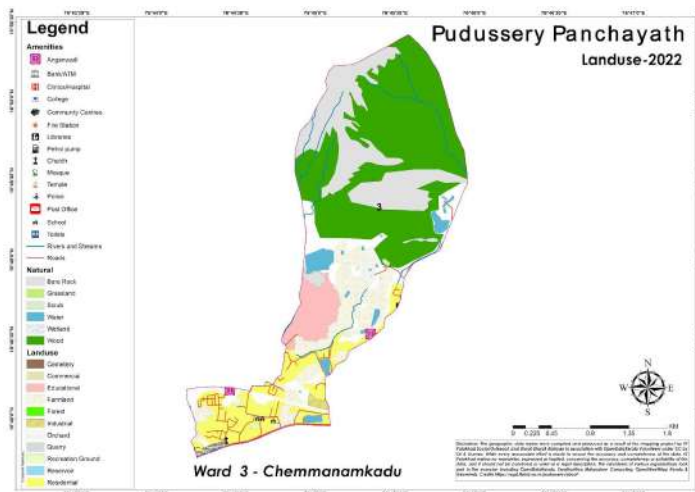
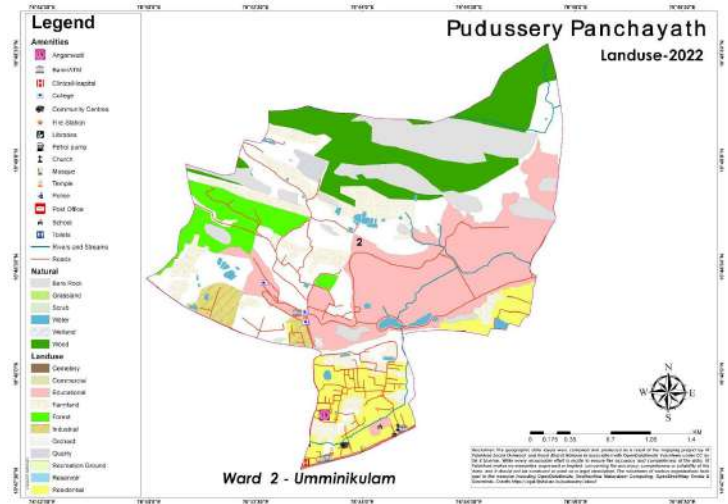
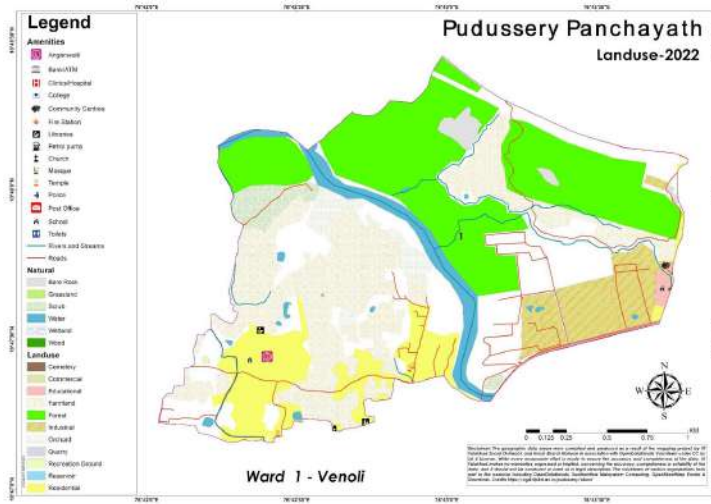
The science, art and technology of map-making are known as cartography. The non-spatial information connected with spatial components is then transformed into the form of maps. Maps are prepared according to the use case which is demanding.

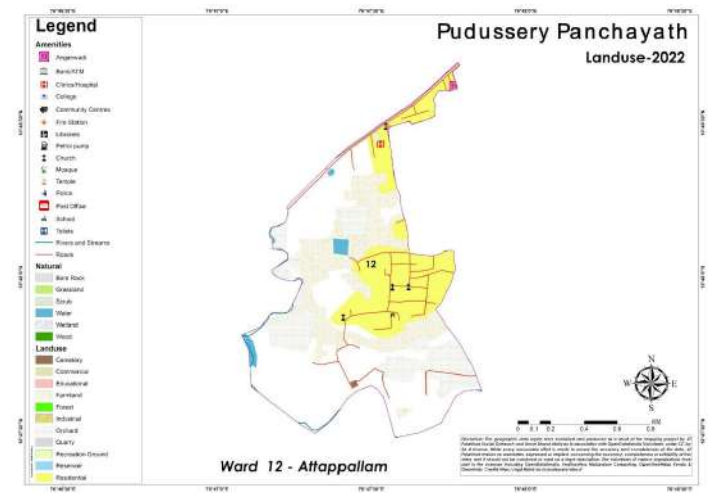
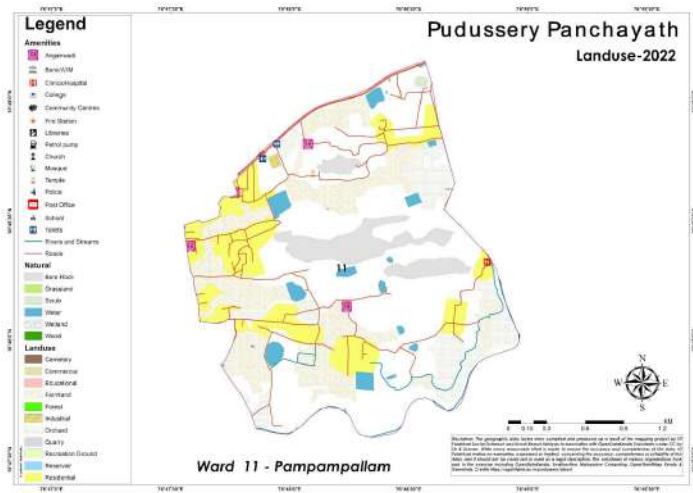
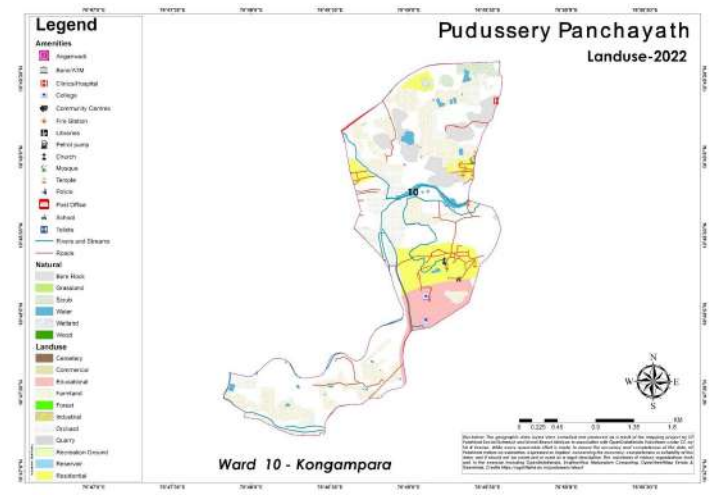
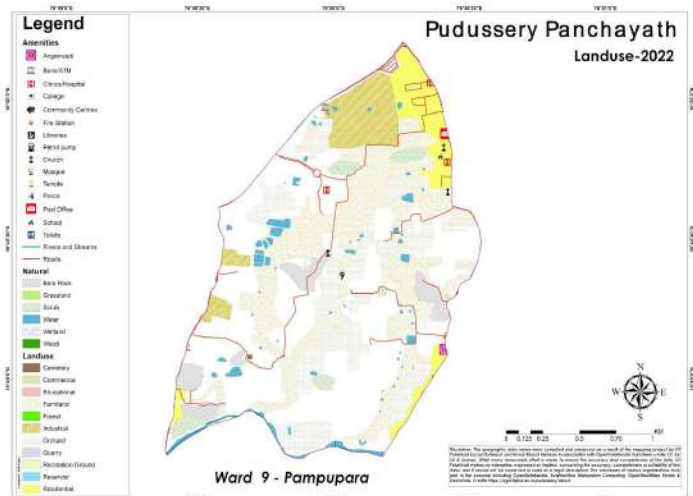
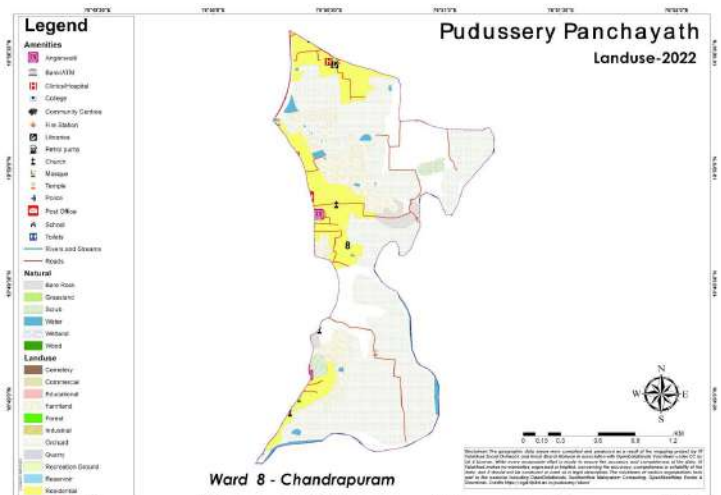
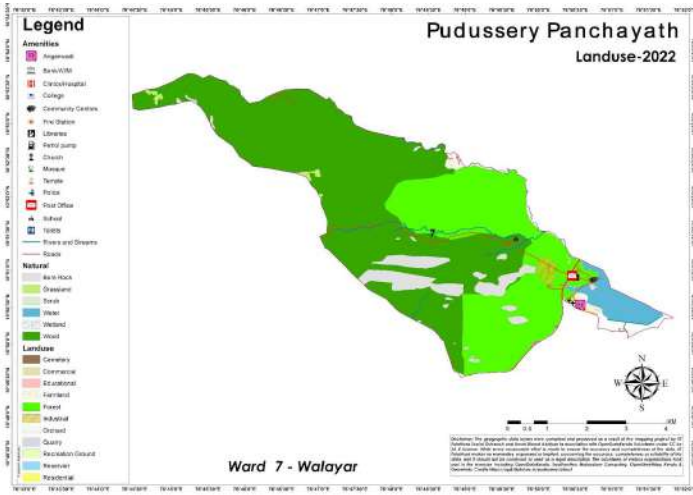
The cartography used in the project was using GIS technology. The layers of different themes were mapped to OpenStreetMap according to the normal standardized procedure. OSM editing tools such as iD editor, JOSM etc. were used to achieve this. The data were mapped as a tag value pair. Each feature has a common category tag and corresponding values. This helps in identifying the features and its category. Once the mapping and validation are done. The data from OpenStreetMap is downloaded using corresponding queries from various tools such as overpass-turbo APIs. The downloaded data is cleaned and attributes are corrected as and where required. When certain layers were combined to make common layers, certain were split. QGIS map compose module is used to prepare the maps in the various decided themes. The decided themes are

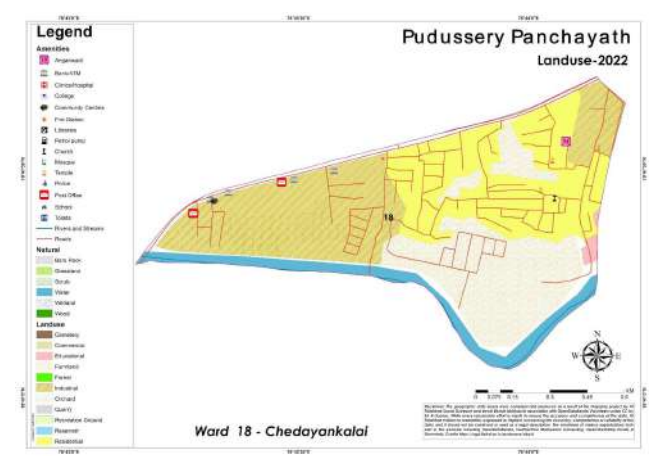
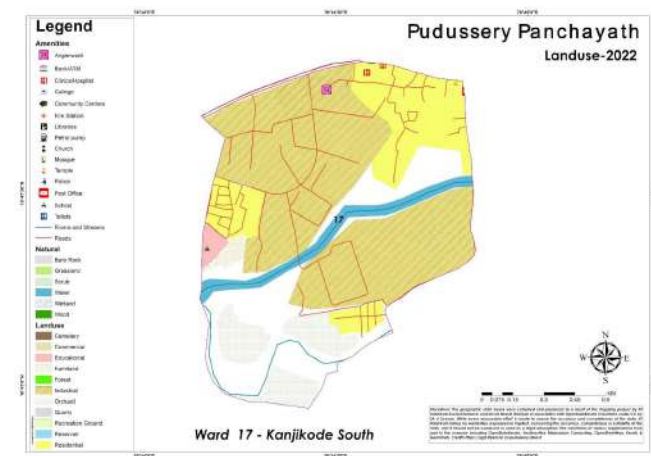
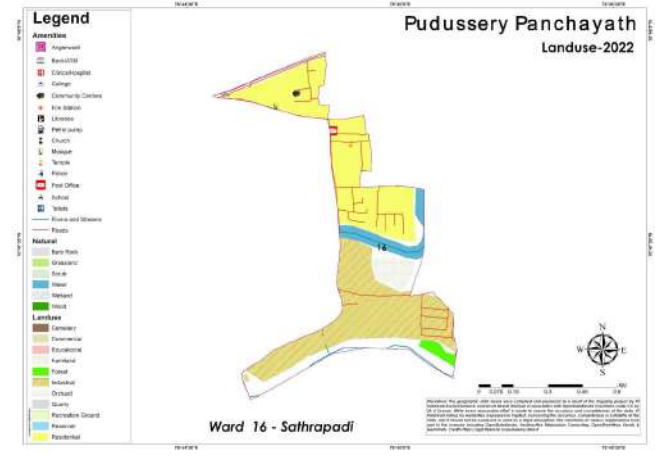
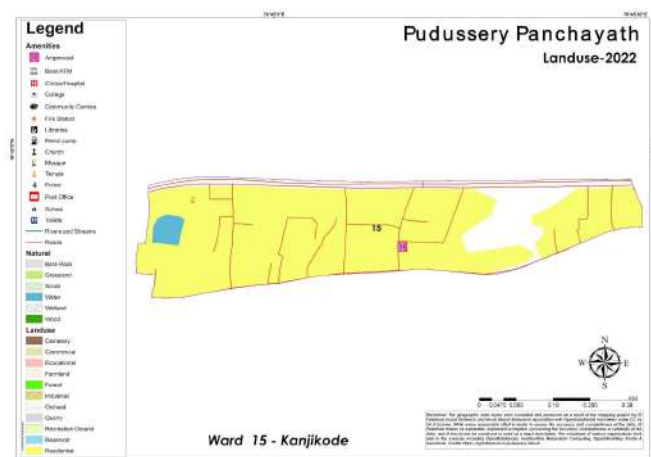
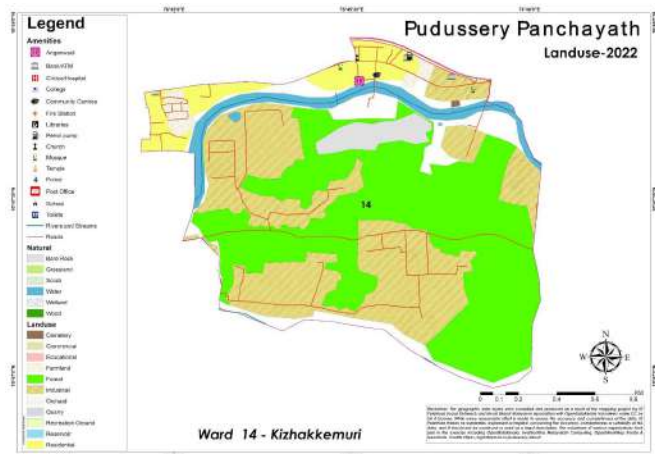
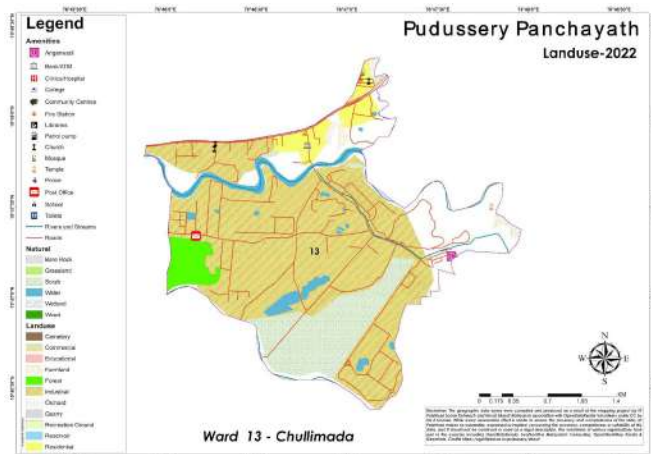
1. Ward Map 2022
2. Land Use Pattern 2022
3. Farm Land Map 2022
4. Water Resource Map 2022
5. Ward-wise Land Use Map 2022

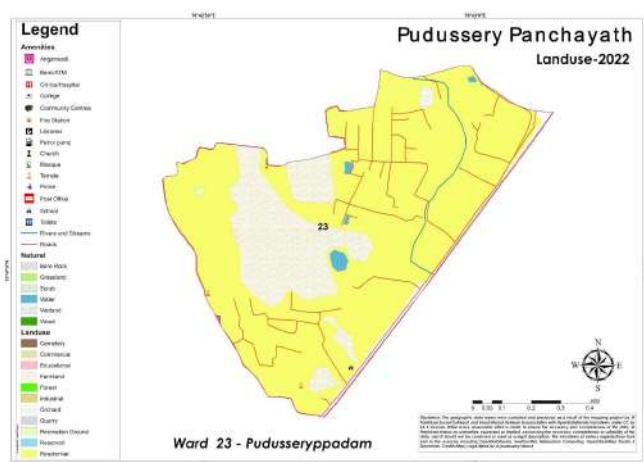
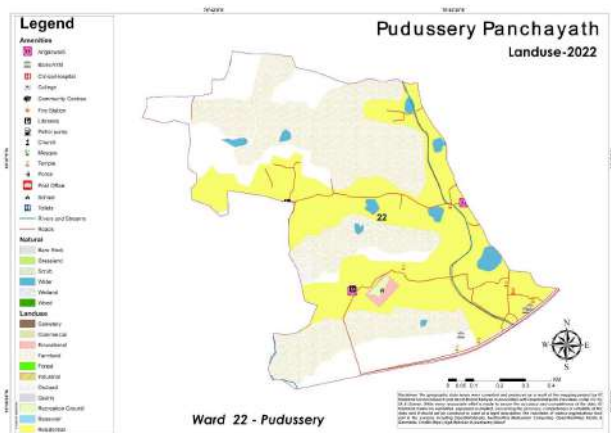
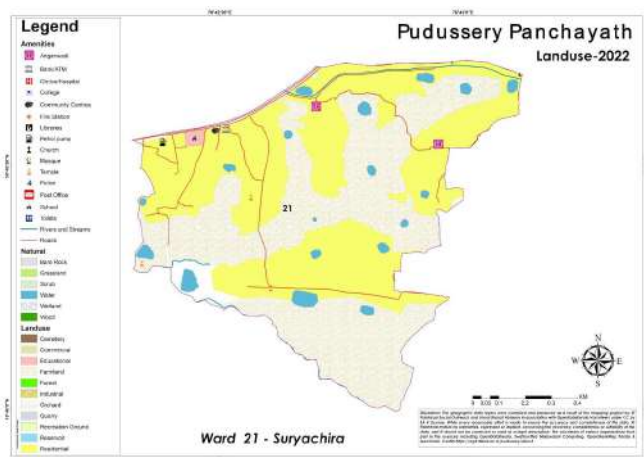
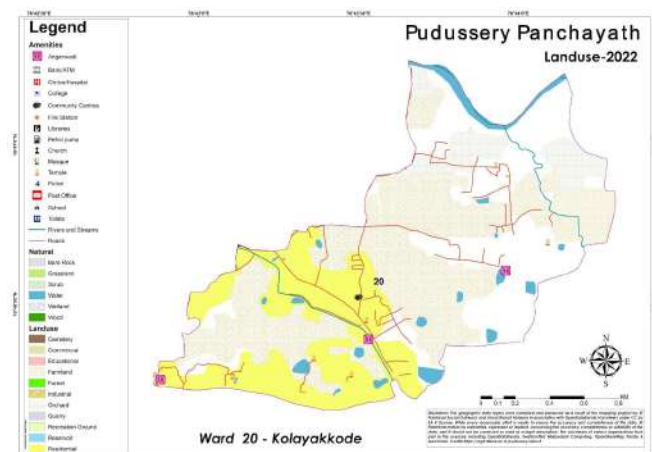
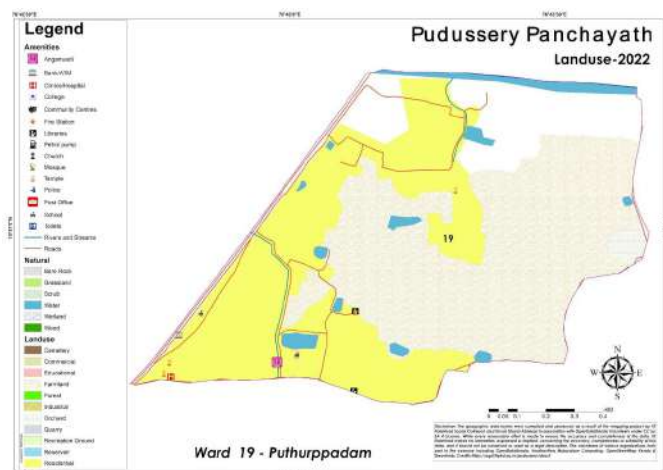
Once the maps were decided on these themes the layers were added and symbology and styling for layers were prepared. Then QGIS compose map tool helped to convert the layers into a map format. The cartography activity was led by Mr Ark Arjun of Geominds.











Web Interface

The Open Geospatial Data platform was set up as an accessible open resource to make it possible for the citizens to engage with the geospatial data collected through this project. The frontend is built using Leaflet JS, a popular lightweight library for interactive maps. The backend is a collection of static APIs maintained through nodejs scripts that provide the required data. The data is downloaded from openstreetmap.org where it is deposited by the community through this effort. OpenStreetMap is a global collaborative project to create a community-maintained geographical database of the world and has been running since 2004. For this focused effort, data was collected and processed using various open sources technologies like ODK Collect and JOSM editor. The platform set-up was led by Dr Akshay Dinesh.

Website: <https://ogd.iitpkd.ac.in/>

Video Documentation Link: [Video Documentation](#)



1.4 Chellankavu Field Visit Report

A field visit was conducted to Chellankavu Lake (10.81620° N, 76.76695° E) along with the Pudukkottai Agriculture Department and the local farmers on 22-06-2022 to study the water resilience project possibility.

Discussion Summary

- The area was affected severely by the Kerala floods of 2018 and consequent landslides.
- Silt deposit of 3-4 feet in height
- The lake width reduced from 20 m to less than 10 m in the past years.
- 1 km length of silt removal has been demanded by the farmers.
- Suggested construction of an earthen dam near Valencheri
- 45 hectares of farmland have been affected.



Under their CSR initiatives, United Breweries Limited has undertaken a Water Sustainability Project for the rejuvenation of Chellankavu Lake in 2016. The project involved the rejuvenation of the village tank, which has a huge catchment area on the northern side next to the hills of the Western Ghats. In addition to this, the depth of the lake was also deepened by 1.5m from the existing base level. The bund on the northern, eastern, and South-Eastern sides was strengthened, and the height of the weir was increased. A check weir was constructed at a suitable location on the eastern side of the nullah, thus diverting water to the lake through open drains and a pipeline network.

1.5. Catch the rain awareness campaign

IIT Palakkad has participated in the Catch the Rain awareness campaign organised by Unnat Bharat Abhiyan NCI IIT Delhi and uploaded the selfies in the shared google form.



1.6 Participation in the Brainstorming Session on Sustainable Development of Palakkad.

Mr. Anurenj P Kumar, Project Coordinator, UBA participated in Brainstorming Session on the Sustainable Development of Palakkad District organised by the Palakkad District Library. The meeting, held on 15th February 2023 at the District Library, saw active participation from diverse institutions, NGOs, social workers, and development enthusiasts. The sessions focused on various critical



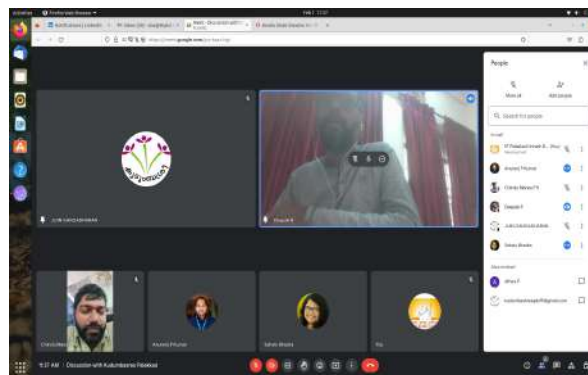
topics related to sustainable development in the district. Participants engaged in discussions about tourism development, agriculture, water resource management, waste management, and industrial development. Each topic received valuable insights and ideas from the diverse range of stakeholders present at the meeting.

The collaborative nature of the Brainstorming Session provided a platform for exchanging knowledge, experiences, and innovative solutions to address the sustainability challenges faced by Palakkad District.

1.7 Discussion with Kudumbasree District Mission

UBA Cell engaged in discussions with Kudumbasree Mission (State Poverty Irradication Mission) Palakkad, regarding the monitoring of Kudumbasree Janakeeya Hotels in the district. The primary objective was to develop an effective monitoring cum reporting system to address concerns related to exaggerated claims of the number of meals served at subsidized rates by hotel owners. Such manipulation led to an increased allocation of funds from the Government.

To combat this issue, the UBA Cell proposed the implementation of various technological solutions. These included the use of face-detecting cameras, fingerprint readers, and OTP (One-Time Password) verification methods. These technologies would help ensure accurate and reliable data on the number of customers served at subsidized rates, thereby preventing fraudulent practices.



The discussions involved key stakeholders, including Dr. Deepak Rajendraprasad, Associate Professor, Dept. of Computer Sciences, IIT Palakkad Dr. Albert Sunny, Dept. of Computer Sciences, IIT Palakkad Mr. Biju KV, Technical Officer, IIT Palakkad and Dr. Sahely Bhadra, UBA Coordinator who collaborated to devise an efficient and foolproof monitoring system. By incorporating technology-driven solutions, the aim was to enhance transparency, accountability, and efficiency in the operations of Janakeeya budget hotels under Kudumbasree Mission. This would ultimately lead to fair and equitable distribution of funds and resources for the benefit of the community.

1.8 Development Seminar by Pudukkottai Grama Panchayat

A Development Seminar organized by Pudukkottai Grama Panchayat in February 2023 which was a platform for various stakeholders to contribute suggestions for developing projects in the upcoming financial year. Representing Unnat Bharat Abhiyan- IIT Palakkad, Mr. Anurenj P

Kumar, Project Coordinator participated in the seminar and presented valuable recommendations.

The suggestions put forward by Mr. Anurenj in the Water and Sanitation Group Discussion included:

1. Systematic Waste Collection through Haritha Karma Sena: Implementing a well-organized waste collection system by involving the Haritha Karma Sena, thus ensuring efficient waste management in the Panchayat.
2. Mechanization in Plastic Waste Management: Proposing the use of plastic shredding machines and baling units at a centralized level to enhance plastic waste management practices and facilitate recycling efforts effectively.
3. Upskilling Haritha Karma Sena Members: Advocating the training of Haritha Karma Sena members in other trades such as electronic repairing and plumbing, empowering them with additional skills and enhancing their contributions to the community.
4. Decentralized Liquid Waste Management Plants (DEWATS): Suggesting the establishment of decentralized liquid waste management plants to efficiently manage and treat liquid waste at the local level.



By introducing these recommendations, UBA IIT Palakkad aimed to contribute to the development agenda of Pudussery Grama Panchayat, promoting sustainability, community involvement, and improved waste management practices. The seminar facilitated the exchange of ideas and expertise, fostering collaboration between experts, public representatives, and stakeholders to pave the way for a more prosperous and eco-friendly future in the region.

1.9 Open GIS Mapping Handing Over Ceremony

The official handing over ceremony of the Open GIS Mapping Project took place, marking the successful completion of the initiative that was initiated in the previous year. Dr. Divya PV, Associate Professor, presented the cartography-based maps of wards, land use patterns, farmland, and water resources to Mrs. Praseeda, the President of Pudussery Grama Panchayat. The ceremony was graced by the presence of Mr. Ajeesh, Vice President of Pudussery GP, Mr. Manoj K from the Open Street Mapping Community, Mr. Saji Sebastian, the Executive Director of Socio Economic Unit Foundation in Trivandrum, and Mrs. Susmy Sunny, the Hazard Analyst from the Kerala State Disaster Management Authority.

During the event, the web interface <https://ogd.iitpkd.ac.in/> was also launched as an outcome of the Open GIS Mapping Project, providing a user-friendly platform to access and utilize the generated maps.

As a follow-up project, the UBA Cell is now focusing on the development of a local-level disaster management plan specifically tailored for Pudussery Grama Panchayat. This initiative aims to enhance the preparedness and response capabilities of the community to potential disasters and emergencies. By integrating the insights from the GIS mapping project and collaborating with various stakeholders, the UBA Cell endeavors to create an effective disaster management plan that will safeguard the welfare and well-being of the residents in Pudussery GP.



1.10 Meeting with Haritha Karma Sena

The UBA Cell has convened a meeting with the Haritha Karma Sena Team members of Pudussery Grama Panchayat in March 2023 at the Panchayat Hall as an initial step towards development of a Detailed Project Report on Solid Waste Management in Pudussery Grama Panchayat. The meeting was held in the presence of Smt. Parvathy, Haritha Karma Sena Leader and Mr. Manikantan, Village Extension Officer. The major aim of the meeting was to collect input on drawbacks in the current waste management system in the panchayat, to know about any social stigma they faces when they go for collecting the waste, any specific requirements etc.

The Haritha Karma Sena, established a couple of years ago, currently consists of around 40 members. Their primary objective is to collect non-biodegradable and plastic waste from households, shops, and establishments. To fund their operations, they charge a user fee of Rs. 50 from households and Rs. 100 from establishments.



Despite their efforts, the number of households registered for waste collection is below 50%.

Moreover, the team faces challenges with some households reacting negatively, and there are instances where certain households refuse to pay the user fees. Additionally, the collected waste is mostly unsegregated, leading to questions from people about why they should pay user fees if proper segregation is not being followed.

Transporting the waste presents another issue, as the Haritha Karma Sena has only one tractor available for this task. They are responsible for covering the tractor's fuel and maintenance expenses. The waste from each ward is stored in mini Material Collection Facilities (MCFs) within the wards or sometimes kept on the roadside.

When the waste is transported to the Panchayat Material Collection Facility, it is not segregated, and unfortunately, a significant portion of the collected waste is not suitable for recycling. To address this, the collected waste is handed over to a private party for disposal, and the Panchayat incurs the expenses for this service.



The Haritha Karma Sena faces challenges with low registration for waste collection, non-compliance from some households, unsegregated waste collection, and limited resources for transportation. The UBA Cell is intervening in this issue by preparing a DPR for sustainable solid waste management for Pudussery Panchayat.

1.11 Pale Blue Dot Lecture- 5 : My Adventure with the Ribosome by Prof. Venki Ramakrishnan

In January 2023, IIT Palakkad organized the 5th edition of the Pale Blue Dot Lecture Series in collaboration with Unnat Bharat Abhiyan and District Public Library Palakkad. The highlight of the event was the captivating lecture titled 'My Adventure with the Ribosome' presented by none other than Prof. Venki Ramakrishnan, a distinguished scientist and a recipient of the 2009 Nobel Prize in Chemistry for his groundbreaking research on the structure and function of the ribosome.

Prof. Venki Ramakrishnan took the audience on an intriguing journey as he shared his remarkable experiences and insights into his profound association with the ribosome. The lecture promised to be an enthralling narrative of both his professional and personal endeavors.

During the lecture, Prof. Ramakrishnan discussed his relentless pursuit to unravel the intricacies of the ribosome's structure. He delved into the challenges he encountered and the innovative approaches he employed to achieve this groundbreaking feat.

In addition to his scientific achievements, Prof. Ramakrishnan also shed light on his unique career path, which saw him living on three different continents. He shared anecdotes from his life, highlighting his transition from the field of physics to biology, a decision that ultimately led him to the fascinating world of ribosome research.



Students from nearby schools and colleges also attended the lecture. The event at IIT Palakkad provided a rare opportunity for the audience to gain insights from a Nobel laureate and witness the passion and dedication that fueled Prof. Ramakrishnan's extraordinary scientific

journey. The lecture series served as an inspirational platform for students, encouraging aspiring scientists and researchers to follow their curiosity and explore uncharted territories in the realm of science.

1.12 Visit to Local Schools

During visits to the local schools in the UBA adopted villages, the UBA Project Coordinator from IIT Palakkad conducted a comprehensive assessment of the requirements and challenges faced by the students. These schools primarily cater to the children of migrant workers employed in nearby industrial estates.

The students expressed several needs during the interaction, and the UBA - IIT Palakkad team took note of them to explore ways in which they could contribute. Some of the requisites highlighted by the students included financial assistance for those from vulnerable backgrounds, such as victims of POSCO cases, students battling serious diseases like Cancer or organ failures, as well as support for purchasing notebooks.



In response to the plea for assistance, the Government Lower Primary School in Kanjikode sought the support of UBA - IIT Palakkad in resource mobilization. This request is essential as they are soon part of the STARS project (Strengthening Teaching-Learning and Results for States) which is backed by the World Bank and the Ministry of Education.

Based on the needs identified during the visits and interactions with the schools, the UBA cell formulated proposals to seek possible funding from the IIT Palakkad Charitable Trust. These proposals aim to address the specific needs of the students in the adopted villages, particularly those from marginalized and vulnerable backgrounds, to ensure they receive the necessary support and resources to pursue their education and improve their learning outcomes.



By collaborating with the IIT Palakkad Charitable Trust and other potential sources of funding, the UBA initiative aspires to make a positive and meaningful impact on the lives of these students and contribute to their overall development and well-being.

2. GOVERNMENT VICTORIA COLLEGE, PALAKKAD

2.1 Village Survey

Government Victoria College Palakkad initiated the village survey in their adopted villages early this year. A team of five faculty members and 16 student volunteers were formed for this initiative. Village surveys were conducted in two adopted villages viz. Kodumba and Kannadi-II.



2.2 Household Survey

After the completion of the village survey, GVC initiated household surveys, to find out the major issues and challenges faced by the villagers. The survey is ongoing and a total of 185 houses jointly in Kodumba and Kannadi-II villages have been surveyed to date. Major problems like scarcity of water resources, lack of street lights and improper waste management systems etc. are noted.

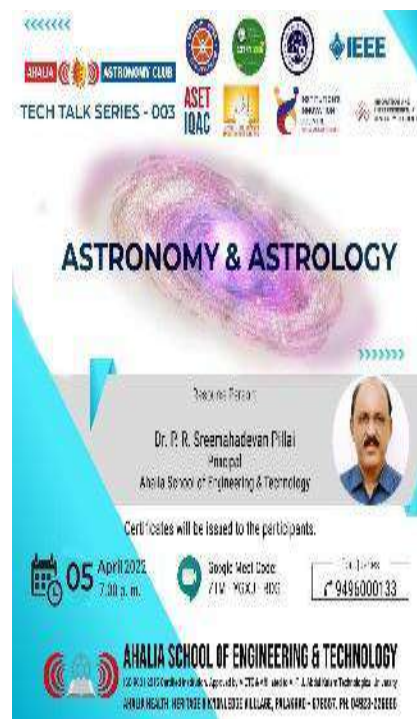


3. AHALIA SCHOOL OF ENGINEERING AND TECHNOLOGY, PALAKKAD

3.1 Tech Talk Series – Astronomy and Astrology

UBA Cell of Ahalia School of Engineering and Technology Organized the Tech talk series on Astronomy and Astrology in association with IEEE, ISTE Ahalia Chapter, IEDC, IIC, ASET IQAC, ASET NDLI CLUB on 05 April 2022. Dr. P. R. Sreemahadevan Pillai, Principal, ASET was the resource person. The session dealt with the evolution of Indian & Western Astronomy and Astrology. While astronomy is based on facts, astrology holds onto beliefs too. There was a productive interaction with the participants after the initial talk. The event was presided over by Dr. Balamurugan V., HoD, Dept. of Electronics & Communication Engineering, ASET, Prof. Dhanesh S., Coordinator, Ahalia Astronomy Club offered the welcome address. Ms. Bindu Valoor, Manager of Academics Outreach proposed the vote of thanks. Tech Talk Series is an initiative of Ahalia School of Engineering and Technology, Palakkad, which explores relevant topics that prompts the participants to ponder deeply, thereby igniting critical as well as creative thinking

YouTube Link: <https://youtu.be/lhf8Mklflcw>



3.2 Tech Talk Series – What to do after 12th standard

UBA Cell of Ahalia School of Engineering and Technology organized a Tech Talk Series on What to do after 12th Standard? in association with IEEE, ISTE Ahalia Chapter, IEDC, IIC, ASET IQAC, ASET NDLI CLUB on 27 April 2022. Dr. P. R. Sreemahadevan Pillai, Principal, ASET & Director, Ahalia Group Academic Institutions was the resource person. He had been offering career guidance sessions for school and college students for decades. In this interactive session, students and parents asked course and career specific questions, which were clarified in detail by the resource person. 100 participants joined the session which included the students from various schools in India and abroad. The event was presided over by Dr. Binoy Balan, HoD, S&H, ASET. Ms. Hardhi S., Secretary, ASET Alumni Association offered the welcome address.



Ms. Bindu Valoor, Manager Academics Outreach, Ahalia Group, expressed the vote of thanks. Tech Talk Series is an initiative of Ahalia School of Engineering and Technology, Palakkad, which explores relevant topics that prompts the participants to ponder deep, thereby igniting critical as well as creative thinking.

YouTube Link: <https://youtu.be/jtqCVUVMcCQ>

3.3 World Laughter Day Celebration

UBA cell of Ahalia School of Engineering and Technology in association with NSS, NDLI Club, ASET Literary Club and Ahalia Forum organized an online World Laughter Day celebration on 01 May 2022 at 7 p.m. The program was intended to give moments filled with laughter, which

helps us relax as we follow a stressful lifestyle. Laughter is therapeutic, we want to spread it to all. The program was presided over by Dr. P. R. Sreemahadevan Pillai, Director, Ahalia Group Academic Institutions. The following speakers cracked some amazing jokes and created a hilarious ambience. Prof. (Retd). K. P. Mukundan Kutty, NSS College of Engineering, Palakkad, V. Suresan, President, Narmakairali, Dr. Sudhodanan, Deputy Director (Retd.) Animal Husbandry Dept., Govt. of Kerala, Rohini Rahul, Artist, Kanakam of Uppum Mulakum Serial, Kochukrishnan K., Retd D.G.M. Malabar Cements Ltd., Anugraha M., B. Tech First Year, Ahalia School of Engineering and Technology, Jamil Kumar P. K., Treasurer, Palakkad Hockey Association, Binya Thushar, YouTube Blogger, Nithin Chettoor, Secretary, Palghat Management Association, Athul Krishna V. A., 6th Standard, Ahalia Public School. Ms. Bindu Valoor, Manager-Academics Outreach, Ahalia Group offered the



welcome address and Prof. Abhijit Menon, Training and Placement Officer, Ahalia School of Engineering and Technology proposed the vote of thanks. More than 90 participants joined the program.

YouTube Link: <https://youtu.be/VSBVQB89eFo>

3.4 International Earth Day Celebration

On account of International Earth Day, UBA Cell of Ahalia School of Engineering and Technology, Palakkad celebrated the occasion by conducting an awareness program and

literary events on 6 May 2022. An essay writing competition was conducted with the current theme “Invest In Our Planet” and around 30 students participated in the event. An awareness competition was conducted with the theme “One Earth One Life” The proposed event was a group competition and 5 groups participated in the skit. The coordinators awarded the winners with “Save Earth” hampers.



3.5 ASET Adopts Elappully Gram Panchayath

Under Unnat Bharat Abhiyan, Ahalia School of Engineering and Technology has adopted Elappully Gram Panchayath. A meeting was organised on 10 May 2022, with the representatives of Elappully Panchayat, NGOs like OISCA and Water Aid India, to discuss the Village development activities. An extensive plan of action has been devised. The areas of association identified are water management, hi-tech agriculture, education, green initiatives, health awareness, etc. Dr. P. R. Sreemahadevan Pillai, Principal, ASET, Dr. Sudhodanan, State Secretary, OISCA International, Mr. Joseph, Water Aid India, Mr. Rameshan, Elappully Panchayat Standing Committee Member, Mr. Vinod, Agriculture Officer, Elappully, Mr. Vijumon, Agriculture Assistant, Elappully, Mr. Babu, Vice President, OISCA, Elappully, Mr. Chenthamara, Secretary, OISCA, Elappully, Dr. Murugananth, HoD, EEE, Prof. Preeja, Coordinator, UBA, Prof. Roshan Sanu, Program Officer, NSS, Prof. Vignesh, Coordinator, UBA, Mr. Sreenivasan, Admin. Officer and Ms. Bindu Valoor, Manager-Academics Outreach took part in the discussion.



3.6 Meeting with Elappully Gram Panchayat

UBA Cell of Ahalia School of Engineering and Technology is joining hands with Elappully Panchayat in Panchayat development activities. A meeting of representatives of Elappully Panchayat and Ahalia School of Engineering and Technology was held at Elappully Panchayat Community Hall at 2:30 p.m. on 30 May 2022. Shri. Rameshan, Standing committee member welcomed the participants. Smt. Revathi Babu, Panchayat President presided over the meeting. Sunil Kumar, Vice President, Elappully Panchayat, felicitated both the parties for entering into this association. Dr. P. R. Sreemahadevan Pillai, Principal, Ahalia School of Engineering and Technology, Palakkad & Director, Ahalia Group Academic Institutions, India suggested to offer technology support for the proposed development activities in water conservation, agriculture, healthcare, education etc. Panchayat can use the technical excellence of the faculty and students of Ahalia School of Engineering and Technology. Dr Sudhodanan, State Secretary, OISCA, proposed to organise eye camps in schools. Shri. Joseph, Water Aid India, said a survey of open wells, borewells, ponds etc. should be done to identify the water availability in the Panchayat. The database currently available is many years old, hence not reliable.



Ahalia School of Engineering and Technology will support in starting a Facebook page for Elappully Panchayat and also maintain it. Prof. Abhijit Menon is entrusted with the development of a website and FB page for better information dissemination in the Panchayat. The new rooms being constructed in GLPS, Pallatheri hasn't received sanctions for electrical wiring and plumbing work. Dr. Murugananth, HoD EEE will inspect and help with electrical wiring and the Dept. of Mechanical Engineering will help for the plumbing work. This will be a hands-on experience for students too. On 15 June ASET will support the Agriculture department in organising a training program on Paddy farming for the farmers in the Panchayat. The venue can be Ahalia Campus or Elappully Panchayat community hall. Ms. Bindu Valoor will liaise with the Panchayat officials to organise this training. Prof. Preeja, Prof. Prabha and Prof. Vignesh will prepare the survey form for comprehensive data collection in the Panchayat.

3.7 Environment Day Celebration

Kerala Armed Forces 2nd Battalion, Muttikulangara and Ahalia School of Engineering and Technology jointly celebrated World Environment Day by planting 800 saplings at Muttikulangara by the Kerala Armed Forces 2nd Battalion, in collaboration with the Student Police Cadet, Central and Kerala, government institutions and various voluntary organizations. Mr. Ajith Kumar IPS, Commandant, Kerala Armed Forces 2nd Battalion, Muttikulangara, delivered the welcome address. Malampuzha MLA, Mr. A. Prabhakaran presided the function. It was inaugurated by Palakkad MP, Mr. V. K. Srikandan. District Collector, Smt. Mrunmayi Joshi IAS and President of Pudupariaram Panchayat, Smt. Bindu P. R. offered felicitated the

function. Dr. P. R. Sri Mahadevan Pillai, Principal, Ahalya School of Engineering and Technology, Director, Ahalya Group of Educational Institutions, Acknowledged the function. Dr. Parvathy Warriar, Vice President, OISCA International, South India, President, Palakkad District Development Corporation, Shri. Balan P., Deputy Superintendent of Police (Retd.), Smt. Binsi. C., District Youth Officer Nehru Yuva Kendra, Mrs. Deepa Assistant, Coordinator, Sanitation Mission, Palakkad, National Rural Employment Guarantee Scheme representatives, Shri. Satindran, Assistant District Nodal Officer, Student Police Cadet Project, Palakkad, were present on the occasion.



3.8 Tech Talk Series: Only One Earth

Tech Talk Series 006 - Only One Earth was organized in association with Kerala Armed Police II Battalion, Muttikulangara, Student Police Cadet, IEEE, ISTE Ahalia Chapter, IEDC, IIC, ASET IQAC, ASET NDLI CLUB on 05 June 2022. Dr. P. R. Sreemahadevan Pillai, Principal, ASET was the resource person. The session dealt with various facts about the formation of the earth and the effects of climate change. The resource person shared some useful tips to save the earth from destruction. 60-plus participants attended the webinar. This event was coordinated by Ms Bindu Valoor, Manager-Academics Outreach, Ahalia Group, Palakkad



YouTube Link: https://youtu.be/mf_tL2_jFBk

3.9 Session on 'India and the World – Building a Great Nation'

Shri. Mohan Murti, Managing Director, Europe, Reliance Industries Ltd., addressed the students of Ahalia School of Engineering and Technology and Ahalia School of Management on How to Build India into a Great Nation, on 14 June 2022. He gave an insight on how Indians are perceived by other nationalities and what are opportunities and challenges lie ahead of us in the global arena. Dr. P. R. Sreemahadevan Pillai, Principal, Ahalia School of Engineering and Technology & Director, Ahalia Group Academic Institutions, offered the presidential address. Dr. Krishna Kumar Kishor, Vice Principal, Ahalia School of Engineering and Technology & Executive Director, Ahalia Group Academic Institutions and Dr. Vijayachandran Pillai, Principal & Director, Ahalia School of Management offered the felicitation address. Ms. Arya R. Krishna, S6 ECE, ASET, welcomed the august gathering. Ms. Farzana Noushad, S2 MBA, ASM introduced the speaker. Ms Bindu Valoor, Manager-Academics Outreach, proposed the vote of thanks. Ms. Soumya Sree, S6 CE, ASET anchored the event.



3.10 Free Eye Check-Up in Association with Elappully Panchayat and Ahalia Foundation Eye Hospital

In association with Elappully Grama Panchayat, UBA Cell of Ahalia School of Engineering and Technology & Ahalia Foundation Eye Hospital organized a free Eye Check Up for the students of schools in Elappully Panchayat. Two years of online education has triggered some health issues in children. This drive is dedicated to identify vision related ailments in students, so medical care can be offered at the earliest. The inauguration of the event was held in Sree Narayana Public School, Elappully on 20 June 2022 at 9:30 a.m. The vision of 1200 students and over 100 teachers of Sree Narayana Public School, Elappully will be checked. Dr. P. R. Sreemahadevan Pillai, Principal, Ahalia School of Engineering and Technology, Palakkad, & Director, Ahalia Group Academic Institutions, India, inaugurated the program. Shri. Balan C., President, SNES, presided over the event, Smt. Rajakumari K., Education Standing Committee Chairman, Elappully Panchayat and Dr. Sudhodanan, State Secretary, OISCA, & Academic Director, SNPS offered felicitation. Shri. Pradeesh Sundaram, Assistant Manager, Ahalia Foundation Eye Hospital proposed the vote of thanks. Smt. Revathi Babu K., President, Elappully Grama Panchayat, Shri Bhavadas, Vice President, SNES, Shri. Vasudevan, Treasurer, SNES, Shri. Babu, Vice President, OISCA Elappully Chapter, Prof. Abhijit Menon, Training and Placement Officer,



Ahalia School of Engineering and Technology, Shri. Arun, Marketing Executive, Ahalia Foundation Eye Hospital graced the occasion. The event was coordinated by Ms. Bindu Valoor, Manager-Academics Outreach, Ahalia Group, Palakkad.



3.11 International Yoga Day Celebration 2022

International Yoga Day was celebrated at Ahalia School of Engineering and Technology on 21 June 2022 from 10 am to 12 pm in association with Physical Education Department and National Service Scheme Unit of ASET at Seminar Hall 1. The program started with prayer. Ms. Mithra P. C. delivered the Welcome Address. Then Dr. P. R Sreemahadevan Pillai, Principal ASET delivered the Presidential Address. After that the celebration was inaugurated by Shri. Vipin Chandran, Yogacharya, Sivanandasramam. He also led a session on yoga which contained deep insights about the application of yoga in the human body followed by small breathing exercises which relax human body and mind. The program ended with Vote of Thanks by Ms. Naeema Nazeer. The second-year students of Ahalia School of Engineering and Technology participated in the program.



3.12 Tech Talk Series 007 – Choices After SSLC

UBA Cell of Ahalia School of Engineering and Technology organised an interactive session on Choices after SSLC in association with IEEE, ISTE Ahalia Chapter, IEDC, IIC, ASET IQAC, ASET NDLI CLUB on 22 June 2022 at 7 p.m. The course a student chooses after the tenth standard is crucial. Proper guidance at the right time can help them opt for a better course that aligns with their interest and also has huge career prospects. This was one such session where the participants could get their queries answered by a learned resource person. The resource person was Dr. P. R. Sreemahadevan Pillai, Principal, Ahalia School of Engineering and Technology & Director, Ahalia Group Academic



Institutions, India. Sixth semester students of Ahalia School of Engineering and Technology Ms. Bhavya and Ms. Deepika offered a welcome address and vote of thanks respectively. 75 plus participants attended the session. Ms. Bindu Valoor, Manager-Academics Outreach, Ahalia Group, Palakkad, coordinated the event

YouTube Link: <https://youtu.be/bqnFr7BOYcU>

3.13 Free KEAM Coaching

Free KEAM coaching for engineering aspirants is organised by UBA Cell of Ahalia School of Engineering and Technology in association with Nehru Yuva Kendra, Ministry of Youth Affairs & Sports, Government of India, from 27 to 30 June.

Shri. T. R. Ajayan, Retd. Executive Engineer, Director, Kairali TV, Secretary, Swaralaya inaugurated at Nehru Yuva Kendra Hall, Palakkad, at 10 a.m. on 27 June. Dr. P. R. Sreemahadevan Pillai, Principal, Ahalia School of Engineering and Technology, Palakkad & Director, Ahalia Group Academic Institutions, presided. Prof. Prakash D., Dean - of Academics, Ahalia School of Engineering and Technology welcomed the participants and Ms.



Bindu Valoor, Manager-Academics Outreach, Ahalia Group, Palakkad, offered a vote of thanks. Prof. Prabha, Assistant Professor, Department of Science & Humanities, Ahalia School of Engineering and Technology, hosted the inauguration ceremony. Prof. Prakash and Prof. Prabha engaged the first-day sessions. 85 students participated.

3.14 Honoring War Veterans

On 15 August, Ahalia School of Engineering and Technology honoured war veterans Col. K. Mohandas, Col. Sankaranarayanan and Commander Chokkath Gopinathan, on account of Azadi Ka Amrit Mahotsav. Their valour and commitment were hailed by the Principal, Dr. P. R. Sreemahadevan Pillai. The Guests of Honour shared their experiences and reminded the students about their responsibilities towards the Nation. Dr. Krishna Kumar Kishor, Vice Principal felicitated these



war veterans. Dr. Sivakumar, Dean- of Research, welcomed the gathering. Ms Bindu Valoor, Manager-Academics Outreach proposed the vote of thanks. NSS programme officer, Prof. Roshan Sanu coordinated the event. After the honoring function, a Patriotic Song Competition for school,

college, and students were conducted. First and second prize winners were given cash prizes and all participants were given mementos.

3.15 Development Project Information Collection at Elapully Panchayat

Students of Ahalia School of Engineering and Technology started the survey to collect information from Elapully Gram panchayat to plan innovative projects for the overall development of Elapully Gram Panchayat. Panchayat resources, health statistics, educational attainment, employment opportunities, agricultural production and backward colonies are covered in this study.



3.16 Kisan Diwas

Palakkad Ahalia Group of Educational Institutions and OISCA in association with UBA cell of Ahalia School of Engineering and Technology celebrated National Farmers Day on 23rd December. As part of this, meritorious farmers were felicitated at a public ceremony held at the farm of Mrs. Bhuvaneswari Amma, who won the Farmer Shri Award. The program was inaugurated by Malampuzha MLA, Shri. A. Prabhakaran, performed Elapulli Panchayat President Mrs. Revathi Babu and Vice President Mr. Sunil Kumar were the special guests. Elapulli Panchayat Agriculture Officer Vinod, P. Bhuvaneswari, Udayaprakash S., Ganesan, Bindu, Rajagopal, Ramachandran, Sumathi, V. Chentamara, V. Mani, Shahul Hameed and Haridasan were honoured. OISCA State Secretary Dr. Suddhodana welcomed the audience. Ahalia Group Educational Institutions Director Dr. P. R. Shri Mahadevan Pillai presided. Elapulli Panchayat 1st Ward Member Anitha gave a welcome speech. Participating students sowed vegetable seeds along the pada varambam. Through this program, the message was given that these students are with the new generation of farmers with the determination to restore our agricultural culture. Panchayat members, volunteers working in the agriculture sector, and students participated in this function.



4. NSS COLLEGE OF ENGINEERING, PALAKKAD

4.1 Household Survey

UBA mandatory survey was completed at our adopted villages at Malampuzha, Puthupariyaram and Akathethara villages by April 2022.

4.2 Meeting with Akathethra Grama Panchayat

The UBA Cell has initiated a meeting with Akathethara Grama Panchayat to understand the challenges faced by the panchayat. The members and faculties of the college attended the meeting and the Panchayat has agreed to include some faculties of the college in the Working Groups.

4.3 Energy Audit

An Energy Audit exercise was held on 11th June 2022. The audit was organised in association with the Urja subunit of NSS. Volunteers of the unit took an energy audit of homes in the adopted villages and through which awareness of energy conservation was created among them. Through this campaign, we made aware of the need to reduce energy consumption in our everyday lives, and proper steps to avoid unnecessary energy usage in future.

4.4 Clean Energy Challenge

A Clean Energy Challenge was held on 26th June 2022. The main objective of the challenge was to promote innovation and start-ups in the Clean energy landscape at the grassroots level in Kerala. A LED display vehicle was made in association with Urja Cell, APJAKT University to show the Government's vision to make Kerala a knowledge economy with its focus on clean energy and allied sectors.



4.5 LED Bulb Making Workshop

A LED bulb making was organised which helped to give an understanding about the use of LED bulbs and its advantages to solve the future's energy crisis. The workshop was organised on 11th October 2022 in our college in association with The Institution of Engineers India (IEI), Electrical Chapter NSSCE. Around 70 LEDs were made through this workshop.



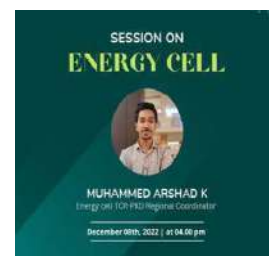
4.6 Sponsoring resources made by students to Attapadi

Students made LED bulbs and Notebooks, Paper Pen etc. from recycled paper were handed over to the Tribal students of Attapadi. The handing-over ceremony was held at the Kerala Institute of Local Administration, Project Office at Attappadi. Prof. Krishnachandran VN, UBA Principal Coordinator and Prof. Sajith VS handed over the materials to the Panchayat authorities. Mr D.Ravi, Standing Committee Chairman, Sholayur Grama Panchayat, Mr M.R. Jitesh Chairman Health and Education Standing Committee, Panchayat members and KILA resource person Mr G. Radhakrishna Kurup and officials from Attapadi Police Station were present in the function.



4.7 Energy Cell Awareness Session

A session on Energy Cell was organised in our college. The session was handled by Mr Muhammed Arshad K, NSS Energy Cell Thrissur Palakkad Regional Coordinator. About 100 students participated in the session. The session gave an idea on energy audits, different methods for saving energy, efficient use of available energy, etc.



4.8 Cleaning of Water Supply scheme supplying water to 22 Tribal hamlets of Attapadi

The UBA cell has initiated cleaning the entire water supply scheme was cleaned from intake to the discharge point. Cleaned the silt sediment on the upstream side of the Thalakani Amman check dam, cascade aerator in the water conductor system, five desilting sedimentation chambers and filter units of the Varatimala Thalakani Amman water supply scheme were cleaned. This scheme supplies drinking water to 22 Tribal Hamlets in Attapadi.



4.9 Jal Jeevan Mission Awareness Campaign

The UBA Cell has organised Jal Jeevan Mission Awareness Campaign from 26th to 28th December 2022. The volunteers have painted pictures and slogans on the walls of Primary Health Center, Sholayur, Sholayur Anganavadi, Govt. Higher Secondary School, Sholayur, Vattalakki High School and a Panchayat well and bus stop in Sholaur region. The painting works were aimed give awareness of the Jal Jeevan Mission. Jal Jeevan mission is envisioned to provide safe and adequate drinking water through individual household tap connections by 2024 to all households in rural India



to



4.10 Participation in the Orientation Workshop

Prof. Krishnachandran VN, Principal Coordinator UBA, has participated in the Virtual Orientation Workshop on 21st February 2023 for participating institutes organised by NCI, UBA IIT Delhi.

4.11 Participation in the Tribal Webinar

Prof. Krishnachandran VN, Principal Coordinator UBA, has participated in the webinar following the previous Tribal webinar "Understanding Various Modes of Tribal Development Protecting their Indigenous Culture from External Influence - 19"

4.12 Master plan Preparation for Development of quarry at Kunnumpara, near Kallekulangara into a tourist destination

The vision is to develop a tourism centre in a sustainable and acceptable manner, taking full advantage of regional facilities and international trends so that it will significantly contribute to the socio-economic development and improvement in quality of life of people in and around Kallekulangara while promoting and conserving nature and cultural heritage.

Prepare a master plan for the development of the existing abandoned quarry site and nearby hill into a tourist attractive space creating additional recreational facilities, in consultation with the local community people and the Panchayat members/officials. Several site visits were conducted for preliminary inspection, detailed survey and soil sample collection for testing etc. along with representatives from Panchayat.

5. HOLYCROSS INSTITUTE OF MANAGEMENT AND TECHNOLOGY, KOZHIKODE

HIMT is a newly joined UBA Participating Institute with five adopted villages Chathamangalam, Chemancheri (CT), Cheruvannur, Madavoor and Thalakkulathur (CT) in Kozhikode District. After receiving the seed money, the college initiated several UBA activities.

5.1. INAUGURATION (20-12-2022)

The activities related to UBA project commenced on 20-12-2022 with an inaugural function conducted at Chathamangalam. The programme was inaugurated by Mr. Abdul Gafoor, the Panchayat President, in a public meeting which was presided over by Mrs. Sushama M., the Vice President of Chathamangalam panchayat. Mr Jose Mathew K, the coordinator of UBA programme of the college, explained the nature and importance of UBA project.

5.2. RAPPORT BUILDING & HOUSEHOLD SURVEY PHASE: 1 (29-12-2022)

As part of the annual camp of the NSS unit of the college, the first phase of the UBA house hold survey was conducted on 29-12-2022. The questions of the survey form and the mode of filling up the same were explained to the team in advance. NSS volunteers started their house visit at 9.00 am and completed the day's survey at 5.00 PM. Since rapport building was an additional objective of the visit, each volunteer group spent extra time with the family members.

The first phase of the survey, in spite of having met with few difficulties, went on smoothly. The major obstacles that the volunteers faced were:

- a) The volunteers met with difficulties to find out the houses as no one from the locality were arranged to accompany them.
- b) The questions related to farming were irrelevant for the selected villages as majority of the villagers had no agricultural land of their own.
- c) Since the questionnaire (survey form) was not translated to the local language (Malayalam), the volunteers and the respondents had difficulty in understanding certain concepts.

5.3. HOUSEHOLD SURVEY PHASE: 2 (28-02-2023, 03-03-2023)

The responsibility to conduct the second phase of the house hold survey was taken over by the trainees of the Department of Social Work. Since there were few difficulties in the first phase survey, proper care was taken and arrangements were done to avoid them to repeat in the second phase.

- a) A training session was conducted on 27-02-2023 in which the questions and the mode of filling up the forms were demonstrated.
- b) The CDS members of the panchayat were arranged in advance to accompany the teams of trainees to identify the houses of each village
- c) The household survey form was translated into the local language (Malayalam) to avoid confusion both for the trainees and the respondents
- d) Guidance was given to the trainees to skip the questions related to agriculture and related matters if it found that the household is not having



a minimum area of cultivated land (minimum ½ acre)

The survey lasted for two days (28th February & 3rd March 2023) and the trainees were able to complete the survey successfully.

The collected data is kept safe and we are waiting for the website to be updated so that we will be able to upload them to avail a report

6. PROVIDENCE WOMEN'S COLLEGE, KOZHIKODE

6.1 SEG Project Approved by Sustainable Agriculture System

Technology Intervention proposals under the category of "Technology Development": Project-No: RP-03525G entitled, "**Integrated Fish Farming: A Low-Cost Mixed Farming**" submitted by **DR.E. JULIE** under the Unnat Bharat Abhiyan 2.0 Program, has been approved by Sustainable Agriculture System SEG and funded by the National Coordinating Institute UBA 2.0 (IIT Delhi) against UTR No. – 269595690 vide dated 30-12-2022.



Objectives of the project are use of animal manure as pond biofertilizer, use of crops by-products as supplementary feed for fish, use of pond sediments as terrestrial crop bio manure and use of aquaculture wastewater for crop irrigation.



Participatory institute involve in Testing Ph of the water of the pond using Ph paper, Planting of vegetable crops and Collection of water samples from the pond for the detection of Ammonia.

6.2 Proposal submission for promoting Anjilora as a tourist place

Kuruvattoor village of Kozhikode District

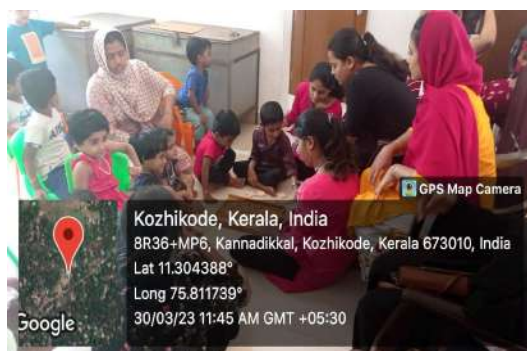
Anjilora is an unexplored tourist place in Kuruvattoor village. The Providence women's college UBA volunteers were trying to explore this place to the world. For this volunteers along with staffs visited that place and prepare a report and submitted it to the state tourism minister Mr. Muhammad Riyas



6.3 Intelligent assessment of preschoolers

Vengeri village of Kozhikode corporation

This program aims to understand the intellectual level of preschoolers. This was done in collaboration with Aganawadi of ward 10 of Kozhikode corporation with the help of UBA volunteers of B.Sc psychology. It helps the parents to identify the IQ of the child and to give more care to the needy. We are planning to extend this project to other adopted villages of UBA



6.4 Road mapping

Kuruvattoor village of Kozhikode District

UBA volunteers assisted village authorities to map the road which is not included in the asset of the panchayat. This was done as voluntary work as per the request from the officials.



6.5 Keep the old documents in a new form

Kuruvattoor village of Kozhikode District

As per the request from the Kuruvattoor panchayat officials, UBA volunteers help to e-file and replace the very old documents. They remove all the old documents in a period of 6 months.



6.6 Soil collection for analysis

Kuruvattoor village of Kozhikode District UBA volunteers collected soil samples from the farmers and send them to soil analysis laboratory at Thikodi.

6.7 Haritha mitram Project @ kakkodi

Kakkodi village of Kozhikode District



UBA volunteers participated in Harithamithram” Smart Monitoring System Survey at different wards of Kakkodi Panchayat of Kozhikode District. This project aims to monitor proper waste management in kakkodi panchayath. As part of the programme an orientation class was conducted on 11/09/22 at kakkodi panchayat office. After the orientation volunteers conducted the survey and placed QR code on each houses they visited.

6.8 Harithamitram survey as part of Azhaku project of Kozhikode corporation

Ward 12 of Kozhikode corporation

UBA volunteers has actively participated in Azhaku project of Kozhikode corporation. The project is a massive initiative of zero waste management of the project cell of Kozhikode Corporation health wing. As part of the project students were orientated and conducted harithamitram survey. Volunteers completed the



survey of all the houses in ward 12 and place the QR code in each house

6.9 Awareness on linking Aadhar with Voters ID

Ward 9 of Kozhikode corporation

In the month of August 2022 UBA volunteers at Providence Women's College visited the nearby places at Malaparamba to make aware peoples the importance of linking their Aadhaar cards with Voter IDs. Students also helped people to link their Aadhaar cards with voters' IDs.



6.10 Employment Survey

Vengeri village of Kozhikode corporation & Kakkodi village

One of the common problem faced by the households of the adopted villages is the absence of steady work and income. The UBA volunteers of the Department of Economics with an aim to understand the unemployment situation and the skill sets of the people, conducted a survey in of Vengeri and Kakkodi. 152 households were covered in the survey among which 80 households belong to Vengeri village and 72 households belong to Kakkodi panchayath. Many respondents have expressed their willingness to attend skill-oriented programmes if arranged. 50 respondents who are skilled are seeking employment opportunities. The employment survey was conducted during the months of March and April.



7. VIMAL JYOTHI ENGINEERING COLLEGE, KANNUR

7.1 Village women economic empowerment through low cost IoT Based Hatchery Unit distribution.

Title of the Activity: A helping hand for Rural Women

Need of the Activity: The major source of income of villagers is either farming or business related to agricultural products. The COVID-19 pandemic made a drastic drain in the economic status of the villagers. This proposal aimed to support the village women for finding a revenue through poultry farming. This low-cost incubator is capable of producing 100 chicks from a single unit and will be able to make an income of upto 30000



per month.

Each unit is capable of holding 100 eggs (at a survival rate of 90%). The total cost for this is EGG - 5 per unit, electricity bill of 100 Rs for 63 days. They can market chicken meat (130/kg), egg (7 Rs per unit), or chicks (30 Rs per chick). On average 30000 Rs can be expected from a single unit. 13 unit is distributed to each kudubasree JDS of 13 blocks one each.

7.2 Distribution of National Flags to Villagers

We celebrated Azadi Ka Amrit Mahotsav with the villagers by distributing the National Flag to the villagers to fly the tri colour in their houses. The Occasion was marked with a Special Gram Sabha Where-in the Panchayath president, Ward members, Panchayath Officials, the college authorities and village representatives were present.



7.3 Snehagiri Psycho Social Home Visit

Need of the Activity: For developing the personality and character of the student through community service, these kinds of activities are promoted among student community. These kind of visits helps the students to identify the social needs and the real problems faced by the inmates. This will help to promote the development of socially relevant project ideas among the students for the villagers.



Brief Description: Snehagiri Home is a charity home situated in one of the adopted Village. The students and staffs in our institution spend one full day with the inmates. They helped them for their daily activities and entertained the residents of the Centre with games, dance and songs.

7.4 Texpo 22

Need of the Activity: Technical exhibitions can be a potent medium of communicating the latest developments in science and technology to people, in particular youngsters who could be encouraged to take up science as a career.



Brief Description: A science and technical exhibition, “Texpo22” was conducted at Govt. Technical High School, Naduvil, on 29th October 2022. The students of our college demonstrated various technical projects. The villagers and the nearby school students visited the stall.

7.5 Panchayat Planning Committee Membership

The panchayath planning committee is meant to organize the development plans for the villagers, so our college put forward an initiative to provide technical support in the developmental activities happening in the panchayath level. A request is submitted to the president for adding two of our staff members as permanent member in the panchayath planning board. Mr. Vasudevan (NSS coordinator) and Ms. Vidhya S S (UBA coordinator) is added as member.



7.6 Visit to old age home- 'Karunalayam'

NSS unit 194 ,306 and UBA organized a visit to nearby oldage home 'Karunalayam' on 25th February 2023. 22 volunteers accompanied with 5 staff members participated in the event. The team reached 'Karunalayam' at 10 AM. Volunteers interacted with the inhabitants till 10.30 AM.



7.7 THRIVE: Tribal Higher Education and Interactive Ventures for Excellence

Need of the Activity: The THRIVE (Tribal Higher Education and Interactive Ventures for Excellence) programme is a project organized and coordinated by District Development Commissioner, Kannur. It is designed to ignite the aspirations and career goals of tribal students in Model Residential School, Pattuvam and to provide them with opportunities for growth and development. This programme focuses on delivering high-quality, relevant, and interactive educational content with the help of nearby colleges, NGOs and other institutions. Through virtual classrooms and hands-on learning experiences, students will develop the skills and knowledge needed to succeed in the modern workforce.



Brief Description: Vimal Jyothi has got an opportunity to be one of the coordinating members of THRIVE project. A meeting was held at Kannur and decided to select 10 students as volunteers for the programme. The following students are selected.

7.8 UNNATI Mahotsav & Expo

VJEC participated in the UNNATI Mahotsav & Expo organized under Unnat Bharat Abhiyan, a flagship program of the Ministry of Education on 17th - 18th March 2023 at IIT Delhi. Our "Low-cost Egg Hatching Unit" project was chosen for presentation at the IIT Palakkad project expo, and it was subsequently displayed at the "UNNATI" Mahotsav & Expo" project exhibition.



8. M.AM.O COLLEGE, KOZHIKODE

Muhammed Abdurahiman Memorial Orphanage (MAMO) College was recognised as Participating Insititute in April 2021 and has adopted 5 villages- Pottassery, Kuttiyerimmal , Manassery, Chennamangalur and Pulparamba in Mukkam MUunicipality.

8.1 Pannooly Colony Visit

The NSS volunteers in association with UBA conducted a visit to the Pannooly colony of Manassery to study the socio-economic background of the people living there.

8.2 Waste Management Survey

The UBA volunteers conducted a survey on waste management in association with Mukkam Municipality and Haritha Kerala Mission. They collected the details of houses and buildings and generated QR codes for waste management mobile application.

8.3 Participation in Women Empowerment Program

UBA volunteers participated in the women empowerment program organized by Mukkam Municipality in association with Kerala State Women's Commision on 1st October 2022.

9. INDIAN INSTITUTE OF MANAGEMENT, KOZHIKODE

9.1 Rural Immersion of IIMK PGP-LSM Students

UBA Cell IIMK recently organized a rural immersion program for 51 PGPLSM students in two villages, Puthupadi and Atholi. The aim of the program was to provide exposure to rural India and help the community members with any kind of development that could further their growth. The students were divided into three groups - Agriculture, Tourism and Education, and a total of 51 students participated in the program. The rural immersion program began on January 23, 2023, and continued till January 31, 2023. Out of the 51 students, 31 were sent to Atholi and 20 were sent to Puthupadi. The

students were able to gain first-hand experience of the challenges faced by the rural population and also provided assistance in various developmental activities.



The program was a great success as it not only helped the students gain knowledge and experience but also provided the rural communities with much-needed support. UBA Cell IIMK plans to continue such initiatives in the future to promote rural development and provide students with a unique learning experience.

Prof. Anubha Shekhar provided orientation to each student group, resulting in the creation of a list of activities to achieve their respective goals. The Education group aims to enhance English language proficiency and provide career guidance to higher secondary school students. The Tourism group plans to explore the culture and tradition of these villages and too bring them on tourism map, and create a tourism development plan with the District Tourism Department. Lastly, the Agriculture group aims to guide community members on the benefits of Mushroom cultivation and its marketing, with the help of the Agricultural Office in these villages. These groups aim to empower individuals to be self-sufficient and live an empowered life.

The Education group's focus on English language proficiency and career guidance will equip higher secondary school students with the necessary skills to succeed in their future endeavors. The Tourism group's exploration of respective village's culture and tradition will attract tourists, leading to the development of a tourism plan with the District Tourism Department. The Agriculture group's guidance on Mushroom cultivation and marketing will provide community members with a sustainable source of income. These groups aim to empower individuals to live a self-sufficient and empowered life.



In conclusion, Prof. Anubha Shekhar's orientation provided each student group with a clear direction towards achieving their goals. The Education, Tourism, and Agriculture groups aim to empower individuals with the necessary skills and knowledge to live a self-sufficient and empowered life. The IIMK students had the privilege of experiencing new and fruitful encounters each day with both the local villagers and fellow students. Their hard work and dedication were recognized by the panchayats, who organized a valedictory function. During the event, the students presented their work in the form of a video, which was well received by the attendees.

The function held in Atholi Panchayat was attended by the respected M.P, M.K

Raghavan. The students were grateful for the opportunity to showcase their work and were honoured to have such a distinguished guest in attendance. The event was a fitting tribute to the hard work and dedication of the IIMK students, who had made a significant impact on the lives of the local villagers.

In conclusion, the valedictory function was a testament to the successful collaboration between the IIMK students and the local villagers. The event provided an opportunity for the students to showcase their work and receive recognition for their efforts. The presence of M.K Raghavan added to the significance of the event, and the students were grateful for the opportunity to share their experiences with him.



9.2 Visit to Achankovil Tribal Settings

Achankovil, situated in the Western Ghats forest of Kerala, is a small village that is renowned for its natural beauty and the Achankovil temple. The temple is famous for being one of the most significant temples of Lord Ayyappa, with a statue believed to have been consecrated by Lord Parasurama himself. The picturesque temple attracts numerous visitors who come to witness the stunning Manalar falls and the Kumbuvurutty falls, which are located nearby.

Achankovil, also known as Achencoil, is an important pilgrim centre of Kerala. Throughout the year, it attracts pilgrims from Kerala and Tamil Nadu, especially during the Sabarimala season. The temple is very similar to the famous shrine at Sabarimala and is a must visit for those who are seeking a spiritual experience.

In conclusion, Achankovil is a beautiful village that offers visitors an opportunity to experience the natural beauty of the Western Ghats forest and to witness the stunning Achankovil temple. The village is an important pilgrim centre of Kerala and attracts numerous visitors throughout the year. Visitors can also witness the breathtaking Manalar falls and the Kumbuvurutty falls, which are located nearby.

The temple located in Kandamala, near Kollam, is believed to be the place where God Ayappa showed his presence to Lord Parasurama during a long term penance. The temple's idol of Ayyappa is known as Rudraksha Shila and two important festivals, Mandala Pooja and a festival held at 'Ravathi', take place here.

In addition to its religious significance, the temple is also known for its treatment of poisonous snake bites. The sandal paste in the hands of the Dharma Sasta idol is believed to have a miraculous cure for snake toxin. People take this paste, along with water offered by the chief priest from the temple well, to cure poisonous snake bites.

The Achankovil River, an important part of Achankovil Temple, flows through this region. The temple's location amid the lush green forests of Western Ghats adds to its natural beauty and serenity.

In Achankovil, a snake bite victim is made to stay inside the temple for three consecutive days. During this time, the victim is only given Theertham, sandal paste, and tulsi. On the first day, the victim is not allowed to sleep, but on the following two days, they are permitted to rest. This treatment is believed to be effective due to the medicinal properties found in the well water used as Theertham, along with the sandal paste and tulsi. These properties were traditionally used to treat snake bite poison and are now preserved in the name of God.

It is important to note that there are no hospitals or medical facilities available in or near Achankovil. In the event of a medical emergency, individuals must travel a long distance to Punaloor or Tamil Nadu for treatment. This lack of medical resources may be a contributing factor to the continuation of this traditional snake bite treatment.

While this treatment may seem unusual to outsiders, it is a deeply ingrained part of the culture in Achankovil. The use of traditional medicinal herbs and practices is highly valued in this community, and the temple serves as a place of healing and spiritual guidance.

The Achankovil Shastha Temple, also known as the Dharamsastha Temple, is a significant religious site in Kerala. It is dedicated to Lord Ayyappa and features other deities associated with the Ayyappa legend. The temple complex is surrounded by a large wall, adding to its grandeur.

However, the educational facilities in Achankovil are not as developed as one might hope. While there is one UP and HSS present, there is no well-established library or other resources available for students. As a result, many of the younger generations have to leave their hometown to pursue their studies in places like Punaloor and Trivandrum, where they have access to more extensive resources.

Despite these challenges, a tribal student from Achankovil has managed to overcome the obstacles and complete his PhD. He is now working as a professor in Trivandrum.



This achievement is a testament to the student's hard work and determination, as well as the importance of education in overcoming barriers.

In Achankovil, a hostel has been established for Tribal girl students to provide them with proper education and nutritious food. However, the students have expressed their concerns regarding the lack of resources available for their studies. Despite seeking help from elderly residents and their school, they often find themselves without answers to their questions. It is clear that these students are eager to learn and would greatly benefit from additional resources.

In addition to access to educational resources, these students also require proper career guidance. Some have expressed an interest in the IT field and wish to learn more about computer programming. Providing these students with the necessary resources and guidance will not only benefit them individually, but also contribute to the development of their community as a whole.

It is important to recognize the potential of these young students and provide them with the support they need to achieve their goals. By investing in their education and future, we can help create a brighter future for all members of the Achankovil community.

9.3 Pre-visits for Rural Immersion.

In order to discuss rural immersion with higher authorities, a clear structure and benefits must be provided. This will also involve understanding the panchayat's culture, tradition, and souvenir for tourism purposes. Additionally, it is important to gather information on the needs of students and higher secondary teachers, and provide accordingly. Finally, the advantages of small scale production in mushroom cultivation must be understood and marketed to provide a sustainable income source for the SC/ST community.



UBA Cell IIMK is planning a rural immersion program that will focus on three key sectors: Agriculture, Education, and Tourism. The goal is to drive growth and development in these areas by involving students. To achieve this, we need to have proper discussions with authorities in each sector of each panchayat. This will help us understand their needs and determine which areas to focus on. We will also need to arrange for necessary items to ensure the success of the program. It's important that the beneficiaries are able to continue the work in a sustainable way.

10. ST. JOSEPH'S COLLEGE, DEVAGIRI, KOZHIKODE

10.1 Water Bodies Mapping

Need of the Activity: The state water resources department has launched an ambitious project to prepare digital maps of all 44 rivers in the state and feed them on to a geographic information system (GIS)-based platform. The aim is to create remarkable decision support system to develop an integrated, sustainable and long-term water conservation and management plan for the state, which is increasingly



vulnerable to droughts and drinking water shortage. So, we decided to participate in this tremendous task.

Brief Description: The MSW students of the St. Joseph's College, Devagiri have decided to participate in the water resources mapping programme in one of the adopted villages in collaboration with a leading NGO of the Calicut district. The students from the college visited the place Cheruvannur, Kerala on 21st June 2022 and attended a meeting with the Panchayat members and understood the procedures in water

resources mapping. After the meeting, the students went to various parts of the village and collected the information related to it.

10.2 Drug abuse campaigns at various places in the adopted villages (29, 30, 31 October and November 01, 2022)

Need of the Activity: From the last Grama Saba meeting held at the adopted villages, we came to know that drug abuse among youth is a major concern of the community people because it has serious negative consequences on their health, education and overall well-being. From the interactions with the teachers in the schools of adopted villages, our students found that the drug abuse could interfere with school or work, as well as relationships with friends and family. In addition, drug abuse is linked to a variety of social problems, such as crime, domestic violence, and child abuse. In this scenario, awareness against drug abuse plays an important role.



Brief Description: Raising awareness about the dangers of drug abuse is important because it can help youngsters to make informed decisions about drug use and encourage them to seek

help if they are struggling with substance abuse. By keeping this in mind, various education campaigns and community events were organized at the various places of the adopted villages.

1. An awareness rally was organized from Pulpally Panchayat Office to Pulpally Bus Stand followed by a Street-Play which was intended to promote awareness against drug abuse.

- An awareness rally followed by a Street Play to create awareness on Drug Abuse was conducted at Thazhekappu Colony with the students of GLP School Mundakuttikkunnu, Pulpally.
- The next activity related to it was a visit to Kripalayam Special School and formed a human chain by both the students of college and the students of Kripalayam Special School against Drug abuse followed by a Street-play.



10.3 Awareness class on good touch and bad touch (02/11/2022)

Need of the Activity: From the interactions with the village people, we came to know that the tribal students are lacking knowledge in various topics that is essential for their day-to-day life activities.

Brief Description: Conducting awareness campaigns in the villages with the help of students and government officials was one of the activities planned in the Gram Sabha meeting. Through awareness campaigns, we can provide accurate and up-to-date information about the risks and consequences of the problems facing by the community people. This can help people make informed decisions about the issues and encourage them to seek help if they are struggling with any kind of issues. By keeping this in mind, an awareness class on good touch and bad touch was conducted for the students of the GLP School Mundakuttikkunnu, Pulpally by the college students. By this Awareness class, we helped students to reduce stigma by promoting a more understanding and compassionate approach to this topic and at the end, we provide information about where to find help for such kind of issues if happens. This can make it easier for the students to access the help they need.



10.3 A craft making tutorials for students (31/10/2022)

Need of the Activity: From the Gram Sabha meeting we got a suggestion that the students should have some activities which they can do in their leisure time. In this, we planned to conduct some craft tutorials in the surrounding schools in the adopted villages.

Brief Description: A craft tutorial for the tribal students of the Devi Vilasam Vocational Higher Secondary School, Veliyambam. Pulpally was organized by the students of St. Joseph's College (Autonomous) Devagiri. In this, the students were taught to make paper bags, paper pens and paper flowers.



10.4 Computer Literacy programme (01/11/2022)

Need of the Activity: At the time of Gram Sabha, there was a demand from the side of village people that the tribal students are getting laptops from the government but many do not know how to use it. Therefore, they demanded for a computer class for the students and from the interactions with them, we came to know that there is lack of computer and English proficiency among villagers especially among women. Therefore, we planned accordingly.

Brief Description: The students from the college visited these places and found out the students and organized Tutorial sessions on the use of laptops to the tribal students from the adopted villages. In this tutorial the topics like how to use laptops, the fruitful use of laptops in their studies, how to connect internet to it and how to search various topics using desktops were discussed.



10.5 Training in farming and making a small vegetable garden at the school premises in the adopted village (02/11/2022)

Need of the Activity: At the time of Gram Sabha there was a demand for the vegetable garden for the students from the Asha worker of the Ward – 10 of Pulpally panchayat. Gardens help students to make the connection between growing food and good diets, develop life skills and increase environmental awareness.

Brief Description: By involving the students from the GLP School Mundakuttikkunnu, Pulpally we made a vegetable garden at the school premise. It was a novel experience to the students and many students actively participated in this making process. Students showed interest in the farming and we selected some students to look after it.



10.6 Preparation of a playing space for the students of the GLP School Mundakuttikkunnu, Pulpally. (02 & 03 Nov 2022)

Need of the Activity: During the time of Gram Sabha meeting conducted by the initiative of UBA cell of college there was a serious discussion on how students can productively spend their leisure time. Then there was a suggestion of spending their time in sports. But the sports facilities like playgrounds and playing equipment were not available. Then after discussion, the college has decided to prepare a playing space for the students of the GLP School Mundakuttikkunnu, Pulpally.



Brief Description: The students from the department of Social Work visited the school and found a place for making their playing area and the students cleaned the

area. After cleaning some sports equipment were installed there. Then the walls of the playing space were painted and the students from the college added some colorful pictures, which made the playing space more attractive.

10.7 Workshop on paper bag making (31/10/2022)

Need of the Activity: Introduction and training of some income generation means was an expressed need of the community people in the adopted villages.

Brief Description: Workshop on paper bag making was an initiative by STARS NGO Calicut in collaboration with Malayala Manorama daily. UBA Cell of St. Joseph's College (Autonomous) Devagiri tied up with them in this initiative and provided training in paper bag making. Interested persons from the adopted villages participated in this workshop. In this workshop, how to make paper bags, the possibilities of selling them and how to collect raw materials for these were discussed and the training were mainly focused in it. The workshop was conducted at Devagiri College and participants from the nearby villages participated in this workshop.



10.8 Career Guidance class (31 Oct & 03 Nov 2022)

Students from these adopted villages demanded for a career guidance session. This can help students make informed decisions about their careers, leading to greater satisfaction and success.

The students from the department of social work conducted a



career guidance sessions for the students from these villages. In this session, various career opportunities were discussed. In this, major exams that they can attend during these times were informed to students and how to prepare for them.

10.9 Menstrual Hygiene class

Need of the Activity: From the health survey that we conducted in the adopted villages, we came to know that in some area many are ignorant in Menstrual Hygiene. Therefore, we decided to conduct Menstrual Hygiene class for the students in various schools in these adopted villages.

Brief Description: Undoubtedly, period awareness has increased in urban area: with more women opting for sanitary pads rather than cloth, and not only women; people, in general, have developed a better understanding of menstruation in metro areas. However, in the rural area the case is different. Therefore we planned to give an awareness class on the topic of menstrual Hygiene class. Students from the department of Social Work delivered awareness class and they have demonstrated how to handle periods safely and hygienically. This kind of awareness help them to become emotionally and physically ready to face these situations.