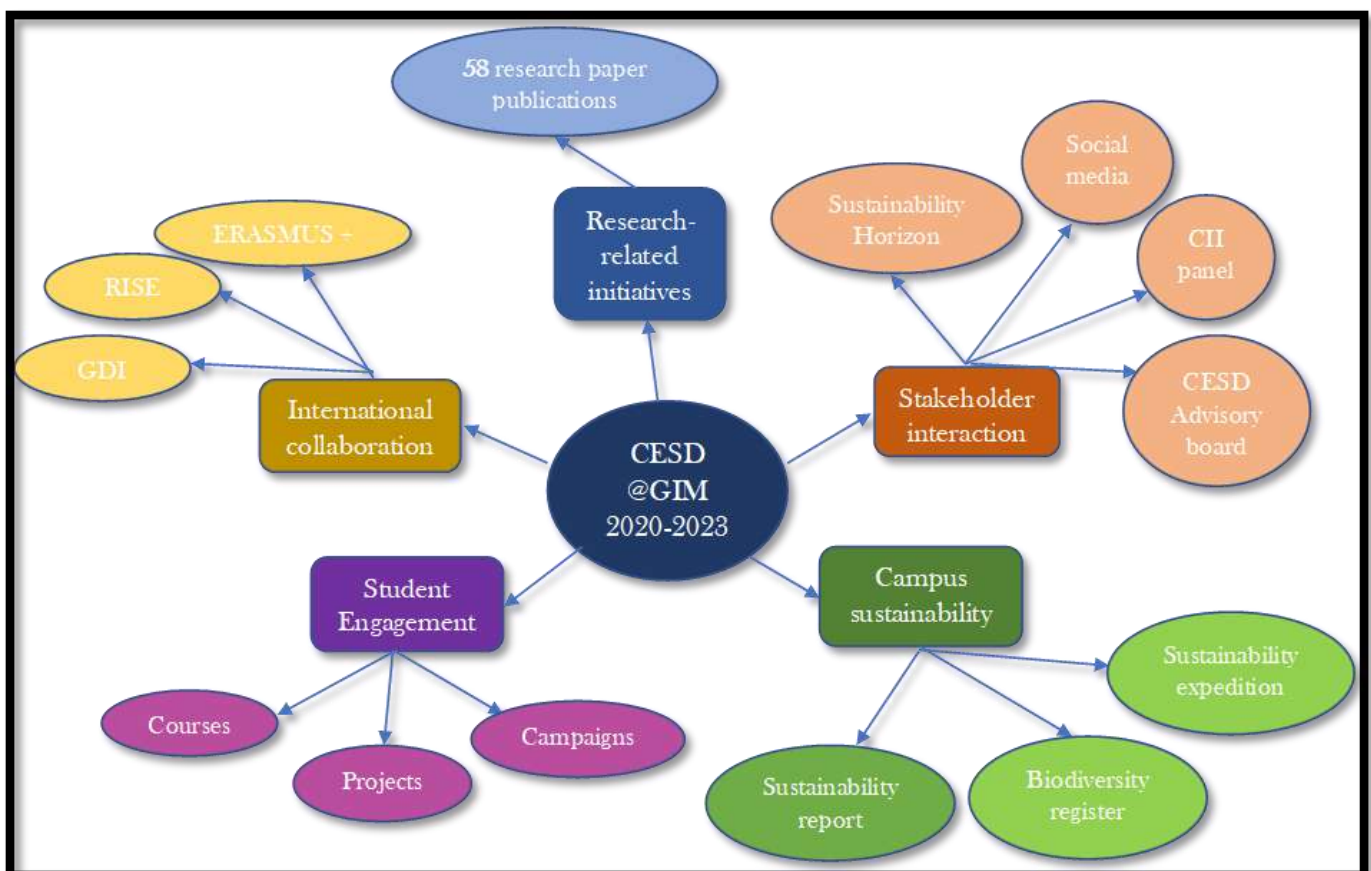


(Report for the AY 2022- 2023)

Activities of CESD:

The activities of CESD over the years can be divided into five categories:

1. Environmental Sustainability at GIM- Campus development
2. Student Engagement
3. Communication with multiple stakeholders
4. International activities/collaborations
5. Research-related initiatives



1 Introduction

The Centre for Excellence in Sustainable Development (CESD) was formed in July 2018 to contribute to GIM's quest for environmental sustainability.

The core objectives of CESD are:

Knowledge Creation:

- To develop a model institute for green campus in India and transform GIM community into a more sustainable community. At the same time, use these processes for action research in the field of sustainable development.
- To help develop knowledge through research in the aforesaid field.

Knowledge Dissemination:

To increase awareness about green living and sustainable development in the community around us and carry out activities to try to reduce the carbon footprint of the state of Goa and India as a whole.

Knowledge Application:

- To develop a resource Centre for sustainable development at GIM for imparting training, providing consultancy and participating in policy making.
- To contribute to the development of start-ups and ventures for sustainable development at the grass-root level.

The CESD team comprises of the following members:

- Prof. Arpita Amarnani, Chair
- Prof. Vithal Sukhathankar, Member
- Prof. Avik Sinha, Member
- Prof. Ajay Vamadevan, Member
- Prof. Purvendu Sharma, Member
- Prof. Muneeb Ul Lateef Banday, Member
- Prof. Diya Guha Roy, Member
- Prof Abhinav Sharma, Member
- Dr. Karen Fernandes, Senior Research Associate

2 Selection of Student Ambassadors and Engagement

The CESD chair Prof. Arpita conducted induction sessions for the incoming batch of students for all programs, introducing the Centre, describing its activities and identifying opportunities for student engagement.

Thereafter in July'22, the Centre gave out a call to all new students to onboard a group of highly motivated students who would contribute to the Centre by taking up activities like organizing awareness sessions and events like sustainability hackathon, webinars, workshops, managing the social media for the CESD, contributing to the Centre's newsletter, live projects, etc. The team would closely work with CESD over their 2-year tenure at GIM.

A team of around twenty students were selected by a panel that included Prof. Avik, Prof. Muneeb and Prof. Purvendu, after a round of interviews to check for passion and skills. On **25th August 2022**, the first meeting of the CESD team of faculty and students was held to prepare a calendar of events for the present Academic year. The CESD team now comprises of a total of seventeen students.

The following live projects were undertaken by the CESD Ambassadors. A Photography contest titled '**Sustainable Imprints – Capturing through the lens of GIM**' was organized which was a success. A satisfactory number of entries was received and after scrutiny, four winners were selected and felicitated with prizes and certificates at an event organised on **23.11.2022**.



Twenty participated in the *Winners of the Photography contest- Sustainable Imprints* contest which included two staff members.

A Videography contest titled '**Reel it In**' was organized on the theme Sustainability, Ecotourism and Wildlife on the **7th February 2023** with eight participants. The contest was promoted on Unstop platform where 16 registrations were received. This competition gained 7459 impressions on unstop. The results of the competition are as follows: Jay Jain- Goa Institute of Management secured the first place- 2,500/- prize money, Prem Thale - KET's V.G.Vaze College (Autonomous) Mumbai - 1,500/- prize money, secured the second place and Vansh Chhetri- Indian Institute of Management, Ranchi- 1,000/- prize money secured the third place.

Green Industries Goa Campaign

Under the Green Industries Goa Campaign, the Givegoa students on the **21st of January 2023**

organised a webinar titled "**Webinar on Sustainable Development for Micro, Small, and Medium-sized Enterprises (MSMEs)**"

This webinar was organised by the Givegoa students of GIM in collaboration with the Centre for Excellence in Sustainable Development



Webinar organised on Sustainable Development for MSME's (CESD), GIM. Two guest speakers namely Prof. Daniel Balsalobre Lorente (University of Castilla, Spain) spoke on Waste Management for Green MSMEs and Prof. Prakash Singh (Goa Institute of Management) spoke on Schemes and Incentives for Green MSMEs. The Give Goa Project for “**Green MSMEs campaign**” has been carried out under the guidance of Dr. Arpita Amarnani, Associate Professor (Finance) and Chair, Centre for Excellence in Sustainable Development at Goa Institute of Management, Dr. Avik Sinha Assistant Professor General Management & Economics, Goa Institute of Management and Dr. Karen Fernandes, Senior Research Associate of Centre for Excellence in Sustainable Development at Goa Institute of Management.

A Research paper publication is in progress on the Eco- business registry created to understand the drivers and challenges of eco-businesses in Goa.

Mapping of GIM courses with Sustainability

The center has attempted to link curriculum with the three core objectives of the center’s quest for sustainability which is knowledge creation, knowledge dissemination and knowledge application. Therefore, the following courses are identified under various programs which directly or indirectly connect and can be mapped to sustainability. This is the first step the centre has taken towards identifying what is the current status and how sustainability from various perspectives can be incorporated into the teaching- learning process.

Program	Course	Term	Credits
PGP-Full time	Business Ethics	III	1.5
	Social responsibility and action	III	1
	Marketing and Creativity for Social Change	V	1.5
	Tourism Management	VI	2.5
	Green Supply Chain Management	VI	1.5
BIFS	Social Responsibility & Action	II	1
	Business Ethics	III	1.5
	Sustainable Finance- (SF)	V	2.5
HCM	Ethics & Corporate Governance	VI	3
	Social Marketing and Social Engineering (common elective)	VI	2
PGDM-Part time	Business and Government Affairs	V	2

Sustainability Hackathon

On the 28th of February, conducted the 2023 edition of their flagship event ‘Sustainability Hackathon’. The theme of this year’s event was ‘Sustainable Tourism and Hospitality’. Prof Oana Driha, Associate



Professor of Applied Economics at the University of Alicante (Spain) and member of the International Economy Institute as well as of the Tourism Research Institute was the keynote speaker for the event. Mr. Jack Sukhija (Working partner at M/s Tan Estates which owns and operates Goa’s only classified Heritage hotel, Welcomheritage Panjim Inn, Chairman of Tourism committee - Goa Chamber of Commerce, Vice President (North) - Travel and Tourism Association of Goa) was the panelist for the panel discussion as well as judge for the event. Dr Jennifer Lewis e Kamat, Member of the Managing



Committee of Goa Chamber of Commerce & Industry was also a panelist for the event.

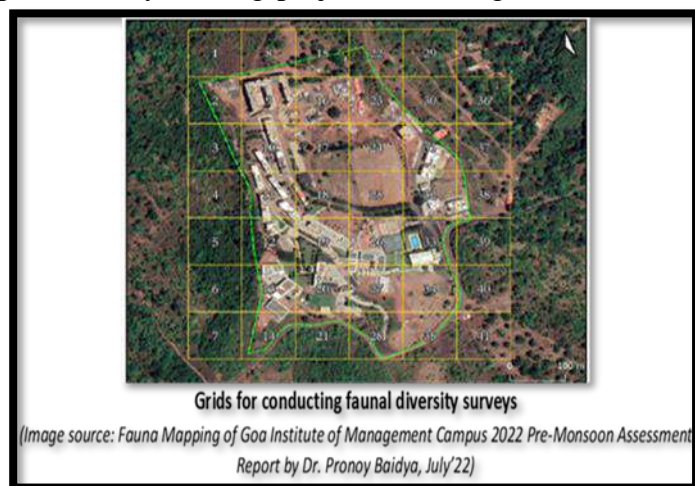
The Sustainability Hackathon brings together teams of students and professionals from various disciplines to work on real-world sustainability challenges. The event provides a platform for participants to showcase their creativity, critical thinking, and problem-solving skills. Team Sankalp from the International Institute of Information Technology (IIIT), Hyderabad, won the first prize of INR 25,000 for their idea on E-bikes. A Team (Goa Institute of Management) and Team Ajax (BMS Institute of Technology and Management (BMSITM), Bangalore) were declared the first and second runner-ups, winning INR 15,000 and INR 10,000 respectively. A post event video is being created and the event also saw coverage from the Times of India.

3. Campus Sustainability

Project 'Faunal Biodiversity Register of GIM'

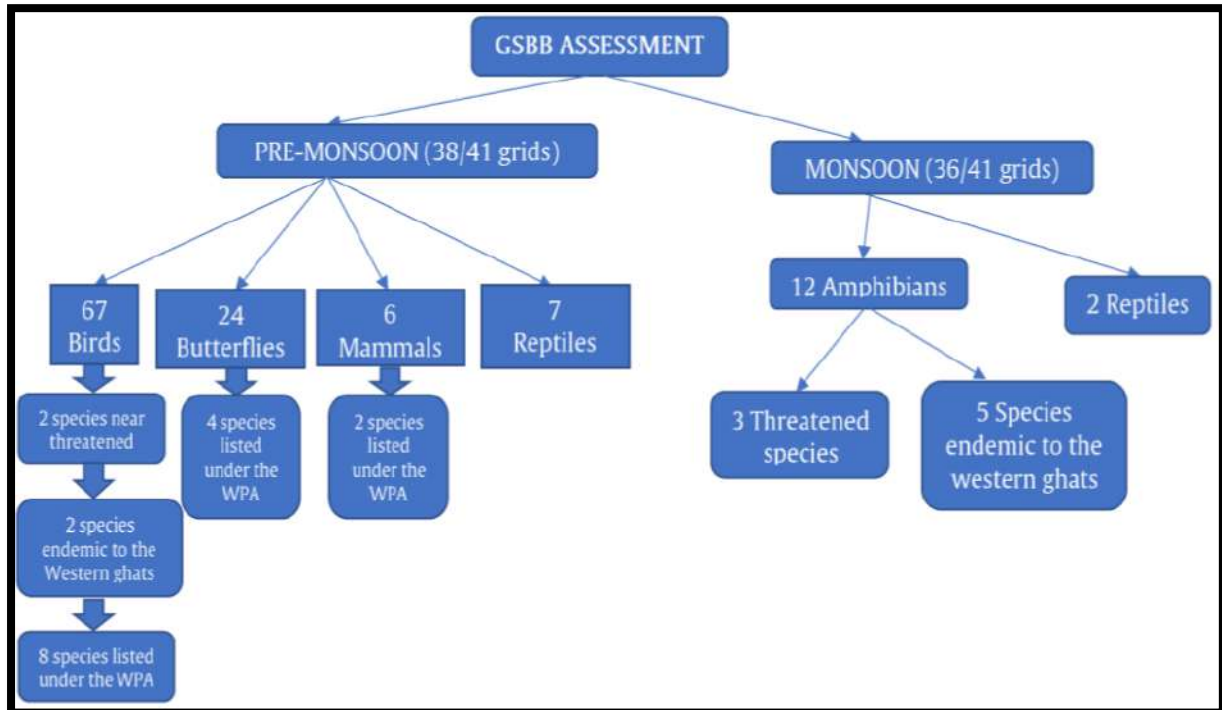
After successful completion of the first phase of the campus biodiversity register that photo-documented 150 floral species found on the GIM campus, the CESD has taken up the next project "Biodiversity Register of GIM Campus: Major Fauna". The project aims to document fauna on the Campus including birds, butterflies, reptiles, insects, and other animals in a phased manner. In March'22, CESD tied up with the Goa State Biodiversity Board (GSBB) and two private consultants for technical inputs in documenting and identification of various faunal species found on the campus. The output of this year-long project is envisaged to include a

Faunal Biodiversity report in addition to flyers/ pamphlets that shall help to increase awareness about the rich biodiversity heritage of the area. This shall also lead to the identification of key measures to conserve the biodiversity of the campus. Over the period from April'22 to November'22, the consultants have



completed 15 ground surveys to photo-document faunal species on the campus, including pre-monsoon, monsoon and post monsoon observations, and daytime as well as nocturnal surveys. The GSBB team has visited the campus nine times during this period. In their report submitted in August'22, the GSBB team has reported that 40 genera and 50 species (under 32 families) of birds and 78 species (75 genera) of insects were recorded from the campus under 47 families.

The consultants have adopted an interesting methodology, where the campus and certain neighboring area is divided into 41 one-hectare grids as shown in the diagram for conducting surveys.



After their pre-monsoon assessments reports submitted in July 2022, the consultants have provided a monsoon report where 36 grids were surveyed from 19 July 2022 to 18 August 2022 covering both morning and evening sessions to account for variations in faunal activity.



Qualitative data was collected for reptiles and amphibians based on visual encounter survey. 14 species reptiles and amphibians were recorded, of which 12 were amphibians and 2 were reptiles. Of these 12 amphibians, three species are in the threatened species list of IUCN Red Data Book and five species are endemic to Western Ghats. Amboli Bush Frog designated as Critically Endangered species by IUCN and Bombay Bush Frog, designated as Vulnerable were the most widely distributed and frequently recorded species on the campus, with distributions in 18 out of 36 grids that were surveyed. This was

followed by the Indian Tree Frog, with distribution in 14 grids. The highlight of the survey was the observation and record of the endemic and charismatic frog of Western Ghats – Malabar Gliding Frog at the water pond.



On the **12th of October 2022**,

GSBB conducted an orientation and training program in connection with the Faunal Biodiversity Register of the GIM campus. Prof I K Pai- Former Professor and Head, Department of Zoology, Goa University, Mr Parag Ragnekar- an ecologist based in Goa and Mr Shrichanran Desai- a wildlife rescuer were the resource persons for the training program. Prof. I K Pai spoke about the rich faunal biodiversity that exists in Goa while Mr Parag Ragnekar highlighted the various online sources of data on fauna. Besides, Mr Shrichanran provided insights on the rescue of wildlife considering the fact that the audience present may encounter wildlife in the process of its identification on campus.

A faunal biodiversity flyer was released on the **26th of January 2023** to increase awareness about the rich biodiversity heritage of the area and the same was posted to 230 recipients. The release of the flyer was covered by various print media (Five Marathi newspapers).



Release of the Faunal biodiversity Flyer

Besides, a post-monsoon survey is being conducted through quantitative surveys for birds and qualitative surveys for other indicator taxa where Harshada



Coverage on print media

Gauns will invite additional resource persons for conducting the same. Upon completion of surveys, a detailed biodiversity report for post-monsoon season is expected by the end of June 2023.

Sustainability report

CESD has been instrumental in taking up the creation of a Sustainability Report for the Institute to report on various ESG aspects. The GRI Standards are a modular system of interconnected standards. They allow organizations to publicly report the impacts of their activities in a structured way that is transparent to stakeholders and other interested parties. According to a report in 2022, 74 out of 498 reporting organizations in India follow the GRI standards.

A review of the existing relevant frameworks were done to arrive at a structure for the sustainability report for GIM. A four-member team including Prof. Arpita Amarnani, Prof. Shiv Nath Sinha, Prof. Ajay Vamadevan and Apoorva Apte worked on the project and the report was released in August 2022.

The report was emailed to approx. 1200 recipients which included the faculty and staff of GIM. Hard copies were mailed to approx. 230 recipients which included various governmental agencies/departments, NGO's, private consultants, heads of institutions, civil authorities etc.

The Sustainability Report makes GIM one of the first Institutes in the country to report its sustainability initiatives using the internationally acclaimed GRI framework. Currently CESD is working on updating the Sustainability report for the year 2023.

International Green Gown Awards

The International Green Gown Awards are supported by UN Environment and are open to any university or college across the world. Recognizing exceptional sustainability initiatives being undertaken by the world's universities and colleges, the International Green Gown Awards set the bar and put every learning institution at the heart of delivering the UN Global Goals. There are various categories under the Awards and considering the gamut



of initiatives undertaken under the theme of environmental sustainability, CESD was requested to explore the possibility of applying for the “**Sustainability Institute of the year**” award. After collating all the relevant information and completing required calculations, CESD was able to put up an application in the said category.

GIM was chosen as a finalist in the category and thereafter, GIM was declared a "Highly Commended - Sustainability Institute of the year" in the International Green Gown Awards 2022, at the award ceremony held virtually on 6th July'22.

Campus sustainability initiative: Proposal for use of recycled paper

The CESD is working on a Project Proposal that suggests partially switching to recycled paper for the total paper requirement of the institute. With a 50% switch to recycled paper, the CESD estimates that a saving of 13 trees, 293 kWh of electricity, 191 kg of waste, 24 kL of wastewater and 526 kg of CO₂ saving shall be achieved.



Stickers to save water usage

In addition, the centre has implemented the use of old newspapers in washrooms to dispose sanitary napkins in an attempt to control the use of tissue rolls thereby saving the environment. Besides in an attempt to educate on the usage of flush in washrooms to reduce usage of water, stickers were designed and affixed in washrooms.

World Environment Day: Sustainable Expedition and Interactive session- 5 June 2023

On the 5th of June 2023 the Centre for Excellence in Sustainable Development- Goa Institute of Management celebrated World Environment Day by organizing a Sustainable Expedition through GIM campus followed by an interactive session for the faculty and staff.



The Sustainable Expedition consisted of a walk through GIM campus to spread awareness about the various sustainable initiatives undertaken by the institute towards energy, water,



waste and biodiversity. GIM faculty and staff shared information on various sustainable initiatives such as the biogas plant, waste management, solar energy etc.

The interactive session on environment focused on reptiles particularly snakes through a snake awareness cum show by Mr Charan Desai, a wildlife rescuer and proprietor of SAWE Solutions who sensitized the faculty and staff about snakes, precautionary measures to avoid encountering snakes and measures to be taken in the event of a snakebite.



A team of ten members from the Forest department- Sattari Valpoi headed by Range Forest Official Mr. Sangam Desai attended the event and shared information on sustainability with the audience after which saplings were distributed to faculty and staff. The event ended with the Prof Ajit Parulekar Director GIM sharing his thoughts and Prof Vithal Sukathankar delivering the Vote of thanks.

3 Stakeholder Interaction

‘Sustainability Horizon’ newsletter

Sustainability Horizon, a quarterly newsletter by CESD collates contributions from students, academicians, and practitioners in the field of environmental sustainability and attempts to address the changing dynamism in the sector. Practitioner’s interviews conducted as a part of the newsletter ensure that it addresses the key topics in the domain of environmental sustainability. The Newsletter successfully completed one year in December 2021 and the themes for the further four issues of the newsletter were chosen to be relevant to the SDGs set out by the UN:

- Jan'22 Climate Action Ecosystem
- Apr'22 Finance for environmental sustainability
- Jul'22 Alternate fuels and sustainability
- Oct'22 Sustainability in Healthcare Management

The newsletters of 2022 featured 10 student articles, 07 practitioners' articles including 3 articles by international experts in addition to articles by nationally reputed practitioners.

Presently, the newsletter is sent to around 1200 people, including the GIM community, corporates, start-ups, government agencies, etc. The Centre has received several appreciative



Latest Issue- Volume 3 Issue 1



Issues of 2022

messages/ emails from the recipients mentioning that the newsletter is a good resource in sustainability.

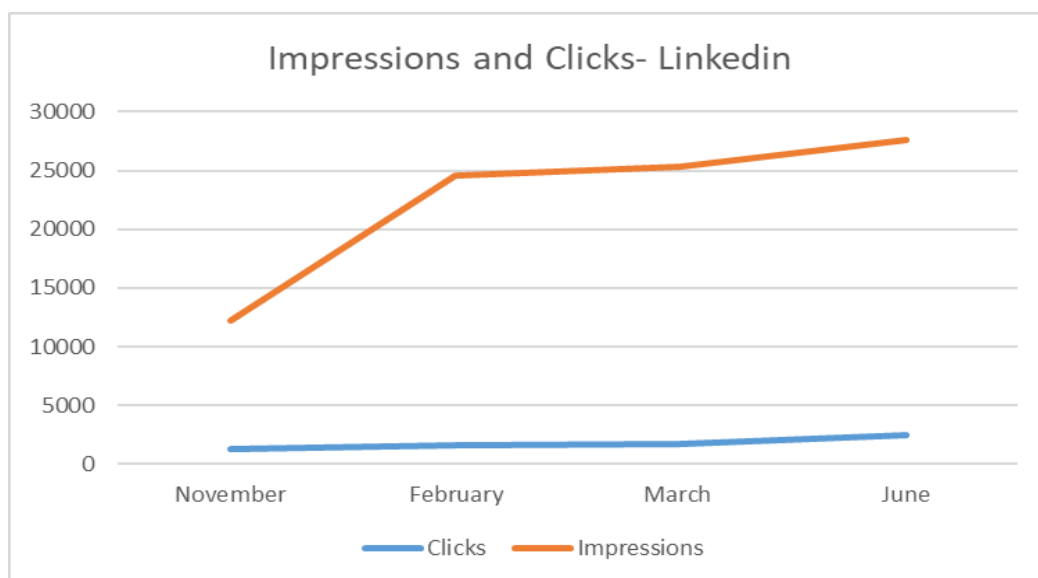
For the current year 2023, the next four issues of Sustainability Horizon will be released on an overall theme for the year titled ‘Global Impactful Events’ with four sub-themes to cover each quarterly newsletter. Sixteen articles have been received till date. The four sub-themes include

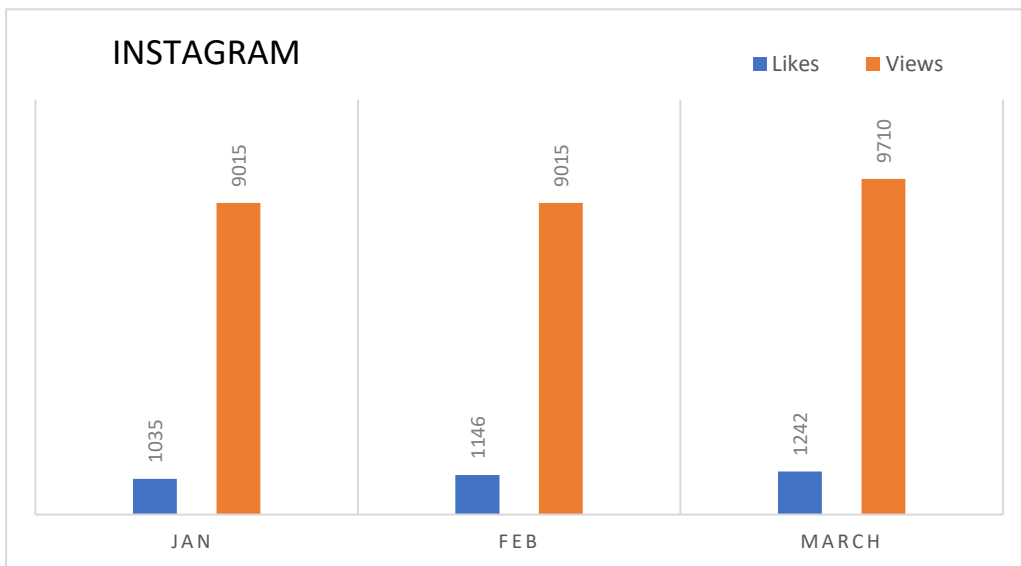
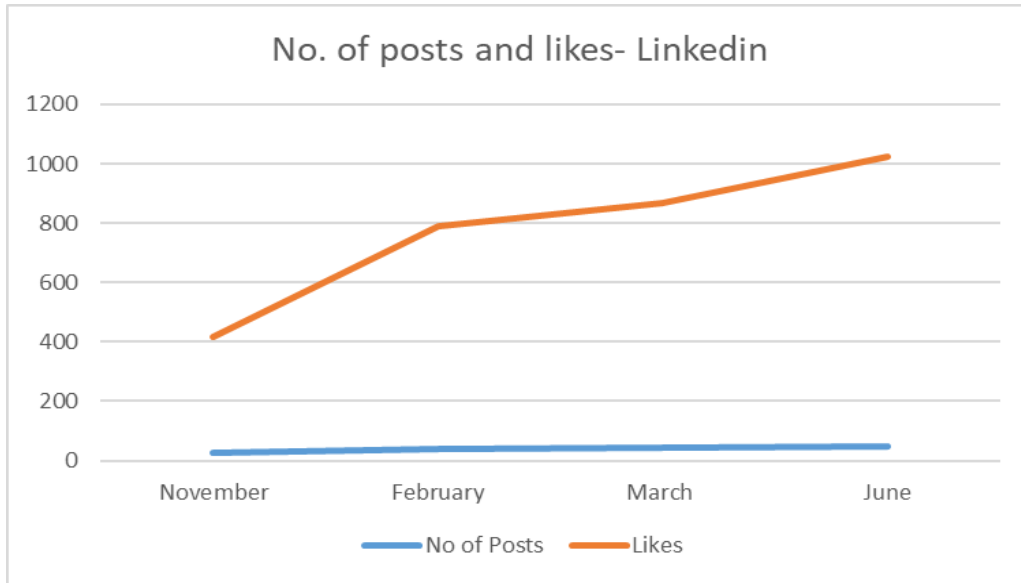
- i. Impact of COP27/G20 Summit on Environmental Sustainability
- ii. Impact of Global Sports events (e.g., FIFA World Cup Soccer) on Environmental Sustainability
- iii. Impact of COVID-19 aftermath on Environmental Sustainability
- iv. Impact of Russia-Ukraine War on Environmental Sustainability

Social Media Engagement

CESD has been able to create an impact through social media posts and the figure above provides analytics of the LinkedIn posts. CESD plans to improve its social media presence with the help of the student group, by consistently posting quality content related to various themes in the domain of sustainability.

The Student ambassadors organized Reel It In, a videography competition and this was promoted on ‘Unstop’ which gained the centre, **7420** impressions. CESD is currently organizing a Sustainable Hackathon on Tourism and Hospitality which is also promoted on Unstop which has gained the centre an additional **17,804** impressions.





Conference of Indian Industries (CII)

Prof Arpita Amarnani, Chair CESD is nominated as a member for CII panel on Solar Energy and Sustainable Development. Dr. Arpita Amarnani was recently the chairperson and moderator for the Green Finance session, at the Second Edition- CII Goa Conference on



Dr Arpita Amarnani chairing the panel discussion at the CII Conference on Clean Renewable Energy

Clean Renewable Energy. India's energy sector is experiencing a transition with increasing penetration of renewable energy in the energy mix. Securing the necessary finance is one of the major impediments in the process. This session saw insightful inputs and enlightening ideas from eminent panelists including Mr Pradip Kumar Das- Chairman & Managing Director, Indian Renewable Energy Development Agency Ltd (IREDA), Ms Shweta Mathur-Head, Enterprise Account, Tata Power Company Limited and Mr. Prasad Pratap Prabhu- Chief Manager, Credit and Business development- SME, State Bank of India.

Dr Karen Fernandes, senior Research Associate was a participant at the conference and worked on writing a white paper for CII on the conference which was later submitted to CII.

Formulation of the CESD Advisory Board

The Centre formed its Advisory board comprising of five external advisory board members. The advisory board member are as follows; Dr. Ajit Parulekar, Dr. Arpita Amarnani, Dr. Venkatesh Naga, Dr. Isabella Allan, Dr. Abhinav Jindal. Mr Levinson Martins, Mr Ashwin Kak and Ms



Wilma Rodrigues. The first advisory board meeting was conducted through online mode on the 22nd of May 2023. These members are academicians, practitioners from the corporate sector, government officials, and experts working with various foundations. The CESD advisory board members will provide advice relating to the various pursuits of the Centre as well as direction on how the Centre for Excellence in Sustainable Development (CESD) at GIM can reach greater heights in the future in the field of sustainable development.

4. International Collaboration

RISE Project and Development of Co-Life Project: CESD worked on an international project, Responsibility and Innovation via Social and sustainable Entrepreneurship (RISE) funded by Finnish National Agency, EDUFI. The objective of this Project is to co-develop a curriculum for partner Higher Education Institutions (HEIs) for capacity building in the field of social and sustainable entrepreneurship. The Project aims to identify specific training and capacity-

building needs in this field in the partnering countries. The RISE project is led by LAB University of Applied Sciences (LAB UAS), Finland and the partnering institutions are from Finland, Denmark, Belgium and India. The RISE project provided GIM faculty with travel funding. As a part of this Project, the team conducted a survey that aimed at understanding the richness of different views, interpretations and experiences about social and sustainable entrepreneurship. The insights from the survey helped understand and map the current situation and recognize gaps to be addressed, especially in education, training, skills to improve social and sustainable entrepreneurship in India.

Under the project, Prof. Arpita and Prof. Sukhathankar from CESD visited Finland in February 2022 to co-create a comprehensive application for seeking funding under the prestigious Erasmus+ project of the European Commission. The application was successfully submitted by the consortium on 15th February 2022. The results of the same were declared later in the year. The project received in-principle approval from the funding body but was put in the reserved category as higher-ranked projects got precedence due to budget constraints.



Glimpses from Prof. Arpita and Prof. Sukhathankar's visit to Finland for the RISE project

A fresh application was prepared based on the detailed feedback received from the agency after several rounds of online meetings with all the consortium members. A hybrid meeting was also organized in Mumbai in the second week of January and the new application for Erasmus+ funding was submitted on 12th February 2023.

German Development Institute (GDI): This project was on discovering the role of government and private training institutes in localizing the SDGs In India. This project was funded by the *German Development Institute* and Prof. Avik Sinha from CESD was a core member of the team. The objective of this project was to explore and map the SDG training landscape for

government officials in India. A major contribution of the project was to help India develop an evidence-based policy on SDG training.

5. Research in environmental sustainability

The contribution of Prof. Avik Sinha from CESD during the year 2022-23 has been commendable as his publications include 36 research papers. Prof. Avik's most recent research paper titled Exploring the Dynamic Connectedness among Energy Transition and its Drivers: Understanding the Moderating Role of Global Geopolitical Risk is published in *Energy Economics* – an A* category journal as per the ABDC rating system. A Case study titled 'Goa Institute of Management: campus water sustainability projects' was published by Prof. Arpita Amarnani and Prof. Vithal Sukhathankar in the journal 'Emerald Emerging Markets Case Studies' in January 2023. Another publication titled Service Supply Chain Environmental Performance Evaluation using Fuzzy TOPSIS method authored by Prof Diya Guha Roy was accepted for publication in February 2023.

In addition, Prof. Avik Sinha was invited to join the Editorial Board of Energy Policy as an International Advisor, which is a coveted position for energy researchers. Prof Avik is also recognized as one of the top 1% of researchers around the world. This ranking is released by Clarivate (Web of Science group). Recently, Prof. Avik Sinha featured among the top 20 Global Economists in a pool of 15,075 economists whose first publication of any kind is 10 or fewer years ago.