

# Best Practices - 2019-20

## Best Practice No.1 : Parivarthana - Zero Waste Campaign and Sustainable Environmental Practices in CHRIST (Deemed to be University)

### Objectives of the Practice

- To ensure sustainable environmental promotion through Zero Waste Campaign
- To ensure trash to treasure and create livelihood promotion for women and men through sustainable and scientific management of wastes generated in the campus
- To develop replicable models of waste management segregation at source and ensure systematic and scientific management
- To educate the student community and faculties, educational institutions, community people and other stakeholders such as BBMP and corporate sectors etc.

### The Context

In an institution set up like CHRIST (Deemed to be University) the challenging issues that needed to be addressed in designing and implementing this practice is that systematic waste audit and types of waste generated in the campus and accordingly design the intervention strategy is need to be comprehensive and integrated in nature. The biggest challenge would to educate the student community and faculty members to ensure their participation and commitment in waste segregation at source. One needs to also consider the capital investment in terms of machineries and appropriate infrastructure for systematic collection, segregation and recycling of waste. Education of house-keeping staff and other workers associated with waste management process is supremely important for the success of this model.

### The Practice

Under the Parivarthana project Centre for Social Action (CSA), the development wing of The Zero Waste Campaign with primary focus on *“Reduce, Reuse, Recycle and Safe and Scientific Disposal”* is the major strategy adopted in CHRIST (Deemed to be University). Student volunteers of CSA-CHRIST (Deemed to be University) sensitize and educate the student community and faculty members on Zero Waste Campaign. All the students are given exposure on sustainable waste management and environmental practices in the campus. CHRIST (Deemed to be University) generates around 900 kgs of waste everyday which includes both wet and dry waste. 70% of primary segregation of waste generated in the campus is undertaken by the students and faculties. 30% of secondary segregation is undertaken by sorting cum composting unit. In order to ensure carbon neutrality food waste is converted into bio-gas and kitchen waste, fruit/vegetable waste and other bio-mass are converted into organic manure and used for vegetations. The Institution does not use chemical or synthetic fertilizer. Paper and tetra packs are recycled and sold by which a sizeable amount of revenue is generated. Waste resources such as bottles, newspapers, aluminium foils, chocolate wrappers, plastics etc. which cannot be recycled are sold in the scrap market and revenue generated. By this process CHRIST (Deemed to be University) generates monthly revenue of Rs. 150,000 which goes as the remuneration for the people working in the waste management unit. 70-75% of the waste resources generated in the campus is reused, recycled or sold in the scrap market. Only 25- 30% rejects are sent to the scientific landfill for safe disposal and treatment. Parivarthana initiative of CHRIST (Deemed to be University) has been awarded by Rotary Club for comprehensive waste

management initiative in the campus as well as in the slum community. Water harvesting systems established in CHRIST (Deemed to be University) is unique in all aspects. Every day in the main campus about 300000 liters of grey water is being treated and used for vegetation and gardening.

Similarly grey water is being treated and used for vegetation and gardening in Kengeri campus as well. Rain water harvesting promoted in Kengeri Campus is one of the unique features of judicious utilization of water resource. With the concept of "catch rain water where it falls", CHRIST (Deemed to be University) ensure in both campus to recharge ground water. Roof top rain water and run-off water is channelized through a system and collected in a swamp and used for watering the garden. Student volunteers of CSA- undertake awareness campaigns on E-waste Management; The Institution has ensured systematic way of collection of E-wastes which are sold in the scrap market to generate revenue for the Parivarthana unit. Toilet waste and laboratory wastes are managed safely and systematically. Thorny bushes/shrubs and thermacol are sent to the scientific landfills. Indeed CHRIST (Deemed to be University) is a hazard free environment. Educating the student community with imbining in themselves the culture of ensure primary segregation concept and practice, educating the house keeping staff and other workers associated with waste management process, and staff attrition were some of the constraints.

#### **Evidence of Success**

- Continuous education of student community by the student volunteers with primary focus on "*Reduce, Reuse, Recycle and Safe and Scientific management of waste.*"
- Comprehensive waste segregation system established in the campus to ensure 70% primary segregation at source and sorting cum composting unit for ensuring 30% of secondary segregation.
- Establishment of Bio-gas units to ensure carbon neutrality and convert food waste (with 500 kgs of daily feeding capacity, cooking gas equivalent to 25 kgs of LPG generated everyday and slurry rich nutrient is used for vegetation) and establishment of Information dissemination unit to educate other stakeholders
- Kitchen waste, fruit/vegetable waste and other bio-mass are converted into organic manure and used vegetations.
- Paper and tetra packs are recycling unit which mobilizes a sizeable amount of revenue is generated. Waste resources such as bottles, newspapers, aluminium foils, chocolate wrappers, plastics etc. which cannot be recycled are sold in the scrap market and revenue generated about Rs. 150,000.
- Every day in the main campus about 300000 liters of grey water is being treated and used for vegetation and gardening. Similarly grey water is being treated and used for vegetation and gardening in Kengeri campus as well.
- Rain water harvesting promoted in Kengeri Campus is one of the unique features of judicious utilization of water resource. With the concept of "catch rain water where it falls", CHRIST (Deemed to be University) ensure in both campus to recharge ground water. Roof top rain water and run-off water is channelized through a system and collected in a swamp and used for watering the garden.
- With a view to managing E-wastes, systematic way of collection ensured which are sold in the scrap market to generate revenue for the Parivarthana unit.
- Toilet waste and laboratory wastes are managed safely and systematically. Thorny bushes/shrubs and thermacol are sent to the scientific landfills. Indeed CHRIST (Deemed to be University) is a hazard free environment.

## **Problems Encountered and Resources Required**

Following are the problems encountered and resources required to implement the practice:

- In spite of best efforts many a times lack of cooperation from student community to ensure primary segregation at source
- Human resource – adequate staff with commitment to work in the waste management unit
- Adequate financial and material resource for ensuring systematic and scientific management of waste

## **Notes**

Following are some of the intervention may be relevant for adopting/ implementing the Best Practice in other institutions:

- Formation of Eco-club with a view to making the children aware on solid waste management
- Working with other educational institutions: This intervention aimed at creating a learning space for other educational institutions to understand the waste system and help them as well to undertake such initiatives in their own campus.
- Observing Green Apple Day of Service event and undertaken tree plantation Capacity building for members of Resident Welfare Associations on segregation concepts and utilization of food and dry wastes, water management
- Street theatre training for college/ university students on segregation policies, safe disposal of food waste in bio-gas plant, solid waste management etc.
- Street theatre to educate the community on segregation of garbage, solid waste management and water management

## **BEST PRACTICE 2**

### **1. Title of the Practice: Peer Education System - From Me to You**

The national and international student population of CHRIST (Deemed to be University) is, hailing from diverse cultures and socio-economic back grounds and it is always a challenge for the management to strengthen and help the students to go through their educational career. As 60% of our students are outstation scholars who are unequipped to handle the luring & frivolous urban life. City of Bangalore has become a hub for unrestricted use of alcohol & other addictive substances. Sudden taste of freedom & exposure to the adversities of urban lifestyle make youngsters the easy victims of addictions and irresponsible sexual behaviour. In this context and in the new emerging world of the 21st century it is a phenomenon that young people appreciate and are influenced in positive ways by a peer-led intervention if it is well-designed and properly supervised hence serving as a peer educator provides a challenging, rewarding opportunity to young people to develop their leadership skills, gain the respect of their peers, and improve their own knowledge base and skills.

Objectives:

- To reach out to youth through their own peers.
- To empower youth to make healthy choices in lifestyles, relationships and safety

- To enable the students, balance academic and social pressures
- To enable the students develop healthy self-esteem, thus helping them realize their goals in life,
- To empower them to build nurturing relationships that lead to fulfilling lives.

Peer education as a programme involves students of the second year undergraduate programme who are invited to join the programme. They are required to register their names by filling in an application form which includes a brief write up on their purpose of joining the course. The shortlisted candidates are called for an interview to assess their motivation, leadership qualities, & commitment. The selected students undergo 35 hours of formal training sessions on topics like Life skills, Reproductive health and Personal Safety. Their curriculum broadly covers

- Self-Awareness
- Self-Esteem,
- Goal Setting: Decision Making
- Body Image
- Relationships
- Safety in intimate relationships
- Personal safety
- Child sexual abuse
- Values & intelligences
- Addictions & substance abuse
- Evolution of human body
- Why two sexes?
- Changes in puberty - emotional & physical
- Pregnancy
- Sexual Orientation,
- Sexual Identity, Gender Bias

The methodology includes lectures, role plays, group discussions, interactive sessions, group projects field trips and mentoring sessions. As a next step the trained peer educators deliver formal and informal sessions in their own classes on the topics like relationships, reproductive health, substance abuse, personal safety etc.

The uniqueness of this programme indicates that the peer educators themselves are empowered to handle their lives better and make appropriate choices and decisions for themselves. It helps them increase their knowledge level and have a clear understanding on the topics covered. Further it enhances their interpersonal relationships, communication skills and most all the confidence to interact with cross-section of people. The students who attend the Peer Education classes are more receptive and find it relevant and effective. It also helps them develop positive attitude and have clarity on the topics covered. Students also feel that peer educators understand their perspective better than adults. Since the topics discussed during the sessions are related to their present life it becomes interactive and lively and students openly share their perspectives without any inhibition.

Through the formal sessions the peer educators make their presence known among the peers so that they access them whenever they are in need. This can lead to many healthier interactions in future between the peers without having the feeling of being judged.

Most importantly as an integrated educational programme the peer educators are assessed based on their formal sessions and credits are awarded to them. The evaluation of the programme is carried out based on a random collection of feedback from the students after each session for further decision-making process and to improve the effectiveness of the programme.

Peer education programme has proven very effective in the development of students both personally and academically. It is to be noted all the Peer Educators were part of the focused group discussion and the peer educators unanimously agreed that there was a huge hike in their confidence level & self-esteem. The programme has positively affected their perspectives. It also gave great clarity in terms of their goals in life.