BEST PRACTICE-II

1. Title of the Practice

Together, a step towards a Cleaner, Greener future.

2. Objectives of the Practice

- To promote environmental consciousness through different awareness activities.
- To provide exposure to students in experiential learning beyond traditional classroom learning.
- To catalyse new initiatives of community engagement to help the local community. To contribute
 to the socio-economic development of the rural community.
- To acquire understanding of social realities and find solutions.
- To plant and preserve trees in the neighbourhood and on campus
- To organise skill-building workshops for the neighbourhood farmers to equip them to earn additional source of income.
- To implement a successful Clean Green Campus policy and take actions to promote environmental sustainability.

3. The Context

Hislop College, as a family, has been particularly concerned about the effects of environmental deterioration on the continued life of people, animals, and the natural surroundings. Lack of knowledge about the local habitat amongst the youth was observed. The youth were found to have little awareness of the regional biodiversity. The main environmental problems were discovered to be societal motivation to maintain green cover.

Hislop is aware of the crucial role higher education plays in educating young people about environmental protection. Hislop believes that raising environment consciousness amongst the younger generations will ensure a promising future.

The achievement of two objectives—a better environment and a better society—is also ensured through community participation in a variety of environmental initiatives.

An example of a societal issue is the suicide of farmers in Vidharbha, where the cause was found to be their reliance on agriculture as their sole source of income.

4. The Practice

The college through its Clean Green Campus policy ensures environment friendly practices on campus. This is carried out through conducting green audits, using renewable energy sources and making a shift to energy conserving lights and equipment.

College enables efficient disposal of both dry and wet waste. The wet waste which is collected is then sent to the vermicompost, dry waste is further segregated to paper waste and e-waste. The dry waste is handed over to the local municipal corporation. E-waste is disposed off through a government recognised e-waste management agency.

The college also lays a strong emphasis on environmental awareness through a variety of channels.

For the past 18 years, Hislop College has been the sole institution in central India to host the eagerly anticipated annual flower show. In addition to showcasing thousands of different flowering and non-flowering plant species, this flower exhibition serves as motivation for city inhabitants to create their own tiny gardens. These plants are raised using the organic manure produced by the vermicompost, which is also sold to encourage people to utilise non-chemical fertilisers in their gardens. This annual event also includes contests to raise schoolchildren's awareness of the environment, like "Papillion" and "Green Window."

The college offers a certificate course in Allied Agriculture for the students and other interested groups. It aims to develop and equip the students, develop skills in Floriculture and Landscaping, Mushroom Cultivation and Vermicomposting.

Urban afforestation is another initiative of the institution that contributes to a greener city.

Institution motivates teachers and students to conduct local habitat surveys and carbon sequestration audits.

Human life is directly impacted by the environment, hence the college has identified a number of issues that can be addressed through the NSS, Rotaract, and Environmental Cell. A number of awareness campaigns, street plays, rallies, etc. have been organized on topics including 'World Environment Day', 'No Honking', 'Save Water', 'Say No to Plastic'. Civic engagement drives such as neighbourhood clean-up and Nirmalya collection, during festival season to protect the nearby water bodies from pollution are undertaken. College has also been a part of various activities organized by TERI.

College promotes green living by gifting Saplings to guests or dignitaries during events.

The expertise available at the institute train and make the farmers self-reliant. Students are also encouraged to volunteer in Beekeeping programme for farmers, and during their interactions with farmers, they raise awareness about various Central and State Government initiatives for beekeepers, so that they can benefit from subsidized Bee Boxes, live bee colonies, tool kits and training. The farmers are taught beekeeping as a potential self-employment activity. The training is offered to support Sweet Revolution's MSME mission at KVIC.

5. Evidence of Success

The following examples demonstrate the effectiveness of various environmental initiatives and practices:

- Hislop was the only college to receive funds from MNRE for a Rs.6,00,000/- environmental audit.
- The college was accredited as the Best College by the YMCA for its environmental activities.
- For its collection and quality of plants, the college has won numerous accolades.
- Participation from 609 students in Pappilion and Green window.
- 150 participants successfully completed the certificate course in Allied Agriculture.
- More than 25 environmental events were organized to sensitize students and community at large.

- Students participated in 'Green wheels on Air' to celebrate the public outreach day organized by The Ministry of Housing and Urban Affairs (MoHUA), GOI, and GIZ, Germany.
- Hislopians also joined hands with an Environment activist Mr. Chetan Pandey, Alumnus, to take forward a local green issue of 'Save Bharat Van' and 'Save Ajni Van', the 2 urban forests.
- The college's environment cell has played a significant role in donating and planting saplings with a focus on urban afforestation through tree plantation drives thereby improving the green cover. At the Dragon Palace in Kamptee and at Muarazari, 600 and 300 saplings, respectively, were planted as part of the Hislop urban afforestation initiative.
- Students persistently contribute by playing major role in local wildlife surveys and carbon sequestration audits at Rajbhavan, Seminary Hills and Ambazari Biodiversity Park.
- Meliponi(for the bee colony)and Bee Hotel (for solo bee) is developed in house by Hislop College for the purpose of Rescue conservation and rehabilitation of bees.
- The college is actively involved in the rescue of stingless bee colonies during tree felling, resulting in bee conservation. At different land use management sites, stingless bee colonies are rescued all year long to minimize the negative effects of tree clearance on the ecosystem and providing rural families an opportunity to earn additional money.
- The college is also connected with the Gondi tribe, from Gondia district of Maharashtra and have trained them to obtain honey from the stingless bees from forest without cutting the trees. The tribals are also trained to rear these bees in boxes so that they do not need to move to forest in search of honey. The honey can be extracted from the reared bee boxes. These boxes are placed at their homes and farmlands for the purpose of pollination.
- This has led to the rescue of about 50 stingless bee colonies till date. Out of the 50 rescued colonies, about 78% of the colonies are working well. The rescued and established colonies are being reared at the Botanical Garden of Hislop College, Raj Bhavan, Nagpur, BNHS Centre, Bhisi, Chandrapur, Aura Park, Kathalbodi, Bazargaon, Nagpur, Grace Farms, Mahurzari, Nagpur and at farm in Kulpa, Lanji, Madhya Pradesh.
- This practice for saving and preserving stingless bees was presented at the international conference WILDCON-2020, where it was well-received and also awarded second place.
- A new species of bee has been reported by one of the research student which is named as *'Tetragonula ashishi'*.
- 80+ farmers from 5 batches have received training in bee rescue, rehabilitation, rehoming, and
 rearing to date. These farmers have benefited from this institute-community-environment
 interaction and have become self-sufficient. The farmers are provided with a certificate after
 completion of the training which also bears a reference number for the Khadi Village Industrial
 Board, government of Maharashtra.

- In addition to promoting the medicinal benefits of honey and its usage in cosmetics, the college does testifies product quality of honey.
- PG and research students have regularly presented papers on environmental issues. Students have also taken up volunteering as well as have chosen to pursue higher studies at renowned wild life and environmental institutes, nationally and internationally.
- Webpage has been designed where information related to multiple species of QR coded E-birds is available for public at large.
- The tree species of the campus have been QR coded for identification and easy reference for their use and medicinal properties.

6. Problems Encountered and Resources Required

- Financial constraints and time restrictions were the main issues because it was difficult to fund these projects and align the activities with academics.
- Resistance from the general public.
- The students were prohibited from remaining on the field and continuing the rescue of the stingless bees during the pandemic.

7. Notes (Optional)

Hislop College is willing to offer free training to staff, students, and other stakeholders in finding stingless bee colonies, extracting and rescuing them. In the process, various other organizations and parties may also embrace the practice.

We are prepared to offer the best wooden box designs for the domestication of stingless bee and to offer local floral information appropriate for these bees.