



Quad-monthly

Convocation Issue



Friday, June 3, 2022

www.gctatku.org.np

Page 1

What's Inside?	Page 2	30 Years of Academic Excellence: Celebration at Kathmandu University
	Page 6	Junkiri: Shell Eco Marathon Asia 2022
	Page 15	Sunaulo Katha : Story of Smarika Phuyal
	Page 24	COP26: New Assurances & Hopeful Actions to Address Urgency

- Our Convocation Specials -

7 Schools, 7 People

Alumni are the essence of the University and this convocation special acKUaint honors all the alum of Kathmandu University (KU). '7 schools, 7 people' recognizes one alumnus from each school and shares their KU and alum journey for all of the University to read.

More of this on Page 11

Convocation Phase 1

On December 15, Kathmandu University (KU) held its first phase of the 27th Convocation ceremony. The convocation was a grand success with a total of 1449 undergraduate and postgraduate students receiving their degrees. The event's chief guest, Dr. (Mrs.) Pankaj Mittal was the highlight of the convocation. The convocation's second phase is dated for June 3 with Dr. Budaraju Srinivasa Murty as the chief guest. 1500 students will be graduating in the second phase of the convocation, which brings the total number of students graduating to 2949.

More of this on Page 12

27th CONVOCATION

Interview with the Chief Guest

Prof. Budaraju Srinivasa Murty, Director of Indian Institute of Technology Hyderabad is the Chief Guest for the 2nd phase of the convocation. He has a Diploma in Metallurgical Engineering from Government Polytechnic, Vijayawada. He received his BE from VRCE Nagpur in 1986, ME from IISc Bangalore in 1988, and PhD from IISc Bangalore in 1992. He began his professional career as a professor at IIT Kharagpur, where he worked from 1992 to 2004. He is now serving as the Director of Indian Institute of Technology Hyderabad from August 2019.

More on Page 10



Prof. Dr. B. S. Murty

Director, IIT Hyderabad

Interviews With

Dr. Sushil Shrestha

Dr.Sushil Shrestha is an Assistant Professor at the Department of Computer Science and Engineering, who is also the Lead Researcher and Lab Incharge of the Digital Learning Research Laboratory and was recently designated the Associate Director of the Student Welfare Directorate. (On Page 9)



Mr. Neelesh Man Singh Pradhan

Mr. Neelesh Man Singh Pradhan, a Digital Banking and Payments Enthusiast is the Founding CEO of Nepal Clearing House. (On Page 13)



Dr. Kanchan Thapa

Dr. Kanchan Thapa is a conservation biologist, who is also the Head of the Wildlife Program at the World Wildlife Fund(WWF). (On Page 14)

RUSSIA-UKRAINE WAR: AGITATION AND AGONY



Even after three months of the steep escalation of the Russo-Ukrainian war, the world is yet to catch a break from this mayhem of misery. Claimed as a grave mockery of sovereignty and autonomy, this war has brought about one of the ugliest crises in Europe. Russia and Ukraine both lust for one another's blood at this point, but the main difference lies in where it stems from. What are the reasons that have the blood of thousands of people on its ledger? How did the world come to witness the toppling of a sprouting democracy in the 21st century?...

More of this on Page 16

MOU signed with OWSN



On March 27, 2022, the Green Club of Thoughts (GCT) and the Organization for Women in Science for the Developing World-Nepal Chapter (OWSN) signed a memorandum of understanding. Despite the fact that women's participation in research and community service has been steadily expanding in recent years, this MOU offers a ray of hope for some reforms in GCT and Kathmandu University. Aiming to empower women in the field of science, OWSN and GCT hope to achieve the milestone with collaborative programs...

More of this on Page 4

30 Years of Academic Excellence: Celebration at Kathmandu University

Kathmandu University celebrated its thirtieth (30th) year of establishment on December 11, 2021 (Mangsir 25th, 2078) with a formal program within the premises of the main campus at Dhulikhel. The program recognized and valued those whose contributions have been significant to the university.

Under the moderation of Associate Professor Dr. Hem Raj Kafle, former Head of the Department of Management Informatics and Communication, the celebratory program was successfully executed with a positive attendance of past as well as present Kathmandu University faculty and staff members.

The program was blessed by the presence of The Founding Vice-Chancellor Prof. Dr. Suresh Raj Sharma, the present Vice-Chancellor Prof. Dr. Bhola Thapa, the Founding Registrar Prof. Dr. Sitaram Adhikary, the current Registrar Prof. Dr. Subodh Sharma as well as several respected

past and present deans, faculties and staff from all seven schools of the university.

First female and acting Dean of School of Arts, Ms. Ekku Maya Pun and Prof. Dr. Bivek Baral shared welcoming words to all attendees from the side of faculties and Mr. Surendra KC performed the same, representing all staff members.

In light of the important day, the KU Oration of Late Ramananda Mishra and Late Tika Dutta Baral was also conducted. The citations of the oration were recited by the Registrar Prof. Dr. Subodh Sharma and the awards were presented to the families of the departed by the Vice-Chancellor Prof. Dr. Bhola Thapa.

The respected Vice-Chancellor, in his concluding words, expressed appreciation towards all those present in the ceremony. With this, Kathmandu University propels forwards to future periods of quality education and academic excellence.



KATHMANDU UNIVERSITY, DHULIKHEL, NEPAL

School of Engineering

School of Engineering and Society of Nepalese Engineers in UK signs an MOU

School of Engineering (SOE) and Society of Nepalese Engineers in UK (SONEUK) signed an MOU on April 18, 2022 to promote collaboration in research and study by collaborating on activities and projects where their strategies and objectives are aligned. Prof. Dr. Manish Pokharel, Dean of SOE; and Mr. Sanyukta Shrestha, Chairperson of SONEUK signed the MOU.

When working together, both

parties will adhere to the following principles: to work together, cooperate, and be honest with one another; to share information, experience, and skills; to learn from one another and develop effective working practices, work collaboratively to identify solutions, eliminate duplication of effort, and to be aware of risk and costs; to follow all applicable laws, regulations, and best practices.



Kathmandu University School of Engineering signs an MOU with SNV Nepal

The Global Sanitation Graduate School (GSGS), a project of the Kathmandu University School of Engineering (KUSoE), with an objective to further their domain of providing education and training on sanitation to graduates and professionals, has signed a MoU with SNV Nepal. SNV Nepal has been working in the sector of Urban Water, Sanitation and Hygiene (WASH), Climate Change Adaptation, and Social Inclusion in local government.

The country director of SNV Nepal, Ms. Ami Reza and the Dean of the Kathmandu University- School of

Engineering, Prof. Dr. Manish Pokharel signed the MoU on behalf of SNV Nepal and KUSoE respectively, on May 5, 2022. The signing ceremony was witnessed by Mr. Suman Dhun Shrestha, GSGS Program Coordinator at KU; Mr. Nischal Khadka, GSGS Program Researcher at KU; Mr. Abhaya Kanta Sigdel, Sanitation Financing and FSM Services Advisor; and Ms. Manima Budhathoki, Governance and BCC Advisor. Areas of collaboration correlating to SNV Nepal's field of work were proposed during the signing ceremony and were later mentioned in the MoU itself.

School of Management

MoU Signed with National Youth Council, Namobuddha Municipality and Idea Studio Nepal

The role played by innovative ideas of individuals in the development of a community, and ultimately the nation can not be denied. Proper nurturing of such innovative ideas can change the fate of the developmental course. With this in view, an MoU was signed between the National Youth Council (NYC), Government of Nepal, Namobuddha Municipality, Idea Studio Nepal, and Kathmandu University (KU) on February 23, 2022 at the office of the Mayor of Namobuddha Municipality, Bhakundebesi, Kavre district.

The MoU envisions the establishment of a National Youth Innovation Centre at the Namobuddha Municipality, Kavre.

This is to encourage and aid innovative ideas that hold the potential to contribute to easing daily lives to national development. The MoU was signed by the Vice-Chairman of the NYC, Mr. Surendra Basnet, Director of Research, Development and Innovation (RDI), KU, Prof. Dr. Deepak Prasad Subedi, Mayor of the Namobuddha Municipality, Mr. Tanka Prasad Sharma (Timilsina) and Board of Director of Idea Studio-Nepal, Mr. Suresh Simkhada. The signing ceremony was witnessed by Mr. Rama Kanta Sharma, Dr. Rijan Bhakta Kayastha, Mr. Rajan Poudel, and Ms. Alisha Singh from their respective organisations.

School of Medical Sciences



KUSMS Has Started Construction for Mental Health Research Center

Kathmandu University School of Medical Sciences, Mental Health Research Center's building construction was set in motion from February 15, 2022, at Batase Danda, Dhulikhel. The construction of this Research Center's building designed by KU-Center for Educational Design (CED).

During the ground-breaking ceremony of this building, Vice-Chancellor Prof. Dr. Bhola Thapa, Registrar Prof. Dr. Subodh Sharma, Dean Prof. Dr. Rajendra Koju, School of Medical Sciences; Deputy Mayor of Dhulikhel Municipality Mrs. Bimala Sharma and other delegates were present.

School of Science



Dr. Ghana Shyam Gurung To Be The Kathmandu University Chair of Conservation Biology

On January 23, 2022, an interaction program was held with Dr. Ghana Shyam Gurung, Kathmandu University Chair of Conservation Biology, under the chairmanship of Prof. Dr. Bhola Thapa, Vice-Chancellor, Kathmandu University. The interaction program was organized after Dr. Gurung was nominated for the position of "Kathmandu University Chair of Conservation Biology" upon the recommendation of the Dean of School of Science, a Country Representative of WWF Nepal and the Faculty Board Member of School of Science which was approved at the 646th meeting of the Executive Council.

Dr. Gurung was presented with a certificate during the interaction which

was followed by admirable remarks from Dr. Bhola Thapa. Along with Dr. Gurung and Dr. Bhola Thapa, Prof. Dr. Kanhaiya Jha, The Dean of the School of Science; Prof. Dr. Subodh Sharma, Registrar, Kathmandu University; Prof. Dr. Panna Thapa, The Controller of Examination; Prof. Deepak Prasad Subedi, Director of Research, Development and Innovation (RDI); Prof. Dr. Bibhuti Ranjan Jha, Director of Coordination and Communication; Dr. Bed Mani Dahal, Associate Dean of School of Science; The Head of Departments; Program Coordinators, Professors, Managers and other officials were present in the program.

KU Welcomes new Dean at School of Science

Prof. Dr. Janardan Lamichhane was appointed Dean of the School of Science on February 20, 2022. The School of Science hosted a ceremonial program to welcome the new Dean and bid farewell to the former Dean Prof. Dr. Kanhaiya Jha. Dr. Lamichhane has worked at Kathmandu University for over 29 years, rising through the ranks of Lecturer to Professor, with his PhD on Molecular Biology from Sun Moon University in South Korea. In addition to that, he has worked on projects such as Advance Organic Farming in Nepal, a grant project by the Korea International Cooperation Agency (KOICA). He is also the recipient of prestigious awards



such as the Nepal Vidhya Bhushan "Ka" awarded by the President of Nepal and Academician issued by Nepal Academy of Science and Technology (NAST) awarded by the Prime Minister of Nepal. The induction program was anchored by the Associate Dean Dr. Bed Mani Dahal. After the program, the former Dean handed over the Dean office/documents to the newly appointed Dean.

School of Law

BEC-LL.B at Kathmandu University School of Law

Kathmandu University School of Law, the seventh school in the Kathmandu University system, since its inception in 2013 has established itself as a leading centre for legal education in Nepal. It has been offering a remarkable environment for studying law; as with the highly experienced faculty, diverse academic community and a record of producing proficient graduates. KUSoL set its mark in the legal education system of Nepal with the launch of its first undergraduate degree of BBM-LL.B, atypical to any other law schools in Nepal. Sustaining this standard of providing a distinctive undergraduate degree, KUSoL is now ready with its second undergraduate degree, Bachelor of Economics and Bachelor of Law (BEC-LL.B).

BEC-LL.B. is a full-time five-year, ten semester long study program, with 59 subjects and 188 credits, sim-

ilar to BBM-LL.B, and is now being offered by KUSoL every February with 44 intakes. While the idea of the BEC-LL.B degree had been in discussion for quite some time now; it finally got the green light from the Academic Council of the University and is now set to go. Law and Economics are society's two fundamental constructs and enmeshing these two allows a multi-faceted study of the very fabric of society, which is the precise aim of this degree. This degree will provide a strong legal and economic background that will allow graduates to choose from an array of career prospects and post-graduate degrees. The administration of the economics components of the BEC-LL.B course is supported by the School of Arts. The law components of the degree are mostly the same as the BBM-LL.B degree, with only some minor changes.

School of Arts

KUSoA's First Female Dean

Professor Ekku Maya Pun becomes the new Dean of Kathmandu University School of Arts. She is the first female dean ever to be appointed in any of KU (Kathmandu University) schools. She has paved the way for several women dreaming to take the same responsibility in the future. When talking about how she feels about this achievement, she says, "I feel honored and excited. I am also a bit apprehensive, at the same time, in anticipation of the challenges that I will face in my new capacity as the acting Dean. It is an opportunity to establish that female leaders are capable of handling such a responsible position successfully. I am also alert that I should not be the only one."

Professor Pun was formally designated as the acting dean of KUSoA on October 24, 2021. She has been a faculty member of KU since March 14, 1994 and of KUSOA in particular, since June/July of 2005. She is an associate professor of English at Kathmandu University School of Arts with the experience of working as an associate dean and executive member of Kathmandu University. She is also the spokesperson of Kathmandu University.

Professor Pun has had several opportunities to represent Kathmandu University in her 28 years as a faculty member. One of the most important ones of her career, according to her, has been the opportunity to visit Tibet and Chengdu, at the invitation of Tibet University.

Similar to the previous deans of KUSoA, she is also looking forward to



various developments during her tenure. "In line with current VC, Prof. Dr. Bhola Thapa sir's vision, I am looking forward to the expansion of programs unique to KUSoA and taking these to other parts of Nepal and making them accessible to students outside Kathmandu in greater numbers. At the same time, strengthening the existing programs, departments, human resources, and physical infrastructure are also of priority. I am happy to share that we are starting the construction of a building at the Hattiban complex suitable per our need," says professor Pun.

As for the upcoming challenges in her tenure, professor Pun says, "I am very realistic in regard to the challenges that will come in the path of accomplishing them. I believe with the teamwork and cooperation of all concerned, they are achievable. We are in the process of finalizing the strategic plan for 2022-2027 of KU which will no doubt give us a clear road map to go forward."

School of Education



SoEd held a GroundBreaking Ceremony for New Academic Building

On May 6, 2022, the ground-breaking ceremony of the School of Education took place, over a land of 704 square meter, at Hattiban, Lalitpur. The construction was designed by KU Center of Education Design, and is said to be completed within 24 months. The chief guest of the ceremony was Prof. Bhim Prasad Subedi, Chairman

of the University Grants Commission of Nepal. Among other delegates, the Vice-Chancellor Prof. Dr. Bhola Thapa, the Registrar Prof. Dr. Subodh Sharma, the Dean of School of Education Prof. Dr. Bal Chandra Luitel, the Dean of School of Arts Ms. Ekku Maya Pun were present at the ceremony.



MOU signed with OWSN

Green Club of Thoughts (GCT) signed a memorandum of understanding with the Organization for Women in Science for the Developing World-Nepal chapter (OWSN) on March 27, 2022, in the presence of Mr. Haris Adhikari, Advisor of the Club; Dr. Rajendra Adhikari, Technical Advisor of the Club; Mr. Ashim Joshi, Advisor of the Club; Mr. Kishor Khanal, Associate Director of Community Engagement Division (CED) KU; Dr. Sushil Shrestha, Associate Director of Student Welfare; and Mr. Madhav Khatiwada, Counselor of KU-Counseling Cell.

Dr. Bivek Baral, Patron of GCT, and Mr. Anup Chhetri, President of the Club, signed the MoU on behalf of the club whereas Dr. Hemu Kharel Kafle, President of OWSN, signed on behalf of the organization; a total of 15 attendees witnessed the signing ceremony.

It was concluded from both the parties' presentations that GCT and

OWSN's interests, views and objectives matched to a certain degree. OWSN's main aim is to encourage women to pursue careers in science, and the women who make up the team of the organization are a group of seasoned professionals eager to share their knowledge with active female students, particularly in the field of science. Dr. Kafle believes that there is so much to learn from both the parties and that their experiences may be shared with the community through GCT.

Although women's participation has been significantly increasing along with the passing days in the field of science as well as community service, this MOU is a ray of hope for some changes in GCT as well as Kathmandu University, GCT and OWSN working together will definitely fill the gap of inequality in the community.

First-Ever: Green Club of Thoughts to Release Annual Calendar

Green Club of Thoughts is releasing its annual calendar for the year of 2022 A.D. The annual calendar presents the planned year ahead for the club and is intended to promote coordination and transparency of the clubs' plans and activities.

The dates of various activities and events that have been and are going to be conducted by the club have been mentioned in the calendar. The calendar highlights the release of the 4th issue of acKUaint, a newsletter issued every 4 months, to be on the 21st of March. Additionally, the dates for the release of future issues of the newsletter have also been indicated.

For the year, the calendar sets aside the time for longer events of the club. The week-long programs, Summer School and Winter School have been allocated the proper periods. Similarly, days have been set to complete shorter club programs such as meetings with groups, workshops, talk shows and other extracurricular events.

The main highlight of the calendar is the separation of dates for the Annual Board Meeting and Annual General Meeting which are on 31st October and 25th November respectively. Similarly, the calendar also has dates for monthly board meetings.



Computer Handover to Dhaneshwor School

As a supporting initiative, Green Club of Thoughts (GCT) in collaboration with the Community Engagement Division (CED), jointly signed an MoU with Shree Dhaneshwor Mahadev Adharyut Vidyalaya on November 14, 2021.

Located in the Panauti Municipality - Ward 5, Shree Dhaneshwor Mahadev Adharyut Vidyalaya was reinstated in 2076 B.S. Likewise, this school comprises 83 students. Due to lack of physical infrastructure and adequate financial support, this school has been facing challenges to sustain.

After signing the MoU, the initiative was implemented to be carried out in two phases. In the first phase, agreed parties had planned to establish the computer lab and basic science lab. The duration of the initial phase was six months.

There was an agreement to conduct educational activities in school for at least one year in the second phase. Moreover, GCT will continue to provide teaching guidance to the school throughout this initiative.

As this initiative progressed, computers and other support material for the school's lab setup were handed over to Shree Dhaneshwor Mahadev Adharyut Vidyalaya within January 2022.

On February 23, 2022, as per the agreements on the MoU signed, the establishment of the computer lab in Shree Dhaneshwor Mahadev Adharyut Vidyalaya was successful. Likewise, the school has also started to conduct academic activities..

New Board Members

Green Club of Thoughts Executive Board of 2021/22

S.N	Name	Position	School
1	Anup Chhetri	President	Engineering
2	Eva Kafle	Vice-President	Arts
3	Ayush Paudel	General Secretary	Engineering
4	Aviral Regmi	Joint Secretary	Law
5	Agya Dhungana	Treasurer	Engineering
6	Isha Acharya	Engineering SR	Engineering
7	Saugat Bastola	Management SR	Management
8	Prajwal Dhungana	Arts SR	Arts
9	Alsha Regmi	Law SR	Law
10	Nista Koirala	Medical SR	Medical Science
11	Sushma Dahal	Executive Member	Engineering

Green Club of Thoughts Editorial Board of 2021/22

1	Samrin Basnet	Editor-in-Chief	Law
2	Maharasha Rawal	Co-Editor-in-Chief	Law
3	Jamyang Gelek Iho-wa	Design Director	Engineering
4	Ezal Sujakhu	Copy Editor	Management
5	Sushmita Humagain	Copy Editor	Law
6	Deepali Shrestha	Copy Editor	Arts
7	Supriya Yashaswinee Adhikary	Copy Editor	Law
8	Surangana Dhakal	Copy Editor	Law
9	Rhitika Shrestha	Copy Editor	Management
10	Nirveek Khatiwada	Copy Editor	Arts
11	Gaurav Khadka	Designer	Engineering
12	Chandan Kumar Mahato	Designer	Engineering
13	Prasiddha Raut	Designer	Engineering
14	Ashish Thapa	Technical Incharge	Engineering
15	Dristi Thapa	Production Manager	Management

Green Club of Thought's First Book Talk Session



Green Club of Thoughts (GCT) organized its first ever book talk session on May 3rd 2022 entitled "सती संवाद". This session was moderated by Eva Kafle and Prajwal Dhungana in the presence of the author Mr. Sujit Mainali of the book "सती : इतिहास र मीमांसा".

The attendees of the program included Prof. Dr. Bed Mani Dahal, Associate Dean of School of Science; Mr.

Kishor Khanal, Associate Director of Community Engagement Division; Dr. Sushil Shrestha, Associate Director of Student Welfare Directorate; Mr. Madhav Khatiwada, Counselor of Counseling Cell; Mr. Yash Raj Lamsal, Assistant Professor DOMIC; Mr. Punya Koirala, Assistant Professor DOMIC; and Mr. Ashim Joshi, IPP and Advisor of the club.

This informative session looked at the ancient and deeply rooted Sati Pratha in Nepal, which was abolished a hundred years ago, to better understand patriarchy's motivations for inflicting repression and violence on women's lives and bodies through cultural practices such as child marriage, dowry, bride burning, acid attack, menstrual taboo, prostitution, rape, and so on.

GCT to work with Nepal Academy of Science and Technology (NAST) and Diyalo Foundation on Early Flood Alarming System

The Nepal Academy of Science and Technology (NAST) was founded in 1982 as an autonomous apex body to promote science and technology in Nepal. The Academy is charged with four key goals: advancing science and technology for the nation's overall development; preserving and modernizing indigenous technologies; promoting science and technology research; and identifying and facilitating acceptable technology transfer.

Diyalo Foundation, founded in 2014 in the United States, is an organization aiming to empower young Nepalese through education. Since the foundation of Diyalo Foundation Netherlands in 2017, it has been sending volunteers to Nepal to work on educational projects using their unique skill sets.

On 10th February 2022, Green Club of Thoughts (GCT) held a meeting with Diyalo Foundation to discuss the matter of establishing Early Flood Alarming System in flood-affected regions of Nepal. On behalf of the club,

Mr. Anup Chhetri, the President of GCT, and Eva Kafle, Vice-President of GCT, attended the meeting, whereas representing Diyalo Foundation Jord Drontmann, the Co-Founder and Executive Director of Diyalo Foundation, and Sudip Lingthep, the Chairman of Diyalo Foundation attended the meeting.

Further on 13th March, Dr. Rabintra Dhakal, Faculty Chief of NAST joined the discussion on establishment of Early Flood Alarming System and agreed to help GCT from NAST.

As Kathmandu University has already been working on a flood-alarming system itself in Kamalamai Municipality, this collaboration will further expand this project.

The project will be led by Dr. Rabintra Adhikari, Technical Advisor of the club on behalf of GCT. The installation of the system lies on GCT while NAST will provide infrastructural support for the project and Diyalo Foundation will look after the new technologies and help GCT with resources.

GCT to Provide Teaching Assistance in MandanDeupur

Kathmandu University School of Education (KUSoEd) has recently signed a Memorandum of Understanding with three schools of ward 10 and 12 of MandanDeupur. The MoU was regarding the improvisation of the course according to the local needs. GCT in collaboration with KUSoEd has planned on sending volunteers in the re-

spective schools of MandanDeupur. The volunteers will work as teaching assistants and will then be focusing on teaching science, agriculture and IT. This collaboration is done in order to uplift the Schools of MandanDeupur. GCT will be sending teaching assistants for an entire year in those schools.

Gradient
ENGINEERING SOLUTION PVT. LTD.

Baluwatar-04, Kathmandu | 9847112588 | gradientengg2020@gmail.com

We have a strong team of Mechanical, Civil, Architecture, Electrical and Electronics, Geomatics, Geologist and Environmental Experts with solution to any higher level projects.

Our Services:

- Detail Projects Report
- Modeling and Simulation of Real Life Problems
- Building Energy and HVAC Systems Consulting
- MEP with Energy Efficient Buildings Consulting
- Solar Thermal and PV Systems Consulting
- Water Treatment and Filtration System Consulting
- R&D Projects and Survey
- Detail Design, Drawing and Supervision to any other projects

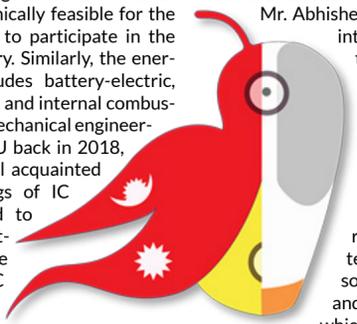
Junkiri: Shell Eco Marathon Asia 2022

Junkiri, an innovation of Kathmandu University's mechanical engineering students, is a self-made, competition-focused vehicle made to compete in a global event- SHELL Eco-Marathon. This project has been in KU since 2018, back then Junkiri was the first-ever team from Nepal to participate in this tournament. This team also competed in the SHELL Eco-Marathon, Malaysia 2019. The team's current target is to compete in the SHELL Eco-Marathon Asia 2022 with further improvements on the same model. The team's goal for the vehicle to give a mileage of 200km/hr would mark a great achievement for the second iteration of the project.

The competition's main focus lies on energy efficiency. And adhering to that, team Junkiri is focused on making the engine most efficient, considering primarily the vehicle's aerodynamics, weight, and the fuel delivery system. The engine used was initially a carburetor-based system. It is converted into a direct fuel injection engine, and has been tuned further by installing an electronic control unit to maintain a controlled fuel delivery. The weight of the body panel is also reduced by using aluminium and glass fibers. Though it hasn't been officially revealed yet, the competition is set to be held in the months of September/October or November/December. Currently ranked 53, Junkiri comprises 16 team members participating in the virtual and physical league of this tournament. Out of which only 9 members can attend the physical tournament, the selection of which has placed the team manager in a conundrum since all 16 of the members are working diligently on the project. SHELL Eco-Marathon has two

vehicle categories and three energy categories, and prizes are awarded in each category. The vehicle category includes Prototype and UrbanConcept. Since the UrbanConcept targets the mass market and is not economically feasible for the team, they chose to participate in the Prototype category. Similarly, the energy category includes battery-electric, hydrogen fuel cell, and internal combustion engines. As mechanical engineering students of KU back in 2018, the team was well acquainted with the workings of IC engine, compared to the other two categories, they chose to go with the IC engine category. This is how Junkiri came into being. Moreover, SHELL Eco-Marathon has two

What with representing Nepal in a global tournament like SHELL Eco-Marathon and all the efforts the team put into Junkiri, recognition was bound to follow. The team manager, Mr. Abhishek Subedi during the interview, looks back to the days when people had to tell Junkiri from the very basics, but the situation has entirely changed now. People just know what Junkiri is. Moreover, the team put efforts into social media reach and promotional acts, which landed them sponsorships that makes meeting their rulebook for the competition, which leaves next to no room for creativity. But team Junkiri could still get creative in the name, concept and visualization of the prototype, all under the rules of the competition.



जुनकिरी

But the entire journey was not a smooth sail for the team, they met many boulders on the way; be it in the form

of difficulties in part procurement or lack of sponsorship, or the administrative hassle. All of which led the team to lose valuable time and caused a delay in meeting the deadline. But the team rose to these challenges and is still fighting the financial battle. The physical competition is just around the corner so, the team's travel and accommodation costs and the vehicle's shipping costs are on the line. This hasn't deterred the team and they are all set on performing well in the SHELL Eco-Marathon Asia 2022.

The team is not only determined and hopeful of themselves, but they are also a beacon of hope for those students who have ideas like Junkiri in their minds. Team Junkiri truly believes that curiosity is always a good thing to have. But they also believe that this needs to be backed by a set target, a clear framework, and the confidence to present the idea in front of the right people at the right time. All while dealing with the administrative hassles and taking the questions raised head-on.

GCT Correspondent



Nepal Sees A Hopeful Future Of Two More NORPART Projects

NORPART, Norwegian Partnership Program for Global Academic Cooperation, is a renowned program funded by the Norwegian Ministry of Education and Research and the Norwegian Ministry of Foreign Affairs. NORPART allocates and supports projects that strengthen and promote quality of higher education, and joint educational and student mobility between Norway and partner countries every year.

In 2021, NORPART had approximately allocated NOK 178 million (Norwegian Krone) to 26 projects, which also includes NOK 23 million for 67 full degree master scholarships. Amongst which one was by an established Nepali in Norway Dr. Prabhat Khanal.

Dr. Khanal graduated from Institute of Agriculture and Animal Sciences, Tribhuvan University, Nepal, with a degree of Bachelor of Sciences (Agriculture) and Animal Sciences. He further completed his PhD abroad. On October

29, after his several attempts in Norway, his proposition on the project of improving the livestock sector in Nepal was selected under the 26 of 150 applied projects to NORPART. This research aimed to focus on alternative grains, grain-based animal health products and health promotion of animals. The research grant project provided by NORPART is of more than 10 Crore Nepali Rupees.

Dr. Khanal's project (Project Number: NORPART 2021/10345) is titled 'Establishing the Circular Economy based livestock sector through collaborative Educational and Research activities (CEER)' which is under the 'Agriculture Environmental Technology' discipline area. The selected project has two network partners, among which one is Kathmandu University (KU) who will put forth a collaborative effort with Nord University.

Current plans describe conducting a five-year study and research project

that will focus on how insects, forest and agricultural by-products in Nepal, and aquatic plants can contribute to the future development of a sustainable and environmentally friendly animal husbandry sector. Mobility of 20 Nepali students to Norway for postgraduate studies and 4 for Ph. D, and 8 Norwegians to Nepal is anticipated.

A representative of Kathmandu University reports that the success of Dr. Prabhat Khanal is to bring about a completely new curriculum for study and research as well as facilitate exchange of experiences and skills among the Nepali and Norwegian students.

Project number NORPART 2021/10175 is another project applied by University of South-Eastern Norway in network with Kathmandu University, as well as other foreign universities, targeted towards environmental; technology. The project title read 'Instituting research based education system for

development of renewable energy technology in circular economy; A joint project among universities in Norway, Nepal, Bangladesh and Sri Lanka'.

This project aims to strengthen the research-based education system in higher education emphasizing circular economy and renewable energy technology. Similar to Dr. Khanal's project, it is expected to reap educational benefits providing scholarships as well as facilitate exchange of higher education students.

While this isn't the first time Nepal has been networking with NORPART projects, the increasing rate brings more hope for development in the higher education fields and opportunities for Nepalese citizens. This remarkable collaboration paves a path to attain sustainable exploitation of Nepal's resources.

GCT Correspondent

Green Hydrogen: A pathway for Carbon Neutral and Energy Independent Nepal

Climate change is currently one of the major environmental challenges, mostly contributed by the emission of greenhouse gasses from anthropogenic activities such as fossil fuel consumption. Although researchers have been warning about the severity of climate change since long ago, it has recently started getting attention from politicians and policymakers. The immediate action for the reduction of Greenhouse gas (GHG) emissions from governments all around the world is imperative to avoid the global average temperature increase from 1.1 to 6.4 °C during the 21st century. Nepal is among the most vulnerable to the consequence of climate change due to mountainous and challenging topography and socio-economic conditions. Climate change has altered the precipitation pattern, melted the ice caps and increased the frequency of extreme weather conditions resulting in loss of life and damage to socio-economic aspects.

Nepal's average daily energy demand is 1.6 PJ with an annual increment of 4%. Biomass is the primary contributor to the national energy mix but the demand for fossil fuel is increasing rapidly for mobility and heating application. 77% of the total energy demand of Nepalese industries in 2017 is still met by fossil fuels. Coal is the primary energy source mainly in brick, limestone, cement, and steel industries. At present, almost 10% of the National GDP is invested annually to import fossil fuels and is anticipated to increase in the coming years due to population growth, inefficient operation, and increased economic production. While the rest of the world is gearing up to cut its dependency on fossil fuels, the exponential demand for petroleum products in Nepal is very alarming. Also, the increasing loss of Nepal oil corporations by subsidizing the high demand for commodities has posed a serious threat to the national economy. It is high time to act on making strategic decisions and impactful actions to transit Nepal toward a carbon-neutral

and energy-independent country.

Nepal has abundant renewable energy in the form of hydropower and solar resources. Currently, we are experiencing a surplus production of electricity during wet seasons. According to the Department of Electricity Development, around 9200 MW hydropower projects are under construction in Nepal. However, the current energy mix trend forecasts domestic demand for electricity to fall lower than its production within 2022. Nepal has potential for solar energy production like hydropower. The commercial potential of solar for grid connection in Nepal is 2100MW1 and only 5% is installed as per the Department of Electricity Development. Proper management and policies are needed to utilize surplus hydropower and investment in solar farms to harness the solar resources.

Green Hydrogen can be an alternative fuel for clean energy in a world struggling to limit global warming. It is produced from renewable energy and water through the thermochemical process in which an electrical current is used to dissociate water into hydrogen and oxygen in an electrolyzer. Renewable hydrogen production is promoted as a clean and cost-efficient way to value surplus electricity production from renewable technologies for enabling a more significant fraction of renewables in the energy mix. Furthermore, countries like Japan, USA, and China have invested an enormous amount in research and development of hydrogen and fuel cell technology. They also have published policies and strategies to promote hydrogen and fuel cell technologies by superseding fossil fuel technology. Today, we are observing a revival of interest in prospects of the hydrogen end-use as an energy carrier rather than feedstock as it has attributes to decarbonizing the world's economy.

The energy cost for hydrogen production varies from USD 5.91 to USD 12.75 depending upon the production period and tariff rates. In contrast, Nepal

has a competitive advantage over other nations as surplus energy, the risk of being spilled, can be utilized for the green hydrogen and reduces the energy cost. At present, the average cost of green hydrogen on the international market is \$3-5 per kg, which is targeted towards below \$1 per kg by the end of this decade. The groundbreaking research and innovation and the policy-based interventions to promote renewables as the primary supply of energy is pushing



green hydrogen to overtake fossil fuel both technically and economically.

There is a need for replacing carbon-based fuel with carbon-free fuel for energy generation and thermal application for carbon neutrality and energy independence. Green Hydrogen is considered one of the most promising fuels for generalized use in the future because it is a versatile, energy-efficient, low-polluting, and renewable fuel. Hydrogen, produced from natural gas, has long been feedstock for the production of fertilizer, steel, petroleum, and chemicals. As a fuel, Saturn rockets used liquid hydrogen for the second stage engine. It has also been running vehicles for years such as forklifts in the USA.

Hydrogen fuel cells, which convert hydrogen gas into electricity, provide a longer range and can be fueled faster than electric batteries. Hyson's hydrogen fuel cell trucks powered by hydrogen can run for 1000 km with a single refill. In 2021, Toyota Mirai, a hydrogen

fuel cell car, set Guinness World records by covering 845 km with 5.65 kg of hydrogen fuel. Airbus is working on hydrogen and hydrogen-based fuel to achieve zero-emission in commercial aircraft by 2023. Alstom has developed the first hydrogen fuel cell train named Coradia IInt with exhaust being only steam and condensed water. The Nippon Sheet Glass group has produced architectural glass powered by hydrogen replacing natural gas. These are a few advancements in hydrogen technologies.

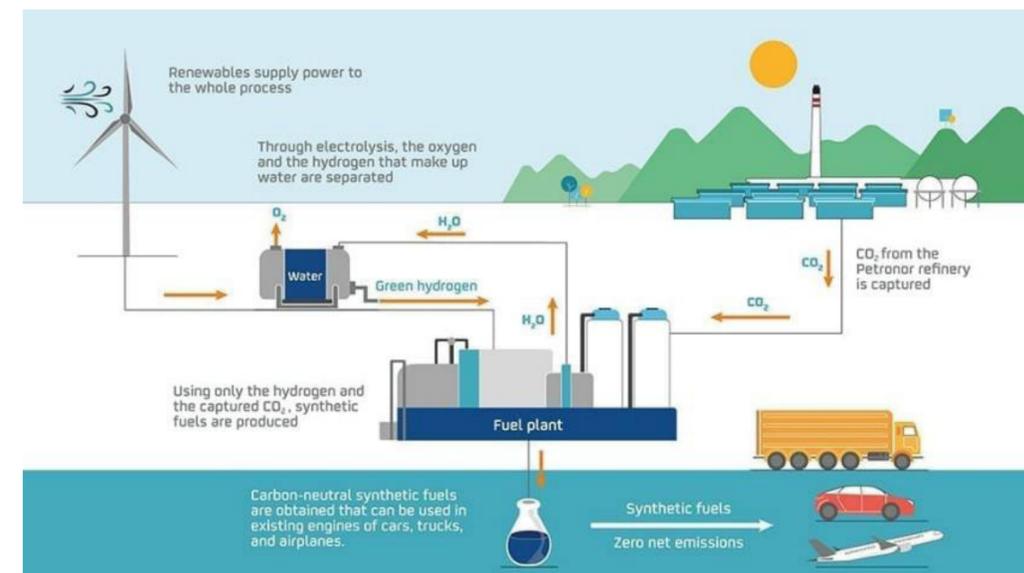
Nepal committed through the Paris agreement has developed a need for alternative fuel for industries and the energy sector. Hydrogen from renewable energy and water can be a viable option for replacing fossil fuels to meet residential and industrial demand. In addition, it can be used for existing and future process industries such as mining, ghee production, urea, and so on. There is a need for a consolidated program initiated and owned by the Government to establish and incubate the green hydrogen economy for Nepal, and prepare the business sector to take over the commercial applications in a competitive manner in local, regional, and international markets.

Kathmandu University has been promoting renewable energy to minimize fossil fuel consumption and reduce emissions to contribute to the low carbon economy in the country. The university has been working on green hydrogen technology research to contribute to a green economy in Nepal and valorize renewable energy in the National energy mix. The country has abundant solar energy and surplus hydro-energy that can profitably be converted as green hydrogen for local utilization and export to the international market. The green hydrogen value chain has the potential for business innovation in Nepal. However, strong political and social commitment, high-level knowledge transfer from university to industries and communities, and willingness from the commercial and business sectors to invest in green hydrogen are needed. Kathmandu University has set forth the 'Nepal Hydrogen Initiative' (NHI) on June 5, 2021. NHI is a consolidated program of the Government of Nepal to establish the policy foundation, develop an implementation action plan, and incubate a value chain for green hydrogen business innovation as the driver to address present and upcoming environmental, social and economic challenges in Nepal.

Recent regional conflicts have inflated the prices of fossil fuels in the international markets. Hence, the government is exploring alternative energy carriers to bring seasonal parity between demand and production of hydroelectricity as well as replacing fossil fuel as the fuel for transportation, cooking, and industrial heating. For hydrogen technology, the Ministry of Energy has formed a Coordination Committee under the secretariat of the Water and Energy Commission to conduct a study on the role of Green hydrogen in balancing the demand and supply of hydropower electricity. The study report is anticipated to recommend the government for policy-

level decision to open the door for the incubating business based on the green hydrogen technology from the public and private sectors.

Sabin Bhattarai



Networked Improvement Communities for School Leaders Towards Equity and Inclusion

Digital Learning Research Lab

The project Networked Improvement Communities for School Leaders Towards Equity and Inclusion seeks to explore how networks for school leaders - Networked Learning Communities (NICs), underpinned by an open learning platform, can be harnessed as a system-wide scalable method for building school leaders' capabilities to bring about sustainable changes in school practices which address inequalities in student access and learning in their institutions.

school leaders are able to increase their agency to bring about improvements in education equity.

The Networked Improvement Communities for School Leaders Towards Equity and Inclusion-Digital Learning Research Lab project works with partners in three countries in South Asia: Afghanistan, Pakistan, and Nepal.

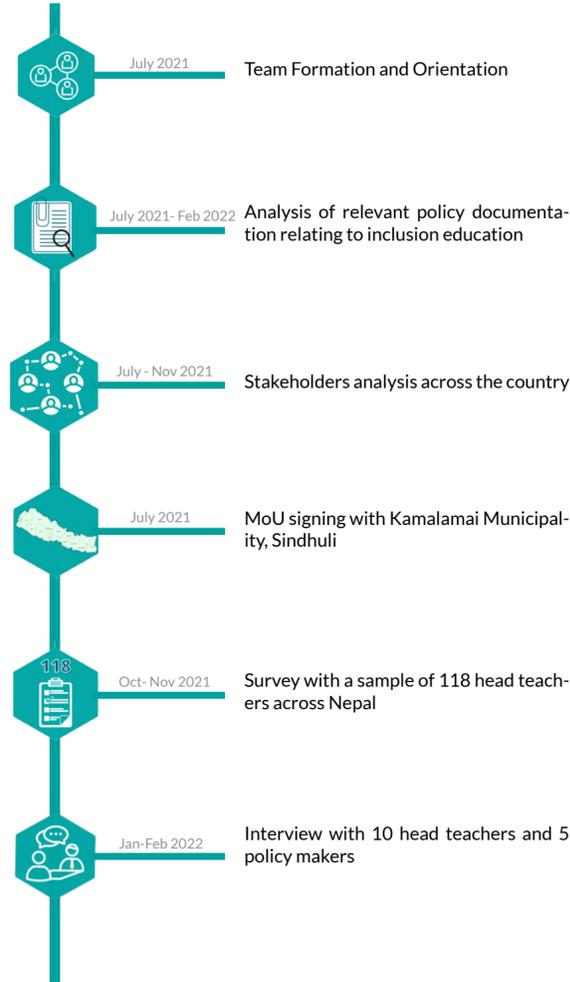
The Education Act (7th and 8th amendment) and subsequent regulation (Education Regulation, 2059) have defined 31 different functions, duties and powers for school Head teachers. These responsibilities are summed up here in three points;

The ambition is that through working collaboratively on small experiments to tackle 'micro problems' of inclusion,

- Goal setting through preparation of school's yearly, half yearly, and monthly school plans and programs
- Building school culture by maintaining cooperation among teachers, students, and parents, and ensuring a respectful, ethical and disciplined school environment
- Teacher support through selecting & recommending teachers to the Local government for training programs, assigning jobs and responsibilities to teachers and staff

Plans and Policies mentioning inclusive education in Nepal

- Children's Act 1992
- Consolidated Equity Strategy 2014
- Constitution of Nepal 2015
- Disability Rights Act 2017
- Disabled Protection and Welfare Act 1982
- Education Act 1971 (Seventh Amendment)
- Free and Compulsory Education Act Nepal 2018
- Gender Equity Act 2006
- Inclusive Education Policy for Persons with Disabilities 2017
- National Human Rights Action Plan 2010-2013
- Safe School Policy 2017
- National Plan of Action for Children 2004-2015
- National Policy and Plan of Action on Disability 2006
- School Sector Reform Plan 2009- 2015
- Science, Technology and Innovation Policy 2020
- Special Education Policy 1996
- Education Master Plan 2013-2017
- 15th Periodic Plan 2019/20- 2023/24
- School Education Sector Plan 2021- 2030
- School Sector Development Plan 2016-2023



Findings from the survey

12.7% head teachers use a basic phone with no web browser



Usage of digital tools	Everyday	Less than 3 days	More than 3 days	Never
Whatsapp	77.97%	6.78%	11.02%	4.24%
Google docs	18.64%	22.88%	24.58%	33.90%
Powerpoint	23.73%	20.34%	20.34%	35.59%

Table. Usage of digital tools (per week) by head teachers

NO ACTIVE INTERNET IN 30.5% SCHOOLS

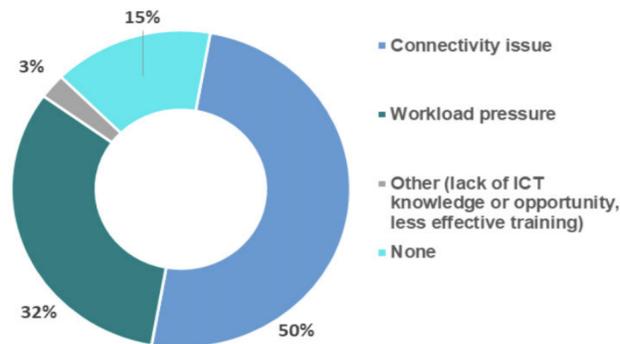


Fig. Factors that could prevent HT's participation in online course in the future

Interaction between head teachers increased during COVID pandemic



Dr. Sushil Shrestha

Dr. Sushil Shrestha is an Assistant Professor at the Department of Computer Science and Engineering of Kathmandu University (KU). He is also the Lead Researcher and Lab Incharge of Digital Learning Research Laboratory. He was recently designated the Associate Director of the Student Welfare Directorate (SWD) at Kathmandu University, Dhulikhel.

How do you take the position of SWD as the Associate Director?

I am an alumni of KU. During my time as a student, I have known all there's to know about student life at KU. And even now, as a faculty, I see the students' lives and contrast it with mine back then. I try to draw differences and find similarities, which would ultimately help me in making necessary and positive changes in the betterment of the overall environment of the student's life in the University. And for this, the SWD seemed like a really good place. Having been both a student and teacher at KU, I thought that my knowledge and experience at this university would make it easier to work.

Now that you are in the position to make changes, how do you plan on achieving the goals that you have set out?

In my opinion, whether it is a single or a group of students, if they have a genuine concern, it should be heard. It's just that their opinion should be strong enough and useful. Irrespective of the number of people, their background, their political affiliation, or whatever other differences there may be, if the content being presented is legitimate, it must be addressed. As a student, being heard by the management or the school authority is difficult. And I believe that this should not be a problem. All of the students' concerns should be taken into account and looked upon. Students' basic needs should be catered to. Now that I am in such a position to address the issues, I would definitely make the students feel heard and seen. I stand as the Associate Director of the SWD to work towards the welfare of the students. There's so much that can be done. For example, after my appointment, I have systemized the process for conducting several student activities. Now the students do not have to trouble themselves with the lengthy process of acquiring approval for activities.

You are an Assistant Professor of the Department of Computer Science and Engineering and have been an active advocate for Information Communication Technology (ICT) in learning, how much are you involved in the sector of Digital Learning?

This is the era of technology; the development in technology has made everything easier; you can do just about anything while just sitting at your home- buying things, paying bills, connecting with people, and so on. Why should getting an education be any different, right? I believe that ICT in learning, among many of its other advantages, defies the geographical barriers that make education inaccessible to many people, especially in a country like ours. This should be looked at from a research point of view and should be further developed. I have a Digital Learning Research Lab myself. We run numerous projects on digital education, human-computer interaction, data science, machine learning and Artificial Intelligence etc. We conduct studies on ICT in education and are focused on equity, inclusion and strengthening ICT learning.

What do you think is the pre-pandemic and post-pandemic situation of online learning in Nepal?

None of us were ready for this pandemic. We never expected anything like this, so the initial situation was very chaotic. Educational institutes shut down for months, but it couldn't go on like that for long, so eventually they switched to online learning. But since this was an unforeseen situation, teachers and students alike

were inexperienced and not prepared. This has made adapting to online learning difficult. Classes were conducted just for namesake. This hindered the quality of education and the teaching-learning process. We were not digitally ready. As a student of ICT, having done my Masters and PhD in online learning, I didn't see any differences in physical and online setup of learning. The process of online education did start and the teachers and students did learn about it, but that wasn't enough; they weren't that prepared. In the name of online classes, schools and universities have used apps like Google Meet and Zoom, but that alone is not online learning. Those are mere mediums for interaction between students and teachers. Online learning has its own environment and features- it focuses on asynchronous content, which is accessible to students at any given time, and a competent instructional design that makes it an entirely different platform to facilitate quality education. There's a lack of awareness regarding online learning among people in Nepal; they don't really understand online classes and its presence beyond Google Meet and Zoom.

How can KU make use of its resources to make online learning more productive during the post pandemic period?

Like I mentioned earlier, the lack of faculty and student readiness to face a situation like this pandemic is the main barrier in the way of online learning. Most of us still haven't understood the basic concept of online learning. There are certain principles of online learning, which we haven't followed or even understood properly. There hasn't been any significant improvement in the sector of digital learning. During the pandemic, everyone started getting 'A's in their exams, which made them say that online learning is better. This is a fault on both the students' and the education systems' behalf. We can look at Coursera, FutureLearn etc. to see what digital learning actually is. Google Meet, Teams, Zoom and all are merely components, which only provide synchronous learning.

How can KU set a benchmark for other universities in incorporating ICT in the educational system?

Incorporating ICT into any university's educational system comes with a number of advantages. It breaks geographical barriers and makes education accessible to all. Students can access their course materials at any given time. It is cost effective. It reduces the need for transportation, which relates closely to pollution control. There is so much more to digital learning. If KU embraces ICT in the teaching-learning process, that will open the gates for other universities to follow its courses. In a way, KU has always been able to set benchmarks and standards for other universities to match or compete with. We can set a framework for digital learning in such a way that it is generally of a blended approach but can revert to online in emergency situations. We should build a whole system around the principles of online learning.

As the Associate Director of the SWD, how are you planning on running the clubs under SWD virtually if a situation similar to the previous pandemic surfaces in the future?

Students should do more than just study during their University life. There's so much to the student life experience that is outside of the classrooms and studying. Students should engage in as many extracurriculars as possible; boosting one's personality is just as important as being academically well. Now that we have had a taste of online learning, we can conduct many other programs virtually too. We can do many interactive programs, seminars and workshops online, the possibilities are endless. All that is important is the students' satisfaction and improvement. We can conduct programs virtually, this way we can have international guests and speakers attend such programs without causing them much inconvenience. Some programs can be held in such a way that some people can be present physically at the venue of the program and the rest can stream it online.

Interview with the Chief Guest of Convocation 2022, Phase II

“*Follow your heart always and nothing else. Always keep the flag of your alma mater high.*”

Prof. Budaraju Srinivasa Murty is the director of director of Indian Institute of Technology, Hyderabad. He is also the recipient of Shanti Swarup Bhatnagar Prize for Science and Technology, the highest science award in India.

Looking back at your career you have visited different states. As someone responsible for guiding others, what is your view on coexisting in a different cultural environment?

In my personal life, after I completed my Diploma in my hometown (State: Andhra Pradesh), I moved to Nagpur (State: Maharashtra) for doing BTech and then for my MTech & PhD to Bangalore (State: Karnataka). My first job was in IIT Kharagpur (State: West Bengal) for 12 years and then I moved to IIT Madras (State: Tamilnadu) and worked there for 15 years and now I am at IIT Hyderabad (State: Telangana) for the past 2.5 years. The languages (except that people of Andhra Pradesh and Telangana speak the same language) and cultures of every one of these states are different. Each of these states are rich in their cultural values and I have learnt a lot from each state.

I learnt to speak Hindi in Nagpur, and I could get the national feeling and that I am an Indian first and then anything else. Karnataka people taught me how to be gentle with others. Bengal people taught me how to develop the feeling of contentment. Tamilnadu people taught me how to be efficient in your work. Every place has enriched my life. In fact, I advise my students to interact with a lot of people. Every person, whom you meet in life teaches you something, either how to be or how not to be. Both lessons are important in life.

Reflecting on your affiliation with foreign universities, what differences have you noticed in the approach to education from the side of teachers and students?

Overseas universities, particularly USA, are more flexible in their education, providing a lot of choices to students. One can learn engineering and philosophy together or medicine and economics together, for example. I would call this as student centric education. Indian education to a large extent so far has been straight jacketed. The recent New Education Policy-2020 in India is a boon to students as it provides a lot of flexibility.

Two years back, at IITH, we have brought a lot of flexibility in our undergraduate curriculum, with 10% of credits being dedicated to Basic Sciences, 10% for Basic Engineering, up to a max. of 60% for the professional major, 10% dedicated to liberal arts and creative arts and 10% free electives. We also provide Double Major to our UG students. Education system is rapidly changing in India in a positive direction, and we hope to see many reforms being implemented by various universities soon.

We have realised your commendable contributions in many sectors. To that light, what do you believe it takes for a mind (person) to be ingenuine?

First and foremost, that is essential to be able to contribute well is the nurture an inquisitive mind, always questioning about things around you. Curiosity is the mother of innovation. Many a times we are not satisfied with the state of affairs around us. However, we wait for someone to come and change instead of bringing that change ourselves. Pujya Babu Ji (Mahatma Gandhi) once said, “be the change that you want to see around you”.

I always wanted to be a good engineer, who wants to apply their knowledge towards practical problems. In addition to that, one should keep dreaming a

better world and work hard towards it with Passion. Abdul Kalam once said, “Everyone should dream, and dreams should be as colourful as possible”. I would add saying, “you should dream and pursue the dreams with passion”.

It is often said that once a student of science, always a student. To what extent do you think that's true?

Science teaches you inquisitiveness, questioning attitude and not to accept anything at face value. Even our ancient scriptures are full of knowledge that came out of questioning. In fact, one of the Upanishads is “Prashnopanishad”, which focuses on questing.

At IITH we have started a Department of Heritage Science and Technology and we have started teaching five Sanskrit courses,

which we believe will help the brilliant IIT student to explore the scientific heritage of India.

Any development in the society and technology starts with questioning, which is what Science prepares you for. Thus, a student of science, once trained in this direction, remains a student of science always. However, this scientific mind should be utilised for the benefit of the whole humanity, that is when you become immortal. The final question that our forefathers have felt important to address is “who am I?”. Why you try to get an answer to this question, for you the whole world is yours, “Vasudhaika Kutumbam (the whole universe is one family)” and your biological family is just a small nano part of your bigger family, the whole world. Your life gains a meaning then.

You were awarded the Shanti Swarup Bhatnagar Prize for Student of science and Technology, the highest science award in India, for the year 2007 in the engineering science category. What was your contribution to receive that award and how did it further shape the trajectory of your career?

Bhatnagar Award is not given to anyone for a specific work. It is given to people for their significant contributions below the age of 45, which can inspire others to pursue. My main contributions in research are in materials science, in the development of nano materials, bulk metallic glasses and high entropy materials.

Would you like to give our graduating students a message?

Dear graduating students, there is nothing in this world called “impossible”. As someone said, “Impossible” can be

read as “I’m possible”.

You are what you think you are. If you think you are small, and aim at small things, you will remain small. If you aim high and work hard with passion, you would one day be a role model to your own generation and for the future generations. Follow your heart always and nothing else. Always keep the flag of your alma mater high.



The Shanti Swarup Bhatnagar Prize for Science and Technology is one of the highest multidisciplinary science awards in India. It was instituted in 1958 by the Council of Scientific and Industrial Research in honor of Shanti Swarup Bhatnagar.



7 Schools, 7 People

Dr. Pranita Rajbhandari, KUSMS

Dr. Pranita Rajbhandari, an esteemed and recognized graduate of Kathmandu University started her journey in the field of medical science in 2010. She started her course of study in one of the affiliated colleges of Kathmandu university which is Lumbini medical college located in Tansen. Dr. Rajbhandari was determined to study the MBBS program with an ambition to contribute to the field of medicine.

After persistent hard work and determination, Dr. Rajbhandari graduated in 2016, which was the twenty-second convocation at Kathmandu University. Along with the MBBS degree, she also succeeded with one of the significant accomplishments in her life. Dr. Rajbhandari was awarded a gold medal for her academic excellence. She managed to attain the highest marks in her MBBS degree. Likewise, Dr. Rajbhandari secured 82.81% in her examination result. She managed to top her course of study among the students of eight medical colleges affiliated with Kathmandu University. Moreover, Dr. Rajbhandari is widely respected for her dedication and academic excellence. Overall, by outshining with an admirable accomplishment among nine hundred and forty-six MBBS graduates, she has set an example to the upcoming batch to make a significant impact in the society.

After a dedicated journey in the Lumbini Medical college, now Dr. Rajbhandari is a registered doctor at Nepal Medical Council. Currently, she is a medical officer at Nepal Government. With her accomplishments and qualifications, Dr. Rajbhandari is enthusiastic about progressing improvements in the field of medicine.



Abhishek Jha, KUSoL

With the allure of a brand new course in a new place, away from all the hectic city life, Mr. Abhishek Jha chose to spend five years of his life at Kathmandu University School of Law. Being the first batch at KUSoL, there was a general idea among him and his peers that they were an experimental batch, but as the semester went by, he rather felt that everything, from the course structure to the teaching methodologies, were up to mark and was highly appreciative of his professors. Mr. Jha and his batchmates had an experience of flourishing in an all around harmonious environment from having a good student-teacher relationship with the law professors to a great community relationship around the Dhulikhel area that resulted from providing informal legal aid to the locals and discussing matters of law with them and other things as such.

Since KUSoL is far from the Central KU premises, there wasn't enough representation or participation of law school in the interdepartmental activities at that time. Mr. Jha felt the need to

fill this gap with the establishment of an organised student body, in which he succeeded by forming the Student Welfare Council (SWC) with a team of his friends. During his term as the first President of the SWC-KUSL, he led the SWC into conducting various interdepartmental activities as well as many national and local level programs. This, he believes, instilled a leadership quality in him and led him to prosper smoothly as a student, a lawyer and a person in his life.

His journey as a law graduate began as he went on to work in the International Conference Secretariat of the National Human Rights Commission of Nepal. This was followed by his work as an Assistant Consultant, Document and Litigation Coordinator at the Terai Human Rights Defenders Alliance. He also worked at the Forum of Federation- Nepal, and is currently pursuing his Masters in International Relations and Diplomacy from TU. He is currently working at the Institute of Foreign Affairs and is a partner at Magnum Legal Group.

Aman Kharga, KUSoM

Aman Kharga grew up in a business-oriented family and was sure of growing in the same field even though it meant going against the societal standards of success parallel to technical field jobs. Chasing the big dream, Aman moved to Kathmandu from Golbazar in Siraha with the dream of reaching more opportunities to grow. This decision came from his parents who understood the value of good education.

After completing his higher secondary education from Global College of Management as an excelled student, Mr Kharga was adamant on KUSOM as his only option within Nepal to pursue further education. And he found his home in the city which, previously, had given him a big cultural shock.

At KUSOM, he was impressed with the vision, standard of education material as well as qualities such as time punctuality. He grabbed the opportunities to grow in different areas. From maintaining his academic grades to leading the KUSOM Placement Cell as its Vice-Secretary and successfully organizing the KUSOM Job and Internship Fair (KJIF), Aman has built himself to be a strong contender in this competitive place.

He is currently developing a successful career in the financial and accounting department of a conglomerate.

For his next step, he plans a Master's degree after gaining some corporate experience and to continue growing in his career path of finance. The further future awaits an organization that aims to aid capable and deserving people who are held back by family or other circumstances.

What he wants the future family at KUSOM to know is that just getting good grades in this field of study is not enough. Connection with people as well as learning practical skills as per the demand of the market is a must. Aman quotes, “If you have the will, your time never becomes an issue.”

Vidhya Pokhrel, KUSoEd

An ambitious student and an aspiring teacher, Vidhya Pokhrel, an arts graduate is an inspiration to young teachers of Nepal. With the vision of someday becoming a teacher from a young age, Mrs. Pokhrel made her dream come true after pursuing her bachelor's degree in arts, majoring in English.

After years of a teaching career following her undergraduate program, her passion towards teaching led her to Kathmandu University School of Education (KUSoEd) for her masters. In KUSoEd she found her second home, her solace and her family. Her teachers became her motivation and inspiration in every step she took. Although her married life took her abroad for a couple of years, she never found peace there as she did in Nepal, teaching to her lovely students. With years of experience and motivation, she returned back to Nepal to start her own School hoping to provide as quality education as she saw in schools abroad. With this vision she established her own school in Dhapakhel, Kathmandu namely Regent Residential School.

Although years had passed, she was again drawn back to Kathmandu University where she is currently pursuing her PHD. Her teachers are her biggest aspect for her to return to Kathmandu University, she says. Their passion towards teaching, their dedication and their hard-work is what inspired Mrs. Pokhrel to trust KUSoEd enough to return with the enthusiasm she had while pursuing her Masters degree. Hoping to implement all she learns in KUSoEd, Mrs. Pokhrel is an ever growing and learning enthusiast, clearly an asset of Kathmandu University. An ever loving teacher and an ever evolving student, Mrs. Pokhrel, plans to test her own limits on the improvements she can make as a teacher as well as a student hoping to improve and expand her teaching and learning fashion.



Chandhi Raj Dahal,
KUSoA

Chandhi Raj Dahal, who is now the Assistant professor and coordinator of Kathmandu University School of Arts (KUSoA) admissions and students' welfare, wasn't just a studious child but also enjoyed writing stories and poems and writing for newspapers from an early age. Studying in Jhapa till class 8, he was involved in publishing Bhitte Patrika and also served as an editor in his school days.

Mr. Dahal, who has now dedicated his career to teaching students in Kathmandu University School of Arts, was himself a student studying Bachelor in Media Studies. "When I came to KU, I felt like I made the right decision for myself," says Mr. Dahal. He joined KU in 2008 after he completed his +2 in Mass Communication and Journalism from Kavre Multiple Campus. His dedication towards studies and his work went hand in hand during his college years when he started working as a full-time reporter for Sanjivani Patra. He even topped his college in +2.

During his time at KUSoA as a Bachelor's student, Mr. Dahal was active in different activities that, according to him, helped in his growth as a Media Studies student. He helped revive the Media Studies Group that wrote Newsletters and conducted departmental activities. He served as a president and chief editor during the last two years of his Bachelor's degree. He also helped lead the different activities occurring inside the department during his time

with the group. Along with journalistic writing, Mr. Dahal had started reaching his hands toward visual journalism. He went to villages in Mugu to produce a documentary for an NGO. "I would carry my camera and shoot all day forgetting rest and hunger," recalls Mr. Dahal. He had directed a short film for a competition organised by Nepal Army which was selected in the top 10.

He completed his master's degree in Journalism from the prestigious Hongkong University after graduating from Kathmandu University. After completing his Master's, he then joined KUSoA Arts as a faculty member in 2015. In August of 2017, he guided the students in his department and went to Germany with them for the mobility program. As for his plans, Mr. Dahal is looking forward to his Ph.D. in the field of media and mass communication.

Says Mr. Dahal: "Since to excel further in my field and also for greater opportunities, Ph.D. is a requirement, but I don't want to do my Ph.D. only for the opportunities that may arise in the future, I want to do it for my interest. Besides that, I want to carry on being an academician in KU."

CONVOCAATION PHASE I

Kathmandu University (KU) held its first phase of the 27th Convocation ceremony at the premises of the university on December 15, 2021 at Dhulikhel. A total of 1449 undergraduate and postgraduate students received their degrees at this ceremony. The Senate, chaired by the Prime Minister Sher Bahadur Deuba, the board of trustees, chief guest, KU members, media and the graduating students and their parents were present at the ceremony.

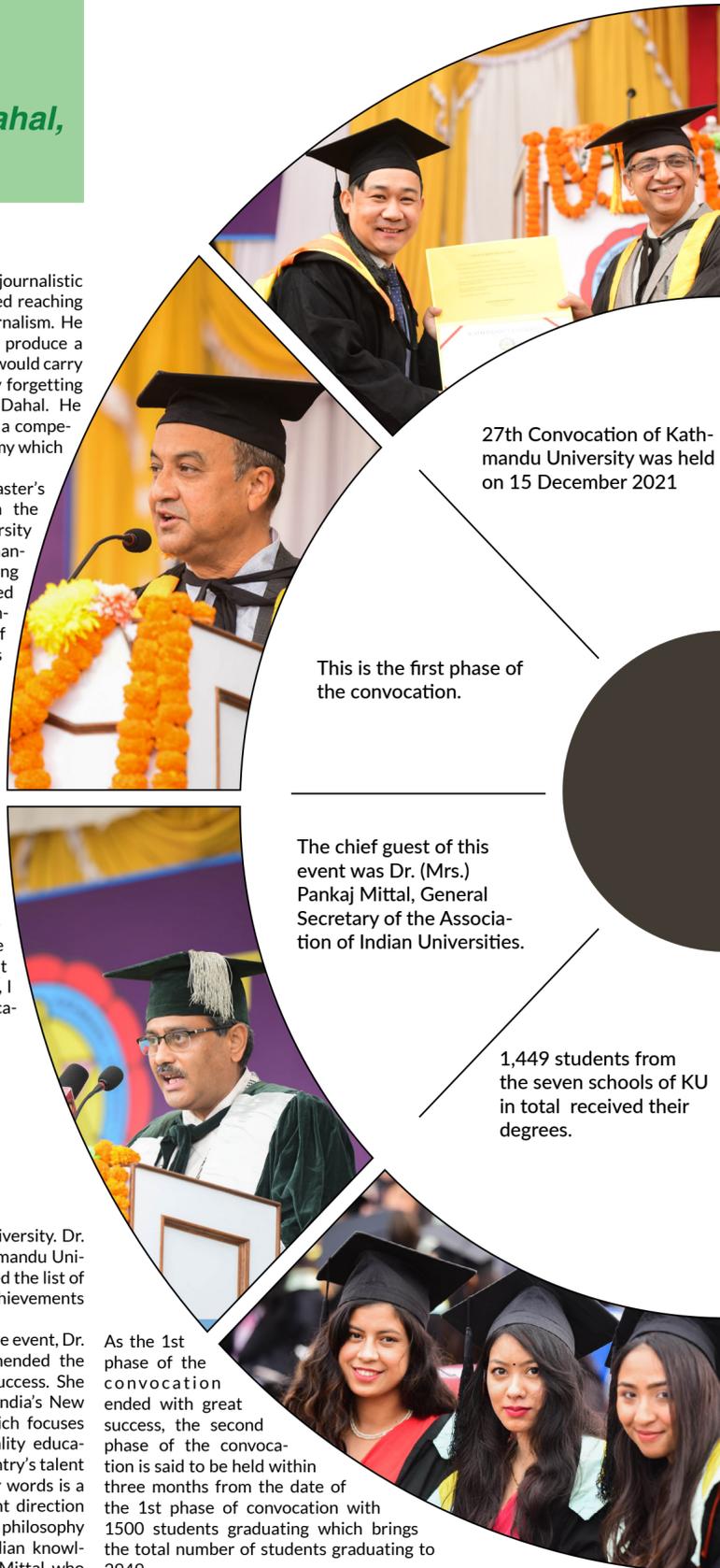
The vice-chancellor Dr. (Mr.) Bholu Thapa gave a welcome speech addressing the guests, parents and guardians, graduates and all the people attending the event. His speech emphasized Kathmandu University's achievements and its role in shaping the country by producing excellent scholars. According to him, about 45 percent of the total practicing medical doctors and physicians in the country are the

products of Kathmandu University. Dr. Thapa reiterated how Kathmandu University has unfailingly topped the list of Nepali universities for its achievements in quality education.

The chief guest of the event, Dr. (Mrs.) Pankaj Mittal commended the graduates on their great success. She then went on to describe India's New Education Policy 2020 which focuses on universal access to quality education for maximizing the country's talent and resources which in her words is a remarkable step in the right direction since it is developed on the philosophy and thought of ancient Indian knowledge, wisdom and truth. Dr. Mittal, who is the secretary general of Association of Indian Universities, also elaborated the salient features of the policy. "Nepali Education can learn a lot from the Indian Higher Education system", she said.

As the 1st phase of the convocation ended with great success, the second phase of the convocation is said to be held within three months from the date of the 1st phase of convocation with 1500 students graduating which brings the total number of students graduating to 2949.

Photo Credit : Shiva Thapa Magar



27th Convocation of Kathmandu University was held on 15 December 2021

This is the first phase of the convocation.

The chief guest of this event was Dr. (Mrs.) Pankaj Mittal, General Secretary of the Association of Indian Universities.

1,449 students from the seven schools of KU in total received their degrees.

INTERVIEW WITH Neelesh Man Singh Pradhan

A mechanical engineering prodigy from Kathmandu University turned Digital Banking and Payments Enthusiast as the founding CEO of Nepal Clearing House after pursuing his masters in Business Administration. Although he was an excellent student in engineering and even pursuing teaching it after his graduation from KU, his pull towards management was stronger than ever and hence he gravitated towards the field of business and management.



KUSoE

On 13th April 2022, Green Club of Thoughts had an opportunity to sit with Mr. Neelesh Man Singh Pradhan in the comfort of his office at Nepal Clearing House, Kamaladi, Kathmandu.

- As a former student of Kathmandu University (KU), how have you found Kathmandu University in comparison to other educational institutes throughout your life as a student and what changes do you see in KU from your time of study and now.

I had been in association with KU for 7 years since 1993 A.D., including one year as a lecturer, before I joined my masters in India. KU had also just started mechanical engineering when I first joined the university. During my early years, KU was operating its intermediary program in a rented building, so different from how KU is now. We had less accessibility, undeveloped infrastructure and unpaved roads with dust flying with each step we took. When Tribhuvan University (TU) Schools were well established KU was still taking baby steps, yet KU evolved so quickly and graciously. KU lagged in infrastructure and had less number of professors although the course was similar to TU as well as to those in India. The progress in the span of 30 years is very commendable. I believe a core factor which has placed KU where it is today encompasses competitiveness and discipline to facilitate education. The commitment to infrastructure development, gradual increase in human resources and the commitment of the University as well as the professors to groom its students hasn't swayed throughout the years which makes me very proud to see its development.

- After spending 7 years of your life with KU, how did you think it shaped you as a person and how has the KU experience helped you to face your endeavors as an adult?

I will have to say that KU has given me a great opportunity to groom myself to become a better and stronger person. The credit goes to my teachers, professors and the university itself. KU has taught me hard work, perseverance and punctuality irrespective of environment variability, which all three are very essential in my daily lifestyle. I always completed my course work regularly and the academic strength I developed was essential in leading my further education. I enjoyed the experience KU provided me with. It gave me a path to several opportunities for my career growth.

- What differences did you see as a lecturer and student in KU?

There was a vast difference I experienced as a lecturer and as a student. As a student there was always a pressure of academics and I always had the ambitious attitude to attain the highest marks. But, as a lecturer, I got to step out of a student's shoes and get into a professional world. I had to remodel and accept the challenges that came my way. The adaptive challenge of teaching subjects that were new to my knowledge was a lifetime learning experience which taught me some great deal of knowledge along the way.

- After being a mechanical engineering student for so long, what inspired you to forsake the field and pursue management instead?

I believe that a person's mind is always growing and evolving. Although I was excelling in engineering, I always believed that the bachelor education is basic knowledge which grows the clarity of available options. The importance of management was highlighted to me by KU. We had to study some management subjects in our course as well. Thus, with my sparked interest in management and the basic technical skills I had, it led to what I currently refer to as a techno functional role, meaning engaged in technology management.

- Strategic management applies in the field of management, but how do you think it applies in someone's personal life?

In my opinion, strategic management is a catalyst to personal and professional growth. A bit of clarity of a goal five or ten years down the line gives directions as to what decisions, steps and mindset is needed. It ultimately drives an individual's determination which in turn leads to hard work and achievement.

- What inspired you and what was your aim to establish the Nepal Clearing House Ltd. (NHCL)?

I established Nepal Clearing House in March of 2011 A.D., in hopes to operate and facilitate the large scale national payment system. This corporation is essentially existent whenever we talk about digital transactions, large value transactions between banks, customers, and integrations of businesses and government related institutions in Nepal. Consequently, all digital payment platforms in Nepal also have some services provided by the NHCL which are a part of their operation. Currently, the set objective of Nepal Clearing House is to identify, implement and operate large scale payment system related infrastructure.

- What do you believe is the significance of leadership skills in students?

Positive attitude towards all circles of life is a very important attribute of any leader. For one to step out onto the real and professional world, the right attitude has to be built and carried as a value from student life itself. Technical skills are readily available anywhere and can be learned at any time. However, skills level par in learning to deal with people are prime and cannot be learnt overnight.

- Nepal faced a hard time during the pandemic and companies struggled the most due to the economic crisis it created. What changes did you see in management of Nepal Clearing House during that period?

While the maximum number of businesses struggled to survive during the time of pandemic, Nepal Clearing House boomed. With no means of physical interaction people started to get more inclined towards digital transactions and we were blessed with significant transactional growth. Even when online, we worked rigorously and proved that physical distance cannot be a barrier in our line of work.

For management as a whole, the significance of digital transformation was better realized. Since management is about people, a greater challenge of operating without physical interaction was faced which pushed out an evolved concept of managing human resources through digital connections.

- Do you have any plans to go back to KU and contribute to the University?

Yes, KU has always been my home and I do plan on going back there someday, to the place where it all started. I am forever grateful and thankful for the platform KU had provided me with and I am very interested to contribute in any ways that I can. I wish nothing but the best for the University and hope it flourishes even more as the time passes by.

- What suggestions would you like to give to the leaders of Kathmandu University, its students and its teachers?

A great leadership skill comes with learning eagerness and positive attitude. You must always have a positive attitude towards others and towards your work. You must set your goals and work hard in order to achieve them. So my suggestion to everyone in KU is to be patient in the work you do, work hard and never give up on your goals.

Interview with Kanchan Thapa

“Dr. Kanchan Thapa is an Environment Science graduate of Kathmandu University School of Science (KUSoS) who is currently the head of the wildlife program at the World Wildlife Fund (WWF). After pursuing his Bachelor's degree in Environment Science, a relatively new subject back in the 90s, he was able to go beyond the expectations of the society and work as a tiger conservationist for over two decades.”

On May 15, 2022, Green Club of Thoughts had an opportunity to have a conversation with Dr. Kanchan Thapa and talk about the status of wildlife conservation.

You pursued Environment Science (ES) in your undergraduate program which was a new subject when you started your Bachelor's. What was the trajectory of your career during that time and was society open to your choices?

Kathmandu University had introduced ES for the first time in Nepal back in 1994 A.D. Skeptical of the new subject, the first batch comprised only 7 students. I joined KU in 1995. In just a year of being introduced, much to my surprise, the number of students increased rapidly. The course itself is a bit different from Forestry. In a society full of MBBS and Engineering students, ES felt foreign to many. I had to consult a couple of people before joining. The positive feedback I got for it made me even more excited for this course. When I graduated in 1999, I was in a huge dilemma on what to do next. I had two options for my future career, one being the pollution sector and the other being the green sector. For some reason, I was drawn toward the green sector. The green sector consisted of diversity and Nepal being rich in natural resources and forestry, the choice seemed fit for me. KU presented me with a substantial foundation in my undergraduate program that ultimately allowed me to flourish in a diverse workplace environment.

When you graduated in 1999, what was the status of wildlife then?

During the year, things were evolving and developing. There was a different aspect to Wildlife Management compared to the present. Wildlife Management focused mainly on the grounds of protection, research and monitoring, management, and people participation. We protect wildlife from two aspects: one being in the core area (the National Park itself) and the other being in the buffer area (the area surrounding the National Park). It was a rather new concept during my graduation period. This concept started only in 1994. As this concept developed, the realization that conservation of wildlife is much more than just conserving the National Park area grew. With increasing participation, the conservation of buffer areas also increased exponentially through the 1990s. Cases of poaching decreased significantly and the wildlife population increased gradually. When I entered the wildlife sector, Maoist insurgency was at its peak due to which the protection of the core area was very weak compared to how it is now. But as the nation calmed, conservation improved gradually.

How did your first-ever work (with the Silt Consultancy on their project “Environment Impact Assessment of Hila Bhojpur Feeder Road Project”) impact your career?

Upon completion of my undergraduate, I had this urge to enroll in a master's degree as soon as possible. Unlike many other students of that time, I did not take a gap. Post graduation, I wanted some experience before aiming for my PhD. Pondering for a while, I stumbled across a project in Bhojpur as an Environmental Associate. My days at KU helped me immensely when I got the job. The university used to present us with real-life scenarios related to Environmental Impact Assessment (EIA), which was very similar to the work I was doing in the position. I used to transport back to those days a lot. KU made sure that my academic and professional experiences were interlinked in every step and I am very grateful for that. Joining



KUSoS

the project before my PhD was a great decision as it kick-started my career in the wildlife sector. I joined WWF immediately after my tenure. During my time in WWF, I reflected back on my gained experience which had helped me gain confidence in my work.

How did you gain interest in this field?

I was just a mere officer when I first joined WWF. I had no direction. During my interview, the CEO suggested I join the research team. I was elated and immediately started my fieldwork. My first work was in WWF's field office in Bardiya National Park. My master's was focused on National Resources Management so starting my research work in wildlife was new and exciting. I still remember my first ever assignment where I was assigned to transport ten rhinos from Chitwan, leave them out in the forests of Bardiya and monitor their daily activities. During my research work, I found that I had this affinity towards tigers. I started to travel to different national parks for research. My work mainly focused on tigers themselves and that is how my interest sparked in tiger conservation. I got my Ph.D. in a different aspect of tiger research and am currently involved in wildlife research and conservation mainly focusing on tigers.

You have been involved in preparing the Tiger Conservation Action Plan, could you tell us more about it?

Tiger Conservation Action Plan is a policy document, a systematic, periodic action plan created by the Nepal Government, and is a 5-year plan for the conservation of tigers. We have a national biodiversity strategy and an action plan which guides the overall conservation of species in Nepal. Within this, we have to make an action plan for Nepal's priority species and the Nepal government has to work accordingly. Although all species are equally important, there are a few flagship species that the department of national park believes are worth saving as they reflect the overall ecosystem. Action plans are made for such species, and tigers are also among such flagship species. Each strategy is followed by a suit of action. For example, in the Tiger Action plan, we visit all sites abundant with tigers and consult with a range of stakeholders regarding the conservation of tigers. Strategies and action plans are formed accordingly. Therefore, in an action plan, we have an overall goal, what we want to do in the next five years and we set different objectives. We make documents accordingly and present them to the government, which then funds our plans as needed. In the case of tigers, to be specific, there are various organizations that assist the government to fill the gaps in the overall action plans.

You have also worked as a Co-Principal Investigator for the Nepal Tiger Genome Project. So, there's probably a lot you can tell us about the

cats of our nation. Could you please tell us more about this?

My PhD studies focused on two aspects: tiger ecology in the Churiya region and tiger genetics. The research was heavily based on genetics as a tool for conservation. Although the world made significant advancements in genetics, Nepal's work on wildlife genetics was still behind. Upon returning from the US, we were looking for opportunities to develop this field. However, genetics is a sensitive issue in Nepal, mainly because we cannot take genetic samples out of the country due to various government laws such as property rights. The one government lab was more focused on plants and humans. Hence, we collaborated with the Center for Molecular Dynamics (CMD), an NGO. With infrastructure attained, we approached USAID for finance. As an approving gesture for a project, we signed a MoU with Nepal government to collect every tiger's genetic data in order to count their species and sexual identity. We observed strategic locations, extracted DNA from the feces of the tiger, prepared a genetic database, and a range of analysis which focused on conservation genetics. Nepal has 3 sub-population; Chitwan, Bardiya and Shukla. We have observed only a few gene flows of both males and females, which we addressed in our research.

You have worked in a plethora of fields till date. What do you think has been your most significant work?

I value all my efforts equally. My work with Silt Consultancy on their EIA of Hila Bhojpur Feeder Road Project is a strong contender. The opportunity to witness the entire process in a very technical aspect from the inception to the final presentation to the Government of Nepal glorified this instance. However, the most significant work is the tiger census that the Nepal government has conducted every 5 years since 2009. As I was involved during the inception of this census, I was present when it became a practice. We started from scratch and now we have a peer review paper coming out of it along with a full fledged lab dedicated to genetics.

How did studying at KU help shape your career?

In the beginning, when environment science was a relatively new subject, KU created a solid foundation because we were exposed to a wide range of topics. This helped widen the horizon of my career and build up my expertise simultaneously. This helped me shape up my career for which I must thank KU and my department. The course structure, the attitude that the teachers have towards their students, and the environment that I got to study in was a great experience all in all.

Stories of Kathmandu University

Smarika Phuyal

Kathmandu University School of Arts
Bachelor's in Music

“The beauty of music lies in its rumination of human life; it is happiness, it is sorrow, it is life, it is death.”



From the dawn of eternity, mankind has found solace in its profound friendship with music. After all, human beings seem to be acquainted with innate musicality. From the inception of time, music has been at the core of what it means to be human. It is the sounds of human bodies and minds moving in creation, to make and tell stories of the infinite. This is one such story, a story of music, a story of pure bliss, a story of friendship. This is the story of Smarika Phuyal.

Smarika Phuyal is a 21-year old and hails from Bhaktapur. Not only does she share her heart with music, she plans on devoting her life to it. Currently pursuing a Bachelor's Degree in Music, her love for music goes beyond the mere limits of words. She is studying ethnomusicology, which is basically the study of music in a sociocultural context. She is not only studying music but its profound relationship with human beings. After all, she does believe that music and humans have merged into one ever since the birth of infinity. Studying how music touches human lives and how humans touch music has only made her affinity towards both music and humans more earnest.

This story was penned when Smarika was younger, and more sparkle-eyed than ever. It was in the nooks and crannies of family gatherings that she found this friendship of a lifetime and beyond. Her family would hold talent shows and there it was, a gem patiently waiting to be discovered--her voice. Singing made her feel like an entirely new person, so full of hope and life, as if she was filled with rainbows and unicorns. She wanted to seal that feeling forever for she fell in love with it. In addition, it was all the praise and a newfound confidence from her teachers that made her sure of wanting to dive deeper into music. And thus started her journey. She dedicated three years taking vigor-

ous music lessons at Nepal Music Center. Music felt like home to her, and she decided to find permanence in her home. This is when she treaded to Kathmandu University School of Arts.

There are times when she catches herself smiling at the thought of her friendship with music. They have come a long way together. She then wonders if the words of the entire dictionary could ever express her gratitude to the people who made her realize what she was missing in her life, the magic of music. Especially her teachers who praised a little girl to a world of hopes and dreams and who made their classroom her stage, a mirror that was ruminant of her love and talent.

Her journey hasn't been all euphoric. Choosing arts for a livelihood is still frowned upon and that breaks her heart a million little times. Nepali society has constantly pointed fingers at her for her choice to pursue music as a career. Her heart cries in melancholy when she sees how belittling people can be to those who want a future in arts. The constant comparison and questioning send her in an awful farrago of self-doubt and dejection. To think the beauty of arts and passion is being subjected to such fumes of ignorance and derision suffocates her. But she is not someone who would compromise her love for music fearing the corroded shackles of society. Words can't possibly define her gratitude towards her parents, her pillars of strength. From taking her to her music lessons when she was younger to standing up for her today, they have been her ardor. Their words and actions soothe her broken heart. There are times she feels that while she is devoting every

inch of her being to her passion, her parents are valiantly slaying the biggest dragons for her. Their constant effort to shield her from the sour-faced society propels her to the precipice of perfection every single day.

A part of her heart had stopped beating and a part of her soul would weep in anguish for almost three years when she had to halt her music lessons. This was so that she could focus on her studies. The distance from music and the agony so deep only made her love grow yawning. She knew her destiny was music and nothing would ever stop her from knowing music inside out for a lifetime.

Having worked at theatres as a composer has made her realize that music is chaos, a beautiful one at that. And the beauty lies in the fact that it reflects the chaos in human lives. That is what she wants to embrace, writing it, composing it, performing it, immersing in the chaos of it all. The chaos is her ultimate fate. All roads and avenues take her to the chaos.

The pressure of society's harsh judgments has gotten hold of the best of Smarika at times, so much so that she has considered pursuing another degree. She has questioned the entirety of her trajectory with music by comparing herself to others. But little moments of music give her all the reassurance she needs. It is almost as if music rejuvenates her entire being and shows her life in itself. And just like that, she is there, holding hands with music and looking at the world of her dreams. The bond she has shared with music is what keeps her going; the basis of the bond is the bond itself, a beautifully infinite loop.

Smarika is an avid believer in the

concept of Moner Manush, an idealised 'inner being' hailing from the Baul concept widespread in Bengali folk music. Humans are inherently beautiful but the Moner Manush is unattainable. Only with art, Smarika thinks, one can get the closest to the attainable magnificence. The alluring energy within a human is infinite, and to her music is the best way to channel it.

There are places in the universe that words can't reach. There are heart-strings that mere words can't touch. There are feelings that words couldn't possibly express. That is where music is. The reach of music is above and beyond the limits of words. This very beauty is what keeps her going. With music, she believes she can touch lives like never before as words could never do.

Everybody has a life, a life that might not be a bed full of roses. Humans have wars going on within themselves. People need to embrace those wars in order to ease them. A person gives her sweat and blood to her craft, but the society is too quick to judge her choices. This in turn leads to gloom taking over her life, slowly killing her passion. Smarika believes that the very essence of human life lies in passion. What would be life without passion, if nothing but an endless, desolate, agonic void?

Smarika believes in the strength of dreams, the hues of hope, and the magnificence of perseverance. Her story is one full of these adornments. Her story is a heartening one. Her story is a story of friendship: of life and love; of her and music; of humans and beauty. This is the story of Smarika Phuyal.





Credit: Vadim Ghirda/AP

RUSSIA-UKRAINE WAR AGITATION AND AGONY

The mere thought of war is enough to send awful chills down someone's spine. The horror and chaos that ensues in the backdrop of the bloodshed and anguish are infelicitous. Sadly, this became a frightening reality for 44 million Ukrainians on February 24, 2022 as they woke up to a full-scale land, sea, and air invasion by its ever-dominating neighbour Russia. Once the epitome of brotherhood and fraternity, Russia and Ukraine now seem to thirst for blood, hence making this war one of Europe's gravest security crises since World War II.

Dating back to the military buildup from October 2021 on its side of the border, Russia had started igniting grave concerns over a potential invasion. Internationally deemed a crime of aggression, the blood of more than 15000 people, including thousands of civilians, is on this "special military operation", termed by Vladimir Putin in his speech that gave a green flag to the invasion. It also has disturbingly set off the continent's largest refugee crisis since World War II, with more than 3.9 million Ukrainians fleeing the country, and millions more internally displaced. The war has cut off power stations and other supply lines within war zones leaving thousands of civilians exasperated in subzero temperatures without electricity or water. In addition to slumping food, fuel, and medical supplies, the catastrophe is heart-wrenching. A crisis like this was imagined to be only for the history books, and now Europe witnesses this humanitarian disaster unfolding.

How did the world come to witness the toppling of a sprouting democracy even in the 21st century? The

answer seems to be somewhere in the history of these two nations and the hurt ego of the former Soviet giant. Not to forget the constant belittling, if not denial, of the Ukrainian statehood by Russia. On the face of it, the ongoing war seems to stem from the power struggle between Russia and the west, namely America veiled as NATO. However, it is an undeniable fact that Russia has had Ukrainian blood and tears on its account for a rather long time now.

In the late 1700s, Ukraine lost much of its territory to the Russian Empire under Catherine the Great. Despite the valiant struggle for independence in the early 20th century, Ukraine could not succeed, therefore, becoming a part of the communist giant, the Soviet Union. The Holodomor famine of 1932 speaks of the Ukrainians' suffering imposed by the Russian government. Under Stalin, their farmland and wheat were confiscated. It was estimated that 4 million people lost their lives to the famine.

The year 1991 marked the ultimate collapse of the Soviet Union and the independence of Ukraine. But Russia has always challenged the statehood of the nation by trying to link historical, cultural, and linguistic ties with the very notion of independence.

The collapse of the Soviet Union in 1991 led to the establishment of NATO (North Atlantic Treaty Organisation), with the motive to protect Europe against Soviet attacks during the Cold War. NATO then expanded eastward, eventually taking in most of the European nations that had been in the Communist sphere or, to say the least, the Russian sphere of influence. Once parts of the Soviet Union- The Baltic republics

of Lithuania, Latvia, and Estonia, joined NATO, as did Poland, Romania, and others. NATO getting closer in miles to the heart of Moscow, directly bordering Russia, instilled a sense of fear and uncertainty in the government. So much so that Russian President Putin has claimed it to be an encroachment on Russian interests and a betrayal by the U.S. and its allies who "vowed not to expand the organisation into the former Eastern Bloc." The sense of betrayal, fear, and threat seemed to have amplified for Moscow once Ukraine was promised eventual NATO membership in 2008, even though that is still seen as a far-off prospect. The heavy treads of NATO right next door posed unduly threats to Russia and hence it took on the task of stomping on the Ukrainians' choice to join the alliance, like other former Soviet states who were only eager to flee the cold, ruthless whiff of Kremlin and found that escape in the seemingly warm embrace of NATO. Putin, in his speech, justified the invasion by asserting the very objective of "demilitarisation," of Ukraine. This likely points to dismantling Ukraine's military capability, hence leaving it incapable of defending itself and ultimately unable to join NATO.

In December 2021, Russia's foreign ministry issued a set of demands calling for the United States and NATO to discontinue any military activity in Eastern Europe and Central Asia, which essentially translates to "cease further NATO expansion toward Russia", and more importantly to prevent Ukraine from joining NATO in any immediate future. Russia's military action has portrayed a sense of power struggle against NATO at the cost of victimising Ukraine.

But there's more to it.

The very premise of a post-Soviet Europe is definitely flaming Russia's agitation to a great extent. Crediting the shared history of these two nations under the Soviet Union, the Cold war stakeholder often discredits the very statehood of its neighbour. Putin's open statement about considering Ukraine's place to be in Russia's fold from time immemorial strengthens this very fact. Putin has proven his desire to reemerge as the once almighty Soviet Union. Undoubtedly, Ukraine is the cornerstone of this vision. This explains his claims that Ukrainians and Russians "were one people – a single whole," between whom the west has formed a spiky, insurmountable wall.

The growing affinity of Ukraine's democratically elected government towards the West, especially after the Orange Revolution of 2004, seems to have upset the Kremlin. Russia hasn't shied away from claiming Ukraine as fundamentally a part of Russia, culturally and historically. This not only scars the nationalist sentiments of the Ukrainians but, undermines the sovereignty of the land. The relentless bombardment of the country's cities and towns makes it clear that Russia is acting as if it has no regard for a nation and its sovereignty, let alone its people. A nation with such close linguistic, cultural and geographical ties attempting to form bonds with NATO and the European Union raises concerns in Moscow. It seems as if Russia is intolerant to the very idea of Ukraine's possible proximity with other powers of the world. Putin has constantly emphasised the cultural and historical ties and used them as a basis to demean Ukraine's sovereignty and independence. Justifying the downright disrespect and disregard of the statehood has proven to cause not only severe inflammation to the nationalist sentiments of the people but has brought the country to the brink of total mayhem. Russia aims to topple Ukraine's



Credit: Euro News

democratically elected government and engulf the country into Russia's orbit for the namesake valour of the Soviet Union.

This act of invasion is neither the first of its kind on Russia's part nor is it the first time it has expressed its disagreement with the heavy boots of its insanely powerful military. In 2014, mass protests in Ukraine forced out a Russia-friendly president. Russia's response to this was the swift invasion and annexation of the Ukrainian peninsula Crimea. Russia wasn't done yet, a separatist rebellion was instigated that seized the Donbas region of Ukraine, in a war that cost the lives of about 14,000 people.

Ukraine has long been a victim of Russian agitation, oppressive behaviour and blatant arrogance that have led to this grave human catastrophe. Even in the 21st century, which should

perhaps be the pinnacle of democracy and civility, a nation holds the power to intimidate and torment another sovereign nation. Nuclear weapons, the military budget, or even the size of the nation should have no say in a nation's internal affairs in a way that would undermine its very statehood. The merciless effects of this war won't just be felt in Ukraine, the whole world will cry tears of agony, the sole result of Russia's agitation. As upsetting as it is, the end of this devastation still seems to be a long way from now. The fumes of Vladimir Putin's war are still raging, and the world will pay the debts of this war for who knows how many generations in terms of blood, piles of dead bodies, and helpless lives!

Sushmita Humagain
sushihumagain@gmail.com

Slippery Death and Blood-Stained World Cup in Qatar

A decade ago, Qatar won the bid to be the host for the 2022 World Cup and has since embarked on a major construction project. However, the international media spotlight in 2018 revealed the horrifying working conditions of migrant workers and their deaths. Human rights activists uncovered that young people from India, Bangladesh, Nepal, Sri Lanka, and Pakistan were paying enormous sums to recruitment firms, frequently up to £3,000, for employment on minimum wage in the blistering heat and awful conditions, chained to their employers with little possibility of escape.

The death of Nepali migrant workers didn't assuage their desperation to work there because of the obligations they had towards their families back home. With the meager income of the workers working towards building stadiums, hotels, and roads in Qatar, they could send the money back home to

their families.

According to the Daily Mail UK, Nepali workers building the stadiums and hotels for the 2022 World Cup call the death of their counterparts "Chiplo Mrityu". "Chiplo Mrityu" means slippery death which implies that these young, hardworking, and healthy workers suddenly slip away at night. Heatstroke is known to be a contributing factor in many deaths. According to Nepali Times, a study published in the Cardiology Journal discovered a strong link between heat stress and young employees dying from cardiovascular diseases throughout summer. It is estimated that appropriate heat protection measures could have saved 200 of the 571 cardiovascular fatalities between 2009 and 2017.

Rameshwar Nepal, the South

Asian director of Equidem Research and Consulting, says to the Daily Mail UK, 'In the majority of cases, the Qatar government has significantly failed to provide the cause of death and it is said the Government is not doing a proper autopsy.' Because of the lack of data, Ramesh-



FIFA WORLD CUP Qatar 2022

war concedes that it is impossible to attribute specific deaths to individual projects, but he adds: 'Heat exhaustion is clearly a role in many deaths.'

"They go to work; they work in high temperatures and they come back to the room in the evening or late at night and the next morning the worker is found dead," says Rameshwar.

Qatar promised to reform and

improve the conditions of migrant workers. The basic minimum wage has been increased to 1000 Riyal, with additional allowances of 300 Riyal for food and 500 Riyal for lodging. However, there are still complaints of underpaid salaries, excessive recruitment fees, awful living conditions, and heat stress mortality. The cost of staging the competition is predicted to be £138 billion, and FIFA would receive £1.9 billion from broadcast rights alone, while migrant workers benefit from a guaranteed minimum salary of £200 per month, that was reformed and implemented.

According to Nepali Times, there are reports that talk about the possibility of Qatar planning to send back many construction workers, including Nepalis, on prolonged leave before the games begin in the stadiums and infrastructure they helped build.

In March 2020, companies in Qatar went bankrupt due to the COVID-19 outbreak, and the workers were left unemployed and abandoned. Many Nepalis were rescued back to their homes. However, the vow made to reintegrate employees who were forced to return owing to the COVID-19 outbreak, the government has failed to follow through with that. Delivery of schemes like the Prime Minister's Employment Program which was announced earlier has failed miserably.

The upcoming World Cup isn't going to be like any other World Cup to many people, especially to the migrant workers and their people back home. The number of fatalities and the dreadful living conditions of the hard-working migrant workers have made the upcoming World Cup a painful show, revealing the unjust exploitations and affecting the context with which we see these greatly anticipated international competitions.

Deepali Shrestha
stha.deepali@gmail.com



Credit: DW

Millennium Challenge Corporation: What next for Nepal?

From the youths aggressively shouting slogans against Millennium Challenge Corporation (MCC), hurling stones towards police and the police chasing them back, to people actively defending MCC, Nepal officially ratified MCC on February 27, 2022. Since its ratification, the question still looms large regarding the appropriateness of the pact. However, in the aftermath of the ratification, there are certain inalienable issues and facts which may shape the trajectory of MCC.

The uniqueness is that the second party of the pact needs to complete the project within five years' time from the date of endorsement. In the same way, the pact incorporates 500 million dollars which is quite a large sum in the context of Nepal. In spite of these strengths, the pact did not remain bereft of debate. The huge grant of 500 million dollars from such a powerful nation like the US sparked fear and doubt among nation-loving Nepalese. The conflicts and protests significantly delayed the ratification process.

A partial resolution of conflict came from the parliament itself. The parliament passed the MCC pact along with a 12 points interpretative declaration.

The declaration includes a provision that Nepal will end the grant agreement if it goes against the spirit of the declaration.

A highly lucrative development project will ensue after the ratification. In which 315 km of double circuit 400kv transmission line will be constructed under the MCC project and a part of \$500 million will be invested on improving road projects, as the main focus is to elevate Nepal's energy and road sectors. Nepal will be able to export and sell surplus monsoon electricity through transmission lines to India and Bangladesh after the completion of the project.

The projects will have tremendous influence upon the economic sectors of Nepal. The supporters of the project claim that the compact has helped

reduce poverty around the world and it will follow suit in Nepal by promoting economic freedom, good governance - basically the democratic principles and battling corruption.

In the same way, just hours after the ratification of the pact, MCC headquarter appreciated the decision saying that ratification will enable it to implement the five year program, create conditions for more reliable electricity supply, lower transportation cost and create more job opportunities for Nepalese.

Regarding the project's physical implementation, Mr. Himesh Dhungel, the first country head of MCC Nepal Program, says, "Due to the delay in parliamentary ratification of the MCC compact, four and a half years have been wasted and the momentum has been lost and while restarting it, there is a possibility of a slow start."

However, any delay of the implementation poses irreparable risk to Ne-

pal. If Nepal fails to spend the allocated budget within 5 years, the unspent fund has to be returned back. To prevent such delays of the projects, a land acquisition process has already been started. The process of clearing the land in Nuwakot for the construction of a 400KV Ratmate substation has begun under the MCC compact agreement.

In spite of these claims, the Millennium Challenge Corporation has sparked some crucial geopolitical challenges. First, Nepal is at a risk of forming a bitter relationship with China, after the approval of the compact. China is also aware of the US's influence in Nepal. So, China continuously discouraged the agreement saying that it risks Nepal's sovereignty and also labeled MCC as a potential Pandora's Box for Nepal. The recent unexpected visit of the Chinese foreign minister, Wang Yi right after the ratification provided a hint on the somewhat troubled relationship between the two neighboring countries.

Nirveek Khatiwada
nirveek98khatiwada@gmail.com



Credit: Hurdustan News Hub

Kazakhstan: Kill Without Warning

The first day of 2022 in Kazakhstan saw a doubling of fuel prices that led the people of the city of Zhanaozen onto the streets. What started as a peaceful protest against the price hike in one city spread across the whole country in a matter of days. The Government did reverse the price hike, but by then the citizens' anger had taken its toll and this protest was a way to show that they had had enough. Soon enough things took a violent turn. In Kazakhstan's biggest city, Almaty, the protests spiraled into mass disturbances - they turned into full-blown riots, looting, and arson.

On January 7, in a televised speech, the President of Kazakhstan, Kassym-Jomart Tokayev declared a state of emergency and gave the law enforcement and the army the order to shoot to kill without warning. His justification for this being, that the protesters were not ordinary citizens but terrorists and bandits, and this whole situation was an attempted coup masterminded by forces both within and outside the country. The balance of power had shifted from the Government to the streets. And the President's response to this was labeling the citizens as terrorists and shooting them without warning. Further, he called

for outside help; he called upon regional military assistance led by Russia, namely the Collective Security Treaty Organisation (CSTO). This was an unprecedented move, never in the history of political riots, had a military organization been deployed against a domestic political protest. The Government stated that 225 people had been killed, 19 members of the security forces died and around 12,000 people were arrested. The majority of the arrested people were ordinary citizens that got onto the streets to voice their political grievances. And this clearly shows the Kazakh government repressing its citizens.

This unrest goes well and beyond the price-hike protests. It's been a long time coming for the Kazakh citizens. They have had enough of the mass-scale corruption and the growing inequalities. The narrow elite who control the political and economic life of the country is what has caused the citizens to get on the streets. This mixed with the political intrigue and the power struggle at the top has led to the current predicament of Kazakhstan. The first and former President of Kazakhstan, Nursultan Nazarbayev stepped down from his presidency in 2019 and his hand-picked successor, current President Tokayev was appointed in his place. But Tokayev was just a figurehead, all the strings were still pulled by Nazarbayev. He stuck around as the Elbasy (leader of the nation) and appointed himself as lifetime Security Council Chairperson. And the current situation of civil uproar presented itself as an opportunity to Tokayev to take his power, so he strengthened his position by taking Nazarbayev's job as the Security Council Chairperson. He then appointed a new Prime Minister and cabinet. President Tokayev has totally sidelined his predecessor and has risen to full power. And this order to shoot and kill without warning is just another show of power for President Tokayev.

With everything that's going on, Kazakhstan is following its political transition, the outcomes of which are either of the two: a new form of authoritarianism or a more open political system. This is a sign of political maturity among the citizens. As seen in all the other former Soviet countries, the people are fighting against the system built by the Soviets that serves the leaders at the expense of citizens.

Surangana Dhakal
suranganadhakal@gmail.com



Credit: Nepal Press

The Chief Justice Controversy

Chief Justice Cholendra Sumsher Rana was suspended on February 13, the day as many as 98 lawmakers from the Nepali Congress, the Communist Party of Nepal (Maoist Centre) and the CPN (Unified Socialist) registered the impeachment motion against Rana.

On March 13, through Dev Gurung, chief whip of CPN (Maoist Centre), the impeachment motion against Chief Justice Cholendra Shumsher Rana was tabled in the House of Representatives for further discussions presenting 21 reasons why Rana should be impeached a month after it was registered.

Born on December 13, 1957, Rana worked as a legal practitioner from November 22, 1979 to April 10, 1996. He was appointed an additional judge at the then Appellate Court Janakpur on April 15, 1996, from among advocates. From January 26, 2006 to September 23, 2008, Rana served as a member of the Special Court. He was appointed as the Supreme Court Justice on May 27, 2014. He then succeeded Om Prakash Mishra as the Chief Justice of Nepal on January 2, 2019.

One of the accusations against Rana, presented by Gurung, was that the now-suspended Chief Justice not only used his family members but also justices and judges as middlemen to commit corruption and make money through illegal means. The same accusation is listed in the impeachment motion.

"Rana was involved in earning illegally through corruption and irregularities by mobilizing his family members and relatives, and justices, judges and officials appointed by him," reads one of the allegations according to The Kathmandu Post. "As a chairperson of the Judicial Council, he failed to maintain transparency and made appointments arbitrarily."

Article 101 (2) of the Constitution of Nepal 2072 states that one-fourth of members of the Parliament can register an impeachment motion against any official holding a constitutional posi-

tion on the ground of failing to perform duty effectively or working against the constitution or seriously violating their code of conduct.

Rana first sparked controversy in October of last year, when all of the Supreme Court justices protested against him, accusing him of promoting corruption. Justices stopped hearing cases and sharing benches with him, and the Supreme Court adopted a lottery system on December 1 last year, stripping Rana of his authority to assign cases.

The justices returned to their benches. Lawyers who had joined the protest calling for Rana's resignation kept going on. Rana, on the other hand, refused to back down, insisting that there is a legal way to remove him.

The sudden move by the three parties for the impeachment motion now rather than in the past has left people questioning why. It was claimed that the main opposition CPN-UML reacted by calling the registration of the impeachment motion a "guerilla-style" move aimed at sabotaging the upcoming local elections and influencing pending court cases.

On March 6, Parliament established an impeachment recommendation committee of 11 members to look into the allegations against Rana. Now there are concerns about what will happen to those accused of being complicit with Rana if the committee finds all of the charges against him to be valid and justified.

"If the impeachment motion has been brought with a good intention, it will help bring reforms in the judiciary but if it is meant to serve partisan interests, the judiciary will suffer more," said Bhimarjun Acharya, a constitutional expert, according to The Kathmandu Post.

Supriya Yashaswinee Adhikary
supriya.yashaswinee@gmail.com

EDITORIAL

Hundreds of people waited for hours under the scorching heat of April on the streets of Kathmandu Valley to buy fuel as its line extended to kilometers. Since the first announcement of price hike on petroleum products back in February by Nepal Oil Corporation (NOC), the government-run, monopolistic fuel distributing corporation in Nepal, the fuel prices have only gone uphill till the current date. The hike in the price of fuel along with its ongoing shortage in various areas of the country has wreaked havoc on the Nepalese society. This ballooning price hike in fuel reached Rs. 180 as of the last week of May, the highest ever price of petrol in Nepal.

Never had Nepal faced such economic crises hitting the fronts and backs of the nation through internal as well as external forces. NOC estimated that it was bound to face a monthly loss of Rs. 5 billion if it remained consistent with the previous market price of the fuels.

To prevent such a loss, the fuel price has been increasing at a speed that has pummeled the economy of many households, causing inflation in Nepal. Although the fuel price has risen exponentially, the loss that the corporation is bearing remains static. Putting restrictions on the import of some goods have made minimal changes over the economy but Nepal has drowned too deep in the ocean of debt and needs more than those restrictions to resurface. Fuel prices round up to make around 20 percent of Nepal's imports and as Nepal is to pay over \$500 million more than what it paid during the previous fiscal year on petroleum products, fuel price hike was evident.

One of the main reasons Nepal has come to witness this grave crisis is due to the war between Russia and Ukraine, which has created a domino effect on fuel price hikes in the spewing economic inflation all over the world. Nepal is now sadly sandwiched between the growing world economic crisis and the crushing debt of NOC of which, as a result, Nepali citizens are facing the consequences.

However, the issue of fuel crisis is bigger than people can imagine. Due to its ripple effect on all sectors of the national economy, it has created nothing but chaos in the same. Following this

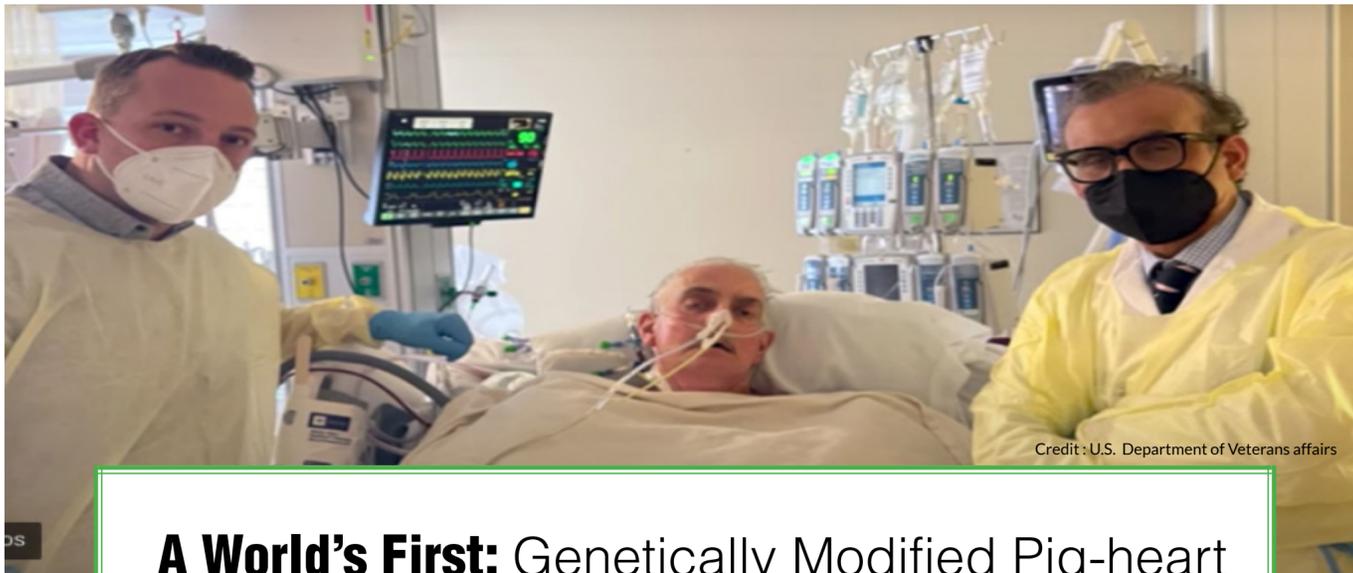
ripple effect, the cost of living has been increasing rapidly as the price of daily household goods also increases tremendously. Nepal is bound to face another surge in fuel prices as the tensions between Russia and Ukraine continue with each passing day.

Although the government decided to give a two-day weekly holiday to government employees and educational institutions from May 15th as per the suggestion of NOC, hoping to reduce the fuel consumption by 20 percent, its consumption has only increased by 40 percent since the first week of May due to the local election of May 13th. With political parties hosting motorcycle rallies with promises of fuel to its voters, the consumption rose enormously much to the government's dismay.

So how can the government fill up these holes in the Nepalese economy? Nepal is now torn between paying its foreign debts and maintaining the household economy. So what could be the solution to this issue? Is it not yet time for Nepal to make changes and take a greener turn?

Some are now drawing parallels between Nepal and the deteriorating situation in Sri Lanka. Misgovernance and economic mismanagement are prevalent in Nepal, much open to the public eye. There is a dearth of policy making based on authenticity and valid judgments. Policy making and policy review based on research and study is no longer practiced nationwide, not by any Universities, or the government itself.

Economists actively promote the use of alternative sources such as Electrical Vehicles, solar energy and so on to be essential in solving this crisis and they could not be more right. As the world advances forward with greener technology, so must Nepal. The soaring price of petrol has led Nepal to spend a massive amount of foreign currency on petroleum products. People seek relief from the government- to lower the taxes on fuel or to provide its citizens with some alternatives, particularly hydro-energy. While in the short run, prompt changes in government policies regarding the national budget deficit might solve the problem, in the long run less consumption of fossil fuel and getting more inclined towards the use of alternative sources might reduce the gravity of the problem.



Credit : U.S. Department of Veterans affairs

A World's First: Genetically Modified Pig-heart Prolongs the Life of Arrhythmia Patient

An extraordinary step in the field of medical treatment was made as a team of surgeons from the University of Maryland School of Medicine (UMSOM) successfully transplanted a genetically modified pig heart into a 57-year-old male from Baltimore, Maryland.

When David Bennett's medical records were reviewed, he had been deemed ineligible for both a conventional human heart transplant and an artificial heart pump. So, this transplant was the only hope for Mr. Bennett, even though the longevity of the surgery was not clear. This decision taken by doctors for the arrhythmia (irregular heart beat) patient stemmed from his utterly poor health condition.

UMSOM stated that it was the first time that a genetically modified ani-

mal heart when transplanted was not immediately rejected by a human body. Therefore, while the surgery saved Mr. Bennett's life, doctors will be required to monitor him in future days for possible complications. The transplantation was authorized by both the US Medical Regulator and the US Food and Drug Administration based on the fact that it was a "do or die" transplant for Mr. Bennett.

The transplanted heart consisted of 10 genetic modifications. Three involved removing genes that would lead to rejection of the pig heart by the human body, one was the removal of a gene to avoid excessive growth of pig heart tissue and six modifications were made for the heart to be accepted by the immunity of the human body.

The success of this particular event generates hope for those who are

on the waiting list for organ transplantation. According to the Health Resources and Services Administration, there are a total of 106,626 people on the waiting list for organ receiving and 17 people lose their lives each day waiting for their turn. The addition to the waiting list versus the transplantation performed ratio is also not uplifting. Dr. Bartley P. Griffith, the director of Cardiac and Lung Transplant Programs and an established professor at UMSOM who was a surgeon in the transplant group, expressed optimism for such patients in the future. As a first-time event, this transplantation is bound to raise questions about ethical consideration. In the past, the process of xenotransplantation has been used for minimal recoveries, such as the use of pig heart valves only. However, some in the medical community question the use

of an entire heart. Ethical stances disagreeing to this process, being a normal option, revolve around the death of the donor and their use as a tool.

Unfortunately, Bennett's condition started deteriorating during the first week of March. The doctors were left devastated in the wake of his demise on the March 8, 2022. Dr. Griffith quoted Bennett to be a "brave and noble patient who fought all the way to the end."

Nonetheless, this event creates hope for many and steps have to be taken carefully to develop this process as a feasible option for the betterment of human medicine.

Ezal Sujakhu
ezsujakhu@gmail.com

As the World Advances, Can We Expect a Revolutionized Birth Control?

Worldwide, pills and tubal ligation are the commonly practiced contraceptive methods for the female human body. But research portrays that, the use of these contraceptives has resulted in extensive side effects and dangerous impacts on the female body. So, experts believe that an improving step is to transform birth control and overshadow its harsh side effects.

Bhawana Shrestha is a microbiologist at the University of North Carolina. As an expert in antibody design, she had started an initiative to develop antibody-based on non-hormonal contraceptives for birth control. Her focus has been on engineering sperm-killing antibodies, to destroy the sperm before being fertilized and then prevent preg-

nancy. This antibody has been showing a positive result. It has been tested in the animal model, achieving 99.9% effectiveness in prevention. As this initiative progresses to develop this antibody into a feasible contraceptive, researchers have established their own company called "Mucommune". According to UNC news, the company will proceed on manufacturing the antibody with safety precautions for human clinical trials predicted to begin from 2023.

Shrestha's initiative in collaboration with Mucommune has picked up a progressive path to revolutionize birth control. Society can expect a safe birth control method for females' reproductive health and safety. Likewise, scientists are also optimistic about the effectiveness this antibody will show as

a human contraceptive in the future. Another unique dimension can also be highlighted. Attainment of positive results from this initiative can outshine female-driven research in a currently male-oriented research field - which has been continuing for decades. Overall,

this can signify female dominance in the field of research and an improved version of birth control.

GCT Correspondent



NEXT FIRST STEP

Theme Section

How would Gautama the Buddha react seeing the present situation of war between Russia and Ukraine?

Dear humans,

The world has seen much of wars
Of hatred, betrayal and agony
Of lives lost or rather burnt
by his own fellow sapiens

Of beautiful cities vibrant with
centuries of decent souls
vanishing to a deserted place
in a moment, just like that
by a petty inhumane button

What do you desire at all?
What future have you conceived of?
What legacy you wanna hand over to your
offsprings?

Lemme tell you,
the enemy you wanna combat
Is not out but inside.
The greatest war if you wanna fight
Is with yourself, your anger the ultimate foe.

War is never the solution
The next first step should be of peace,
Of brotherhood and awakening.



Prajjwal Dhungana
prajjwaldhungana123@gmail.com

"I no longer call myself a feminist." -Cassie Jaye

The documentary is about Cassie Jaye, a 27 years old, award-winning documentary filmmaker who liked calling herself a feminist. The director was looking into rape culture when she stumbled across a website for men's rights activists- A Voice For Men, and the video follows her journey into the gender issue from there. She was determined to expose the dark underbelly of the men's rights movement for which Jaye spent a year interviewing men's rights advocates and feminists. The documentary directed by Cassie Jaye herself and produced by Evan Davies, Cassie Jaye, Nena Jaye, and Anna Lauergue was released on October 7, 2016, in the United States and it also became one of the most controversial films which gathered a lot of critics as well. The title 'Red Pill' is a cultural slogan that comes from the movie 'The Matrix' where the character Neo is given the choice between 'the red pill' and 'the blue pill'. If the character swallows the red pill, the scale will be piled back from his eyes, he sees everything that he hasn't been able to see, and if he takes the blue pill, he goes back to sleep where he is unaware of the life and probably will be a lot happier.

According to Men's Rights Activists (MRAs), one of the major coverages of the movie, the blue pill is what most people are having. They are happy in accepting one's gender issue is bigger than the other, completely trying to bring out only the negative of the other one. Like several people, Cassie Jaye also presumes that MRAs must be a hate movement made up of males who resent the progress achieved by women and desire to reverse that development. When she explores what motivates men's rights activists, she discovers that the movement is very different from what she had anticipated. It goes on to question her previous beliefs about gender power and privilege. She goes into great detail about the numerous reasonable concerns that many men have on issues ranging from military conscription to false rape accusations, paternity fraud, job deaths, combat deaths, suicide, child custody, males falling behind in school, newborn mutilation, and many other human rights concerns which impact men as much as they

do women. In some cases, it includes open hatred that feminist activists have shown in response and society



as a whole.

At 117 minutes, The Red Pill features a diverse range of voices that contribute to the debate over whether MRA and men's rights issues are bad or just poorly reported, including key figures in the movement like Paul Elam (founder of A Voice for Men), fierce critics like Katherine Spiller (editor of Ms. Magazine), and various protestors and YouTube activists.

This film is significant because it is the first time problems affecting men and boys and the activists striving to solve them have been depicted on the big screen. It is a unique documentary with refreshing con-

tent because most mainstream media coverage of the men's rights movement tends to cite the most extreme things stated by the most extreme members in the movement out of context and portray them as typical of the whole movement. While Jaye recognizes that sexist rhetoric is voiced by men's rights activists, she claims that anonymous users are more commonly expressed in internet forums than by the persons she interviewed for her documentary. Making the film undoubtedly required a great lot of bravery as well as empathy.

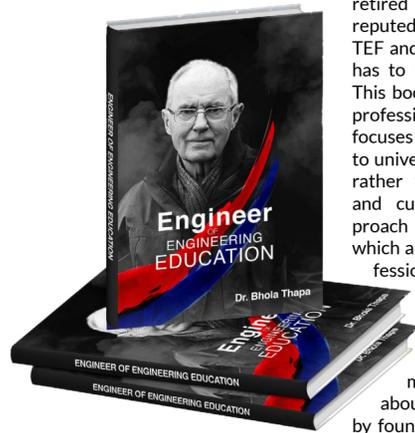
One of the most fascinating aspects of this film is watching director Cassie Jaye's battle with having her feminist ideas questioned through her video diaries, which appear intermittently throughout the film. She was having a hard time coping with all of the data being thrown at her that contradicted her beliefs. This, more than the tragic anecdotes and reality-shattering facts from the men's rights advocates, is what makes this documentary so riveting at the end of the day.

Cassie doesn't just interview Men's Rights Activists, she also conducts interviews with feminists to obtain their perspectives. While interviewing all sides, she does not exhibit any bias. The filmmaker ensures that both sides of the narrative are shown, allowing the viewer to make their own decisions. This film exposes a prevalent trend in our society that provides a one-sided story spun by vested interest organizations that impoverishes us all and demonstrates how we may be tricked into believing something that is just partially true or completely false.

Given the beauty of difference in our being, we need to treat others the way we want to be treated, to be understood, to have our intentions known and understood, and to truly be heard and not prejudged before truly getting to know someone. If anybody is ready to have their preconceived ideas challenged, and wants to see the gender issues from a larger spectrum, this movie is a must-watch.

Bishakha Koirala

Review of Engineer of Engineering Education



retired from academia. Support from reputed institutions like NTNU, SINTEF and the Royal Norwegian embassy has to be credited to Prof. Johansen. This book, being written by a technical professional such as Dr. Bhola Thapa, focuses more on the building a timeline to university and engineering programs rather than conventional storytelling and cumbersome autobiography approach taken while writing biography which aren't appealing to technical professionals. Story of Prof. Johansen is built alongside the timeline of the University. Also the inclusion of documents and correspondences, formal and informal gives readers a detailed view about direction of university as seen by founders and the management. The book can also be framed as "Proposal Writing 101: Professional Proposal Writing" as proposals and proceeding are given priority. This book also addresses common frustrations of University curriculum as expressed by students, painting a clear picture that some courses that may seem to be irrelevant to students at undergraduate levels are the ones which would be most required in pursuit of higher education levels and professional career. The use of administrative language in books may present a main challenge for readability by a not-so-technical audience. Also, inclusion of presentation slides can be omitted to enhance easiness while reading.

Thus to conclude, it can be said without doubt the book "Engineer of Engineering Education" creates a new wave in biography writing like the team of Prof. Johansen, assisting Prof. Sharma created a big wave in the education sector in Nepal. Overlooking the fact that administrative language may make it challenging to read, the book is highly recommended for anyone who wants to learn the story behind the people and institution, Kathmandu University. The book can act as a reminder and a guide for current stakeholders as for leading engineering forward according to the founding mission, also by the general crowd to gain perspective on the education sector in Nepal.

Raghav Sharma
rs02420718@student.ku.edu.np

To All the Mothers

When we're at our lowest
and when nothing feels right,
There is our mother, symbolizing hope

With a smile of love,
Praying for a light to spark on us,
Guiding us through the toughest of
clocks.

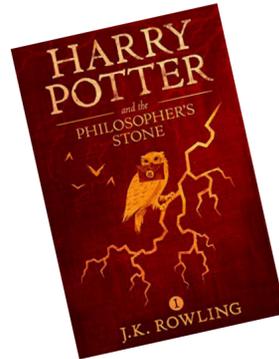
Let's all wear a smile like hers,
And go on a run,
To come back again,
and decorate a beautiful world for her
own.

Just the name is enough,
But still,
For knowing exactly what we need,
For feeling everything we feel,
For being a home to us.



Aayam Adhikari
thisisleo7@gmail.com

Harry Potter and the Philosopher's Stone



The Harry Potter series, consisting of seven books by J.K. Rowling is one of the most loved and read book series of the last two decades, which made roughly \$7.7 billion (£6.1 billion) all over the globe. This is a supernatural book that revolves around the notion of magic.

This book starts with the story of Lily Potter and her husband, James Potter who Voldemort murdered, but when Voldemort attempted to kill their son Harry, his power somehow broke due to the cloaking spell cast by Lily. Harry then became the only living person ever to survive the killing curse, and the only sign of his encounter with Voldemort is a unique lightning bolt-shaped scar on his forehead.

As Harry begins to explore the magical world during his schooling at the Hog-

warts School of Witchcraft and Wizardry, he meets rest of the main characters and gains his two closest friends, Ron Weasley, a fun-loving member of an ancient, large, happy, but poor wizarding family and Hermione Granger, a gifted, bright, and hardworking witch of non-magical parentage known as muggles. Harry also encounters the school's potions master Severus Snape, who displays a conspicuously deep and abiding dislike for him, the rich brat Draco Malfoy whom he quickly makes enemies with, the headmaster Albus Dumbledore, the half-giant Hagrid, and the Defense Against the Dark Arts teacher, Quirinus Quirrell, who later turns out to be allied with Lord Voldemort.

The first book concludes with Harry's second confrontation with Lord Voldemort, who, in his quest to regain a body, yearns to gain the power of the Philosopher's Stone- a substance that bestows everlasting life and turns any metal into pure gold. The book is then followed by six other books which follow Harry's journey in the magical world, his encounters with dark magic, and his love story.

Ojaswee Bhandari
bhandariojaswee@gmail.com



ART BY Apekshya Shrestha
apekshyashrestha12@gmail.com



Indigenous Knowledge of Sustainability: Medicine to Climate Change

Agriculture In Nepal

Agriculture in Nepal has long been based on subsistence farming, particularly in the hilly regions where peasants derive their living from fragmented plots of land cultivated in difficult conditions. According to the officials of the Ministry of Agricultural Development (MoAD), the area of cultivated land has significantly decreased in the past three decades due to urbanization. Rampant urbanization and housing in the land that was formerly used for cultivation are the major causes for the decrease in the area of land used for cultivation. Despite the increase in market demand, the farmers are not able to secure enough profit. The relation between the farmers and the consumers lacks proper channels of business. Furthermore, the agricultural system lacks facilities for better production like- water resources, pesticides, seeds and so on. These difficulties in pursuing agriculture make it easier for them to import than produce. So, once an exporter of rice, Nepal now has a food deficit.

Climate Change

Climate change has played a very influential role in Nepal's current agricultural situation. There has been a change in precipitation in recent years. The country is receiving more rainfall in a short duration of time—an abnormal phenomenon that is slowly becoming a new normal. The gap between dry and rainy days has gone up, which clearly projects the signs of climate change impacts in the country, which will cause the weather to get warmer and wetter in the future. Recorded snowfall in late February of the past two years also serves as an inkling of the climate shifting. Such unpredictability causes uncertainty in farming and development planning and increases the cost. This also causes confusion among the farmers about what kind of crops to cultivate.

Disaster Capitalism

It is widely accepted that the growing trend of climate change mitigation efforts via the carbon market is a form of disaster capitalism; in which neoliberals take advantage of the crisis stemming from their own contribution as a means of capital accumulation. This cartel of certain invisible hands in the market maintaining the demand-supply chain stands as a strong example of disaster capitalism. The price rise of Onions from Rs. 120 per kg to almost Rs. 500 within 3 weeks, supply boycott of chicken-meat and eggs are our day-to-day reality. Though this trend favors some vendors and retailers, its parallel influence on other products will ultimately affect the average inflation rate of people's economy. According to the Central Bank's annual macro-economic data for the year of 2019/20, the inflation rate was 6.82% in mid-January 2020 compared to 4.58% of the same period last year. Food and Beverage prices alone have gone up by almost 8% in the past year. Inflation throughout the world is running at a decade high, and the last stretch of high global food prices- a decade ago, triggered protests and political unrest in numerous regions worldwide, enormously after the Russia-Ukraine war. The miserable side of this hike is that it is a new normal for the Nepalese market.

Indigenous Technologies

People in different parts of the country are practicing varieties of simple local technologies that have been developed from their long term traditional knowledge and experiences. The concept 'indigenous' denotes that they are locally generated within an existing cultural and social tradition using local tools and knowledge. In mid-hill western Nepal, there are some farmers who follow their ancestors' cultivation methods. One example of how indigenous technologies are initiated is the launch of Community Seed Bank at Ghanapokhara, Lamjung.

Each year people collect and deposit samples of harvested seed from various fields. The farmers then exchange their seeds and cultivate their field the following year with those seeds. The crops are properly rotated this way, which balances the soil's nutrition and wellness. This community exchanges local knowledge with people from Mustang and promotes the seeds that perform better in the natural environment. The bank's seed protection also renders market scarcity and catastrophe capitalism separate to the farmer population. Seed bank policies compel group farmers to maintain native seeds and adapt ancient methods, leading to higher yields.

Some of the ways and techniques that are widely practiced in Nepalese communities are:

- Companion Planting, in which planting of two or more crops, especially vegetables, is done in a single field to keep the soil nutrient-rich, resistant to germs-plasm and insects and maintain proper environment. Example: Corn, Beans and Squash, the three sisters are planted together. Between them: Corn supports the beans; Beans fix nitrogen in the soil and Squash provides shade to keep the soil cool, kill weeds and maintain soil moisture.
- Crop Rotation, which causes previously planted crops to leave behind nutrients and other crops take advantage of it later. Pest and diseases living in the soil will die off without a proper host crop present. Legumes (Rajma, Geda gudi) fix nitrogen in the soil. Therefore, crops such as leafy greens, Broccoli and Squash are best planted where Beans or Peas were cultivated the year before.
- Strip Intercropping System, in which two different crops are cultivated side by side with sufficient width. This reduces the need for fertilizers, reduces soil erosion, reduces the risk of surface water contamination, and diversifies the vegetative struc-

ture and increases the yield of crops. The Border Cropping System, also called the Buffer Vegetation System is where trees / shrubs are planted on the perimeter of the field. This offers wind safety and filters out the impure wind vapor. Love-lies bleeding Flower and Prince of Wales Flower are famous examples of border crops in Nepal.

- Different techniques used in rice planting like- raising seedlings, sowing, transplanting and inter-cultural operations have their respective advantages. Row planting contributes to the increase in tillers (branches) for higher yield. Spreading ash helps control the growth of weeds, recharge minerals and melt snow. Mulching, where a layer of hay or other leaves is spread over the soil, helps to retain water, insulate soil and prevent soil compaction.
- Most of the Nepalese farming is rain-fed irrigation based on the lunar calendar.

For many people in Nepal, farming as an occupation is still one of the main sources of income. But, in the crowd of yield maximization and market penetration, indigenous methods and techniques are being forgotten. Reduction of arable land, reduction of fertility, unpredictable rainfall, and drainage of labor force drives a big hole between increasing demand and agricultural sustainability. All the time, study objectives were looked at on the foreign breeds, and genetics of specific traits in the local germ-plasm were not studied. There is very limited use of local knowledge and germ-plasm in research and development. Proper identification of local breeds and its genetic behavior against germ-plasm should be integrated. Establishing a Community Seed Bank, promoting local breeds and species not only encourages local farmers but also reflects national pride.

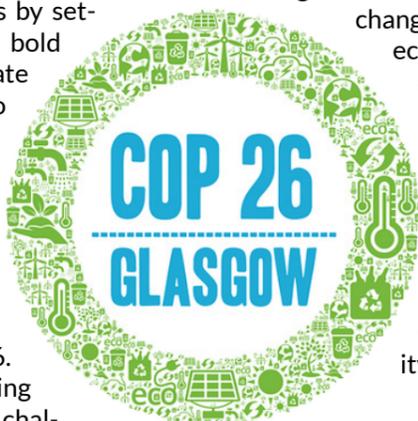
Prabidhi Adhikari
prabidhiadhikari16@gmail.com

COP26: New Assurances & Hopeful Actions to Address Urgency

One of the biggest highlights of 2021 was COP26 - 26th UN Climate Change Conference. The Conference of Parties (COP) is an apex decision-making body that unites representatives from different nations under the United Nations Framework Convention on Climate Change (UNFCCC), an international treaty that supports the world to tackle climate changes caused by human activities. COP26 was conducted from 31st October to November 13, 2021, hosted by the UK in partnership with Italy. The purpose of the conference was to create a fundamental movement, by confederating myriad nations together to fight against climate change by implementing solutions to protect the globe from the hazardous effects of climate change.

As the urgency is alarming, conducting COP26 was extremely important, as the experts consider it an

optimum chance to control climate change. Similarly, COP26 also signifies uniqueness by setting a platform for bold leadership on climate change aiming to discuss equitable solutions for a zero-carbon future. Missing the right chance was not the mindset of those who participated in COP26. After understanding the urgency of the challenges and conferring on different approaches for several days, negotiations proceeded to make important decisions on benefiting several areas. Overall, there were four major approaches discussed to put together in action immediately.



Firstly, COP26 targeted to secure a global net-zero by mid-century. Along with this, an aim to sustain the temperature of 1.5 degrees within the reach was also decided. To proceed this further, countries were supposed to accelerate the phase-out coal, restrain deforestation, rapidly switch to electric vehicles, and promote investments in renewables.

Secondly, COP26 planned for adaptation for protecting communities and natural habitats. COP26 encouraged countries affected by climate change to protect and restore ecosystems. To enable this action, recommendations included building defenses, warning systems, and resilient infrastructure were made. The importance of agriculture was significantly highlighted to avoid the degradation of habitat and the possibility of extinction.

Thirdly, mobilizing finance was deliberated, since budget planning plays a really significant role. Countries agreed to set a larger finance goal for implementation after 2025. Developed countries agreed on attaining a significant milestone in mobilizing double funding, which amounts to at least \$40 billion in climate finance.

Likewise, the Least Developed Countries Fund received a fund of \$431 million for supporting climate finance. COP26 made good quality finance options feasible for developing countries. Furthermore, countries were motivated to make a clear plan to develop guidance on collective assessment for tracking progress under the Global Goal on Adaptation (GGA), which is an important component to reduce the vulnerability of climate change.

Finally, working together to make an impact amidst the burgeoning challenges of the climate crisis was a promise made. Through COP26, governments, businesses, and civil society strengthen collaboration to accelerate actions to tackle the climate crisis.

Overall COP26 summit provided a strong platform and foundation for progress improvements in climate change. There was a two-way expectation set. COP26 expects countries to accelerate their efforts to mitigate climate change adversities. In return, the countries expect sustainability and effectiveness from COP26. Will both expectations be met if the commitment turns into action?

Rhitika Shrestha
rhitikashrestha18@gmail.com

TECH

—Himalaya—

Our Services:

- Web and Mobile Development
- Custom Enterprise Softwares
- Bulk SMS
- Web Hosting, Domain Registration and Cloud Servers
- Digital Marketing

Contact:

Tech Himalaya
Bharatpur-5, Chitwan
9865383233

info@techhimalaya.com
<https://techhimalaya.com>

sales@techhimalaya.com
<https://himalaya.cloud>

GCT AND ACKUAIN

Green Club of Thoughts- GCT, founded in 2007, is the first inter-departmental club that has a blend of all the schools of Kathmandu University (KU). Intending to improve educational, cultural, physical, mental, and literary abilities, GCT has been working rigorously to reach its goals to connect and inspire KU students. GCT has a vision to expose the matters of technical, social, national and International issues to students of Kathmandu University, making them engaged in activities (outreach, debates, interactions, seminars etc.), simultaneously enhancing professional and technical skills coupled to their field of interest. This diversity of GCT has presented itself to be a home for boundless opportunities and experiences to many. GCT has set out a mission to bring together all the students from Kathmandu University's seven schools (Engineering, Science, Medical Sciences, Arts, Law, Education, and Management) and engage them in a series of activities to fulfill the club's mission and objectives, exposing them to a wide range of topics ranging from technical and social issues to national matters of subject. With the same mission and vision, to effectuate one of the objectives of the club, it publishes a quad-monthly semi-scholarly trans-disciplinary journal 'acKUaint'.

'acKUaint' is a quad-monthly journal that comprises semi-scholarly, inter-disciplinary and as well as trans-disciplinary articles collected from all seven schools of Kathmandu University. This newsletter has become a prime platform for undergraduates to exhibit their writings and artworks. With collective news from KU schools, entire Nepal, and all over the globe, it

consists of disciplinary and interdisciplinary articles, literature and art, and so on. This newsletter also serves as a platform for individuals who have a spark for writing for there is also plenty of room for creative pieces of writing and art. Through this newspaper, the club aims to bring together the students from all of Kathmandu University and provide them a forum for fair news coverage, ranging from events of KU to national, socio-political, and international news.

Our Team

Editor-In-Chief

Samrin Basnet

Design Director

Jamyang Gelek (Jackie)

Co-Editor-In-Chief

Maharsha Rawal

Technical Incharge

Ashish Thapa

Copy editor

Deepali Shrestha
Ezal Sujakhu
Nirveek Khatiwada
Rhitika Shrestha
Supriya Yashaswinee Adhikary
Surangana Dhakal
Sushmita Humagain

Designer

Chandan Kumar Mahato
Gaurav Khadka
Prasiddha Raut

Production Manager

Dristi Thapa



Are you Interested in writing ?
Would you like to connect with people?
Would you like to inspire individuals with your skills?

Be a part of GCT.
Drop your queries and creations at
ackuaint@gctatku.org.np