A Consolidated Report

Submitted as a part of AICTE Activity Points required in partial fulfillment for the award of the degree.

BACHELOR OF ENGINEERING

P. E. S. COLLEGE OF ENGINEERING, MANDYA - 571 401
2022-2023
Swachh Bharat Abhiyan is launched by the government of India to make India a clean and hygienic country. Mahatma Gandhi dreamed of clean India, and he said that, Sanitation is more important than Independence. He also said cleanliness and sanitation are important parts of healthy living. In past years India became unhygienic and uncleansed country. According to reports, few percentages of total population are using the toilets.

To make his dream come true Prime Minister Narendra Modi has launched a mission on his birth anniversary on 2nd October 2014 that has to be completed by his 150th birth anniversary by 2nd October of 2019. Narendra Modi said in his speech that A clean India is the best tribute we can pay to Gandhi ji when we celebrate his 150th birth anniversary in 2019. I urge every one of you to spent at least 100 hours every year towards cleanliness. We cannot let India unclean any longer. The mission has been started to clean all the rural and urban areas of the country under the Ministry of Urban Development and the Ministry of Drinking Water and Sanitation.

In response to the clarion call given by the prime minister Narendra Modi for Swachh Bharat the nation is witnessing a wave of enthusiasts wielding the broom and taking up the cleanliness pledge.

Venue: Santha kasalagere, Mandya

Beneficiaries: 450 people of Santha kasalagere, Mandya, Karnataka

Total No. of Participants: 20
ACTIVITY -2

Helping local schools to achieve good results and enhance their enrolment in higher/technical/vocational education.

SUSTAINABLE WATER DEVELOPMENT

Sustainable water means a nation that can be water self-sufficient: ensuring there is enough water to meet multiple needs, from agriculture to municipal and industrial. Sustainable water also means that the economics stack up in matching supply and demand and the water delivery process is as efficient as possible.

Reducing water use through waterless toilets, water efficient appliances, and water quantity monitoring, is an important part of sustainability for domestic water supply. Efficient piping systems that are leak-free and well insulated provide a network that is reliable and help to limit water waste.

EDUCATING

1. Prevent littering and dispose of garbage appropriately. Many of us have a terrible habit of disposing of the garbage right on the spot where we are sitting or standing.
2. Sort your Garbage.
3. Uphold Hygiene.
4. Re-Use and Re-cycle
5. Recycle. Recycling is the process of converting waste into reusable material. You can do this by collecting recyclable materials such as plastic and aluminum.
6. Walk or Bike More Often.

Grow plants in the school garden.
ACTIVITY -3

Ayushman Bharat Health Account Generation Activity

The feasibility study provides a comprehensive understanding of a plan. Furthermore, a feasibility study identifies potential challenges and problems while executing the plan. Moreover, a feasibility study takes into consideration all relevant factors to be considered in the implementation of the plan. The preliminary survey was done by the faculties and guides of the activity and the students were informed about the daily activities that they should do before the activity started through a program flow.
DEPARTMENT OF CIVIL ENGINEERING

The following are the list of activities done by students as a part of AICTE Program

<table>
<thead>
<tr>
<th>SL. NO</th>
<th>No. of HOURS</th>
<th>ACTIVITY</th>
<th>VENUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 weeks</td>
<td>Developing and managing efficient garbage disposal system</td>
<td>Induvalu grama panchayat, Mandya</td>
</tr>
<tr>
<td>2</td>
<td>4 weeks</td>
<td>Developing and managing efficient garbage disposal system</td>
<td>Dudda grama panchayat, Mandya</td>
</tr>
<tr>
<td>3</td>
<td>4 weeks</td>
<td>Prepare and implement solution for energy conservation</td>
<td>Koralli grama panchayat.</td>
</tr>
<tr>
<td>4</td>
<td>4 weeks</td>
<td>Sustainable water management and development</td>
<td>Hulivana grama panchayat, Mandya</td>
</tr>
<tr>
<td>5</td>
<td>4 weeks</td>
<td>Energy conservation and solution for energy conservation</td>
<td>Streets of Mandya</td>
</tr>
<tr>
<td>6</td>
<td>2 weeks</td>
<td>Guidance on higher education and personality development</td>
<td>Kuvempu government School, Mandya</td>
</tr>
<tr>
<td>7</td>
<td>3 days</td>
<td>Scholarship and career guidance</td>
<td>Holalu Government School, Mandya</td>
</tr>
<tr>
<td>8</td>
<td>2 weeks</td>
<td>Guidance on higher education and personality development</td>
<td>Muthegere government school, Mandya</td>
</tr>
<tr>
<td>9</td>
<td>3 days</td>
<td>Cleanliness and road safety management</td>
<td>Government highschool, Devanahalli, Mandya</td>
</tr>
<tr>
<td>10</td>
<td>2 weeks</td>
<td>Public awareness on cleanliness and Importance on Environmental day</td>
<td>Soonagahalli government high school, Mandya</td>
</tr>
</tbody>
</table>
DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

The Following Are the List of Activities Done by Students as A Part of AICTE Program

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<tr>
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<th>NO. OF POINTS</th>
<th>ACTIVITY</th>
<th>VENUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>80</td>
<td>20</td>
<td>Helping local school to achieve good result and enhance their enrollment in higher education</td>
<td>Government Urdu higher primary school sadath nagar, Mandya</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>10</td>
<td>Efficient garbage disposable system as a part of swatch Bharath</td>
<td>Streets of Mandya</td>
</tr>
<tr>
<td>3</td>
<td>80</td>
<td>20</td>
<td>Agri job opportunities in Rural areas</td>
<td>LGS Social innovation and research Centre</td>
</tr>
<tr>
<td>4</td>
<td>80</td>
<td>20</td>
<td>Conducting census in college</td>
<td>PESCE, Mandya</td>
</tr>
<tr>
<td>5</td>
<td>40</td>
<td>10</td>
<td>Film festival in college</td>
<td>Bangalore</td>
</tr>
<tr>
<td>6</td>
<td>40</td>
<td>10</td>
<td>Prepare and implement plan to improve education quality in village</td>
<td>Government higher primary school, Moodahalli, nanjangud (tq.)</td>
</tr>
<tr>
<td>7</td>
<td>80</td>
<td>20</td>
<td>Awareness on Afforestation</td>
<td>Government High School, Piriyapatna, Mysore</td>
</tr>
<tr>
<td>8</td>
<td>60</td>
<td>10</td>
<td>Covid- 19 Awareness Program</td>
<td>Haludvadi Village, Mandya (dist.)</td>
</tr>
<tr>
<td>9</td>
<td>80</td>
<td>20</td>
<td>Ayushman Bharat Health Account Generation Activity (Youth for Seva)</td>
<td>DHO Office, Mandya UPHC Kyathumgere Mandya</td>
</tr>
</tbody>
</table>

**ACTIVITY -1**

Helping local schools to achieve good results and enhance their enrolment in higher / technical / vocational education.

STOP USING BOTTLED WATER:

Schools are an essential part of any community. This is where our kids go to learn and grow their minds. Making sure they can do so in a clean, safe, and fun environment is necessary for parents, teachers, and students alike.

AWARENESS ON CLEAN ENVIRONMENT:

Crew care offers professional, environmentally friendly cleaning services for schools and education centers. We are committed to sustainability and have a robust environmental...
condition. We exclusively use environmentally endorsed cleaning products, and we use a microfiber cleaning system to reduce the amount of water and cleaning products needed.

**Grow plants in the school garden.**

Venue: Santha Kasalagere, Mandya.

Beneficiaries: 450 People of Santha Kasalagere, Mandya Karnataka.

Total No. Of Participants: 20.
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

The objectives of AICTE student activity are to expose students to the real time life challenges, to provide opportunity to gather data, analyses data, propose solutions and implement solutions, provide an opportunity for personal development, to create engineers who are proud volunteers having a sense of achievement and ready to take up projects having social impact and to create digital awareness.

To nurture these qualities, the College has signed an MOU with Youth for Seva organization to learn and earn activity points along with regular academics. All students must earn a minimum of 100 activity points from various activity segments listed to qualify for the B.E degree. For lateral entry students joining from the third semester, the activity point requirement is 75. Points earned by the student will be indicated in the consolidated academic statement.

Following suggestive activities may be carried out by students in teams as per AICTE Norms to acquire points:

- Prepare and implement plan to create local job opportunities.
- Prepare and implement plan to improve education quality in village.
- Prepare an actionable DPR for Doubling the village Income.
- Developing Sustainable Water Management system.
- Prepare and improve a plan to improve the health parameters of villagers.
- Developing and implementing Low-Cost Sanitation facilities.
- Prepare and implement plan to promote Local Tourism through Innovative Approaches.
- Implement/Develop Technology solutions which will improve quality of life.
- Prepare and implement solutions for energy conservation.
- Prepare and implement plan to develop skills of village youth and provide employment.
- Develop localized techniques for reduction in construction Cost.
- Prepare and implement plan of sustainable growth of village.
- Setting of Information imparting club for women leading to contribution in social and economic issues.
- Developing and managing Efficient garbage disposable system.
- Contribution to any national level initiative of Government of India. For e.g., Digital India/ Skill India/ Swachh Bharat Internship etc.
ACTIVITY-1

Energy awareness campaign

VII Semester Students of Electrical & Electronics Engineering Department have actively participated in Energy Awareness campaign around Manday rural places and educated people about the Energy Conservation methods.
ACTIVITY-2

Swachh Bharath cleanliness drive

VII Semester Students of Electrical & Electronics Engineering Department have actively participated in Swachh Bharath Cleanliness Drive which was organized to bring awareness to keep surroundings clean among community people residing in Santha Kialegee village, Mandya.
ACTIVITY-3

Prepare and improve a plan to improve health parameters of peoples (in association with health department, Mandya district) contribution to any national level initiative of government of India. For digital India.

Role and Responsibilities of Volunteers:

- Awareness Campaigns (Ayushman Bharat - Arogya Karnataka, E Sanjivani, Tobacco)
- Support in Health Sector, Mandya.
- Promoting Ayushman Bharat - Arogya Karnataka
- E - Sanjivani App - Backend Support
- Enrichment Sessions to encourage Volunteer.

IV and VI Semester Students of Electrical & Electronics Engineering Department have actively participated in volunteering work for Health Department. Students have visited house to house along with health department staff and collected health related information in an app special developed to digitalize the health-related information. Also, students have advised safe/good health practices to people.
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACTIVITY 1:
Zero food waste – connecting foodless with hotels and community halls.

This project addresses the engineering solution that has potential to fill the wide gap existing in the Food Wastage and methods to check them. Developing such solution helps in • Enhancing the Rural Economy • Enhancing the National Economy • Enhancing the Employment and Entrepreneurship •

ACTIVITY 2:
Agri job opportunities platform in rural areas

ACTIVITY 3:
A case study on UNESCO world heritage center

As per the recent analysis, Tourism is effective in the Religious and National Tourist Spots but
is not effective in the Local Tourist Spots. Very nearby the National Tourist Spots, there are many Local Tourist Centers that attract very few tourists due to the

• Lack of Promotions
• Lack of content to attract visitors
• Ineffective Management Body
• Ineffectiveness in involving/triggering the Emotions of Tourists

Such a solution is developed in this Project. Developing such solution is done by doing a Case study on the UNESCO World Heritage Centre in India along with the study on the

Developing such solution helps in

• Enhancing the Rural Economy
• Enhancing the National Economy
• Enhancing the Employment and Entrepreneurship
• Enhancement in preserving the Indian Heritage
Ayushman Bharat health account generation activity

Ayushman Bharat Health Account scheme is one of the most popular and significant missions in the history of India. On September 27th, 2021, the Government of India initiated the Ayushman Bharat Digital Health Mission (ABDM). The goal of this mission was to provide all the citizens of India with a digital health ID that will facilitate easy access to medical records. This ID is a 14-digit identification number that can be used from anywhere in India. Thus, you can share your health information with medical professionals across India without any geographical barriers. ABHA is a 14-digit unique number used to identify people, authenticate them, and thread their health records (only with their consent) across multiple healthcare service providers. Creating an ABHA ID is a must for users who want to save their health records stored digitally in the PHR app. ABHA (Health ID) is a combination of the ABHA number, PHR address, PHR app / health locker.
ACTIVITY -2

Pre-planning / preliminary survey / feasibility study

ACTIVITY -3.

Preliminary survey of alcoholic and diabetic

Prepare and improve a plan to improve health parameters of people (In association with Health Department, Mandya district) Contribution to any national-level initiative of Government of India. For Digital India

Role and Responsibilities of Volunteers: -

2. Support in Health Sector, Mandya.
5. Enrichment Sessions to encourage volunteers.

Students of, industrial and production engineering Department have actively participated in volunteering work for the Health Department. Students have visited house to house along with health department staff and collected health related information in an app special developed to digitalize the health-related information. Also, students have advised safe/good health practices to peoples.

ACTIVITY -4

Helping local schools to achieve good results and enhance their enrollment in higher education.
ACTIVITY-1

Road traffic awareness (in association with police department, Mandya district)

Significance of the Program:

EVENTS:
Train the trainer:
The train the trainer concept is a valuable approach for building internal capacity and ensuring the effective transfer of knowledge and skills. By investing in training trainers, organizations and communities is made a sustainable and impactful learning environment.

Students of the Mechanical Engineering Department visited the village and created awareness with the public. They went for a JATHA through all the streets of the villages and created an awareness of wearing the helmet, obeying rules, and regulations of the traffic through slogans,
Students also visited Government High School, Ummadahalli to create an awareness of traffic rules and regulations. An essay competition is made for the students about the topic “Advantages of Obeying the rules and regulations of traffic and road safety”. The participants are motivated. The students trained and demonstrated through videos the Dos and DONTs on the road.

ACTIVITY-2

Environment Activity

Significance of the Program:

The need for training on planting, pollution control, and reforestation for high school students is crucial for several reasons:

EVENTS:

a) Presentation on Environment Pollution:

Students prepared and created awareness for the participants. PPT presentation along with the clips has been prepared by the students and presented to the participants. Play cards of slogans
about saving trees, the effect of deforestation, global warming, effect of black holes to the ozone layer etc. are explained to the participants. Participants interacted with the students.

Photographs:

b) Planting:

Based on the suitability for the local climate and the specific requirements of the chosen areas, a variety of plants were selected. These included native trees, flowering plants, shrubs, and herbs. The plants were procured from local nurseries and gardening centers, ensuring their quality and suitability for our school environment. Honge, Guava, teak, Ashoka tree and some other trees are planted in the school premises.

The planting sessions were organized with the active participation of students, teachers, and support staff. Each class or section was assigned a specific planting area, and they were responsible for planting and nurturing the plants in their designated area. Teachers provided guidance on proper planting techniques, including digging holes, positioning the plants, backfilling, and watering.
Feedback and Conclusion:

The students extend our heartfelt gratitude to the school committee and managements for supporting this initiative and we express our sincere appreciation to the school development and Monitoring committee (SDMC) for their hospitality and valuable insights during the visit. The students conveyed thanks to the faculties of all three schools and the administration and managements for their cooperation.
ACTIVITY-3

Education support to government rural schools

Significance of the Program:

A Science and Technology Park (STP) within an educational institute holds significant importance in several ways:

Objective:

The objective of the visit was to provide students with exposure to the Science Tech Park and its various facilities, fostering innovation and practical application of theoretical knowledge.

Activities and Observations:

Welcome and Introduction:

Upon arrival, the students were warmly welcomed by the staff members of the Mechanical Engineering Department. An introductory session was conducted, highlighting the importance of the program.

EVENTS:

a) Yoga and Meditation: The students were trained in Yoga and Meditation. The trainer explains the significance of Yoga and meditation and demonstrates the practicing methods. Many Asanas of Yoga are practices to the students. Students monitored and helped the students to do Yoga.

b) Visit to Science tech Park:

Students visited the Science tech park situated at P E S College of Engineering Campus. The
tech part is equipped with many basic science experiments and working models which demonstrate the basic concepts of science taught at school level. Students explained the working of models. Participants did the experiments on their own and got the experience of basics of science. This enhanced the knowledge of the students.

c) Presentation on Renewable energy Sources:
Renewable energy sources such as wind energy, solar energy, hydro energy and tidal energy development methods are explained to the students. A PPT presentation was prepared by the
students and explained to participants. A working lunch is also arranged by the students for participants. The program was conducted for all the 6 days taking two school children for 2 two days.

Feedback and Conclusion:
At the end of the visit, a feedback session was conducted to gather students' opinions and impressions. Most of the students expressed their enthusiasm and appreciation for the opportunity to visit the Science Tech Park. They found the experience informative, inspiring, and relevant to their academic pursuits.

The students extend our heartfelt gratitude to the AICTE for supporting this initiative, and we express our sincere appreciation to the Science Tech Park authorities for their hospitality and valuable insights during the visit. The students conveyed thanks to the faculties of all three schools and the administration and managements for their cooperation.
Memorandum of Understanding between P E S college of Engineering and ROOTS foundation made and entered on 10\textsuperscript{th} May 2023.
MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) is made and entered
On 10/5/2023

Between

PES College of Engineering, located at K V Shankaragowda Rd, PES College Campus, Mandya, Karnataka 571401.

And

Roots Foundation, a nonprofit organization located at 2nd Floor, Building Number 115, Sector 44, Institutional Area, Gurgaon, Haryana- 122002.

Background of Parties

P. E. S. College of Engineering, Mandya was established in the year 1962 by People’s Education Society*, Mandya under the leadership of Late Sri K. V. Shankara Gowda.

The college is permanently affiliated to Visvesvaraya Technological University (VTU), Belagavi, and has obtained Autonomous status in the year 2008-09 by the UGC. It is recognized by All India Council for Technical Education (AICTE), New Delhi and accredited by National Board of Accreditation (NBA). The college is functioning under the Grant-in-Aid code, Government of Karnataka and also beneficiary of TEQIP grants.

Roots Foundation is duly registered under sections 12AA, 12A and 80G of the Income Tax Act, 1961 (in addition to the Societies Act, 1860). Roots Foundation was established in the year 2012 and focused on sustainable agriculture practices, youth and women’s development, education, health, water and sanitation, and integrated community welfare. Our objective is to empower the underprivileged by providing them with opportunities to realize their potential in innovative and sustainable ways.

Hence, at Roots, the essence lies in identifying the environment which requires intervention, the context in which various stakeholders in the environment operate, and, subsequently, in designing a framework which amalgamates opportunity, empowerment, innovation and sustainability to enhance the medium and long term, the livelihoods of various stakeholders. The organization’s core team comes from different walks of life – agriculture graduates, dairy technologists, academicians, rural development professionals, sports persons, management and medical professionals, etc.