

'A WALK TOWARDS ZERO WASTE'

'Waste'; is considered a serious health hazard in today's world and is a major concern for our planet. Our school very well understands the depth of this issue and wishes to contribute towards maximum waste reduction by converting it into something useful. Different wastes have to be dealt with distinct methodologies, so our project is subdivided into two:-

- The first phase tackles the issue of food waste with the help of an automated machine called the smart Cara
- The second phase of the project consists of various recycling and safe disposal-centered projects-i.e. paper and e-waste recycling.

AIM:

- 1) Our main focus lies in aligning the school sustainable goals with the UN goals.
- 2) To a great extent, we have implemented the 3 R's-Reduce Reuse and Recycle

SMART CARA: A JOURNEY TOWARDS ZERO WASTE WITH A MIRACLE BOX

The protagonist of our project is a machine called the Smart Cara, it enables us to transform food waste into one of the most valuable products - manure. This manure is then used in our Bhavan's organic garden. We also sell our manure to parents and school staff at nominal prices in school premises.

FUNDING:

We had won an award from the Environmental Agency Abu Dhabi in the Community Outreach Category 2017-2019 (Sustainable Schools Initiative) and had received a cash prize. This amount was used for the funding of the project.

OUR JOURNEY:

Our green venture with Smart Cara was incepted at the school level .We conducted a program for the students during the assembly elaborating on the uses of Smart Cara and its functioning. We then placed segregation bins in the cafeteria where food waste was to be found in abundance.

We then decided to take this project a step higher and introduced this concept amongst the parents of our students. We made the parents understand the functioning of Smart Cara in a detailed manner and asked them to bring fruit and vegetable peels. They brought a large amount of fruit and vegetable peels and our manure production rose proportionally. We visited groceries, shops, hotels and families in different apartments to spread our green message. We also let our message travel abroad, by sharing this innovative idea with the students of Bhavans, Rajaji Vidyalay from Chennai, India.

IMPACT:

The most significant feature of our machine is that it functions with substantially less power consumption. Its power consumption is just 0.5KWh per cycle which is lesser in comparison to a dishwasher with a minimum power of 1.2KW or a centralized air conditioner with a

minimum power of 3.5 KW. We acquire about 7 kgs of organic waste per day and the manure we get out of it is around 3kgs. Thus, within a month our collection of manure would amount up to a massive quantity of 70-90 kgs.

RECYCLING: A STEP TOWARDS A BETTER DAWN...A BETTER WORLD...A BETTER PLANET...

PAPER RECYCLING:

We collaborated with Emirates Environmental Group (EEG) for the recycling procedure. Summing up our paper recycling ventures, we had successfully collected 15,325 kgs of paper. It is a well known fact that recycling just 1 tonne of paper saves 17 trees. In our case we have collected 15.325 tonnes of paper, thereby saving 260 trees.

E-WASTE RECYCLING:

In order to minimize the amount of damage to the environment, we have been on a mission to collect as much e-waste as possible since 2017. We had acquired the assistance of Enviro-Serve (Dubai) as well as Emirates Environmental Group (EEG). Our latest collection accounts to a colossal figure of 802.5kgs. This would greatly contribute in reducing the possibilities of toxic chemicals leaching into groundwater.

DEVELOPED SKILLS: Working on this project has enabled us to foster our team work and self confidence. It has developed our problem solving mentality and has been a definite morale booster. Working on the technical aspects have enhanced our scientific knowledge and mathematical skills. It has instilled a sense of environmental responsibility in students, parents and neighbouring communities.

UN GOALS MET:

UN GOAL 12: Responsible Consumption and Production

UN GOAL 11: Sustainable Cities and Communities.

UN GOAL 5: Gender Equality. In our team; we have always had gender balance, hence have accomplished

Goal 8: Decent Work and Economic Growth.

UN GOAL 3: Good Health and Well-being.

UN GOAL 17: Partnerships to achieve the Goal.



