

Criterion 7 - Institutional Values and Best Practices

Key Indicator - 7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words (20)

Response:

Providing sufficient opportunities to each learner to actualize their potential and overcome the life long challenges in the competitive globalized environment is an indispensable aim of the institute. A high standard in the transmission of knowledge within a lively and interactive environment is set, leading learners to not only gain significant honors in their respective field but also develop into contributing and responsible citizens of the future. The attitude of service and social responsibility that ensures our students are change- makers and community builders of the future is instilled by the institute. Special emphasis has been placed on plastic neutrality by the institute keeping in mind the urgent need of environmental conservation. The institution aims to be the first of its kind to recycle 100% of its plastic waste. For this express purpose, the institute has come up with a novel social initiative startup; 'Go Shoonya'. The institution has also transcended the boundaries of the campus to extend this initiative to various localities in the Dahisar - Mira-Bhayandar belt. The goal of the initiative is to not only recycle plastic waste but also to upcycle it and convert it into usable plastic products. This process is rightly dubbed the 'shoonya cycle'; to emphasize the message that we dispose off as little plastic as possible.

The process has been divided into certain stages to ensure smooth functioning of the undertaking.

The Collection Stage: To begin the 'Shoonya cycle', student volunteers visit multiple residential societies, schools, and slum areas around the vicinity of the college in the Dahisar - Mira-road suburbs in order to create awareness regarding waste segregation and the perils of irresponsible waste disposal through street plays. The residents are then instructed on how to segregate plastic waste from other types. These visits take place multiple times over a time period to ensure that residents take the movement seriously and start to segregate the waste they generate in their unit. Specialized bins to collect plastic waste are also installed in these areas. These bins are also produced in the institute itself by the student volunteers out of recycled plastic waste. The residents contact the volunteer team when the bin is close to full and the volunteers set out to collect the

recyclable plastic waste. These bins are then emptied and the contents are brought to the college for the next step.

Segregating Stage: After the plastic is collected, it is brought to the institute in the 'shoonya vehicle' that is a zero emission electric vehicle by the student volunteers for the crucial stages of segregation and cleaning. The students segregate the collected plastic waste by its color as well as its thickness. In total, the plastic is divided into seven categories as per the standards of the American Society for Testing and Materials (ASTM) - International Resin Identification Coding System

Cleaning Stage: The students then begin the crucial task of cleaning and washing the meticulously segregated plastic waste by hand. Waste items like food containers, milk jugs, playground equipment are paid special attention to make sure that any and all dust, dirt, or oil residue is done away with and the plastic is ready and safe for reuse.

Shredding Stage: The segregated plastic is put through a shredder according to color by the volunteers. The students repeat the process till the plastic is pulverized into a fine powder. This step ensures efficiency in the melting of the plastic waste and saves electrical energy as well.

Injecting and Molding Stage: The plastic powder is fed to an injection and moulding machine which melts the plastic and casts into desired shapes by the volunteers.

Finishing Stage: The recycled products are then finished by hand. The product is separated from its mold and filed to do away with any imperfections by the student volunteers. Several products like keychains, coasters, ear-rings and pendants are produced from this recycled plastic. As of now, about 10,000 tons of plastic have been recycled and prevented from being discarded in dumping grounds by the students.

All of the above stages are performed in a specially designed 'shoonya lab' that has been established within the campus itself. It has been aptly dubbed as 'a lab where ideas turn into tangible products.' It is also worth mentioning that all the mentioned stages are executed by the student volunteers itself. The lab has been carefully designed to incorporate innovative ideas and turn them into products leaving behind 'zero carbon footprint'.

Apart from plastic upcycling, which remains an extremely key function of the Shoonya Cycle, the undertaking also involves itself with several other initiatives that aim to take a step ahead for a cleaner and greener future.

The Shoonya Volunteers take part in extensive beach cleanups which not only helps their plastic collection initiative but also aims to ensure that the fragile marine ecosystems remain as unharmed as possible from human activity.

Several patches of rural and urban land have also been reinvented as green pastures with the help of tree plantation drives. The volunteers seek to make the most of the limited land resources by employing the 'Miyawaki Method' to create dense forests using exclusively native plants. This effort has borne fruit quite literally by creating a positive impact on the afforestation efforts in the targeted areas. Eventually, all actions undertaken and solutions applied under the Shoonya Cycle initiative are so designed keeping in mind the much larger goal of achieving a carbon neutral society.

In the future, it is a sincere hope of the institution that the movement gets more and more traction and translates into a greener landscape for all and a carbon-neutral Mumbai and eventually a carbon-neutral India.

This initiative has been on the receiving end of laurels and accolades from prestigious organizations. Some of which are:

1. The UNICEF for increasing awareness regarding waste segregation
2. Mira-Bhayandar Municipal Corporation for beach cleaning and waste segregation