



Royal University of Bhutan

Royal University of Bhutan

Annual Report

2023-2024

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1. Highlights

1.1. Convocation

The Convocation for graduates of 2019, 2020, 2021, 2022 and 2023 was held in the months of May and June 2024 in all the Colleges of RUB. The Convocation, which used to be an annual joint event for all the Colleges in one location, could not be held for the past four batches owing to the pandemic and other restrictions. A total of 3,999 graduates attended the ceremony in their respective Colleges.

The Convocation for the College of Language and Culture Studies (CLCS), Taktse was graced by His Eminence Gyalsay Trulku. His Eminence Legtsho Lupon and His Eminence Tshog-ki Lupon graced the occasions for the Paro College of Education (PCE) and Samtse College of Education as Guests of Honour.

The Cabinet Ministers graced the occasion of the convocations for the rest of the Colleges as follows: Hon'ble Minister for Infrastructure and Transport at Jigme Namgyel Engineering College (JNEC), Dewathang; Hon'ble Minister for Industry, Commerce and Employment at Gyalpozhing College of Information Technology (GCIT) at Kabjesa, and Gedu College of Business Studies (GCBS); Hon'ble Minister for Energy and Natural Resources at College of Science and Technology (CST), Rinchending, and Norbuling Rigter College (NRC) at Paro; Hon'ble Minister for Finance at the College of Natural Resources (CNR), Lobesa, and Royal Thimphu College (RTC), Ngagiphu, and; Hon'ble Minister for Education and Skills Development at Sherubtse College (SC), Kanglung.

Table 1. Total number of Graduates attending Convocation

Colleges	Total Number of Graduates Attending Convocation Ceremony
CLCS	354
Sherubtse	350
GCBS	458
CST	535
JNEC	252
SCE	650
PCE	1011
CNR	389
Total	3,999



Jigme Namgyel Engineering College



College of Natural Resources



Sherubtse College



College of Science and Technology



Samtse College of Education



Paro College of Education

Figure 1. Glimpse of Convocation



Gedu College of Business Studies



College of Language and Cultural Studies

Figure 1. Glimpse of Convocation

1.1.1 Honorary President's Medal and Certificates for graduates of Sherubtse College

A personal initiative of Her Majesty Queen Mother Ashi Dorji Wangmo Wangchuck, the Award of Honorary President's Medal & Certificate was instituted in 2000 to recognize and promote academic excellence at Sherubtse College. The first award was made on 5th November, 2000 during the 8th Convocation held at Sherubtse College by the Honorary President, Her Majesty Queen Mother Ashi Dorji Wangmo Wangchuck. A total of 66 graduates from 2019 to 2023 were awarded the Honorary President's Medal & Certificate by Her Excellency Yeezang De Thapa, Minister for the Ministry of Education and Skills Development.

1.2. The 8th Winter University Games

The annual sports event was held at the College of Science and Technology from 12th-17th December 2023. The Opening Ceremony was held on 12th December 2023 presided by Dasho Nidup Dorji, the President of BUSF/Vice Chancellor, Royal University of Bhutan as the Guest of Honour. The Royal University of Bhutan has initiated and introduced BUSF games as a means to enhance sportsmanship ethics, and improve relations amongst the BUSF member colleges/students and to fulfill the vision of BUSF-Education through Sports. As usual the event comprised four disciplines; Football, Volleyball, Basketball, and Archery and there were a total of 443 participants.

1.1.2 Winner and Runners-up of the 8th WUG, 2023

Table 2. Winner and runner-up in different categories

Discipline	Men Category		Women Category	
	Winner	Runner-up	Winner	Runner-up
Football	SC	PCE	PCE	GCBS
Basketball	GCBS	CNR	PCE	GCBS
Volleyball	PCE	JNEC	CLCS	PCE
Archery	CLCS	PCE		



Figure 2. In the opening match, Men's Football match between - CST (Host Team) and PCE (Defending Champion of 2022) was played



Figure 3. Glimpse of Archery Final (Men)



Figure 4. Glimpse of Volleyball Final (Women)



Figure 5. Glimpse of Basketball Final (Women)

1.3. President, CLCS conferred with Prestigious Bharat Samman

Lungtaen Gyatsho, President, College of Language and Cultural Studies, was conferred the Prestigious Bharat Mitra Samman - Indology Award 2023. The award is a recognition of Lopen Lungtaen Gyatsho outstanding contribution in the field of Indian philosophy and language studies. Hon'ble Lyonchhen DASHO Tshering Tobgay, Prime Minister of Bhutan, graced the occasion as the Chief Guest. A special ceremony was held at India House on 10th May 2024 to confer the award.

1.4. 13th FYP of the University

1.4.1. This fiscal year the University along with the line ministries and other agencies took part in the formulation of the 13th FYP led by the Office of the Cabinet Affairs and Strategic Coordination, Cabinet. The University was grouped under the Social Cluster along with the Ministry of Education and Skills Development and Ministry of Health.

1.4.2. Within the University, all the constituent colleges developed their individual plan, priority areas and budget requirements. Some of the key focus areas of the University in the 13th FYP will be in human resource development, infrastructure development, development of digital infrastructure for blended learning, internationalization of University campuses and revenue generation activities. As of May, 2024 the Cabinet has formally conveyed the 13th FYP budget outlay for the University. Following table shows the Plan output, projects and budget outlay:

Table 3. Plan output, projects & Budget outlay

	Projects	Activities	Approved Budget Outlay (Nu.in million)
Output 1: Education system has adequate, competent, motivated/passionate professionals			508.29
Project 1	<i>Transform Higher Education Teaching Profession</i>	Long term studies for academic staff	243.59
		Recruitment of international experts	264.71

Output 2: More educational institutions have a safe and enabling environment, with inclusive and equitable infrastructure and facilities maximizing use of technology			1,983.92
Project 2	Quality & Fit-for-Purpose Infrastructure	New Infrastructure	1057.369
		Major Renovation	594.81
Project 3	Maximize digital technology for teaching and learning	Digital Technology for Teaching -learning and services	331.74
Output 3: Relevant and Dynamic Curriculum & Assessment Implemented			102.85
Project 4	Future -ready tertiary Graduates	Include elective from reputed university with credit transfer	11.00
		Enrollment of student in modules learning platforms	47.15
		International accreditation.	44.70
Output 4: Adequate funding and innovative mechanisms for resource mobilization instituted and sustained			
Project 5	Innovative revenue generation	Develop university income generation plan and strategies	
		University Branding and marketing	
Output 5: All Bhutanese have increased opportunities for lifelong learning and skills development			
Project 6	Alternate modes of learning	Develop short programmes, part time/distance and postgraduate programmes	
Output 6: More research outputs generated by Higher Education Institutions contributing to policy and innovation			32.84
Project 7	Research and development	Enhance of research centers, research capacity and linkages with industry	32.84
	Total		2,627.90

2. Student Population

2.1. Total Students

As of August 2023, Royal University of Bhutan (RUB) has a total of 7517 students. Gedu College of Business Studies (GCBS) with 1358 has the highest number of students and Gyalposhing College of Information Technology (GCIT) with 396 has the lowest number of students. The College wise details are as provided in the table below:

Table 4. Total number of students in college

College	Male		Female		Total
	Number	%	Number	%	
CLCS	164	38	262	62	426
CNR	271	40	413	60	684
CST	737	68	340	32	1077
GCBS	723	53	635	47	1358
GCIT	266	67	130	33	396
JNEC	485	68	232	32	717

PCE	587	45	711	55	1298
SCE	176	42	244	58	420
Sherubtse	581	51	560	49	1141
Total	3990	53	3527	47	7517

2.2. Student Intake

In 2023, the University admitted 1998 students. As compared to the academic year 2022 there is a decrease of 393 students. A further comparison between government and self-financed students shows that intake in self-financed students has decreased by 87 students and 306 under Government scholarship. The tables below provide details of intake for each college in the last two years.

Table 5. Student intake comparison 2021, 2022 & 2023

College	Government Scholarship Intake			Self-finance Intake		
	2021	2022	2023	2021	2022	2023
CLCS	157	157	-	7	7	-
CNR	142	152	163	50	50	40
CST	235	235	297	52	22	64
GCBS	303	314	307	141	141	130
GCIT	97	98	105	3	3	0
JNEC	214	214	296	3	3	11
PCE	319	318	360	30	30	5
SCE	165	165	-	25	25	-
SC	389	401	220	56	56	0
	2021	2054	1748	367	337	250

3. New Programmes Launched

Ensuring quality and relevant graduates is the primary focus of the University. To this end, the University, having put through the rigorous internal quality assurance process including in depth discussion with relevant agencies and studying the future development prospects of the country has launched a few new programmes. The following table provides the list of programmes launched in the academic year:

Table 6. New Programmes Launched

College	Programmes Launched
CST	1. BE in Software Engineering 2. BE in Mechanical Engineering
SCE	1. BE in Secondary IT 2. BE in English and Geography

4. Research

Alongside teaching and learning, research is one of the core areas of the University. Since its inception, the University focused on developing and promoting research culture by building capacity and creating enabling conditions for academics to conduct research. Increasingly the University is contributing to topical national issues such as climate change, agriculture, education, entrepreneurship etc.

4.1. Research & Scholarly Works

Following were some of the scholarly works the Colleges have disseminated to the relevant agencies and made available in public forums:

- 4.1.1. CNR developed the Food Composition Database of Bhutan as part of a 3 years project on establishing the Asian Food Composition Database with funding support from Asian Food and Agriculture Cooperation Initiative [AFACI]. The project aims to preserve the food culture and biodiversity in the Asian region by securing nutritional information on major agricultural products. Bhutanese Food Composition Database provides the most comprehensive quality nutritional data of 112 Bhutanese food items classified under 15 food groups. The first edition of the database provides nutritional values for 12 parameters i.e. Proximate-6, Minerals – 4 and Vitamin – 1. The data on food composition has been compiled from the results of an analysis carried out in the Nutrient laboratory at CNR.
- 4.1.2. PCE disseminated a study titled 'incompatible with Happiness: Results from Second Survey of Bullying and Discrimination Experiences of Bhutanese Higher Education Students'. The findings of the study were covered by BBS and also presented to a wider audience at a national conference at Samtse College of Education. As a recommendation, the study suggests increasing attention, and review of policies, guidelines and practices with regard to bullying and discrimination.
- 4.1.3. PCE published the second edition of 'The Boneless Tongue'. This is a compendium of 900 timeless and beautiful poetic verses in Dzongkha translated into English. This has added to the cultural richness of the Dzongkha language.
- 4.1.4. CST in collaboration with the Department of Culture and Dzongkha Development developed the first Dzongkha Text-To-Speech using information technology. This project is aimed at preserving the linguistic and cultural value of the national language.
- 4.1.5. The IT Department of CST, in collaboration with the Agriculture Machinery & Technology Centre (AMTC), Department of Agriculture recently held a 3-days training program for its 3rd-year and 2nd-year students. This first-of-its-kind initiative, was aimed to equip students with the skills and confidence to leverage Artificial Intelligence (AI) and Internet of Things (IoT) technologies for practical problem-solving. Smart Animal Intrusion Detection System using AIoT was awarded the best student research work. Additionally Smart Greenhouse & Irrigation Automation System was also recognized as a useful system for modern agricultural practices.
- 4.1.6. A group of SCE faculty carried out a study on group assignments amongst RUB colleges and challenges faced. The study came up with a design of group assignments for a mixed group of students, focusing especially on the structure that will help minimize free riders in group work. The article titled Group Work Assessment Framework (GAF) was published by SCE as a special issue of the College journal. The GAF framework was well received by the higher education institutions and helped in making informed policy decisions and teaching, learning and assessment in the colleges of RUB and private colleges. Via this project, SCE

offered training on GAF to the faculty members of Royal Thimphu College (RTC) and incorporated GAF in most of their modules. Additionally, they offered a ToT workshop to faculty members at RUB Colleges.

- 4.1.7.CL4STEM Bhutan End line Report:** Strengthening Secondary School Teacher Capacities for Higher Order Thinking with Inclusion and Equity project enabled SCE STEM faculty to carry out a study on Status of STEM Education in Bhutan's Secondary Schools and publish books and articles. The project enhanced Pedagogical Content Knowledge of the SCE STEM Faculty especially Universal Design Learning (UDL), Design Thinking (DT) and Reflective Technology and additionally, it assisted building network with project partners such as India, Nigeria and Tanzania and learn the practices of STEM education in their countries and adapt good practices in Bhutan's STEM education. It remained bases for pedagogical Content Knowledge of the Bhutanese secondary school STEM teachers and the capacity of Bhutanese secondary STEM school teachers was also enhanced by immersing them in science and mathematics modules developed and curated by STEM faculty at SCE.

Table 7. Peer Reviewed Articles published

College	Peer -reviewed Publication
CNR	Forestry in the Face of Global Change: Results of a Global Survey of Professionals
	Soil C Sequestration in Himalayan Landscape: Impacts of Vegetation and Edaphic Interactions Under Changing Climate
	Effect of Mixed Grass-Maize Silages on Milk Yield and Composition in Jersey Crossbred Cows
	Assessment of Fertility and Hatchability of Bhutanese Native Chicken Using Natural Service and Artificial Insemination
	Efficacy of <i>Derris acuminata</i> Benth for Tick Control in Dairy Cattle
	Effect of Wet Feeding in Broiler on Growth Performance under
	Freshwater Metacommunity Structure of Suchhu River, Haa District, Bhutan
	Diversity of Pollinator Species and Effect of Pollination on Strawberry Yield and Quality
	Resources time footprint for assessment of human influence on ecosystem service from a sustainability standpoint
	Insights into the relationship between hydraulic safety, hydraulic efficiency and tree structural complexity from terrestrial laser scanning and fractal analysis
	University Students' Perspective on ChatGPT and Technology Literacies
	Conservation Status of the Last Himalayan Cattle Breed of Bhutan
	Exploration of determinants underlying regional disparity in rooftop photovoltaic adoption: A case study in Nagoya, Japan
	Livestock Depredation and Its Impact on Farmers in Trongsa District, Bhutan
	Extraction of Heat-Stabilised Defatted Rice Bran Protein by Solid-State Fermentation Using Heterofermentative Microbes from Traditional Asian Starters
	Colic incidence, risk factors, and therapeutic management in a working horse population in Tuban, Indonesia
	Ethno-medicinal uses and cultural importance of stingless bees and their hive products in several ethnic communities of Bhutan
	First record of <i>Macrogathus aral</i> (Bloch & Schneider, 1801) from the Himalayan Kingdom of Bhutan
	Influence of <i>Mauritia flexuosa</i> L. on Broiler Carcass Mass and Digestive Organs Temperature-Exposed Body Mass
	Influence of microbiota inoculum as a substitute for antibiotic growth promoter during the initial laying phase on productivity performance, egg quality, and the morphology of reproductive organs in laying hens
	Incidence, risk factors, and therapeutic management of equine colic in Lamongan,

	Indonesia
	Comparative Study on Wildlife Impact in Electric Fenced and Unfenced Communities in Dungmin Geog, Pemagatshel, Bhutan
CLCS	འབྲུག་གི་ཡུལ་ཚུགས་ཀྱི་རྩ་གསོལ་དང་ལམ་སྟེན།
	ལྷ་ཆུལ་ཚུལ་རིག།
	Smart Checkpoint Management System for Automatic Number Plate Recognition in Bhutan Vehicles Using OCR Technique
	ཁྱ་བོད་གཉིས་ནང་བར་དོའི་དགོངས་དོན་གྱི་འབྲུང་ཁུངས་དང་འཕེལ་རིམ།
	འབྲུག་ཏུ་ལྷན་ལྷན་དག་འཆད་ཉན་ཇི་ལྟར་དར་ཚུལ།
	སྤྲད་ཚེས་གཞི་སྒྲར་ཐངས།
	ཆུགས་ས་ཁར་གཡུས་གོ་ནང་གསོལ་སྟེང་ཡོད་པའི་རྩ་བུ་ལིང་གི་རྒྱབ་ཁུངས།
	འབྲུག་གི་བཟོ་རིག་བསྐྱ་གསུམ་གྱི་རྒྱུ་གངས་ལྷ་དཔྱད་པའི་གཏམ།
PCE	Incompatible with Happiness: Results from Second Survey of Bullying and Discrimination Experiences of Bhutanese Higher Education Students
	Analyzing Test Data: A Mathematics Test Case Study
	Exploring Bhutanese primary school teachers' technological knowledge
	Happy Students in Bhutan The Land of Gross National Happiness and Paradoxes (BOOK CHAPTER)
	Boneless Tongue
	Happiness and Wellbeing Centre at Royal University of Bhutan: A Unique Approach
	Finding my voice
	Listening with eyes
	Chunku: The little princess
	A tale of down syndrome
	Wheels of wings
	Heritage Education and Professional Center - Research on Bhutanese Songs
	Why did Fridays for Future not spread to Bhutan and other parts of the Global South? A spiritual, ecological and middle path between global and local climate crisis education
GCBS	An Appraisal of Recent Developments in Non-Performing Loans Affecting the Profitability of Commercial of Bank in Bhutan: A Case Bhutan National Bank Limited
	Awareness and Attitude towards Crypto currency Adoption among Business Students in Bhutan
	Entrepreneurial environment in Bhutan
	An Investigation into the Determinants of Investment Knowledge among Younger Generation with Reference to Undergraduate Students of Bhutan
	An analysis of relationships among GNH in corporation, psychological capital and employee performance
	Informal workplace learning and employability: The mediating role of competency development among financial sector employees in Bhutan
	Unraveling the Nexus: Exploring informal workplace learning, competency development, and employability through a mixed method approach
	Assessing the Effects of Reading and Preparation Habits on Oral Presentation Skills
	Assessing the quality level of Entrepreneurship Trainings in Higher Education in Bhutan
JNEC	Optimizing winter climate control in high-altitude smart greenhouse through renewable energy integration
	Forensic Analysis of I2P Communication Network in Android and macOS Environments
	IMEI-based Mobile Device Tracking and Stolen Phone Identification System
	Development of a novel solar dryer with an incorporated heat exchanger
	Big data analytics in the procurement process: organizational alignment and the

	behavior of procurement professionals in bhutanese procuring agencies
	Adaptive Particle Swarm Optimization based improved modeling of Solar Photovoltaic module for parameter determination
	Addressing Water Scarcity in Samdrupjongkhar Thromde, Bhutan: Feasibility Study and Design of a Sustainable Gravity Water Supply System
SCE	Infusion of Gross National Happiness values in teaching Mathematics in higher secondary schools in Bhutan
	Community Based Sustainable Tourism and Its Impact on Socio-Economic Development of Phobjikha Valley
	Community Based Sustainable Tourism and Its Impact on Socio-Economic Development of Phobjikha Valley
	Effects of self-assessment on students' evaluative skills: A convergent mixed methods study at Samtse College of Education
	Scaling Teacher PD in Bhutan
	L4STEM Bhutan Endline Report: Strengthening Secondary School Teacher Capacities for Higher Order Thinking with Inclusion and Equity
	Referencing and Documentation-Handbook for Students
	Brainwaves for Creative Calling
	The Impact of Open Educational Resources Based Professional Development on the Bhutanese Secondary Biology In-service and Pre-Service Teacher
	Educational Innovation and Practice higher education
	Shes-Rig PAGES Volume 10- Autumn 2023
	An Assessment of Climate Change Impact on the Livelihoods of Farmers at Deling Village on Southern Bhutan
	Self-Directed Learning Approach in Teaching Biology to Grade Nine Students
	The Impact of Open Educational Resources Based Professional Development on the Bhutanese Secondary Biology In-service and Pre-Service Teachers
CST	Dzongkha to English translation using the neural machine translation approach
	Highway Project Cost Estimation through Decision Tree Modeling
	Manuscript Rainfall Prediction using Multilayer Perceptron (MLP)
	Bhutanese Currency Recognition using Yolo
	Manuscript Rainfall Prediction using Support Vector Machine (SVM)
	Drinking Water Accessibility Index in Mountainous Rural Area: Case Study on Lamgong Gewog of Paro Dzongkhag in Bhutan
	Utilizing Sentinel-2 Satellite Imagery for LULC and NDVI Change Dynamics for Gelephu, Bhutan
	Optimizing winter climate control in high-altitude smart greenhouse through renewable energy integration
	Blood Pressure Monitoring System Using Machine Learning
	Attendance Management System Using Face Recognition and E-Mail Notification
Sherubtse	Traffic Control System Using AI Camera and Time of Flight Sensor
	Ecotypic adaptation of plants and the role of microbiota in ameliorating the environmental extremes using contemporary approaches
	In-vitro and in-silico evaluation of antimicrobial and antibiofilm secondary metabolites of a novel fungal endophyte, Albophoma sp. BAPR5
	FAIRifying STEM Data Ecosystem to Enhance Data Reuse
	Phytosociological Analysis of Bumdeling Ramsar site, Riverine Wetland of International Importance, Eastern Bhutan
	The Relationship Between PM2.5 Concentration and Meteorological Parameters at Sherubtse College, Eastern Bhutan
	Solid Waste Generation and Management Practices at Sherubtse College
	Students' Sentiment on QR Code and its Implications on Work and Life
	Job Satisfaction among Sherubtse Staff: A Comparative Analysis of Teaching and Non-Teaching Staff

4.2. Research Centers

The establishment of research centers over the years have helped the Colleges to coordinate research activities, attract external grants and streamline research activities according to the focus areas of the College. As of this fiscal year, there are 18 research centers in the Colleges.

Table 8. Research Centres in Colleges

College	Name of Centre
CLCS	Bhutan & Himalaya Research Centre
	Center for Buddhist Studies
CNR	Centre for Rural Development Studies
	Centre for Environment and Climate Research
	Centre for Sustainable Mountain Agriculture
CST	Centre for Renewable and Sustainable Energy Development
	Centre for Disaster Risk Reduction and Community Development Studies
GCBS	Centre for Business Research and Entrepreneurship Development
JNEC	Center for Appropriate Technology
	Center for Lighting and Energy Efficiency Studies
PCE	Centre for Educational Research and Development
	Heritage Education and Professional Development Centre
SCE	STEM Education Research Centre
	Centre for Innovation in Educational Practice and Research
Sherubtse	Center for Archaeology and Historical Research
	Centre for Climate Change and Spatial Information
	Center for Population and Development Studies
	Center for Science & Environmental Research

4.3. Research Journals

Over the years the University enhanced research publication. The University has 12 journals in publication in this fiscal year.

Table 9. Journal Publications in this fiscal year

College	Journals
CLCS	Rigdzoed Journal
CNR	Bhutan Journal for Natural Resources and Development
CST	Zonrig- A Technical Journal of Science, Engineering and Technology
GCBS	Bhutan Journal of Business and Management
JNEC	Journal of Applied Engineering, Technology and Management
	Thruel Rig Sar Toed
PCE	Rabsel - Journal of Education Research
	JEAR - Journal of Educational Action Research
SCE	Education Innovation and Practice
Sherubtse	Sherub Doenme
OVC	Bhutan Journal for Research and Development

5. External Linkages

The University aims to strengthen its collaboration with international institutions to learn from the experiences of reputed Universities towards enhancing teaching, learning, and research. Additionally, the University also places equal value to the in-country partnership with relevant agencies. This effort contributes to inculcating international best practices, revenue generation and internationalizing the Colleges of RUB. Following are some of the MoUs that facilitate international and national collaborations:

Table 10. Active MoUs with reputed International Universities

Sl.No	Name of University/Institution	Country	Collaborating College
1	School Corporation Shimada Gakuen Fukuoka Kokudo Kensetsu Technical College	Japan	JNEC
2	The School for Field Studies	USA	BES/CNR
3	ECOLOG Institute for Social-Ecological Research and Education	Germany	CNR
4	University of Alberta (UALberta)	Canada	PCE
5	Department of Culture, Ministry of Home and Cultural Affairs	Bhutan	CST
6	South Asian Foundation	Delhi India	SCE
7	University of Oslo	Norway	CLCS
8	School of Engineering and Physical Sciences, Heriot-Watt University, Edinburgh (Malaysia Branch)	Malaysia	CST
9	Naresuan University	Thailand	CNR
10	Palacky University Olomouc	Czech Republic	JNEC
11	Sustainability Laboratory	USA	CNR
12	Maejo University	Thailand	CST
13	Naropa University	USA	PCE
14	Kansai University	Japan	JNEC

15	Lund University	Sweden	JNEC
16	University College Leuven-Limburg	Belgium	Sherubtse
17	University of Technology Sydney	Australia	PCE/SCE
18	Edith Cowan University	Australia	SCE/JNEC/GC BS
19	Kyoto University	Japan	CNR
20	University of New Brunswick	Canada	PCE/SCE
21	International Solar Alliance & Ministry of Energy and Natural Resources	India/Bhutan	CST
22	Cadence Systems Inc.	US, India	CST
23	Swiss Federal Institute of Forest, Mountain and Landscape Research (WSL)	Switzerland	CNR

In addition to the existing MoUs the University has initiated discussion with Musashino University, Japan, Coventry University, UK, ETH Zurich, COMSATS at Kathmandu for future collaboration.

5.1. Staff and Student Exchange

The MoUs and linkages established made the staff and student exchanges possible. These exchanges serve numerous purposes, including capacity building, curriculum enhancement, joint research projects, mobility for teaching experience, and participation in conferences and seminars. In the fiscal year 173 RUB staff visited Universities and institutions abroad and 77 international students visited RUB Colleges.

Table 11. RUB Staff Visits to External Universities & Institutions Abroad

Sl.No	Name of College	No. of RUB Staff visiting Universities and institutions abroad
1	CLCS	10
2	CNR	17
3	CST	10
4	GCBS	15
5	JNEC	28
6	PCE	31
7	SCE	29
8	SC	33
	Total	173

Table 12. Number of International Students Visiting RUB

Sl.No.	Name of College	No. of International Student
1	CLCS	10
2	CNR	50
3	CST	4
4	PCE	3
5	SCE	10
	Total	77

5.2. Projects and Events with International Partners

The landscape of university internationalization has evolved from traditional face-to-face interactions to virtual modes. Despite fewer physical visits, colleges have actively engaged in international initiatives through online meetings, joint projects, funding applications, and virtual conferences. Recognizing this shift, it's essential to consider these exchanges when assessing colleges' milestones in their internationalization journey. Following table shows the number of major projects, events and activities in the year. RUB colleges have maximum collaboration on research projects with Universities in the EU in research mostly through Erasmus Mobility projects.

Table 13. Number of projects/activities/events

Sl.no.	Name of College	No. of projects/ activities/events
1	CLCS	6
2	CNR	22
3	CST	1
4	GCBS	2
5	JNEC	15
6	PCE	2
7	SCE	7
8	SC	11

5.3. International Student Admission Policy 2024

This fiscal year also saw the development of a comprehensive admission policy for international students in view of the increasing importance of attracting international students to the University campuses. Further, a standard operating procedure to coordinate and facilitate interactions with international partners, and coordination among RUB's colleges. It ensures consistency, professionalism, and effectiveness in activities such as establishing collaborations, external engagement, including partnership development, organizing events, and managing the program exchanges. Serving as a vital reference, the SOP outlines essential processes and best practices, aiming to enhance RUB's reputation and promote global cooperation.

6. Human Resource

6.1. Long Term Professional Development

6.1.1. Three long-term professional development i.e 2 PhD and one master programmes were implemented in the fiscal year. Among the two PhD candidates, one from JNEC is enrolled in University of Melbourne, Australia through the Melbourne Research Scholarship and another from CST is enrolled in ETH Zurich, Switzerland through the Swiss Federal Society Fellowship. The master's candidate is enrolled in Vellore Institute of Technology, India through RGoB Scholarship. In addition, there are already 30 academic staff and 4 administrative & technical staff on studies enrolled in various Universities abroad.

Table 14. Staff on Long Term Studies

College/ OVC	Academics			Administration & Technical			Grand Total
	Masters	PhD	Total	Bachelors	Masters	Total	
CLCS	-	-		-	-		
CNR	-	4	4	1	1	2	6
CST	4	1	5	1	-	1	6
GCBS	4	2	6	-	1	1	7
GCIT	-	1	1	-	-		1

JNEC	1	2	3	-	-		3
PCE	-	2	2	-	-		2
SCE	2	3	5	-	-		5
Sherubts e	1	6	7	-	-		7
OVC	-	-		-	-		-
Grand Total			33			4	37

6.1.2. In the year, 24 staff completed and reported to the respective Colleges after their Studies. Among 24 of them 15 academic staff completed Masters and 2 completed PhD. Additionally, 7 academic staff members who have reported to the College are awaiting the imminent completion of their degrees.

Table 15. Long term PD completion status of academic staff FY 2023-2024

College/ OVC	Completed Studies			Reported to College but pending completion		
	Masters	PhD	Total	Masters	PhD	Total
CLCS	1	-	1		-	
CNR	4	1	5	1	1	2
CST	2	-	2	-	-	2
GCBS		1	1	-	1	1
GCIT		-		-	-	
JNEC	2	-	2	2	-	2
PCE	1	-	1	-	-	
SCE	-			-		
Sherubtse	5	-	5	-	-	
Grand Total	15	2	17			7

6.2. Human Resource Management

6.2.1. Recruitment:

During the fiscal year 24 new academic staff were recruited. Of the total 12 had master's qualification and the remaining 12 were with undergraduate qualification.

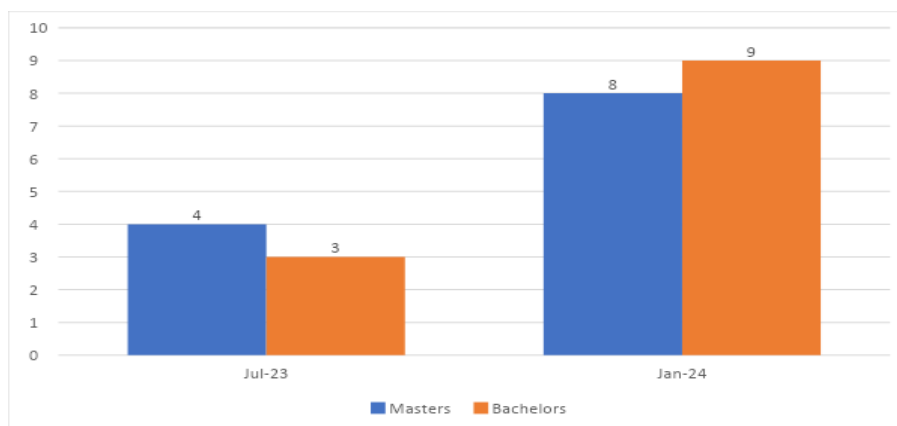


Figure 6 .New Academic Staff Recruited

6.2.2. Total Staff Strength

RUB has a total of 509 academic staff and 558 administrative and technical staff ([Table. 16](#)). Academic staff includes 24 expatriates and 73 Bhutanese working on fixed-term appointments, and 412 regular. Of the 509 academic staff, 476 academic staff are on campus while 33 academics are on long term studies.

Table 16. Total Staff in RUB

College/OVC	Academic Staff															TOTAL ACADEMICS	TOTAL ADMIN. & TECHNICAL STAFF	TOTAL STAFF
	Academics - Regular					Academics - Fixed Term (Bhutanese)					Total	Expatriates (Fixed Term)			Total			
	Diploma	Bachelor	Masters	PhD	Total	Diploma	Bachelors	Masters	PhD	Total		Bachelors	Masters	PhD				
CLCS	-	1	30	1	32	-	0	0	-	0	32	-	0	-	0	32	40	72
CNR	-	8	23	14	45		4	1	-	5	50	-	-	-		50	55	105
CST	-	21	48	5	74	-	15	1	-	16	90	-	3	1	4	94	59	153
GCBS	-	8	37	3	48	-	-	1	-	1	49	-	1	2	3	52	74	126
GCIT	-		20	-	20	-	6	5	-	11	31	-			8	39	48	87
JNEC	5	7	26	-	38		7	4		11	49	1	1	1	3	52	64	116
PCE	-	6	39	14	59	-	2	2	-	4	63	-	1	-	1	64	57	121
SCE	-	2	28	10	40	-	-	-	-	0	40	-		-		40	45	85
SC	-	9	45	2	56	-	17	8	-	25	81	-	4	1	5	86	77	163
OVC	-	-	-	-		-	-	-	-	0	0	-	-	-	0	-	39	39
Grand Total					412				0	73	485	0			24	509	558	1067

7. Finance

The consolidated financial report of the University for the FY 2023-2024 are presented below. The Financial Statements are based on RUB Financial Rules and Regulation 2022 and the report is un-audited.

Table 17. Consolidated statement of Financial Position as on June 2024

Particulars	Notes	30-Jun-24	30-Jun-23
ASSETS			
Current Assets			
Cash and cash Equivalents	4	319,438,869	379,872,606
Inventory	7	5,453,027	2,266,079
Advance /Prepayment	5	72,151,330	83,457,439
Financial Assets	6	212,348,474	272,659,303
Other Current Assets	8	5,942,880	130,621,609
Total Current Assets		615,334,579	868,877,037
Non-Current Assets			
Property Plant & Equipment	9	5,671,679,369	5,430,854,040
Financial Assets	10	224,690,964	128,962,900
Other Non-Current Assets	11	168,370,675	673,698,836
Total Non-Current Assets		6,064,741,008	6,233,515,776
Total Assets		6,680,075,587	7,102,392,814
LIABILITIES			
Current Liabilities			
Deferred Grant Income	12	469,103,021	392,779,655
Security Deposit payable	13	36,191,393	28,911,627
Provision Employee Benefit	14	20,152,762	11,185,875
Other Current liabilities	15	282,387,723	246,373,710
Financial Liabilities -Current		13,918,720	0
Total Current Liabilities		821,753,619	679,250,866
Non-Current Liabilities			
Deferred Grant Income-Non-Current	16	4,267,244,557	4,798,485,028
Employee Benefit Obligations - Non-Current	16	577,109	12,802,558
Non-Current Liabilities	16	39,721,564	65,219,574
Total Non-Current Liabilities		4,307,543,230	4,876,507,160
Total Liabilities		5,129,296,848	5,555,758,026
EQUITY			
Retained Earnings		1,550,778,740	1,546,634,789
Total Equity		1,550,778,740	1,546,634,789
Total Liabilities and Equity		6,680,075,589	7,102,392,815

Table 18. Consolidated Statement of Income and Expenditure as at 30 June 2024

Particulars	Notes	30-Jun-24	30-Jun-23
INCOME			
Tuition Fees	17	1,238,434,985	1,039,215,599
Income From Grants	18	780,091,355	411,390,042
Consultancy Services	19	1,314,439	4,809,178
Rental Income	20	47,215,396	35,843,651
Income From Outsourcing	21	1,019,347	409,142
Income From Hiring Out of Facilities	21	734,672	132,750
Miscellaneous Income	22	5,738,756	8,005,375
Interest Income	23	22,348,662	19,405,315
Other Incomes	24	25,455,827	92,084,568
Total Income		2,122,353,438	1,611,295,620
EXPENDITURE			
Employee Cost	25	927,969,993	757,375,482
General Administrative Expenses	26	267,905,667	166,999,834
Teaching and Learning Expenses	27	18,692,635	27,799,029
Student Service Costs	28	135,728,283	173,611,366
Research and Development Cost	29	11,312,553	23,624,380
Meeting and Celebration	30	16,115,222	5,584,400
Programme Development and Review Expenses	31	9,263,583	9,941,328
Depreciation and Amortization Expenses	32	245,240,868	204,748,427
Project Expenses	33	63,656,278	14,030,051
Audit Remuneration	34	449,468	-
Loss on Asset Disposal		422,977,140	6,187,691
other expenses		1,837,115	15,085,984
Total Expenditure		2,121,148,806	1,404,987,973
NET INCOME		385,033	206,307,648
OTHER COMPREHENSIVE INCOME			
Gain on Revaluation		***22,121	
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		407,153	206,307,648

Table 19. Consolidated Statement of Cash Flow as at 30 June 2024

Particulars	30-Jun-24	30-Jun-23
Cash Flow from Operating Activities		
Cash Receipts for tuition (Direct Income)	140,888,637	920,951,901
Other Cash Receipts (Indirect Income)	97,512,706	75,902,770
Grant Income	524,054,470	99,306,453
Less: Employee benefits obligations	(6,586,554)	(24,483,462)
Operating expenses	(227,761,998)	(503,174,924)
Direct Service expenses	(60,124,792)	(378,073,150)
Other expenses	(17,961,530)	17,709,040
Net Cash flow from Operating Activities	450,020,939	208,138,628
Investing Activities		
Purchase of Fixed Assets	(683,978,460)	(479,546,246)
Fixed Deposits	(21,230,310)	15,859,830
Other Non-Current Assets	482,441,198	77,207,270
Restatement of Assets	(5,992,479)	0
Net Cash flow from Investing Activates	(243,131,521)	(386,479,146)
Financing Activities		
(Increase)/Decrease in Deferred Grant Income NC	(280,745,684)	216,723,492
(Increase)/Decrease in Deferred Grant Income	(1,116,027)	17,673,238
Net Cash flow from Financing activities	(281,861,710)	234,396,730
Increase Decreases in Cash and Cash Equivalents	(60,600,822)	56,056,212
Cash and Cash Equivalent, Beginning of the year	379,872,606	326,005,192
Closing Cash and Cash Equivalents	319,271,784	379,872,606

Table 20. Consolidated Statement of Changes in Equity as at 30 June 2024

Particulars	Retained Earnings	Total
Balance as on 30 June 2022	1,374,605,000	1,374,605,000
Profit for the year 2023	241,334,053	241,334,053
Adjustments/Movements	(39,800,206)	(39,800,206)
Balance as on 30 June 2023	1,546,634,788	1,546,634,788
Profit/loss for the year 2024	407,153	407,153
Adjustments/Movements	3,767,349	3,767,349
Balance as on 30 June 2024	1,550,778,741	1,550,778,741

8. Challenge and Issues

- 8.1. **National vision and direction on tertiary education:** with the Tertiary Education Policy under review, it is hoped that the national direction for Tertiary Education will be clear to define the educational character of the University in terms of planning its programmes and activities;
- 8.2. **Funding and Financing of the University:** a final decision is awaited;
- 8.3. **Revenue Generation:** The University's Charter, Statutes and other legal basis clearly states the need for the University to generate its own revenue to augment government funding. However, there is a lack of understanding on the scope and extent to which the University should generate its own revenue. This is critical given the University's status as a not-for-profit public entity;
- 8.4. **Self-finance Students:** Thus far the University was guided by the overall principle of equity in tertiary education with regard to taking in self-funding students. The primary reason for creating the provision was to enhance access and even the tuition fees charged are at a subsidized rate. However, increasingly the self-funding students are viewed as a source of revenue. Such shifts in thinking have not been debated at the national level;
- 8.5. **Lifelong Learning:** Providing lifelong learning opportunities for the citizens is one of the core mandates of the University. Within this mandate, the University is offering short-term programmes, programmes on alternative modes of learning, and postgraduate programmes. Additionally, postgraduate programmes are also a means to develop the overall culture of research and inquiry in the country. However, for a long time the University has not been able to garner financial support to offer postgraduate programmes. Despite this, the University has developed a number of postgraduate programmes but all the programmes have a very minimal number of students due to a lack of financial support in the form of tuition and stipend.
- 8.6. **Study programmes on alternative modes** such as distance learning and part time mode are not popular. This has arisen mainly because there is a general lack of recognition for programmes offered on alternative mode. The University is of the opinion that the alternative mode of learning needs to be encouraged given the upskilling, reskilling and knowledge upgrade demanded by overall development and the economic development of the Country.
- 8.7. **Internationalization:** The process of signing Memorandums of Understanding (MoUs) is complex and time-consuming, discouraging potential partners. The existing limitation on the number of MoUs restricts the university's ability to establish new international partnerships.
- 8.8. **Attraction of Academic Staff:** The selection of academics with master's degree qualification continues to be a challenge owing to the small pool and scarcity in some areas. Similarly, attracting competent in-service people with added industry experience is also a challenge. Rethinking on the possibility of raising the profile of academic positions and appropriate policy interventions are imperative to address these issues;