

College of Engineering Pathanapuram
UBA cell

Four major problems were identified common to five villages

Drinking water scarcity,

Agriculture

solid waste management

Drinking water scarcity

One of the major problems faced by the villagers is the scarcity of drinking water. UBA cell, members developed an automated system based on sensors and powered by battery and/or solar cells. The sensors deployed in the system provide the information about the quality and contaminants in water and suitable process can be selected automatically. The device can be controlled using an Android App making it suitable for remote installation. This system can be easily plugged in to existing water supply schemes with minor modification. The locality, which was well known for its agricultural history, is now facing hurdles to follow the path, primarily due to unscientific methods of cultivation.

Work done

Agriculture

Developed a portable system to measure moisture content, nutrition and Ph of Soil. The sensors of the system can also measure the levels of gases like oxygen, carbon dioxide and nitrogen. There are sensors which can detect climatic conditions like wind speed and rain. The system, working on battery powered by solar panels, can be deployed on remote locations and can be used to send SMS messages to mobile phones of the users.

Workdone

Solid waste Management

Solid waste management is another major issue faced by the village administration. So proposals of aerobic composting of biodegradable waste and recycling of plastic waste. The non recyclable plastic waste can be shredded and used for road construction.

Program conducted

1. An awareness program was conducted in all villages under plastic hazard, solid waste management and water management.
2. Hands on training and lecture session on solar assembly was conducted for students of school to college levels.

3. Woman hackathon was conducted to all ladies in association with ICFOSS.
4. Mega event on release of village development plan was conducted with panchayat administrators.
5. Organic farming was done on our campus and class regarding was given to tribal colonies.
6. Three projects were uploaded under the financial section under UBA.
7. Three more projects were progress under UBA cell.