



Capital University of Science and Technology,
Islamabad

2021-22

SUSTAINABILITY R E P O R T

DIRECTORATE OF SUSTAINABILITY AND ENVIRONMENT



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Expressway, Kahuta Road, Islamabad

Sustainability Report 2021 - 2022

Vision

To integrate resource conservation practices at CUST and to value and cherish nature that fosters the wellbeing of future generations through environmental sustainability.

Mission

CUST is engaged in going green and sustainability initiatives to ensure efficient resource conservation within the campus in the service of social responsibility to the planet and promote biodiversity that remains the answer to sustainable development.

Strategy

DSE-CUST strives to align its sustainability goals with the UN SDGs to build a stable natural environment. It aims to bring maximum change for the benefit of the planet and people through collaborating with disciplines and leading substantial pathways embedded with 4 R's i.e. reduce, reuse, recycle, and rethink. In aligning with sustainability and environment commitments, CUST is dedicated to 6 key themes;

- ✓ Setting and Infrastructure
- ✓ Energy and Climate Change
- ✓ Water Conservation
- ✓ Research and Education
- ✓ Waste Minimization
- ✓ Transportation



Director's Message



Going green and sustainability has become the core value in campus action. The Directorate of Sustainability & Environment initiative is aligned with the Sustainable Development Goals of the United Nation to promote environmental sustainability within the CUST. Efficient resources conservation using unique sustainable solutions is essential to social prosperity. The Directorate of Sustainability & Environment is highly committed to constructing an eco-friendly sustainably operating framework by incorporating environmental and social dynamics into processes of decision making. Becoming a sustainable and responsible educational institute not merely enhances our reputation but also enlightens a sense of pride in our students and faculty to be an integral part of an organization that cares for the planet. I believe that these initiatives will play a significant role in helping to realize a sustainable society. CUST aims to become an educational institute that shares the joy of creating new value with all of its stakeholders as it steadily engages in efforts to help bring about a sustainable society.

Dr. Ishtiaq Hassan

Director, Directorate of Sustainability and Environment

1. Introduction

Capital University of Science and Technology significantly contributes to implementing sustainable practices to address environmental issues. Front-runners of every department are collaborating for making the environment clean and green starting from engineering to business and social sciences. The aim is to encourage individuals to play a pivotal role in making the world a safer place for future generations through recycling initiatives and participating in free planting. CUST has been comprehensively engaged in extensive research, innovative teaching, and concrete environmental sustainability to ensure the availability and conservation of resources for future generations. Going green and sustainability has become the core value in campus action. The University is consistently making efficient investments in and taking significant steps for sustainability at the operational and programmatic levels.

The Directorate of Sustainability and Environment (DSE) is inclined to create sustainable strategies and leads those initiatives on campus physical infrastructure and programs in energy and climate, water conservation, transportation, and research and education. DSE empowers ambitious partnerships and collaborations that play a pivotal role in making the world sustainable.

All university departments are integrated with DSE to ensure effective collaborative work for the execution of sustainability-specific goals. The DSE focused key areas are communication, training, and education; assessments, evaluation, and reporting; events, campaigns, and talk; organizational effectiveness and infrastructural planning support. DSE emphasizes an economic model that focuses on the efficient use of resources and maximizing the product's life cycle.

2. Policies

Capital University of Science and Technology focuses on the going green and sustainability strategy to bring campus eco-system at equilibrium and ensure efficient utilization of resources. CUST has become a pillar and custodian in embedding sustainability in higher education through its dedicated faculty. Students conduct comprehensive research to develop unique environment friendly solutions for sustainable change. The Going green Policy incorporates directing and inspecting human actions to take useful actions in mitigating adverse impacts on natural resources

and biophysical environment. Currently, DSE is engaged in directing Waste Management, Recycling, and infrastructure that are aligned with its 6 key themes of sustainability.



3. Recycling Policy

CUST seeks maximizing the recycling of waste materials a top priority. The recycling policy is inclined towards substantial pathways embedded with 4 R's of reduce, reuse, recycle, and rethink. The waste management team uses a paper shredder which helps the institute to handle its paper waste effectively. Trash bins with labels of Plastics, Paper, Metals, etc., are placed within the campus, so the students and faculty can help the recycling team by pre-categorizing the waste to make the recycling process more efficient, fast, and easy. Students also steered a cleaning drive at CUST where everyone gathered and picked up garbage and other plastic-related non-recyclable items and disposed them off. Not only this made university a cleaner place but it also spread awareness among students and teaching staff to support our cause. The recycling program also caught attention of print and Electronic Media/Radio Pakistan and the Director, DSE was invited to live broadcast her message at Radio Pakistan. The radio broadcasts have remarkably helped to spread the message of change to the masses to become responsible members of society.



Pakistan wastes 1,491,807 kg per day, of which 86% is mismanaged

DID YOU KNOW?

- The Great Pacific Garbage Patch is an island of discarded plastic that is now triple the size of France.
- Some organisms thrive off discarded plastic, forming a new type of ecosystem called a "plastisphere".
- A glass bottle can take roughly one million years to degrade in the environment.

Environmental Pollution is an incurable disease. It can only be prevented.

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4. Waste Management Policy

Capital University of Science and Technology is committed to making sustainable environmental practices through effective resource management. The Directorate of Sustainability and Environment (DSE) has proposed a waste management policy to contribute in circular economy by eliminating toxic, organic, and inorganic waste from the campus. It's a pivotal initiative taken by DSE to significantly contribute to the SDGs of the United Nation at a local and regional level.

Solid waste plays a key role as a lot of waste ends up in the oceans and landfills which is causing problems for everyone by creating greenhouse gases (GHG) and increasing carbon emissions. Pakistan generates almost 48 million tons of solid waste per year which is increasing by the growth rate of almost 2.4% while the collection rate is only 60% which is also not being dumped properly. DSE-CUST is engaged in using multiple social media platforms such as Twitter, Instagram, and Facebook to create awareness not only among people on campus but also among individuals of twin cities for making the environment clean and green. This social media campaign is actively running with the chant of "Pick up-Clean up" with an aim of saving the Earth together. CUST waste management policy targets to adopt a 'Base to zero approach', achieve a recycling rate of 70 percent by 2023, and eliminate waste production by 10 percent by 2023 across the campus.



5. CUST Pedestrian Path Policy

CUST seeks to establish the Pedestrian path policy to accommodate pedestrians on campus and hence reinforcing the network. The master plan of campus has designed a framework by which the university can achieve the crucial research and academic mission of the institute while enhancing the life quality on campus, absorbing growth, and creating sustainable ethics. A keystone strategy of this pedestrian path framework is circulation and access within the campus. This policy is designed around an “integrated plan to circulation” that depends on well-utilized pedestrian networks. Besides reducing on-campus vehicular traffic, means of active transportation even diminish greenhouse gas emissions and contribute to healthy lifestyles.

CUST has performed premeditated engineering and design efforts for supporting the pedestrian network viability on campus as a top priority. The university is facilitating and supporting on-campus pedestrian network through the following engineering and design efforts:

- At the design phase of the pedestrian path plan affecting paths and transportation on campus, engineering teams have identified ways to meet pedestrians’ needs. The Pedestrian Counseling Committee regularly reviews and provides input to pertain to pedestrians.
- As CUST is centrally located at Expressway so, the Pedestrian Counseling Committee has reinforced connectivity of bike routes outside campus premises through evaluating connection points from Islamabad Expressway bike routes to entry points on campus.

The vehicle parking area on campus is developed and strengthened through car lanes, signage, shared lane markings, and bike boulevards.



6. CUST Parking Area Policy

Capital University of Science and Technology has designed a parking area policy to ensure efficient utilization of limited parking resources. All university faculty and students on the campus have to register their vehicles and must show a valid parking permit. Citations will lead to various Penalties and Sanctions such as fines and warnings. To mitigate vehicle traffic on the campus, CUST has restricted entry of private vehicles to the campus except for unordinary circumstances. Also, parking spaces designated separately for faculty and students have been removed.

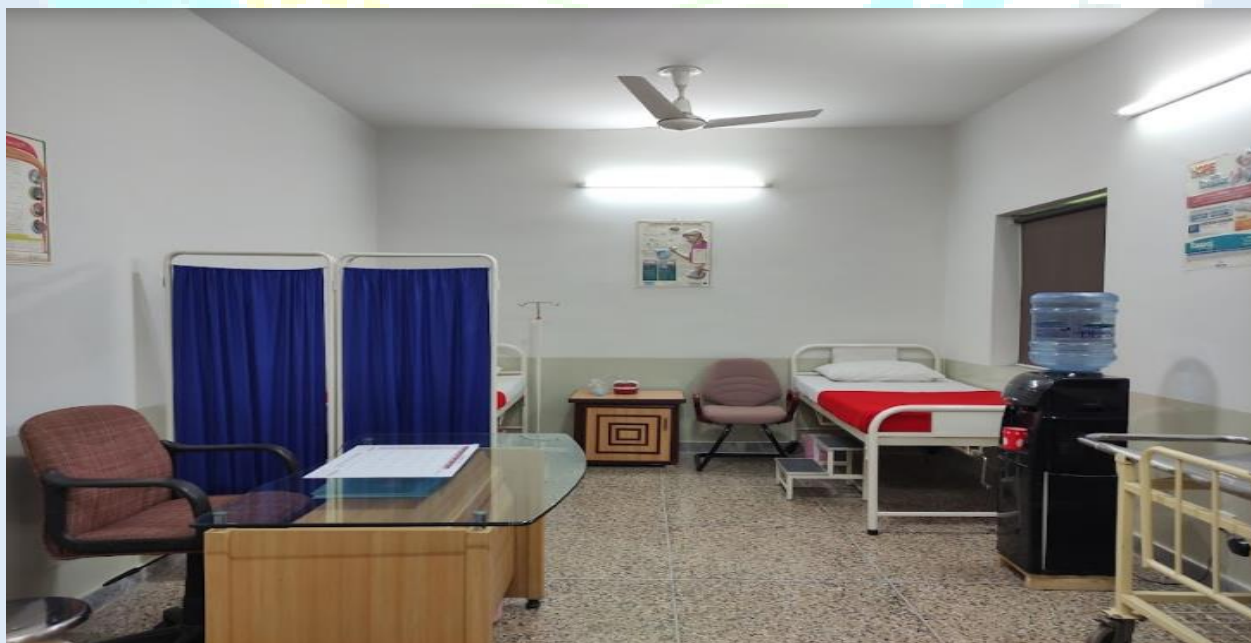
This policy aims to institute a formula of assigning parking permits grounded on the requestor's role on longevity and campus. The university seeks to close off-campus central areas to cars for cutting down on congestion. It will lead to a pedestrian-friendly core campus. The university will use parking lots in the following ways:

- Cars must be parked merely in cars racks reserved by the university.
- Motorbikes must be parked only in bikes racks allotted by the university. They shall not be parked on sidewalks or lawns.
- Buses must be parked separately in buses racks to avoid vehicle congestion.
- Vehicles inadequately parked might be subject to the removal of a locking device.
- All vehicle operators intending to avail the campus parking facilities are required to register themselves for a parking permit to permanently affix to the vehicle.



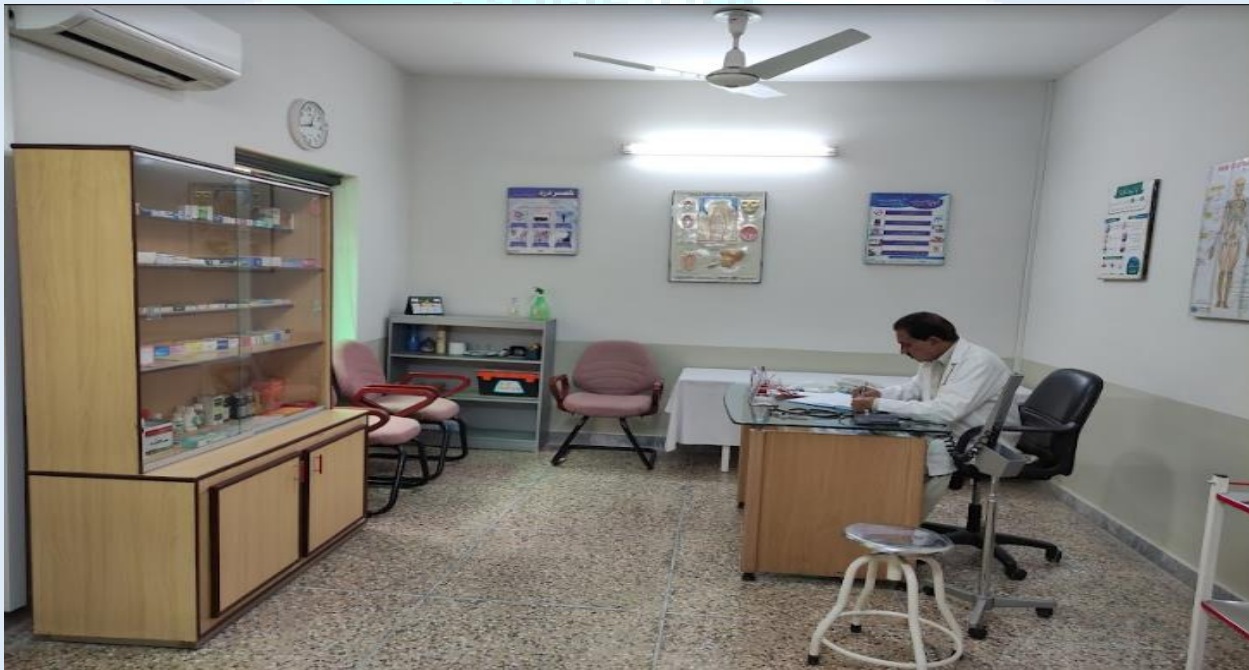
7. CUST Day Care Centre

Capital University of Science and Technology has taken a substantial step to facilitate employees and female students by offering daycare facility at the campus. This dedicated daycare access has significantly diminished the childcare burden on mothers. The facility seemed to be quite beneficial especially during COVID days in which front-liners were engaged in serving the humanity on campus and enrolled their kids in the daycare centre. CUST Day Care Centre welcomes a nurturing, safe, stable, and inclusive environment where children can learn and grow.



8. Wellbeing Centre

Capital University of Science and Technology has created a dedicated hub for the well-being of students and faculty. The wellbeing centre offers an array of welfare services to support students and staff throughout their university hours. The purpose is to provide psychological, social, and therapeutic support to the CUST community seeking health services. Wellbeing hub has a pharmacy and a full-time general practitioner responsible for healthcare assistance.



9. CUST Construction & Renovation Policy

Capital University of Science and Technology promotes stewardship to plan, design, construct and maintain the physical environment of the university. The purpose is to become sustainable, aesthetic, enduring, and contextual to protect the safety and welfare of the university community.

The construction and renovation policy of CUST include:

- Improvement, alterations, or renovation of existing facilities within the campus.
- Modifications in utility systems such as heating, plumbing, air conditioning, gas, air, electrical, etc.
- Installation of major equipment that requires utility connections.
- Window coverings, floor coverings, furnishings, and interior decorating.
- Cost estimates or feasibility studies on construction and renovation.

Only authorized contractors are hired for such services to ensure compliance with campus standards. All vendors/contractors commence the contractual work after signing a contract for campus projects. Despite the contract amount, CUST management can request bids on a particular construction project. This policy seeks risk mitigation for the CUST associated with campus renovation, construction, and property maintenance as well.

10.Capital University of Science & technology (CUST) Achievement

The Capital University of Science and Technology (CUST) is now ranked among the top 300 universities in the world and among the top seven universities in Pakistan. According to the UI GreenMetric World University Ranking 2021, CUST is the 286th most sustainable university in the world, out of a total of 956 universities worldwide. This has been accomplished using GreenMetric's competitive and rigorous ranking system for the evaluation of on-campus sustainability, which has been in place since 2007. Among the important performance indicators were CUST's campus setting and infrastructure, as well as its research and development efforts, as well as its energy and climate change efforts, waste management, water conservation, and the carbon footprint of its transportation operations. The DSE, CUST is taking substantial steps to promote responsible action and incorporate sustainability on campus to achieve the Sustainable Development Goals established by the United Nations (SDGs).

Here is the list of all Pakistani universities ranked in the top 500:

University	Ranking by Country	Global Ranking	Overall Score
Muhammad Nawaz Shareef University of Agriculture	1	154	7550
National University of Sciences & Technology	2	179	7350
Pir Mehr Ali Shah Arid Agriculture University	3	191	7245
University of Agriculture Faisalabad	4	216	7100
University of Lahore	5	226	7050
Khwaja Fareed University of Engineering and Information Technology	6	234	7000
Capital University of Science And Technology	7	286	6775
Mehran University of Engineering & Technology	8	298	6700
University of Faisalabad	9	341	6425

Implementation of the Sustainable Development Goal





No poverty is the first sustainable development goal defined by the United Nations. It focuses on eradicating poverty and bringing prosperity to society. Capital University of Science and Technology has contributed tremendously to achieving this goal. There is a separate department known as “Volunteer in Service” that is striving hard to contribute to society to eradicate poverty and bring equality.

Activity 1: MoU between VIS-CUST and Khubaib Foundation

MoU renewal ceremony held between VIS-CUST and Khubaib Foundation on November 25, 2021. Under this MoU, CUST management will facilitate orphan students of Khubaib Foundation’s colleges in their higher study so the students of different colleges of Khubaib Foundation make their dream true. In this way, CUST is significantly working for rescue, relief and rehabilitation of different factions of the society mainly orphans, prisoners, widows and destitute people to alleviate poverty.





Zero hunger is the second sustainable development goal defined by the United Nations. This goal serves the purpose of seeking sustainable solutions to wipe out hunger and achieve food security.

Activity 1: Rashan Distribution

The Directorate of Sustainability and Environment collaborated with CUST Help Hand Society (CHH) and delivered rashan packs, door to door in a slum area of Rawat, Pakistan. Pre-visits were made and database was made in which 26 poor families living in shacks and quarters were identified.



Activity 2: World Food Safety Day

The Capital University of Science & Technology organized an event on World Food Safety Day with the theme of “Safer Food, Better Health”. The event comprised a food safety awareness walk and a Poster competition depicting food safety. The purpose of this walk is to convey the message by using different colorful posters, and banners for raising awareness about the food preservation.



3 GOOD HEALTH AND WELL-BEING



Good health and wellbeing is the third important sustainable development goal identified by the UN. It aims to promote wellbeing and a healthy lifestyle for all at all ages. This goal addresses all vital health priorities to ensure sustainable development by 2030.

Activity 1: Blood Donation Camp

VIS Directorate-CUST organized blood donation camp in collaboration with Jamila Sultana Foundation on Thursday November 11, 2021. A huge number of students and faculty members participated in blood camp and donated their blood. Volunteerism was also seen in this camp as no bed remains free during the campaign time. Almost 129 bottles were donated and no thalassemia minor patient was found. Jamila Sultana Foundation heartfelt gratefulness is extended to all CUST esteemed donors who made the camp successful.



Activity 2: Awareness Seminar on “Use of Drugs”

The Volunteers in Service Directorate (VIS), Directorate of Student Affairs and Office of External Linkages and International Collaboration of Capital University of Science & Technology (CUST) in collaboration with Islamabad Police and Islamabad Traffic Police conducted a seminar on “Use of Drugs” at CUST. The worthy Vice Chancellor Prof. Dr. Muhammad Mansoor Ahmed presided over the occasion and Mr. Qazi Jamil Ur Rehman Inspector General of Islamabad Police was the chief guest at the occasion.

The purpose was to create awareness among students to eradicate use of drugs from our society that is deteriorating the wellbeing of the current generation. More than 600 cameras are installed in CUST campus to monitor student’s activities minutely and management could not trace anything wrong until now. Chief Guest of the event IG Islamabad Police emphasized on the issue which spread in our society rapidly particularly in our youth.



Activity 3: Seminar on Health Hazards of Tobacco Smoking

Faculty of Pharmacy organized a seminar on Health Hazards of Tobacco Smoking on World No Tobacco Day, May 31, 2022. The guest speaker was Dr. Rubina Aman, Associate Professor of Pulmonology, working as HoD Medical Unit, Riphah International Hospital. The event was arranged to aware the students about causes, risk factors and harmful effects of smoking on human

body. The awareness session was followed by a walk within university premises. The honorable guest was presented a university shield by Dr. Muzaffar Abbas, Dean Faculty of Pharmacy.



Activity 4: Technical meeting on MIS

Coordinator SAFE-RH, Professor Dr. Naeem Ramzan, University of the West of Scotland, UK, visited Capital University of Science and Technology Islamabad on July 19, 2022, for technical meeting. The purpose of the meeting was to get insights into the current progress of CUST and to finalize an integrated system for the forthcoming meeting of all partner universities in University of the West of Scotland. SAFE-RH representor appreciated the CUST SAFE-RH team for making remarkable progress. He provided feedback on MIS and suggested that MIS should focus on

billing, and system should be scalable. Dr. Naeem Ramzan also suggested establishing a clinical lab in CUST to develop healthcare model. Clinical lab will provide healthcare facilities to CUST faculty and students.



Quality Education is the fourth key sustainable development goal identified by the UN. The agenda is to provide free primary and secondary schooling to all boys and girls by 2030. Also, to eliminate wealth and gender disparities through achieving global access to quality education.

Activity 1: MoU between VIS-CUST and Taaleem Foundation

There was a MoU renewal ceremony between VIS-CUST and Taaleem Foundation at their premises in Islamabad on October 01, 2021 to primarily focus on Education sector. The purpose is to nurture students with the quality education and significantly contribute to the betterment of society.



Activity 2: Inaugural ceremony of SPELL Magazine

The Department of English arranged an inaugural ceremony to launch SPELL Magazine on July 04, 2022. SPELL Magazine (Students' Panel of English Literature and Linguistics) is a platform provided by the Department of English for the students to showcase their thoughts and talents in the form of essays, short stories, poems and quotations. A number of students from various departments of the university made their contribution in making this magazine a success. Dr. Arshad Hassan, Dean, Faculty of Management and Social Sciences, appreciated the faculty members and students for making this possible in a very short span of time. At the end, students who performed well in different academic and co-curricular activities were awarded with appreciation certificates.





Gender Equality is the fifth SDGs set by the United Nations to empower women and end gender discrimination through social cohesion. This goal substantially focuses on providing girls and women with equal access to healthcare, education, and representation in economic and political decision-making processes.

Activity 1: Gymnasium and Cafeteria

CUST provides gymnasium facility to both male and female students to ensure that students enjoy thoroughly campus life. It demonstrates step forward in the fight for gender inequality. Also, CUST cafeteria ensures good hygienic standards by offering nutritious food and drink across campus, sourced in an ethical and sustainable way. Attractive environment and added varieties of menu help both male and female students relax and have social interaction with fellow students, in the break between their classes.



6 CLEAN WATER AND SANITATION

Clean Water and Sanitation is the sixth key sustainable development goal set by the United Nations. The purpose is to ensure safe drinking water to all communities through investing in hygiene and sanitation facilities that will restore aqua ecosystems.

7 AFFORDABLE AND CLEAN ENERGY

Affordable and Clean Energy is the seventh SDGs defined by the United Nations to invest in renewable energy and ensure global access to reliable and affordable energy services by the year 2030. CUST is focused on providing energy efficient, sustainable and environment friendly solutions to the several interdisciplinary problems to improve the quality of environment. Department of Mechanical and Electrical Engineering are currently working on providing affordable and clean energy to communities.

Activity 1: 6th International Conference (EESD2022)

6th International Conference on Energy, Environment, and Sustainable Development (EESD2022) was organized by the department of Electrical Engineering. The conference aims to provide a common platform for researchers, engineers, scientists, and academicians as well as industrial professionals from all over the world to present their research contribution and development activities in the field of Energy, Environment, and Sustainable Development. EESD2022 served the purpose of providing opportunities for the delegates to exchange new ideas and share their valuable experiences.

8 DECENT WORK AND ECONOMIC GROWTH

Decent Work and Economic Growth is the eighth sustainable development goal identified by the United Nations that aims to promote productive employment, sustainable economic growth and decent work for all.

Activity 1: Seminar on Introduction to E-Commerce

Department of Management & Social Sciences organized a seminar on "Introduction to E-Commerce", November 11, 2021. The guest speaker, Mr. Abdul Jaleel and Mr. Naeem, is a public relation manager, training head and program coordinator. The main purpose of seminar was to make students realize the importance of e-

commerce platforms which work worldwide and how people sell and purchase their product from these types of platforms and how we can be the part of this online trading world. The primary aspect, scrutinized by the guest speaker was how students can work on amazon as a trader.



Activity 2: Course on Amazon Trading

Office of Research Innovation & commercialization in collaboration with Checkout US conducted a six weeks long comprehensive course on Amazon Trading. The session was conducted by resource persons from Checkout US and consisted of a total 08 Modules which were covered in six weeks from 5th Nov, 2021 to 14th Jan, 2022. E-commerce has increasingly become a vital component of business strategy and recent hype in E-commerce has made the world realize the concrete and actual scope of online markets. Checkout US, also offered internships to course participants based upon their excellent performance throughout the course.



**9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE**

Industry, Innovation and Infrastructure is the ninth SDGs specified by the United Nations. The aim is to encourage research and innovation and technology development in developing countries.

Activity 1: Training Session on Digital Literacy

Considering the importance of digital literacy, ORIC in collaboration with Department of Psychology and Pharmacy organized a training session on digital literacy for CUST youth. The digital literacy project is supported by the U.S. Mission to Pakistan in Partnership with the Pakistan-U.S. Alumni Network. The session focused on process to identify the fake and authentic information, using social media positively and ethically and Toolkit to plan the career progressively.

Activity 2: Seminar on Role of the Telecommunication Industry in Economic Development of Pakistan

The department of Psychology in collaboration with DSE organized a seminar on “Role of the Telecommunication Industry in the Economic Development of Pakistan”. It was conducted by Mr. Hassan Ali who is a Relationship Manager at Ufone Telecom Limited. The purpose of the seminar was to educate and inform the students about how telecom is helping to boost our economy, telecom trends in Pakistan, telecom revenue, foreign direct investment in telecom sector, investment and GST contributions, and telecom’s industry status. Five major national and multinational operators are providing GSM/Cellular services in all over the Pakistan. These operators are named as: Pakistan Mobile Company Limited, China Mobile Pakistan, Telenor Pakistan Limited, and Ufone and PTCL.



Activity 3: Seminars on Fiscal Policy Response to COVID-19: Case of Pakistan and Current Industry Trends and Employability

Seminars on the topic “Fiscal Policy Response to COVID-19: Case of Pakistan” and “Current Industry Trends and Employability” were organized by the Directorate of Sustainability & Environment under the supervision of Dr. Saira Ahmed, on March 28, 2022. The purpose was to create awareness among graduating students about the on-demand employability skills required in the job market. The Guest Speaker for the event were Mr. Mohammad Ali Gulfaraz, (*Director and CEO of Bank of Khyber*) and Mr. Faheem Sardar, (*Senior Policy Specialist*).

Faheem Sardar discussed the economic structure of Pakistan which is a purely consumption-based economy. Growth in Pakistan is not based on production but on consumption due to the crucial configuration for imports. CERN is reconsidering Pakistan’s associate membership which is beneficial for the country’s industrial sector, human resources development, and sharing of techniques and technology in key areas, besides numerous intellectual benefits. He elaborated his thoughts by revealing the following:

“If God gives you a joint, you can touch your muscle; so what else do you need”.

Mr. Gulfaraz primarily focused on the inflation and global supply chain issues that hinder employment opportunities in developing states like Pakistan. He depicted that graduates need to clearly understand their field of interest to pursue a future career path. Employers make rational investment decisions based on reasonably concrete info about the graduate credentials value along with efficient utilization of such human capital within the workplaces.





Activity 4: CUST Transportation Network

To facilitate students, Capital University of Science & Technology has a fleet of 16 busses that cover different areas of Islamabad and Rawalpindi, Pakistan. The transport office is headed by a well experienced Transport Officer who takes care of maintenance of vehicles and ensures smooth

transport operation. The university maintains a steadfast and secured fleet of vehicles; aligned with demand and supply of University transport requirements. Also, safe parking lots are maintained for both Faculty and students. Vehicles operate and get repaired in line with acceptable safety standards. Further, CUST has collaborated with Swvl services to enhance its transportation network. The Swvl app is an online platform that provides affordable rides every day to students and faculty. This transportation app meets comfort, affordability and reliability to ensure ultimate solution to premium and safe rides.

Activity 5: Seminar on Printed Circuit Board (PCB) Design

Office of Research Innovation and Commercialization held interactive seminar on “Printed Circuit Board (PCB) Design”. The seminar encompassed industry-based understanding of concepts like Library Management, Schematic Capturing, PCB Layout/Routing, Gerber Files, Production files etc. Mr. Raees Naqvi was the seminar resource person who is the CEO of Electronic Interconnect Engineering, Islamabad. The guest speaker was thanked and acknowledged with university memento by Dean Research & Innovation, Prof. Aamer Iqbal Bhatti at the end of the session. PCBs have a vital role in this modern day as technology is improving daily. They are used in Consumer Electronics, Industrial Applications, Medical Devices, Automotive Applications, etc. An effective PCB design can help in reducing the chances of errors and also the possibilities of short circuit.



10 REDUCED INEQUALITIES

Reduced Inequalities is the tenth SDGs defined by the UN to bring transformative change. It primarily focuses on reducing the inequalities at all levels including ethnicity, gender, age, income, disability, religion, origin and economic status

11 SUSTAINABLE CITIES AND COMMUNITIES

Sustainable Cities and Communities is the eleventh vital sustainable development goal set by the United Nations. It aims to enhance the cities and make them sustainable.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Responsible Consumption and Production is the twelve important SDGs specified by the United Nations. The purpose is to encourage efficient utilization of resources through sustainable practices. CUST is taking vital measures to encourage youth to contribute to the circular economy in Pakistan.

13 CLIMATE ACTION

Climate Action is the thirteen key sustainable development goal defined by the United Nations. This SDGs vision is to integrate measures of climate change into national planning and strategies to boost resilience. DSE is playing a significant role to become a pillar and custodian in embedding sustainability in higher education.

Activity 1: Seminar on Plastic Pollution

In concern to the climate change, the Directorate of Sustainability and Environment organized an awareness seminar on “Plastic Pollution”, November 29th, 2021. The purpose of this seminar was to bring the government, the corporate sector and the academia on one platform in an attempt to create a mutual understanding of the alarming Plastic Pollution issue and to discuss the possible actions plans which are both feasible and sustained and which can tackle this issue on immediate basis. The Guest Speakers for the event were Ms. Maryam Shabbir (Environmentalist at SDPI) and Mr. Usman Chaudhry (Assistant Professor at FAST-NUCES). Both the guests shed some light on plastic pollution leading to global warming and shared some interesting facts with the audience.

They encouraged the students to make a conscious personal effort on reducing their plastic usage and promote reusable and sustainable resources to conserve the planet.



Activity 2: Tree Plantation Drive

DSE is playing a significant role to become a pillar and custodian in embedding sustainability in higher education. The Directorate of Sustainability and Environment has organized on-campus tree plantation drive on March 29, 2022. This activity was a substantial part of DSE-Sustainability Week 2022 that was held from March 28 to March 31, 2022. The purpose was to sustain the eco-friendly environment and preserve biodiversity at CUST campus by planting more trees and to nurture the students' awareness about the nature.





Activity 3: Celebration of No Backpack Day

Pharma Spark Society in collaboration with the Directorate of Sustainability & Environment organized a ‘No Backpack Day’ where many students in the department participated cheerfully and depicted numerous alternatives to the traditional school bag. The substitutes were not limited to bindles and hangars, but included cauldrons and weightlifting belts. The day was very much adored and relished as students were eager to show the ideas they had come up with.





Life below Water is the fourteenth SDGs set by the United Nations to restore and protect ecosystems.

Activity 1: ICCI Environmental Expo 2022

The Directorate of Sustainability and Environment CUST participated in Environmental Expo 2022 organized by Islamabad Chamber of Commerce and Industry. The theme of expo was “**Only one Earth**”. SDG 14 (below water life) and SDG 15 (On land life) were presented through the model. The model was made in a unique form which represented whole earth with three partition, land area, sea area and atmospheric area. Ahsan Iqbal (Minister of Planning Development & Special Initiatives), and Ambassadors of Vietnam, Nigeria, Portugal and Kyrgyzstan visited and highly appreciated the model.





Life on Land is the fifteenth sustainable development goal defined by the UN to promote sustainable forests management and stop biodiversity loss. The Botanical Garden is located beside pharmacy department and managed to grow medicinal plants for research purposes. Currently, we have several medicinal plants including *Solidago virgaurea*, *Aloe vera*, *Salvia*, *Thymus vulgaris*, etc.

The Department of Bioinformatics and Biosciences has initiated the process of isolation of probiotics from several food materials namely, fermented fruits, vegetables and milk. These isolated strains have been tested for their probiotic nature with the aid of several biochemical tests. These strains can be cultured for the provision of probiotics to several biotechnology companies.



Activity 1: Sustainability for Animal Rights Painting Competition

The Directorate of Sustainability and Environment organized the Sustainability for Animal Rights painting competition that served the 15th SDG (Life on Land) by providing a fulfilling platform to the individuals to show their skills and creativity. The paintings revealed the sustainable ideas to halt biodiversity loss and promote extensive care towards animals. The winners were felicitated by the DSE director who awarded certificates among the participants involved in this competition with great passion and enthusiasm.



Peace, Justice and Strong Institutions is the sixteen sustainable development goal specified by the United Nations. This SDG seeks to promote inclusive and serene societies to overcome conflict and bring justice.



The seventeenth SDGs are Partnerships for the Goals that aim to strengthen equitable trade and revitalize global partnership to promote sustainable development. CUST is engaged with various institutes in the development sector to develop a strong bond with the community.

Activity 1: MoU between VIS-CUST and Rifah Trust

There was a MoU renewal ceremony between VIS-CUST and Rifah Trust in CUST campus, Islamabad on October 04, 2021. The Trust mainly focuses on education, health and technical

trainings sectors. Dr. Amir Qayyum is chairman of Rifah Trust and Professor in Capital University of Science and Technology. Rifah Trust is one of valuable partner of VIS-CUST. It was discussed in meeting with Chairman Rifah Trust that around 45 students will be registered per semester for Rifah Trust. Also the group will be comprised on 12 to 15 students.

Activity 2: MoU between VIS-CUST and Strive Trust

The team of VIS-CUST participated in conference of Strive Trust held on October 7, 2021 at Serena Hotel, Islamabad. As part of the partnership drive of VIS-CUST, there was a MoU renewal ceremony between VIS-CUST and Strive Trust in the presence of Senator, Mrs. Sehar Kamran, DG Health, Islamabad, Dr. Hassan Orooj, PTI MNA, Mr. Lal Chand, Pharmaceutical company, Roche and different NGO's. A long track record of voluntary services to society shows that Strive Trust is one of the most appropriate partners for VIS-CUST. Senator, Mrs. Sehar Kamran applauded the efforts of management of CUST towards betterment of society and present shield and medal to Vice Chancellor, CUST Prof. Dr. M. Mansoor Ahmed which was received by team of VIS-CUST. Chairman, Strive Trust, Mr. Yasir Khan a patient of Spinal Muscular Atrophy (SMA), the attendees appreciate his efforts for the mission of eradicating disability from the society. They also added that the chairman Strive Trust plays a vital role in the research of (SMA) and also putting his best effort to bring drug in Pakistan related to SMA.



CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY



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