Final Report

FOLLOW-UP TRACER STUDY ON GRADUATES OF TERTIARY-LEVEL COLLEGES

Submitted to

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A pool of 30 Field Officers was also recruited full-time to carry out the field survey (both quantitative and qualitative).

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List of Acronyms

BIDS	Bangladesh Institute of Development Studies
BBS	Bangladesh Bureau of Statistics
CEDP	College Education Development Project
CGPA	Cumulative Grade Point Average
FGD	Focus Group Discussion
GoB	Government of Bangladesh
GoB	Government of Bangladesh
ILO	International Labour Organization
KII	Key Informant Interview
LFS	Labor Force Survey
NGO	Non-Government Organization
NU	National University
STEP	Skills and Training Enhancement Project
ToR	Terms Of Reference
UGC	University Grants Commission of Bangladesh

EXECUTIVE SUMMARY

Human resources play an important role in the overall development of a country. It is an incontrovertible fact that human capital remained the most important factor of production in the 21st century. Education has a major role to play in human resource development. Therefore, every country attaches a greater premium on the viability and sustainability of its education to human resource development. To fulfill the human development needs of the country, a baseline study on tertiary-level colleges was conducted in 2017 to provide a snapshot of the current situation of tertiary college education with a special focus on the relevance and external efficiency as well as quality of education. Based on this the first round Tracer Study on Graduates of Tertiary-Level Colleges was conducted.

The Bangladesh Institute of Development Studies (BIDS) conducted the first-round tracer study on graduates of tertiary-level colleges in 2021 to trace the graduates from a sample of NU-affiliated tertiary colleges and to assess the labor market outcome and relevance of the tertiary colleges. The students who graduated (Degree/Honors/Masters programs) in 2017 have been chosen from a sample of NU-affiliated tertiary colleges.

BIDS conducted the Follow-up Tracer Study in May-June 2023 with a new cohort of graduates, students, teachers, and employers to assess how college graduate job market outcomes have changed. The follow-up tracer study assesses the overtime labor market relevance of tertiary college-level education. It also analyses the contribution of tertiary education to developing a highly-skilled, well-educated workforce and accelerated job creation in Bangladesh.

The survey focuses on the following aspects. (i) in-depth assessments of labor market outcomes and economic activities of graduates; (ii) current students' socio-economic backgrounds, motivation, financing agreements and perceptions on college education, market relevance of college education; (iii) training and employers' views on post-secondary education; (iv) analysis of challenges in education quality and relevance of college education; and (v) recommendation for future policy direction for improving the quality and relevance of the tertiary college sub-sector.

For this study, the data were collected from a randomly selected representative sample of graduates and students. The sampling was done through a stratified multi-stage random sampling technique. The stratification categories include (1) ownership (government or non-government) (2) College Type (Honors or Masters), and (3) Geographical area (all administrative divisions). The sampling frame of colleges (primary sampling unit) includes all government or non-government Honors and Masters Colleges affiliated with the NU that have at least 150 new intakes in Honors Courses. Colleges and departments that were newly affiliated in the past five years will be excluded as they may still have a limited number of graduates.

According to the National University ICT Unit (2018), there were around 608 colleges that meet this criterion. The population for the study thus ended at around 608 colleges under the

NU with Honors and Master's programs. For the purpose of this study, a total of 61 colleges (using a 10 percent sample) were selected with 17 government and 44 non-government colleges.

The survey was designed in a mixed method approach of both quantitative and qualitative to address the objectives. According to the Terms of Reference (ToR), the sample consists of four groups of respondents, i.e., college principals, students, graduates, and current employers of NU graduates. Four sets of structured questionnaires have been prepared for the graduates, current students, principals, and the current employers of the National University graduates. We aimed to survey (actually surveyed) 1340 (1345) graduates and 675 students from the 61 sample colleges; 61 principals from each of the colleges along with 100 (107) employers. To complement the quantitative surveys, qualitative approaches were employed including focus group discussions (FGDs) with students, teachers, and key informant interviews (KIIs) of the employers.

Graduate Employability of NU-Affiliated Colleges

A total of 1345 graduates' information has been collected under this study. They are either currently active graduates or not active in the labor force. It is found that the majority of graduates are active in the labor force (91 percent). It is necessary to mention that the percentage of the total labor force for male graduates is higher than that of female graduates, i.e., 96 percent and 84 percent respectively.

A total of 879 graduates are employed in our survey with the male is 652 and female is 227. This reflects the employment rate is 71.76 including 80 percent male and 65.69 female. On the other hand, a total of 346 graduates are found to be unemployed providing 97 male and 249 female graduates. Therefore, the average unemployment rate turns to be 28.24 percent including 19.96 percent male and 34.31 female. This result shows that employment outcomes differ significantly across genders. A much higher share of male graduates is employed compared to their female counterparts.

Among the employed graduates, wage employment is the main form of employment. Only 16.2 percent of graduates are currently being engaged in self-employment. What is most striking is that more than one-fourth of the graduates (28.24 percent) are still unemployed and looking for jobs, even after spending three to four years since first graduating from their colleges.

In tracer study (2021), the current status of employments of graduates shows that 21 percent graduates are salaried employed, while 66 percent are unemployed; 1.5 percent are self-employed and 7 percent are involved in full-time/part-time study. On the other hand, using the same definition, follow-up tracer study results shows that 28.73 percent graduates are salaried employed, while 47.91 percent are unemployed; 10.93 percent are self-employed, 12.40 percent are involved in full-time/part-time study.

The disaggregated picture from tracer study (2021) shows that the proportion of females among salaried graduates is 11.64 percent, while it is 30.74 percent for males; the proportion of females not in the labor force is 9 percent which is only 0.6 percent for males. But the proportion of unemployed females and female graduates in part-time/full-time study are higher

than unemployed males and male graduates (70.3% vs 61%; 8.55% vs 5.14%). However, in follow up tracer study (2023) unemployment rate among the male graduates has decreased considerably comparing with Tracer study (2021). More male graduates are engaged in self-employed activities and are involved in further study to increase their job opportunities.

This result shows that employment outcomes differ significantly across gender. A much higher share of male graduates is employed compared to their female counterparts. After three years of graduation, more than one fourth of the graduates are still unemployed. This share is very high compared to the labor market outcome of the general population. According to the Labour Force Survey 2016–2017, the unemployment rate among those with tertiary education qualifications was 11.2 percent, which was much higher than the national average of 4.2 percent in 2017. The unemployment rate for females stands at 34.31 percent, which is nearly two times higher than that of males (19.96 percent). This level of unemployment is extremely concerning and raises serious concerns about willingness to search job and skills to manage job among the college graduates in Bangladesh.

Labor Market Outcome and Economic Activities of Graduates

We have interviewed 1345 graduates coming from 61 colleges across all administrative divisions of Bangladesh. These graduates come from four types of colleges under the National University affiliation: Government-Honors (GH), Non-Government Honors (NGH), Government Masters (GM), and Non-Government Masters (NGM).

For graduates from government honor's colleges, 38.2% of graduates are salaried employed, 18.7% are self-employed, 13.7% are graduates with part-time work and study, and 29.4% are unemployed. For graduates from Government Master's colleges, 41.4% are salaried employed, 11.2% are self-employed, 19.8% are graduates with part-time study and working, and 27.6% are unemployed. Combining Government Honor's and Master's, 40% of graduates are salaried employed, 14.4% are self-employed, 17.2% are graduates with part-time study and working, and 28.4% are unemployed. Among Non-Government Honors graduates, 47.1% are salaried employed, 18.2% are self-employed, 9.5% are graduates with part-time study and working, and 25.1% are unemployed. In the case of Non-Government Master's graduates, 27.3% are salaried employed, 17.3% are self-employed, 8.2% are graduates with part-time study and working, and 47.3% are unemployed. When considering all graduates, irrespective of college type of the surveyed graduates, 42.28% are salaried employed, 16.2% are self-employed, 13.2% are graduates with part-time study and working, and 28.2% are unemployed.

Graduates who are unemployed, majority of them graduate from BA (pass) course, Political science, Library Management, Bangla, and Islamic history and culture. On the other hand, English, Economics, Accounting, Sociology and Finance and Banking graduates are less unemployed.

A majority (52%) of total unemployed graduates stated that they do not have any definite time span for searching for a job while 24% of them search for a job almost every day and 9.6% search for jobs several times a week. Almost 60% of the unemployed graduates surveyed seem to have been unemployed for more than two years after graduation.

Most of the surveyed unemployed graduates spend most of their time searching for a job (45.74%), though the activity has a higher frequency among the graduates from government colleges (52.04% of the government college graduates compared to 39.82% of non-government colleges). Apart from that, most of them also spend almost an equal amount of time helping their family with the household chores. This indicates that they want to be useful and prefer helping their families to do anything else or being idle.

Among the salaried employers, almost 60 percent of NU graduates have been working in private enterprises, where graduates from non-government colleges seem higher in this sector by 3 percent than graduates from government colleges (i.e., 60.94 and 58.33 respectively). In general, in the government sector, there are more graduate employees from NU-affiliated government colleges than non-government colleges. On the contrary, graduates from non-government colleges are more likely to engage in NGO/Trust or Foundation.

For self-employed activities, 27 percent of graduates have been engaged in wholesale and retail trade and the other 14 percent of graduates are in the agriculture, forestry, or fishing industry. More NU-affiliated govt. college graduates are involved in the garment, food processing, education, and health sectors compared to non-govt. graduates. While, on the other hand, more non-govt. college graduates are involved in the sectors of manufacturing, construction, ICT, E-commerce, and restaurant and food services

It is evident that, graduates who are still studying with some sort of part-time work, around 44% of the graduates enrolled in the study after graduation or post-graduation with the intention of getting a better job. 22% of the graduates perceive that an undergraduate degree is not adequate to get an expected job, and hence they decided to pursue advanced studies. 19.80% surmised that they would need some kind of technical skill for a better job and enrolled in part-time study whereas, 11.17% enrolled because of their parents' wishes.

There is a need for other training for graduates' employability. Overall, 43.7% of graduates among our surveyed ones did not receive any kind of additional training, 24.9% received skill development training while they were studying the college, 19.8% received skill development training after they left college and 11.5% received skill development training such as information and communication technology (ICT) training, technical/vocational training, basic computer skill training etc. before they started their tertiary education. Though most graduates from government colleges did not get any training before starting college, their share (compared to the graduates of non-government colleges) of getting training increased while they were in college and after they finished their college education.

Graduates have been asked if they feel that need for any training opportunities in their respective colleges to make them more capable of getting jobs. It is found that almost 43 percent of unemployed graduates demanded training needs. Graduates have stated the need for specific training courses where it is found that all categories of graduates need mostly Information, Communication, and Technology training (ICT).

Current Students' Socio-Economic Backgrounds, Motivation, Perceptions, and Market Relevance of College Education

Affiliated colleges of the NU in Bangladesh serve secondary graduates of average academic qualifications from decent family backgrounds to achieve tertiary education qualifications. Most students in the survey perceive themselves to hail from lower-middle-class families (73%), followed by belonging to upper-middle-class families (13.95%) and poor families (10.83%). Most students in the NU colleges have parents with primary and secondary education. Government colleges have a higher percentage of students with parents who have lower levels of education (no institutional education, primary education), whereas non-government colleges have a higher percentage of students with parents who have attained higher education levels (Honors and Masters).

Overall, among 675 students, 33.92% students study arts, 28.14% students study business, 22.96% study social science and 14.96% study science. The study findings show the variations in the distribution of students across academic disciplines, highlighting differences in program preferences and enrollments among males and females.

It is evident that current students try to engage themselves in some kind of activities to generate income. 44.30% of students from all surveyed colleges have some kind of employment at present with an average earning of BDT. 6657. 50.83% of the students at Masters colleges and 41,.90% of the students of Honors colleges are involved in employment while earning BDT. 7782.61 and BDT. 6157.01 on average respectively. The working hours are almost 5 per day for all students. Students are also involved in different co-curriculum activities e.g., debating, sports, and cultural activities, student council, etc. 31% of all students at different colleges, 32.2% of students in government colleges, and 30.2% of students in non-government colleges take part in co-curriculum activities according to our survey data.

About the fruitfulness of their college education, government and non-government colleges differ significantly in terms of students' perception regarding the adequacy of knowledge and technical skills learned for future work. Government colleges have a lower mean agreement score (2.76) compared to non-government colleges (3.21). This difference is statistically significant, indicating that students in non-government colleges have a more positive view of the relevance of their education to their future work.

Among the students of all colleges, only 13.3% said they have career counseling services on their college premises. The percentage is higher for students at non-government colleges. However, students at all types of colleges think that there should be a career counseling service at every college

Overall, the data suggests that students in non-government colleges tend to have more positive perceptions of the education and resources provided by their institutions, particularly regarding the relevance of their education to future work and access to technology and research materials

Challenges in Education Quality and Relevance of College Education

About 69 percent of college principals from NU-affiliated non-government colleges think that the college programs are adequate enough to prepare the graduates for the labor market. On the other hand, only 52 percent of principals from government colleges think that the quality of

education is good enough to prepare the graduates for the labor market. However, according to them only 17 percent of the graduates get their expected job on completion. They have to wait almost 2 years to get the desired job.

The principals stated some subjects they taught which have very low demand in the job market. It's one of the prime barriers in the job market to get a suitable job if they didn't learn job-oriented subjects. Subjects like History, Islamic History and Culture, Philosophy, Sanskrit, Political Science, Bangla, etc. are not competent enough compared to ICT/Business or Science-related subjects, which are most demanding in the labor market.

When the principals were asked about the mentioned skills that are being covered by the offered course curriculum, half of them stated that Bangla communication (overall 54.2 percent) is widely used in lectures or daily conversation. Here, non-govt. colleges have covered more sophisticated Bengali language than govt. colleges i.e., 54.5 percent and 53.6 percent respectively. Apart from that, non-govt. colleges have covered other skills higher than govt. colleges such as-time management (33.7 percent), basic computer skills (33.5 percent), and presentation skills (35.9 percent).

Teachers provide a huge contribution (overall 79 percent), to the students about how to search for jobs appropriately, job sources, CV writing, tips about interviews, etc. NU affiliated non-govt. colleges have higher support facilities compared to govt. colleges (i.e., 83.3 percent and 71.4 percent respectively). Job search by different social media/websites (63.2 percent) and career counseling (57.9 percent) also contributed students to getting a particular job.

Besides, almost 42 percent of colleges provide additional skills training to their graduates, where the govt. and non-govt. colleges differ by 5 percent (45 percent and 40 percent respectively). Some of the Principals reported providing limited job placement facilities to the students through career counseling and advice, job fairs, and career seminars or workshops. However, these colleges neither have any job placement unit for graduates nor any staff assigned to provide the service.

On the other hand, keeping track of graduates is not a common practice among the colleges. However, college principals reported tracking the graduates mainly through personal networks and communication.

Collaboration with the industry is relatively low among the sampled colleges. The colleges reported to have some industry collaboration through only workplace visits by students. Only 6.6 percent of the college principals reported having some kind of collaboration with the industry.

According to the principals, students' unemployment rate is more severe than other existing problems, where govt. colleges have to face more student unemployability than non-govt. Other existing problems such as the absence of career clubs in the National University, difficulties in finding employer partners, lack of operating funds, lack of training opportunities for teachers, and absence of students are major issues in the surveyed colleges.

Employers' Views on Post-Secondary Education

Most of the employers, stated they recruit the graduates based on qualifications not based on institutes. Nevertheless, almost every employer reported that their establishment has a special interest in recruiting NU graduates. These employers were asked about the different reasons why their institution considered recruiting NU graduates. The best reason is they do not switch jobs frequently (91%) and have enthusiasm for working with a low salary (84%).

A major proportion of the NU Graduates are working as teachers or assistant teachers (36%). Apart from that, 16% of employees are working as officers or assistant officers in different government and non-government organizations, 14% of employees are working as supervisors, coordinators or field officers and the rest are in other professions.

It is clear that despite a majority of employers stating that their institution has a particular interest in hiring NU graduates, 63% of employers said that NU graduates in current posts are not difficult to replace. Only 2% of employers stated that it is very difficult to fill their posts where NU graduates are currently in employment.

For most of the employers assessed (38%), it will take more than a week but less than a month to fill up the position if a vacancy occurs where NU graduates are currently employed. 38% of employers also reported it will take more than a month actually. Only 4% of employers stated that they would fill the position immediately if a vacancy occurred where NU graduates are currently employed.

According to the employers, ICT (90%), English Language (90%), Communication (78%), Problem-solving (75%), and Teamwork (61%) are the most important areas that universities should train students in. That means employers value soft skills in addition to academic qualifications and would like the colleges to strengthen training in ICT, communication, and language skills. College graduates are strong in Bangla, possess suitable work attitudes, and team working skills. By improving ICT skills and English language and communication skills, college graduates may position themselves in a better position in the job market and fill in a good share of the skills gap that exists in the workforce.

Facilitating the Employability of NU Graduates

The quest to improve the employability of graduates from National University (NU) colleges yielded a multitude of valuable insights from discussions conducted on various fronts:

Firstly, participants emphasized the significance of internship programs, specifically within sectors like food industries and banking, as vital avenues to bolster students' employability prospects. These internship opportunities were regarded as practical pathways for students to gain a foothold in the job market and reduce future unemployment rates.

The value of alumni associations emerged as a powerful resource in enhancing employability. These associations have been envisioned as platforms for current students to communicate with alumni, seek job opportunities in companies where alumni were employed, and receive invaluable guidance on various aspects of job-seeking, from interviews to examinations. Alumni were also seen as potential sources of motivation and mentors who could provide

insights into navigating careers effectively. However, the absence of an alumni association in some cases was noted as a missed opportunity to tap into this valuable resource.

The significance of job fairs was also highlighted. Participants stressed that job fairs could only be effective if they offered comprehensive services and guidance. The regular organization of such fairs, free from corruption, was crucial to benefit students. Regrettably, most colleges lacked arrangements for job fairs, depriving students of the opportunity to learn about companies, available job roles, application procedures, and more.

Lastly, there was a unanimous call for structured career counseling services within colleges. These services were deemed essential to guide students in securing suitable jobs, keeping them informed about the job market landscape, various job types, and working environments, and preparing them effectively for their career journeys. The inclusion of compulsory technical courses like English courses, and basic computer and ICT courses would also help the students to grow their soft skill sets.

Recommendations

This study highlights some issues for improvement in the overall teaching and learning environment of NU-affiliated colleges. (i) Increase the use of ICT in teaching, provide ICT skills training, and upgrade ICT facilities: Teachers need to acquire ICT knowledge quickly to guide their students wherever appropriate. For example, digital skill development courses or ICT training courses deserve priority as reflected in graduates, current students, and employers' opinions. (ii) Training for the NU teachers is highly recommended: Teachers need to be well trained alongside training abroad. Arrangement of training before the process of teacher recruitment and Long-term subject-based training and pedagogical training should be arranged for the teachers for quality teaching. (iii) Conduct periodic institution-level graduate tracking. (iv) Set up job placement support services and carrier counseling within colleges. (v) Job fairs should be organized every year, preferably at the district level, to facilitate industry collaboration. (vi) Encourage greater student enrollment in more market-demanded courses such as economics, accounting, mathematics, management, and statistics in the NU-affiliated colleges. (vii) Introducing short course facilities can increase the job market opportunities of the NU-affiliated colleges. (ix) As the graduate reported to have a lack of English language and communication skills, by improving those college graduates may position themselves in a better position in the job market. (x) The value of alumni associations emerged as a powerful resource in enhancing employability. Strengthening these associations has been envisioned as platforms for current students to communicate with alumni, seek job opportunities in companies where alumni were employed, and receive invaluable guidance on various aspects of job-seeking, from interviews to examinations. (xi) Most tertiary education academic programs do not provide students with the opportunities to gain practical exposure to their field of study. Therefore, practical assessments through presentations, teamwork, research, and internships should be included in academia to evaluate students' performance.

CHAPTER I: INTRODUCTION

1.1. Background

Human resources play an important role in the overall development of a country. It is an incontrovertible fact that human capital remained the most important factor of production in the 21st century. Even with the advent of advanced technology this elemental fact has remained unchanged. Human resources are regarded as the stock of competencies knowledge and personality embodied in the ability to strengthen labour, so as to produce economic value (Osoba and Tella, 2017).

Education has a major role to play in human resource development. Therefore, every country attaches greater premium on the viability and sustainability of its education to human resource development. Investment in human development means investment of any country's economy. Jhingan (2005) mentions that in the process of economic growth and development, it is expected to accord main significance to the gathering of physical capital than human capital. These physical resources are from the capital but aside from that, these tangible capital resources are human capital resources as an aggregate of education or schooling, training and healthcare delivery. This aggregation of human resource development can further increase productivity and income, improve health and fitness, and good habits in individuals such as being trustworthy, responsible, and having integrity, etc. As Bangladesh aims to be among the leading economies in the world today, this desired ambition will be a venture in futility if human capital formation is not given due attention with high priority.

To fulfill the human development needs of the country, the College Education Development Project (CEDP) was incepted in 2016. The GoB is currently implementing the CEDP to improve the teaching and learning environment of participating colleges and strengthen the strategic planning and management capacity of National University (NU) affiliated tertiary colleges in Bangladesh. The project concentrates on the NU, which educates more than two-thirds of higher education students in the country and thus has a critical role in fostering a skilled workforce and promoting job creation in Bangladesh. Since 2016, the World Bank has supported the Government of Bangladesh (GoB) to develop the tertiary education system through the College Education Development Project (CEDP). The CEDP works to improve the quality and relevance of education in colleges and to enhance the management and planning of the tertiary college system.

To fulfill the human development needs of the country, a baseline study on tertiary-level colleges was conducted in 2017 to provide the snapshot of the current situation of tertiary college education with special focus on the relevance and external efficiency as well as quality of education. Based on which the first round Tracer Study on Graduates of Tertiary-Level Colleges was conducted.

1.2. Tracer Study on Graduates of Tertiary-Level Colleges

1.2.1. The First Round Tracer Study on Graduates of Tertiary-Level Colleges

The Bangladesh Institute of Development Studies (BIDS) conducted the first-round tracer study on graduates of tertiary-level colleges in 2021 to trace the graduates from a sample of NU affiliated tertiary colleges and to assess the labor market outcome and relevance of the tertiary colleges. The students who graduated (Degree/Honours/Masters programs) in 2017 have been chosen from a sample of NU-affiliated tertiary colleges.

The finding of this survey shows that 21 percent of the graduates are salaried employed, while 66 percent are unemployed. Additionally, 1.5 percent of the graduates are self-employed, 7 percent are involved in full-time/part-time study, and only 5 percent do not belong to the labour force. The proportion of females among salaried graduates is 11.64 percent, while it is 30.74 percent for males. The proportion of females not in the labour force is 9 percent, which is only 0.6 percent for males. The results also show that females in the sample find it more difficult than males to land a job, and more females are involved in further studies to increase their job opportunities.[1]

1.2.2. The Follow-Up Tracer Study on Graduates of Tertiary-Level Colleges

BIDS conducted the follow-up Tracer Study in May-June 2023 with a new cohort of graduates, students, teachers, and employers to assess how college graduate job market outcomes have changed. The follow-up tracer study assesses the overtime labour market relevance of tertiary college-level education. It also analyses the contribution of tertiary education to developing a highly-skilled, well-educated workforce and accelerated job creation in Bangladesh.

The study covers current students of the National University affiliated tertiary level colleges, graduates from National University affiliated tertiary level colleges, combined with short surveys on institutions and employers. The study captures the economic activities of college graduates around 3 years after their graduation to examine how the competencies they acquired through the college education contribute to their employment and work and how relevant they are to the labor market needs. The survey also interviews the employers of the graduates to assess their views on graduates' skills levels and their expectations for post-secondary institutions in terms of their contributions to human resource development, technological innovations and industry linkage. Principals and/or heads of departments are also interviewed to get information about institutional efforts to improve the quality and enhance employability of students.

[1] CEDP (2021). Final report on tracer study on graduates of tertiary level colleges. Dhaka.

1.3. The Objectives of the Follow-up Tracer Study

The main objective of this study is to enhance policy dialogue on the labor market relevance of the college level education and their contributions to job creation in Bangladesh based on the new evidences collected by the study. This study also provides insights to inform the on-going and future operations for the higher-level college education system, especially in providing over time information on the education quality in project supported institutions.

The survey focuses on the following aspects:

- In-depth assessments of labor market outcomes and economic activities of graduates;
- Current students' socio-economic backgrounds, motivation, financing agreements and perceptions on college education, market relevance of college education;
- Training and employers' views on post-secondary education;
- Analysis of challenges in education quality and relevance of college education; and
- Recommendation for future policy direction for improving the quality and relevance of the tertiary college sub-sector.

The structure of the report is as follows. Chapter II describes the sampling and the methodology in detail, chapter III provides a brief review of the literature on tracer study on graduates in Bangladesh, chapter IV explains the graduate employability in Bangladesh based on graduate survey, V depicts the labor market outcome and economic activities of the graduates, chapter VI, chapter VII and chapter VIII describe findings from the student survey, principal, and employer survey respectively, chapter IX provides the feedback from qualitative interviews, and chapter X summarizes the report and concludes with some recommendations.

CHAPTER II: SAMPLING, AND METHODOLOGY

This section first provides a brief description of the sample selected for this study, and then the methodology used for the analysis. It is to be noted that the 'Follow-up Tracer Study' is the second and the final round of tracer study. Therefore, the sampling procedure followed in the Tracer Study done on 2021 mostly remains unchanged in this study.

2.1. Sampling Approach

The survey was designed in a mixed method approach of both quantitative and qualitative to address the objectives. According to the Terms of Reference (ToR), the sample consists of four groups of respondents, i.e., college principals, students, graduates, and current employers of NU graduates. A separate set of questionnaires were designed for students, graduates, and college principals and as well as for current employers of NU graduates.

Qualitative approaches such as focus group discussion (FGD) and key informant interviews (KII) were also conducted among students, teachers and graduates from these colleges. All the survey instruments were pilot tested at Lalmatia Govt. Mohila College and Dhaka City College in Dhaka in order to facilitate understanding prior to finalization. A survey schedule was prepared and executed in consultation with the respective authorities of the selected institutions.

2.1. Sample Selection Procedure

The study has four modules:

i. Graduates: Trace cohorts of graduates of passing year 2018 (academic session 2014-2015) from Degree/pass/Honors/Master's programs. The year 2018 has been chosen as the graduation year as the students who registered for the year 2018 (academic session 2014-15) were graduated on 22 September 2019 according to National University memorandum of results. Hence, the year 2018 covers the lead time for the results of the examinations. Therefore, this study selects the graduates 3 years after their graduation.

ii. Students: Survey current students of 3rd and 4th year of Degree/pass/Honors/Master's programs.

iii. Institution Head: Survey the sampled institutions/ colleges.

iv. Employers: Survey at least 100 employers of college graduates.

For the cohorts of graduates and students, the data were collected from a randomly selected representative sample of graduates and students. The sampling was done through a stratified multi-stage random sampling. Sampling frame of colleges (primary sampling unit) will include all government or non- government Honors and Masters colleges affiliated to the NU that have at least 150 new intakes in Honors Courses. Colleges and departments which were newly affiliated in the past five years will be excluded as they may still have limited number of graduates. According to National University ICT Unit (2018), there were around 608 colleges

which meet the criteria. This sample population of colleges are being traced to allow the study to observe the trends over time.

Table 2.1: Total number of Eligible colleges by level and management type

Particulars	Honors	Master's	Total
Government	96	75	171
Non-Government	402	35	437
Total	498	110	608

Source: National University ICT Unit, 2018

For the purpose of this study, a total of 61 colleges (using 10 percent sample) were selected through stratified sampling. The stratification categories include (1) ownership (government or non-government) and (2) College Type (Honors or Master's), and (3) Geographical area (all administrative divisions)

Table 2.2: Number of sample colleges for the study

Particulars	Honors	Masters	Total
Government	09	08	17
Non-Government	40	04	44
Total	49	12	61

Source: National University ICT Unit

Then, 02 departments in Honors colleges and 03 departments in Master's colleges were randomly selected in each college. Selection of departments were done taking account of course properties such as level (Degree (pass)/Honors/Master) and subject type (Science/Non-science). At each of the sampled departments, 05 students and 10 graduates were randomly selected to participate in the data collection.

The followings are the respondents of the study:

a. Selection of Institutions

At each of the selected colleges, departments/courses were randomly selected. Departments which have not produced graduates in the past two years were not included and replaced based on a randomly curated list. Principals/Vice Principals/ heads of departments (who have good knowledge of the situation of the institutions) were interviewed. A total of 61 institution heads were interviewed.

b. Graduates Cohort

This sub-module comprises of interviews with graduates of the passing year 2018. At each of the selected departments, 10 graduates were randomly selected from the registration list of students who graduated in 2018 with proportionate gender balance. Selected graduates were contacted through the contact information available on the registry book of colleges or

departments. A total of around 1340 graduates were surveyed. The questionnaire for the graduate module were updated according to the study objective.

c. Current Students

At each of the selected departments, 5 current students were randomly selected from the registration list of students who are studying in 3rd or 4th year with proportionate gender balance. A total of around 670 current students were surveyed. The questionnaire for the current student module were be updated according to the study objective.

d. Employers

About 10% of employers of the sampled graduates were planned to interview. Administrators (organization head, supervisor, human resource manager, etc.) who have direct knowledge about the work of the graduates were interviewed. Finally, a total of around 100 employers were interviewed for the analysis.

2.2. Sample Size

As mentioned earlier, 02 departments in Honours colleges and 03 departments in Master's colleges were randomly selected in each college following the ToR. Selection of departments were done taking account of course properties such as level (Degree (pass)/Honours/Master) and subject type (Science/Non-science). At each of the sampled departments, 05 students and 10 graduates were randomly selected to participate in the data collection.

The total sample size of graduates is 1340 (49*2*10+12*3*10) new graduates along with around 670 (49*2*5 + 12*3*5) students and 100 employers (around 10% of sampled graduates). The study also interviewed all the principals of the 61 colleges. The sample distribution described above is summarizes in the following table.

Table 2.3: Sample size and proposed techniques

Group		Sample Size	Survey Technique
Colleges	Government	17	
	Non-Government	44	
Department		134	
Principals or heads of colleges (Institutions heads)		61	Questionnaire Survey
Students (3rd or 4th year undergraduate students and Master's level)		670 (49*2*5 + 12*3*5)	Questionnaire Survey & FGD
Graduates		1340 (49*2*10+12*3*10)	Questionnaire Survey & FGD/KIIs
Employer	Government	50	Questionnaire Survey & FGD/KIIs
	Non-government	50	

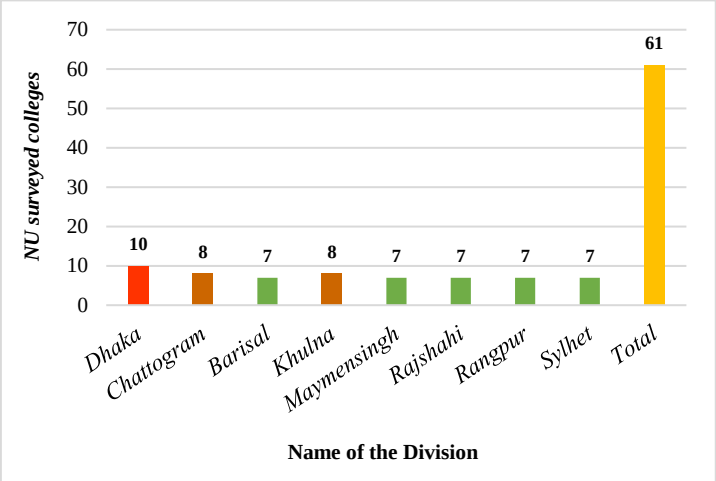
The location of the sampled colleges is presented in table 2.4 and map 2.1. The details are provided in appendix Table A1.

Table 2.4: Location of sample colleges

Division Name	Number of Colleges
Dhaka	10
Chattogram	8
Barisal	7
Khulna	8
Maymensingh	7
Rajshahi	7
Rangpur	7
Sylhet	7
Total	61

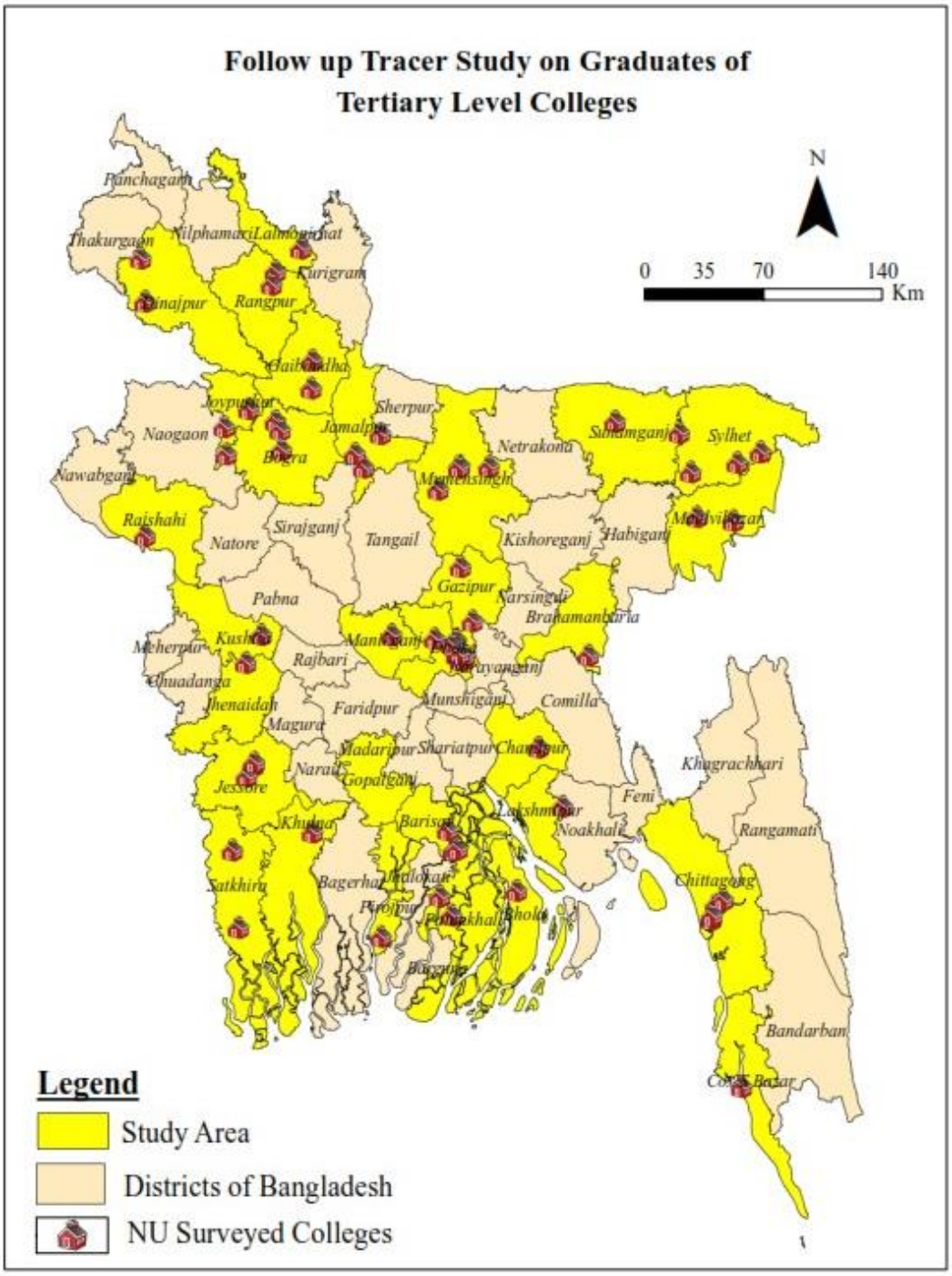
Source: Calculation based on primary data.

Graph 2.1: Location of sample colleges



Source: Calculation based on primary data.

Map 2.1: Location of sample colleges using the Geographical Information System (GIS) software



Source: Calculation based on primary data.

2.3. Qualitative Data

The study has also conducted Focus Group Discussion (FGD) and Key Informant Interview (KII) to incorporate a qualitative component in the analysis. The FGD session has a limit of 7-10 personnel.

The minimum or required number of FGDs and KIIs is not specified in the ToR, but these are the numbers that are proposes and followed for the follow-up tracer survey.

Table 2.5: Number of FGDs and KIIs

Focus Group Discussion (FGD) and Key-Informant Interview (KII)		
No.	Groups	Study Technique(s)
1	Students	8 FGDs (1 in each division)
2	Teachers	8 FGDs (1 in each division)
3	Employers	15 KII

Teachers' interviews consist of both government and non-government colleges. Participation and representation of teachers from a variety of subjects are ensured. Before drawing students randomly for the FGD session, the numerators prepare a list of potential participants and select students from that list.

2.4. Graduate Tracing Process

Tracing the graduate students was the most challenging exercise of this study. Therefore, BIDS study team with the help of the CEDP team requested the colleges to send graduate list of 2018 before start of the field survey. The tracing procedure was initiated by contacting the graduates over the phone and asking them to participate in the interview. As participation was voluntary, the final list of graduates for the survey was determined based on their consent. As per ToR, ten graduates from each department were to be selected. The list provided by each of the sampled departments include the information of all the graduates who passed in 2018 from the respective departments.

A random list of 20 graduates was generated by the Team Leader with the help of statistical software STATA (version 16). Enumerators called the graduates following the lists and asked them to participate in the interview. The enumerators continued calling and asking them until 10 graduates from each of the departments finally consented to participate. Once 10 graduates from each department assured participation in the survey, enumerators ceased calling graduates from the respective department.

Tracing the graduates was done beforehand. Setting the appointments was done over the phone according to the convenience of the respondents.

2.5. Challenges in Administering the Survey

The major difficulties and challenges faced by BIDS to collect the lists of graduates from the selected colleges were:

i. Some colleges did not have any or required number of departments with Honors/Masters graduates in 2018. For these colleges, Honors was introduced after 2015. Hence, the graduation of the first intake in an Honors course is yet to be completed.
ii. As per the proposed sampling methodology, three departments were to be selected from Masters College. We found some colleges have a total number of departments with Masters Graduates in 2018 was less than three.
iii. Almost one-third of the colleges did not provide any graduate list prior to the start of the field survey. Therefore, it took a lot of work for us to communicate with the graduates and take their consent to participate in the survey.
iv. As per the proposed sampling methodology, ten graduates from each selected department should be interviewed. For the colleges which provided a list before the survey to BIDS, we have found that most of the contact numbers/mobile are unreachable or difficult to connect.
v. Most of the colleges do not have any Alumni Association or Student Association, which can help the field officers to have additional information to trace the graduates. In the case of female graduates, it is much more difficult to trace as most of them are married and shifted to other districts/division.

Therefore, BIDS research team came up with the following possible solutions in consultation with the CEDP team as follows:

a. For the colleges which did not have any Honors graduates in 2018, we requested the college to provide us data on graduates in 2018 in Degree (pass course). If they do not have any Degree (pass course), we suggested the enumerators collect the additional sample from the next colleges they visit.
b. For the colleges which did not provide us the graduate list before the start of the field survey, we have requested the field officer to visit the college, and collect the graduate list for 2018 before they start the data collection.
c. For those colleges which did not have adequate departments with graduates in 2018, the respondents would be from those departments for which the colleges can provide data. For instance, for some Masters colleges, we had to collect information from less than three departments.
d. If the graduate list provided by the college could not generate an adequate number of graduates (ten graduates from each department) due to an unreachable contact number, we requested the enumerators check with the graduates (who are traced) to help us to communicate and provide the contact number of their classmates/friend (if any) who have graduated in 2018.

2.5. Data Collection Procedure

The data were collected using structured questionnaires, and from FGDs, and KIIs. The procedure was traditional paper-based method using pen/pencil. A group of enumerators and supervisors were trained at BIDS before the data collection begins. Each enumerator was responsible for surveying students, graduates, principals, and employers of the graduates. Each supervisor oversees the data collection of their assigned team to ensure the quality of the data. The field coordinator was responsible for the overall field management. The survey team was provided intensive training by the study team and the CEDP team considering the task of data collection from remote areas, communication infrastructure, cultural and political barriers, and safety and security concerns prevailing in the study areas. The research team of BIDS has made interventions, when necessary, which might include random field visits by researchers etc.

Survey Instruments

As mentioned earlier, the data was collected using structured questionnaires. 4 different sets of questionnaires were prepared for graduates, current students, principals, and potential employers of graduates. A set of structured questions was prepared for focus group discussions (FGDs) and KIIs and was shared with the CEDP team. The qualitative survey was designed to represent sufficient regional variation.

All questionnaires are drafted in English and Bengali through several back translations to facilitate respondents' understanding. The questionnaires are prepared to keep the objective of the study in mind. All the questionnaires are presented in a workshop organized by the CEDP team, and revised accordingly accepting the feedback from the CEDP team, the relevant stakeholders presented in the workshop as well as feedback from the pilot testing.

Picture 2.1: Questionnaire finalization workshop of follow-up tracer study

Pilot Testing of the Instruments

After preparing the survey instruments, all 4 survey instruments will be pilot tested in two colleges of the Dhaka division namely: Lalmatia Govt. Mohila College and Dhaka City College in Dhaka in order to facilitate understanding prior to finalization. A survey schedule was prepared and executed in consultation with the respective authorities of the selected institutions.

Picture 2.2: Pilot testing in Dhaka City College.

The whole survey team was divided into two groups for pilot testing in the two colleges. After the piloting, the field team provided their feedback, and the survey instruments were modified accordingly.

Training of Enumerators

A three-day-long comprehensive multiple training sessions were held at the BIDS training room. All the instruments were thoroughly discussed with the enumerators and the supervisors. There was a separate session for qualitative data collection.

Picture 2.3: Training of Enumerators at BIDS training room.

The training session was conducted by the BIDS study team. Representatives from the CEDP team were also present during the training session.

They shared their previous experiences, provided instruction for data collection and feedback on questions raised from enumerators and supervisors.

Filed Monitoring and Quality Check

Once the interviews and the FGDs were conducted, the research team analyzed the findings. As the process continued, researchers potentially found areas that needed further information. There might also be follow-up visits, phone calls, etc. in specific cases if considered necessary by the research team.

2.6. Data Entry, Cleaning and Tabulation

The data collection process was completed by the first week of July 2023 and the respected field officers and supervisors turned back to the BIDS office to submit their filled-up questionnaire. After receiving all the questionnaires, data entry process was started using the CSPro software, and will be converted to STATA later on for the purpose of analysis.

The BIDS research team scrutinized the data for the abnormalities after it has been entered in the software, and discovered that everything had been entered accurately. The datasets were cleaned by the research team, and set ready for report writing by the start of September 2023. After the data analysis has been done, findings have been presented in frequency, percentage, and in average terms. It should be noted that the reported mean values are not the weighted mean for the sample. As sampling was done under some limited assumptions, therefore, findings may not be generalization to all NU-affiliated colleges. Also, the weighted mean can be influenced by low or high values in data. We provide high values without assuming any arbitrary weight because the responses we have are subjective in nature. The arbitrary weights might be misleading in our case. Therefore, we provide and use average values for our analysis.

2.7. Methodology for Data Analysis

For analysis, we have used the primary data collected under this study. We use all the appropriate quantitative and qualitative techniques to analyze the dataset. We incorporate the following in the analysis.

a) ***Summary statistic:*** in the form of tables, graphs, figures, etc. are included to understand different characteristics of the distributions of variables at each level of analysis, namely college, student, graduates, principal, and employers.

b) ***Statistical tests:*** Appropriate tests are used to see if there is any statistically significant difference in the indicators between different groups (e.g., government versus non-government colleges).

c) ***Qualitative technique:*** Appropriate techniques are incorporated to complement the quantitative analysis.

CHAPTER III: TRACER STUDY OF GRADUATES IN BANGLADESH: A BRIEF REVIEW

Efficient and productive human resources are the crucial prerequisites for the economic growth and social development of Bangladesh. Higher education has a significant contribution to transforming the human resources of a country into human capital by facilitating knowledge creation and fostering the skills of individuals. This section provides a brief review on the relevant tracer study done on Tertiary-level colleges in Bangladesh.

BIDS (2021) conducted the Tracer Study on Graduates of the NU-affiliated tertiary colleges in 2021. The main purpose of this study is to trace the graduates from a sample of NU-affiliated tertiary colleges. The tracer study will assess the labor market outcome and relevance of tertiary college-level education. As the study was conducted during the COVID period, the specific objectives are to explore the modalities and effectiveness of online classes and document the availability and access to online academic resources on institutional websites. Also, the study attempts to document the impact of the pandemic on economic activities, job opportunities, and changes in career development strategies among graduates by measuring the income, employment mobility, and career progress of graduates. The study uses a quantitative approach, using structured questionnaires to assess the perspective of higher education and its relevance from graduates, students, teachers, and prospective employers of national university graduates. From the study, it has found that the current status of employment of these graduates shows that 343 (21%) graduates are salaried employed, while 1078 (66%) are unemployed; 23 (1.5%) are self-employed, 112 (7%) are involved in full-time/part-time study and 82 (5%) graduates do not belong to the labor force. The proportion of females among salaried graduates is 11.64%, while it is 30.74% for males; the proportion of females not in the labor force is 9%, which is only 0.6% for males. But the proportion of unemployed females and female graduates in part-time/full-time study is higher than unemployed males and male graduates (70.3% vs. 61%; 8.55% vs. 5.14%). It may mean that females in the sample are finding it more difficult than males to get a job, and more females are involved in further study to increase their job opportunities. Around 80% of the graduates' household income is within BDT 30,000. The majority of the salaried employed graduates at the Bachelor level (20%) are from the Business Studies faculty, and at the Masters level (32.74%) are also from the same faculty. The unemployed proportion is above 62% in all faculties except Business Studies at Masters level. The majority of self-employed graduates are from a Business Studies background.

BIDS (2018) has conducted another study with the help of the Higher Education Quality Enhancement Project (HEQEP), the Ministry of Education, to analyze the current economic and labor market outcomes of university graduates and the relevance of university education to the requirements of the labor market in Bangladesh. The study analysis is largely based on quantitative research techniques. The study sample consists of AIF-receiving universities and departments. To know the current employment status of graduates and assess their competencies from various perspectives, we conduct surveys among current students, the most recent graduates, institute or departmental heads, and employers of the graduates of these

universities. The survey approach includes structured questionnaires and focus group discussions (FGDs) of selected current students. The objective of FGDs is to document detailed observations, opinions, and suggestions of students to supplement the findings of the quantitative data. The study finds that the unemployment rate among university graduates in Bangladesh is 38.6 percent. Thirty-four percent of the graduates get a job within 2 to 3 years of graduation. Only 5.77 percent of the graduates choose to be self-employed. The rate of self-employment is relatively higher among male graduates than female graduates. About 14 percent of female graduates do not enter the labor market soon after graduation. Such a high rate (as compared to males) of female graduates moving out of the labor market after graduation may be explained by either pure economic factors (i.e., educated females find it worth remaining in the household activities in order to maximize their family well-being) or social and cultural factors; that force them to go out of the labor market. Employability varies by the type of university. The rate of employment is higher (44 percent) among private university graduates than public university graduates (32 percent). More male graduates of private universities are found to be self-employed than public universities.

World Bank (2019) has conducted a study commissioned to address the mounting concerns about the quality of education at affiliated colleges in Bangladesh and to provide evidence about job market performance and employability of affiliated college graduates. The study adopted a multifaceted approach to survey data collection and analysis. Three different but related groups of stakeholders were interviewed in a bid to generate a more holistic understanding of and allow a triangulated interpretation of graduates' employment outcomes, the labor market relevance of college education, and the existing skills gap. The three respondent groups are graduates, employers, and principals. From the study, it has been found that the majority of graduates are active in the labor force—65 percent. This share is higher than the overall participation rate of the working-age population in the country, which stands at 58.5 percent in 2015. The rest, who are currently not in the labor force, are mostly engaged in further education, while only about 1 percent are neither part of the labor force nor in education. It needs to be noted that 97 percent of all graduates looked for jobs right after graduation. Those who were unable to find a desired job went back to pursue higher education. Those who completed their final tertiary education (that is, master's degree) stayed in the labor market despite being unemployed. Only around 20 percent of graduates are employed, while nearly half, 46 percent, of graduates remain unemployed after three years of graduation. What is most striking is that the highest share of graduates—46 percent—are still unemployed and looking for jobs, even after spending three to four years since first graduating from their colleges. This level of unemployment is extremely concerning and raises serious questions about job readiness and skills to manage school-to-work transition among college graduates in Bangladesh. The share of unemployment varies by groups, such as location, degree, and subjects. It should also be noted that around one-third of graduates are still studying and forgoing their job market participation. A much higher share of male graduates is employed compared to their female counterparts: 25 percent for male and 14 percent for female graduates. Meanwhile, a higher share of female graduates is still pursuing further education, practically further forgoing their entrance into the labor market.

World Bank (2015) assesses the performance of short-term training and interventions by the Skills and Training Enhancement Project (STEP), a tracer study conducted between December 2013 and January 2014. Skills and Training Enhancement Project (STEP) is jointly financed by the World Bank, Canada, and the Government of Bangladesh (GoB). It supports competitively selected 42 public and eight private short-term training institutions for improving the quality of training and providing opportunities to disadvantaged youth to obtain skills from the select training providers. The tracer study aims to profile the characteristics of short-term vocational students to understand the demands and expectations for short-term training and to assess the labor market outcomes of short-term training courses, especially of those that are supported by STEP, and to examine the relevance of the short-term training programs through constructive feedback from users (i.e., students) and demand-side (labor market) perspectives. Data has been collected from randomly selected samples of 994 current students, 953 (cohort 1 – after six months from graduation), and 928 (cohort 2 – after 12 months from graduation) former students, respectively, from 93 trades in 36 institutions. It has been noted in the study that 51 percent of the graduates enter the labor market while 38 percent continue with their further study and training. Many students come to short-term training while waiting for admission to a higher level of education. Indeed, 38 percent of the graduates of the short-term training courses continue studying at upper levels of education. The breakdown of the labor market entrants shows that about 33 percent of graduates are working, and 18 percent are still looking for a job after six months. A large proportion of working graduates find wage employment (21 percent), but 4 percent work as self-employed, and 7 percent work as casual employees. Employment outcomes vary across different trades and types of institutions, with a high job placement rate among students from private institutions.

World Bank (2018) shows that low labor productivity is a longstanding headache for Bangladesh; accelerating investments in human capital and addressing skills challenges will be key to improving labor productivity and accelerating growth. Low educational attainment, despite the expansion of access to education in recent decades, and skills training are putting significant constraints on the productivity of the labor force in Bangladesh. Only around 46 percent of the population aged 15 years or above have attained secondary, and a fraction (4 percent) have tertiary education qualifications. Participation in skills training after formal schooling is negligible. Only 2.1 percent of the population had any vocational training outside of the formal schooling system.

Table 3.1: Major findings relevant to this study

Name of the Study	Year	Implementing Agency	Sponsor	Results
Tracer Study on Graduates of Tertiary-Level Colleges	2021	Bangladesh Institute of Development Studies (BIDS)	College Education Development Project (CEDP)	• 21% of graduates are salaried employed. • 66% are unemployed. • 1.5% are self-employed, • 7% are involved in full-time/part-time study. • 5% graduates do not belong to the labour force
Tracer Study of Graduates of Universities in Bangladesh	2018	Bangladesh Institute of Development Studies (BIDS)	University Grants Commission of Bangladesh	• 46% of graduates are unemployment. • 5.77% of the graduates choose to be self-employed. • 65% are in labour force.
Graduate Tracking Survey on Affiliated Colleges of Bangladesh National University	2019	-	World Bank	• 65% of graduates are active in the labor force. • 1% are neither part of the labor force nor in education. • 46% of graduates remain unemployed after three years of graduation.
How Does the Short-Term Training Program Contribute to Skills Development in Bangladesh? A Tracer Study of the Short-Term Training Graduates	2015	-	World Bank	• 51% of the graduates enter the labor market. • 38% continue with their further study and training.

CHAPTER IV: GRADUATE EMPLOYABILITY OF NU-AFFILIATED COLLEGES: MAJOR FINDINGS FROM GRADUATE SURVEY

This chapter covers data on current economic activity status of the graduates. The economically active graduates (or labor force) encompass all persons employed and all those who are unemployed. People are classified as employed, unemployed or outside the labor force according to definitions of the International Labour Organization (ILO). Respondents are classified as employed, unemployed and outside the labor force based on information collected through the survey questionnaire, which mainly relates to their actual activity during a particular reference week.

4.1. Employment Outcomes

A total of 1345 graduates' information has been collected under this study. They are either currently active graduates or not active in the labor force. The currently active graduates are under the 'Labour Force' and refer to those graduates who contribute or are available to contribute to the production of goods and services in the country. It is found that majority of graduates are active in the labor force (91 percent) (Table 4.1). It is necessary to mention that the percentage of the total labor force for the male graduates is higher than that of female graduates, i.e., 96 percent and 84 percent respectively.

The graduates outside the labor force are those persons who were neither in employment nor unemployment during the reference week prior to the survey. These graduates include: students, physically disable, physically ill, and housewife. Table 4.1 reflects total number of graduates not in the labor force are found to be 9 percent which comprises 4 percent male and 16 percent female. The distribution is as follows.

Table 4.1: Distribution of current status of graduates

Status	Total		Male		Female	
	N	%	N	%	N	%
In labor force	1225	91.08	749	95.90	476	84.40
Not in labor force	120	8.92	32	4.10	88	15.60
Total number	1345	100	781	100	564	100

Source: Calculation based on primary data.

Graduates in employment

Graduates in employment are defined as those who, during a short reference period (usually 7 days), were engaged in any activity to produce goods or services for pay or profit (BBS, 2017). They comprise:

- Employed persons 'at work', i.e., who worked in job at least one hour;
- Employed persons 'not at work' due to temporary absence from a job, or to working-time arrangements (such as shift work, flexible time and compensatory leave for overtime).

The use of this one-hour criterion ensures coverage of all the activities engaged in, including part-time, temporary, causal or sporadic activities, as well as comprehensive measurement of all inputs of labor into production.

The ILO definition of employment provides separate criteria for persons in paid employment and persons in self-employment in order to accommodate the idea that employment covers any work, be it for wage or salary, profit or family gain and including the production of goods for own consumption. The "employed" comprises all persons older than a specified age who, during a specified brief period, either one week, were in one of the following categories (BBS, 2017):

(a) paid/wage employment

- at work – persons who during the reference period performed some work for wage or salary, in cash or in kind;
- With a job but not at work – persons who, having already worked in their present job, were temporarily not at work during the reference period but had a formal attachment to their job.

(b) Self-employment

- at work – persons who during the reference period performed some work for profit or family gain, in cash or in kind;
- With an enterprise but not at work – persons working with an enterprise, which may be a business enterprise, a farm or a service undertaking, who were temporarily not at work during the reference period for any specific reason.

Unemployed graduates

The standard definition of unemployment is based on the following three criteria used by International Labour Organisation (ILO), which should be satisfied simultaneously: "without work", "currently available for work" and "seeking work". The "unemployed" comprise all graduates who during the reference period were: (a) without work – not in paid employment nor self-employed; (b) currently available for work – available for paid employment or self-employment during the reference period (one week); and (c) seeking work – had taken specific steps in a specified reference period (one month) to seek paid employment or self-employment.

Table 4.2 shows that a total of 879 graduates are employed in our survey with the male is 652 and female is 227. This reflects the employment rate is 71.76 included of 80 percent male and 65.69 female. On the other hand, a total of 346 graduates are found to be unemployed providing 97 male and 249 female graduates. Therefore, the average unemployment rate turns to be 28.24 percent included 19.96 percent male and 34.31 female. This result shows that employment outcomes differ significantly across gender. A much higher share of male graduates is employed compared to their female counterparts.

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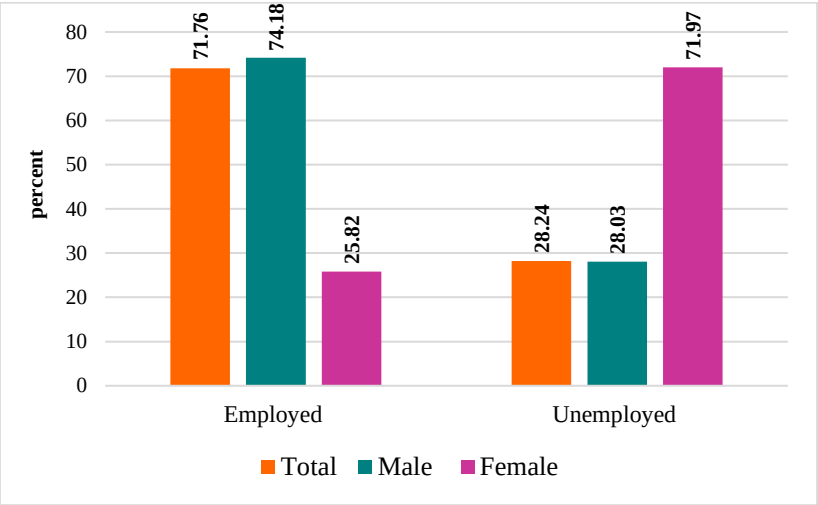
Table 4.2: Employment status by gender

Labor force	Male		Female		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Employed	652	80.04 (74.18)	227	65.69 (25.82)	879	71.76
Unemployed	97	19.96 (28.03)	249	34.31 (71.97)	346	28.24
Total	749	100 (61.14)	476	100 (38.86)	1225	100

Note: Row percentages are in parenthesis.

Source: Calculation based on primary data.

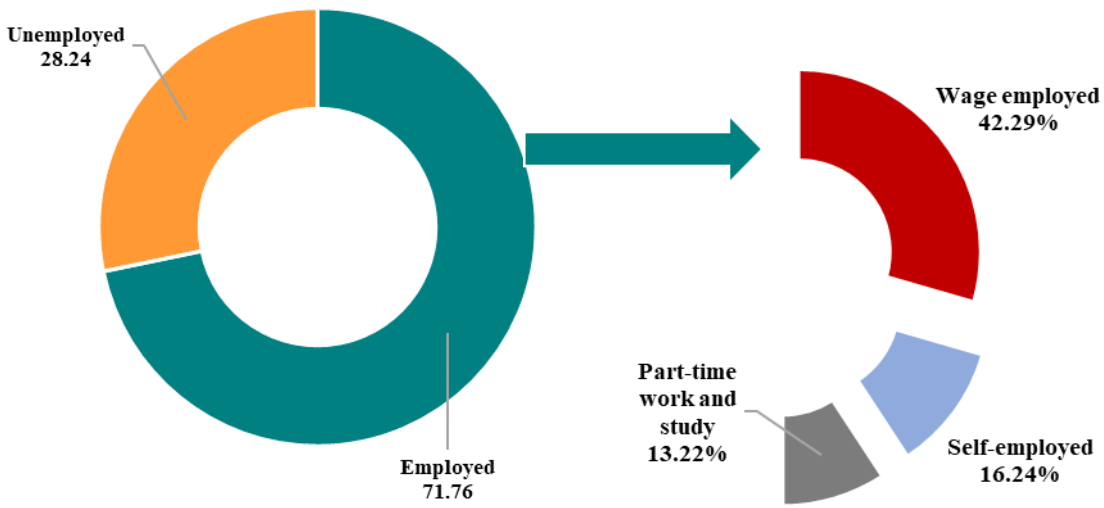
Figure 4.1: Employment status by gender



Source: Calculation based on primary data.

Figure 4.2 summarizes the current economic status of graduates, including both bachelor's and master's degree graduates, roughly after three years of their graduation. Among the employed graduates, wage employment is the main form of employment. Only 16.2 percent of graduates are currently being engaged in self-employment. What is most striking is that more than one fourth of the graduates (28.24 percent) are still unemployed and looking for jobs, even after spending three to four years since first graduating from their colleges.

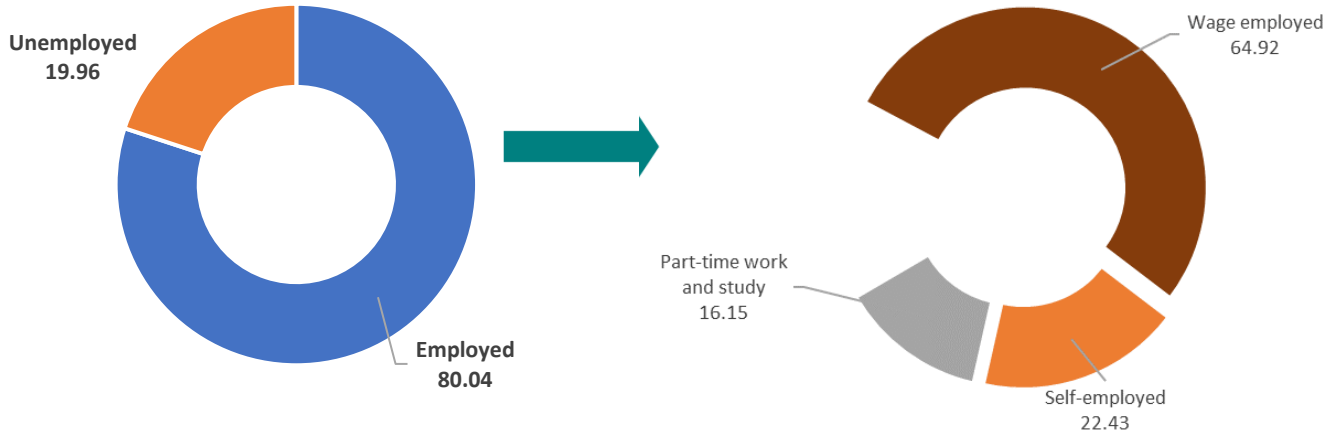
Figure 4.2: Disaggregated employment status



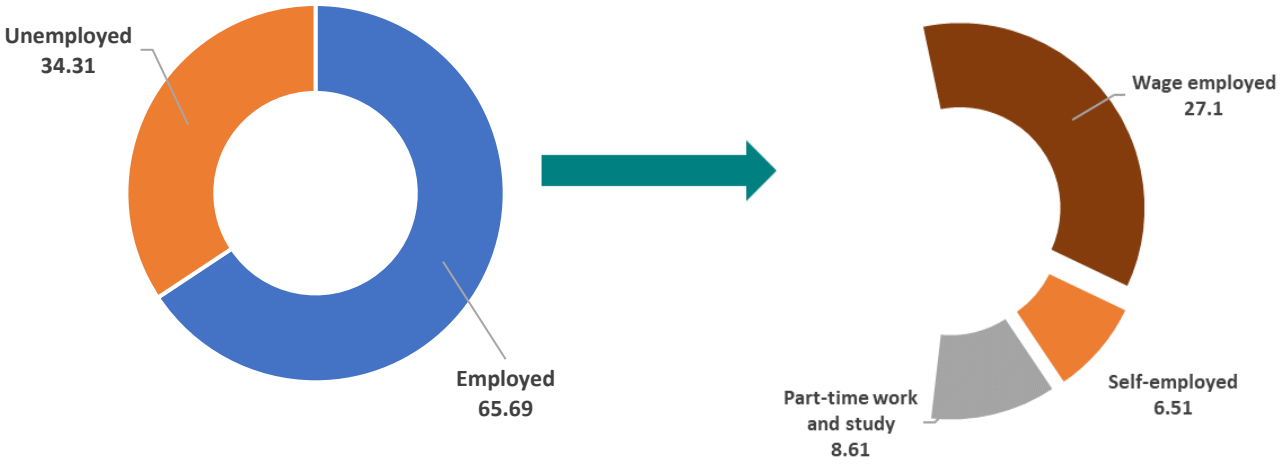
The disaggregated picture shows that wage employment is the main form of employment for both male and female graduates. However, the proportion of graduates engaged in wage employment is higher for males than females. Moreover, a few female graduates are found to be engaged in self-employed activities and further studies.

Figure 4.3: Disaggregated employment status by gender

Distribution of male graduates



Distribution of female graduates



4.2. Comparison of Current Status of Employment with Tracer Study (2021)

Employment outcome:

For this comparison, we have used three types of specification for calculating the unemployment rate.

1) BBS-ILO specification: estimation technique mentioned above
2) BIDS specification: BIDS researchers use a strict definition of employment, which excludes the graduates who are part-time working and studying from the list. This results in a total number of 716 graduates as employed.
3) Tracer Study done in 2021: In previous tracer study, individual identified him/herself as employed or not. It is basically, self-reported identification. This results in a total of 638 graduates as employed.

Therefore, using the above-mentioned criteria the employment and the unemployment rate turns to be as follows:

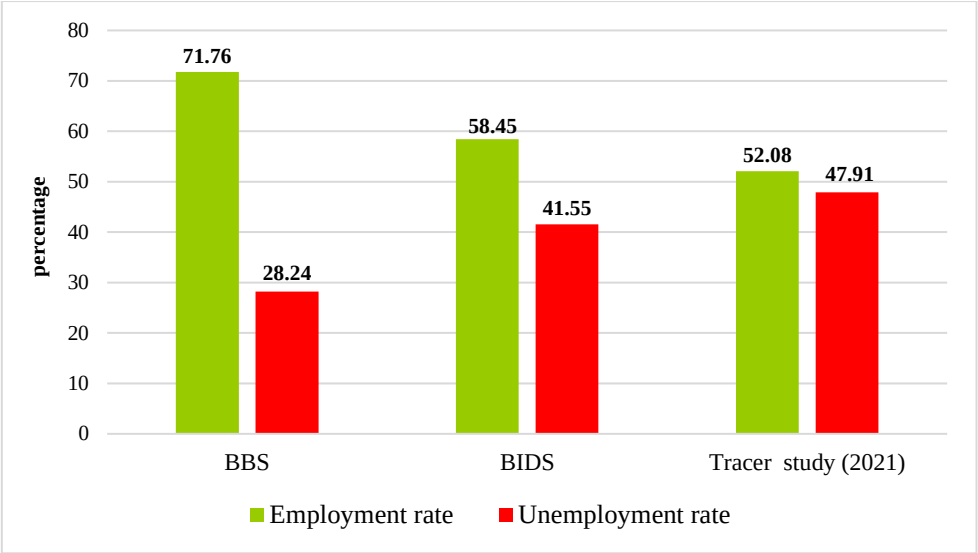
Table 4.3: Employment rate calculation

Sl no.	Formula	Rate	Calculation (Employed graduate /total labor force)X100	Rate (%)
1	BBS	Employment rate	(879/1225)X100=	71.76
		Unemployment rate		28.24
2	BIDS	Employment rate	(716/1225)X100=	58.45
		Unemployment rate		41.55
3	Tracer Study (2021)	Employment rate	(638/1225)X100=	52.08
		Unemployment rate		47.91

Source: Calculation based on primary data.

Figure 4.4 shows that the unemployment rate is relatively low (28 percent) while considering the BBS-ILO liberalize definition of employment based on working for at least one hour in the reference period. While it turns to be higher considering BIDS definition (42 percent). Moreover, a high share (48 percent) of college graduates is found to be unemployed three years after graduation as calculated following the methodology of tracer study (2021).

Figure 4.4: Employment and unemployment rate by different estimates



Source: Calculation based on primary data.

The rest of this report follows the definition of the BBS-ILO for defining employed and unemployed graduates and thereby in the disaggregated analysis also.

Employment outcome at the disaggregated level

In this section, we are comparing the employment rate between Tracer study (2021) and Tracer study (2023) following the same definition used in Tracer study (2021) to observe the changes in employment status of the NU graduate's overtime.

In tracer study (2021), the current status of employments of graduates shows that 21 percent graduates are salaried employed, while 66 percent are unemployed; 1.5 percent are self-employed and 7 percent are involved in full-time/part-time study. On the other hand, follow-up tracer study results shows that shows that 28.73 percent graduates are salaried employed, while 47.91 percent are unemployed; 10.93 percent are self-employed, 12.40 percent are involved in full-time/part-time study.

Table 4.3.1: Comparison of Employment outcome at the disaggregated level

Status of graduates	Tracer study (2021) (%)	Follow-up tracer study (2023) following calculation of tracer study (2021) (%)	Follow-up tracer study (2023) (%)
Salaried employed	21	28.73	42.29
Self-employed	1.5	10.93	28.24
Unemployed	66	47.91	16.24
Full-time/part-time study	7	12.40	-
Part-time work and study	-	-	13.22

Source: Calculation based on primary data.

The disaggregated picture shows that in tracer study (2021), the proportion of females among salaried graduates is 11.64 percent, while it is 30.74 percent for males; the proportion of females not in the labor force is 9 percent which is only 0.6 percent for males. But the proportion of unemployed females and female graduates in part-time/full-time study are higher than unemployed males and male graduates (70.3% vs 61%; 8.55% vs 5.14%). However, in follow up tracer study (2023) unemployment rate among the male graduates has decreased considerably comparing with Tracer study (2021). More male graduates are engaged in self-employed activities and are involved in further study to increase their job opportunities.

Table 4.3.2: Comparison of employment outcome at the disaggregated level

Status of graduates	Tracer study (2021) (%)		Follow-up tracer study (2023) following calculation of Tracer study (2021) (%)		Follow-up tracer study (2023)	
	Female	Male	Female	Male	Female	Male
Salaried employed	11.64	30.74	19.43	34.92	27.10	64.92
Self-employed	0.36	2.51	2.86	16.30	34.31	19.96
Unemployed	70.31	60.98	68.71	34.10	6.51	22.43
Full-time/part-time study	8.55	5.14	9.00	14.67	-	-
Part-time work and study	-	-	-	-	8.61	16.15

Source: Calculation based on primary data.

The summary of this results shows that employment outcomes differ significantly across gender. A much higher share of male graduates is employed compared to their female counterparts. After three years of graduation, more than one fourth of the graduates are still unemployed. This share is very high compared to the labor market outcome of the general population. According to the Labour Force Survey 2016–2017, the unemployment rate among those with tertiary education qualifications was 11.2 percent, which was much higher than the national average of 4.2 percent in 2017. The unemployment rate for females stands at 34.31 percent, which is nearly 1.5 times higher than that of males (19.96 percent). This level of unemployment is extremely concerning and raises serious concerns about willingness to search job and skills to manage job among the college graduates in Bangladesh.

CHAPTER V: LABOUR MARKET OUTCOME AND ECONOMIC ACTIVITIES OF GRADUATES: FINDINGS FROM GRADUATE SURVEY

We have interviewed 1345 graduates coming from 61 colleges across all administrative divisions of Bangladesh. These graduates are coming from four types of colleges under the National University affiliation: Government-Honors (GH), Non-Government Honors (NGH), Government Masters (GM), and Non-Government Masters (NGM).

5.1. Information on Graduates' Colleges

In this section, we present data on colleges that produced graduates in 2018. In Table 5.1, we see that among the interviewed 1345 graduates, 672 studied in government colleges and 673 studied in non-government colleges. Of the 672 graduates from government colleges, 57.3% completed their master's degree and 42.7% completed their honor's degree from the same. Of the 673 graduates from non-government colleges, only 17.8% completed their master's and 82.2% completed their honor's degree from the same.

Table 5.1: Distribution of graduates by type of college and gender

College Type	Number of Graduates			% of Graduates		
	All	Male	Female	All	Male	Female
Government Honors	287	180	107	42.7	44.3	40.2
Government Master's	385	226	159	57.3	55.7	59.8
Total Government	**672**	**406**	**266**	**49.96**	**52.0**	**47.2**
Non- Government Honors	553	303	250	82.2	80.8	83.9
Non- Government Master's	120	72	48	17.8	19.2	16.1
Total Non- Government	**673**	**375**	**298**	**50.04**	**48.0**	**52.8**
All	**1345**	**781**	**564**	**100.0**	**100.0**	**100.0**

Source: Calculation based on primary data.

The results of the graduates have been shown in Table 5.2 where the average results and differences between the results from government and non-government colleges are included. This table portrays the average Cumulative Grade Point Average (CGPA) of graduates categorized by college type. The mean CGPA for honors and master's graduates from government honor's colleges (GH) is 2.96 and 3.00, while for graduates from non-government honor's colleges (NGH), it is 2.91 and 3.01 respectively. While there is a statistically significant difference in mean CGPA between honor's graduates from these two types of

colleges, there is no statistically significant difference in mean CGPA between master's graduates from these two types of colleges. The mean CGPA for graduates from master's colleges are also depicted in the table. The mean CGPA for honors and master's graduates from all government colleges (TG) is 2.99 and 2.98, while for graduates from all non-government colleges (TNG), it is 2.94 and 3.12 respectively. The difference in mean CGPA for honor's results between these two types of colleges is statistically significant.

Table 5.2: Average CGPA of graduates by college type

College Type	Mean		Number		S.D		Diff		P-value	
	H	M	H	M	H	M	H	M	H	M
GH	2.96	3.00	287	123	0.23	0.26	0.053**	- 0.007	0.003	0.829
NGH	2.91	3.01	553	220	0.25	0.3				
GM	3.01	2.98	385	306	0.29	0.31	-0.053	- 0.347*	0.070	0.017
NGM	3.06	3.32	119	119	0.25	2.48				
TG	2.99	2.98	672	429	0.26	0.29	0.052***	- 0.135	0.000	0.068
TNG	2.94	3.12	672	339	0.26	1.49				

Note: TG=total government colleges, TNG=total non-government colleges, H=honors college and M=master's college.
Source: Calculation based on primary data.

The average CGPA of the honors graduates from science is the highest (3.00), followed by average CGPA from social science, business administration/commerce and arts which are 2.91, 2.89 and 2.85 respectively (Table 5.3). The table provides insights into the average CGPA of honor's graduates in different academic programs and distinguishes between graduates from government and non-government colleges. Among the Science graduates, there are 16 graduates in government colleges with a mean CGPA of 3.08 and 3 graduates in non-government colleges with a mean CGPA of 3.00. Among the social science graduates, there are 10 graduates with a mean CGPA of 2.91 in government colleges and 61 graduates in non-government colleges with a mean CGPA of 2.92. For arts and business administration faculties, the average CGPA for government and non-government colleges are 2.86, 2.84, 2.94 and 2.85 respectively.

Table 5.3: Average CGPA of honor's graduates by college type

	N	Mean	SD	Diff	P-value	Mean of all colleges (S.D)
Bachelor in Science						
GH	16	3.08	0.198	0.081	0.5092	3.00 (0.297)
NGH	3	3.00	0.130			
Bachelor in Social Science (BSS)						
GH	10	2.91	0.133	0.0135	0.8006	2.91 (0.198)
NGH	61	2.92	0.160			
Bachelor in Arts						
GH	60	2.86	0.285	0 .0173	0.6764	2.85 (0.279)
NGH	127	2.84	0.255			
Bachelor in Business Administration/Commerce						
GH	78	2.94	0.168	0.099	0.0013	2.89 (0.228)
NGH	142	2.85	0.237			

Source: Calculation based on primary data.

The average CGPA of the master's graduates from business administration/commerce science is the highest (3.17), followed by average CGPA from science, social science, and arts which are 3.10, 2.98 and 2.93 respectively (Table 5.4). The table provides insights into the average CGPA of master's graduates in different academic programs and distinguishes between graduates from government and non-government colleges. Among the Science graduates, there are 113 graduates in government colleges with a mean CGPA of 3.06 and 19 graduates in non-government colleges with a mean CGPA of 3.27. Among the social science graduates, there are 31 graduates with a mean CGPA of 2.91 in government colleges and 19 graduates in non-government colleges with a mean CGPA of 2.99. For arts and business administration faculties, the average CGPA for government and non-government colleges are 2.89, 2.96, 3.06 and 3.52 respectively. Here also, the differences between the mean CGPA for government and non-government college graduates are not statistically significant.

Table 5.4: Average CGPA of Master's graduates by college type

	N	Mean	S.D.	Diff	P-value	Mean of all colleges (S.D)
Master in Science						
GM	113	3.06	0.365	-0.2067	0.0182	3.10 (0.346)
NGM	19	3.27	0.218			
Master in Social Science						
GM	31	2.91	0.312	-0.0765	0.3857	2.98 (0.280)
NGM	19	2.99	0.279			
Master in Arts						
GM	121	2.89	0.238	-0.0632	0.3355	2.93

NGM	15	2.96	0.242			(0.271)
Master in Business Administration/Commerce						
GM	41	3.06	0.216	-0.4675	0.3706	3.17 (1.76)
NGM	66	3.52	3.318			

Source: Calculation based on primary data.

5.2. Graduates' Employment Status

Table 5.5 provides a detailed breakdown of the distribution of graduates by their employment status, categorized by college types (Government and Non-government). For graduates from government honor's colleges, 38.2% of graduates are salaried employed, 18.7% are self-employed, 13.7% are graduates with part-time work and study, and 29.4% are unemployed. For graduates from Government Master's colleges, 41.4% are salaried employed, 11.2% are self-employed, 19.8% are graduates with part-time study and working, and 27.6% are unemployed. Combining Government Honor's and Master's, 40% of graduates are salaried employed, 14.4% are self-employed, 17.2% are graduates with part-time study and working, and 28.4% are unemployed. Among Non-Government Honors graduates, 47.1% are salaried employed, 18.2% are self-employed, 9.5% are graduates with part-time study and working, and 25.1% are unemployed. In the case of Non-Government Master's graduates, 27.3% are salaried employed, 17.3% are self-employed, 8.2% are graduates with part-time study and working, and 47.3% are unemployed. When considering all graduates, irrespective of college type of the surveyed graduates, 42.28% are salaried employed, 16.2% are self-employed, 13.2% are graduates with part-time study and working, and 28.2% are unemployed.

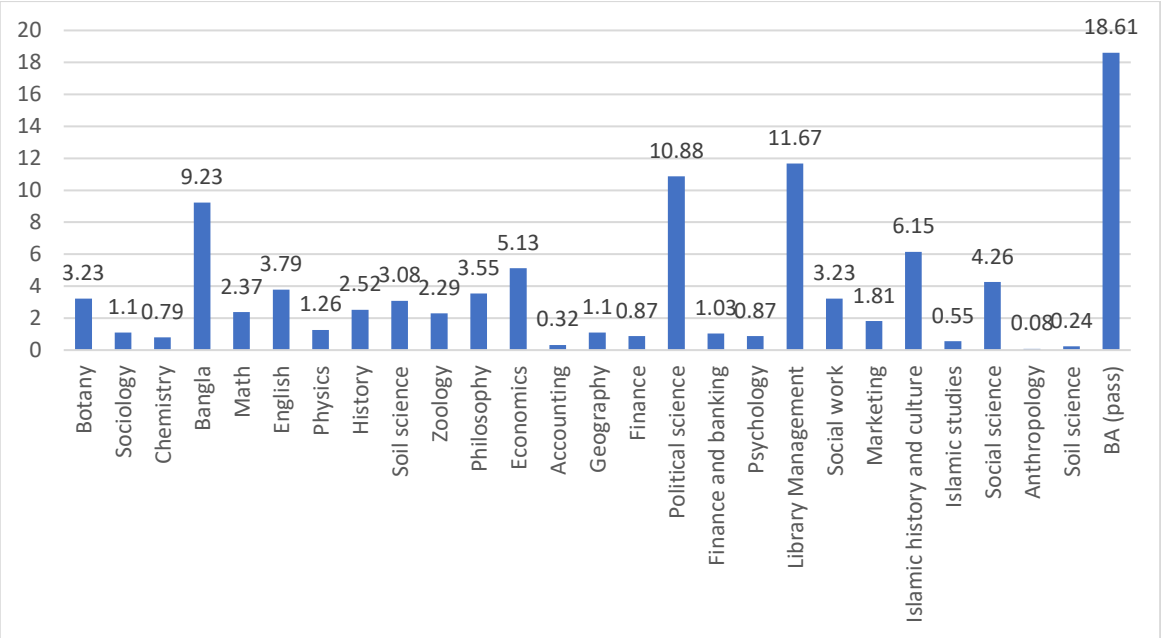
Table 5.5: Distribution of graduates by employment status and college types

Employment Status	Government Colleges (%)			Non-government Colleges (%)			ALL (%)
	GH	GM	TG	NGH	NGM	TNG	
Salaried Employed	38.2	41.4	40.0	47.1	27.3	43.6	42.28
Self-employed	18.7	11.2	14.4	18.2	17.3	18.0	16.2
Graduates with part-time work and study	13.7	19.8	17.2	9.5	8.2	9.3	13.2
Unemployed	29.4	27.6	28.4	25.1	47.3	29.1	28.2

Source: Calculation based on primary data.

The surveyed graduates from different government and non-government colleges studied different subjects at their respective colleges. The academic subjects of these graduates based on their employment status have been listed in Appendix Table A2. The highest number of graduates interviewed studied BA (pass) course (18.61) followed by Library management (11.67), Political science (10.88) and so on. In Figure 5.1, we also see that among the interviewed graduates, very few belong to business-related subjects like Accounting, Finance, Finance and Banking.

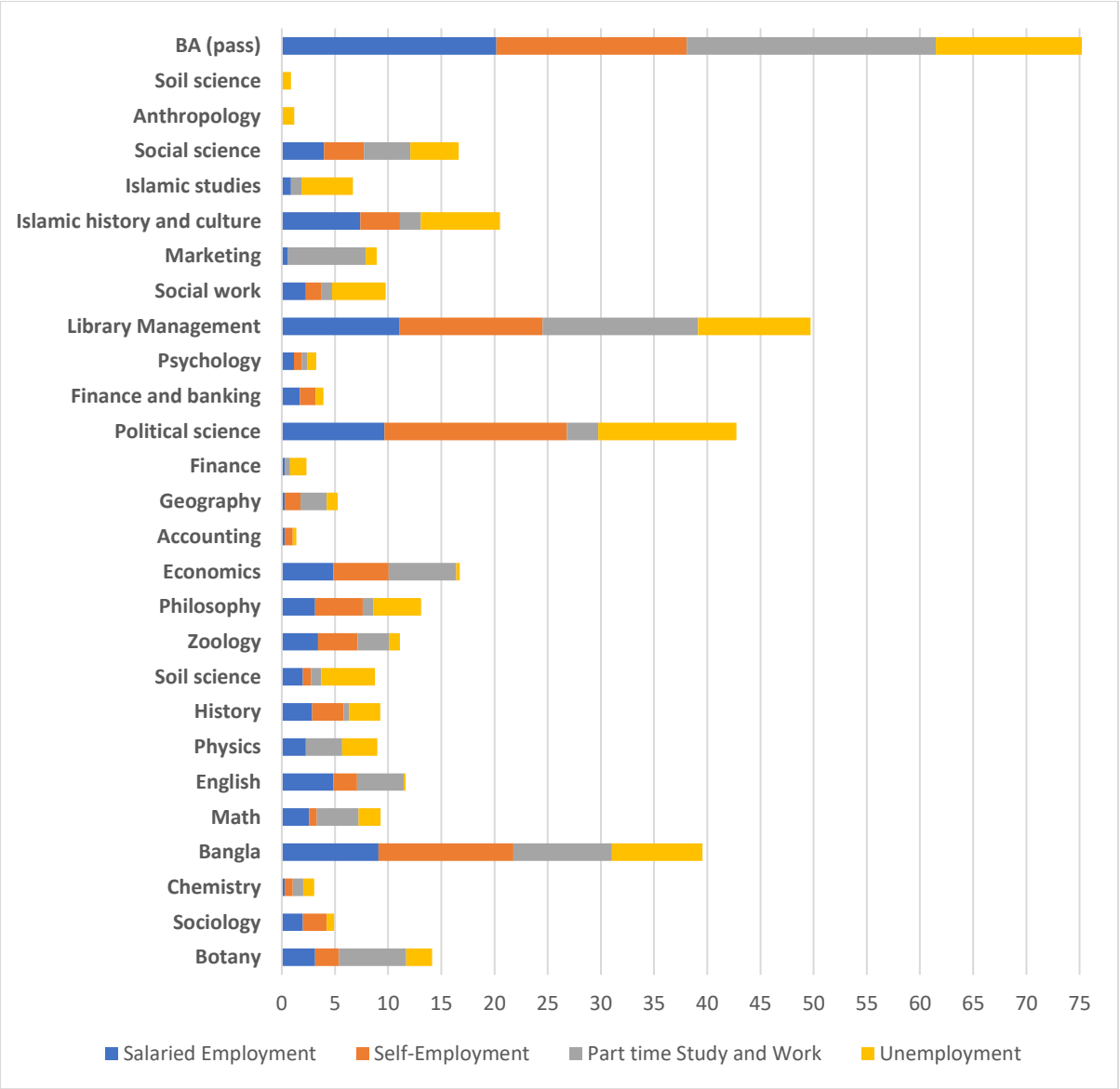
Figure 5.1: % of graduates from different academic discipline



Source: Calculation based on primary data.

In Figure 5.2, the distribution of these graduates' employment status has been presented from where we can surmise that, among the interviewed graduates, graduates from Economics, English, Accounting, and Sociology seem to be less unemployed compared to graduates from other subjects. Among the Botany graduates, 3.1% are employed in salaried positions, 2.2% are self-employed, 6.34% are graduates who combine part-time work with study, and 2.43% are unemployed. In the Sociology department, 2.0% of graduates are salaried employed, 2.24% are self-employed, none are combining part-time work with study, and 0.69% are unemployed. Among the graduates from the Mathematics department, the majority are either self-employed or combining work with studies. Significant number of graduates from Physics, Zoology, Soil science, Social work, Islamic studies, and B.A. (pass) course are of different combinations of employed, self-employed or part time workers.

Figure 5.2: Employment Status of Graduates from Different Subjects



Source: Calculation based on primary data.

Figure 5.3: Employment Status of Graduates by Gender from Different Subjects

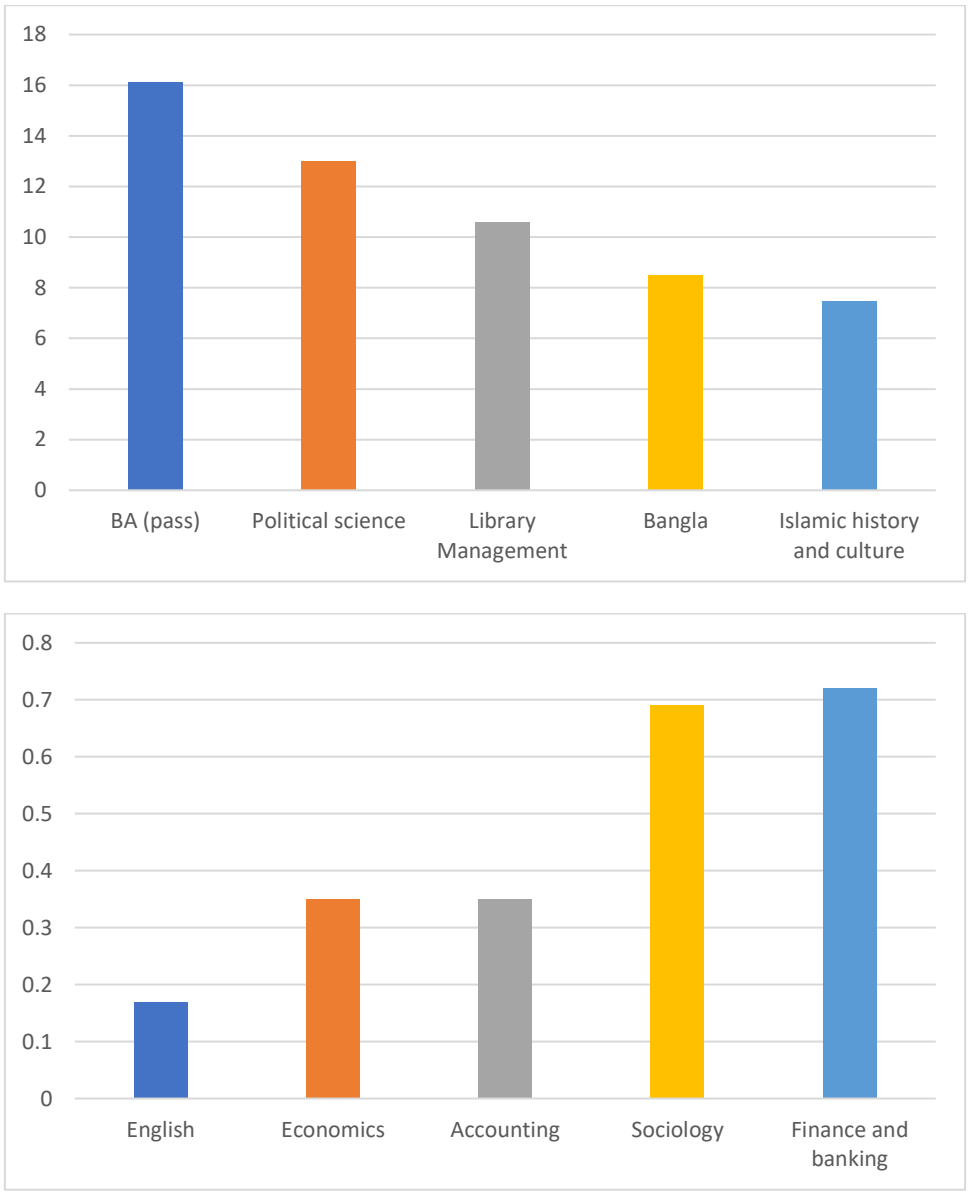
Subjects	Male Graduates					Female Graduates				
	Salaried Employment	Self-Employment	Part time Study and Work	Unemployment	All	Salaried Employment	Self-Employment	Part time Study and Work	Unemployment	All
Botany	1.95	2.5	3.47	2.39	2.46	6.32	0.00	13.11	2.45	4.44
Sociology	1.95	2.5		0.4	1.17	2.11	0.00	0.00	0.92	1.01
Chemistry	0.39	0.83	1.39	1.59	1.04		0.00	0.00	0.61	0.4
Bangla	10.89	14.17	9.03	7.97	10.1	4.21	0.00	9.84	8.9	7.86
Mathematics	2.33	0.83	4.86	3.98	3.11	3.16	0.00	1.64	0.61	1.21
English	3.5	2.5	4.86	0.4	2.85	8.42	0.00	3.28	0.00	5.24
Physics	1.56	0.00	3.47	1.2	1.3	4.21	0.00	3.28	4.91	1.21
History	3.11	3.33	0.00	2.39	2.33	2.11	0.00	1.64	3.37	2.82
Soil science	2.33	0.83	1.39	4.78	2.72	1.05	0.00	0.00	5.21	3.63
Zoology	3.89	4.17	2.78	0.8	2.72	2.11	0.00	3.28	1.23	1.61
Philosophy	3.11	5	0.00	2.39	2.59	3.16	0.00	3.28	6.13	5.04
Economics	4.28	3.33	5.56	0.4	5.05	6.32	21.43	8.2	0.34	5.24
Accounting	0.39	0.83	0.00	0.4	0.39	0.00	0.00	0.00	0.31	0.2
Geography	0.00	1.67	2.78	2.39	1.55	1.05	0.00	1.64		0.4
Finance	0.00	0.00	0.69		0.13	1.05	0.00	0.00	2.76	2.02
Political science	10.51	17.5	3.47	11.95	10.75	7.37	14.29	1.64	13.8	11.09
Finance and banking	1.56	0.83	0.00	0.4	0.78	2.11	7.14	0.00	1.23	1.41
Psychology	1.56	0.83	0.69	1.99	1.42	0.00	0.00	0.00	0.00	0.00
Library Management	12.45	11.67	14.58	11.55	12.44	7.37	28.57	14.75	9.82	10.48
Social work	1.95	1.67	1.39	3.19	2.2	3.16	7.14		6.44	4.84
Marketing	0.39		8.33	1.59	2.2	1.05	0.00	4.92	0.61	1.21
History and culture	6.61	4.17	2.78	9.16	6.35	9.47	0.00	0.00	6.13	5.85
Islamic studies	1.17	0.00	0.69	6.37	0.65	0.00	0.00	1.64	3.68	0.4
Social science	3.5	3.33	4.86	2.39	3.37	5.26	0.00	3.28	6.13	5.65

Anthropology	0.00	0.00	0.00	0.4	0.13	0.00	0.00	0.00	0.00	0.00
Soil science	0.00	0.00	0.00	0.8	0.26	0.00	0.00	0.00	0.31	0.2
BA (pass)	20.62	17.5	22.92	18.73	19.95	18.95	21.43	24.59	14.11	16.53

Source: Calculation based on primary data.

Figure 5.4 shows that graduates who are unemployed, majority of them graduate from BA (pass) course, Political science, Library Management, Bangla, and Islamic history and culture. On the other hand, English, Economics, Accounting, Sociology and Finance and Banking graduates are less unemployed.

Figure 5.4: Subjects having highest % of unemployed graduates (top) and lowest % of unemployed graduates (bottom)



Source: Calculation based on primary data.

Table 5.6 highlights the differences in employment status among graduates from various academic disciplines in both government and non-government colleges. It shows that the distribution of graduates across employment categories can vary significantly depending on their field of study.

In government colleges, arts graduates have the highest percentage of salaried employed individuals at 46.33%, followed by social science at 45.61%, science at 38%, and business

studies at 28.47%. On the other hand, in non-government colleges social science graduates having the highest percentage at 51.54%, followed by arts at 46.96%, business studies at 38.95%, and science at 26.32%. It indicates graduates from the non-government colleges are relatively successful in the labor market when it comes to salaried employment (44% vs. 40%).

In government colleges, business studies graduates have the highest percentage of self-employed individuals at 15.97%, followed by arts at 13.90%, social science at 14.04%, and science at 14.00%. Non-government colleges display a different pattern, with business studies graduates having the highest percentage of self-employed individuals at 18.05%, followed by arts at 19.34%, social science at 17.69%, and science at 26.32%. When considering all students, arts graduates have the highest percentage of self-employed individuals at 16.24%, followed by business studies at 16.84%, social science at 18.05%, and science at 14.43%. In government colleges, business studies graduates have the highest percentage in the category where there are graduates who are studying and working part-time too at 34.72%, followed by science at 17.33%, social science at 12.28%, and arts at 8.49%. Non-government colleges also show a significant percentage of business studies graduates in this category at 11.23%, followed by science at 9.27%, arts at 7.18%, and social science at 5.38%. When considering all students, business studies graduates have the highest percentage in this category at 13.22%, followed by science at 17.21%, social science at 12.28%, and arts at 8.49%.

In government colleges, arts graduates have the highest percentage of unemployed individuals at 31.27%, followed by science at 30.67%, social-science at 28.07%, and business studies at 20.36%. Non-government colleges also display variation, with business studies graduates having the highest percentage of unemployed individuals at 32.98%, followed by arts at 26.52%, social-science at 25.38%, and science at 21.05%.

Table 5.6: Distribution of graduates (%) by Employment status and Academic Discipline

Employment Status	Government Colleges (%)					Non-government Colleges (%)				
	Science	Social Science	Arts	Business Studies	All	Science	Social Science	Arts	Business Studies	All
Salaried Employed	38.00	45.61	46.33	28.47	40.0	26.32	51.54	46.96	38.95	43.58
Self-employed	14.00	14.04	13.90	15.97	14.43	26.32	17.69	19.34	16.84	18.05
Graduates with part time work and study	17.33	12.28	8.49	34.72	17.21	26.32	5.38	7.18	11.23	9.27
Unemployed	30.67	28.07	31.27	20.83	28.36	21.05	25.38	26.52	32.98	29.11
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Calculation based on primary data.

In Table 5.7, we depict the employment status of the government and non-government college graduates according to their gender dimension. In total 40% of the government college graduates are salaried employed, 28.4% are unemployed, 14.4 % are self-employed and 17.2% are Graduates with part-time work status. Unemployment rate among the female students is

much higher than their male counterparts. Also, male graduates seem to be more capable of having self-employment than the female graduates.

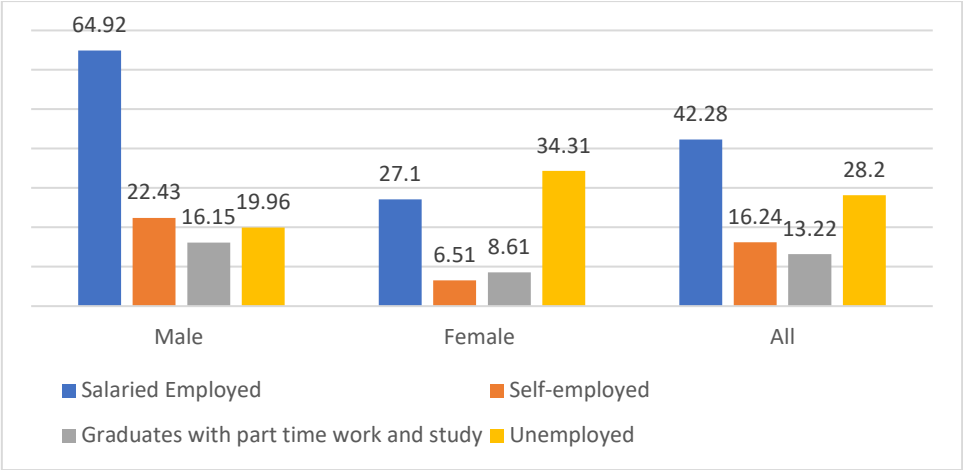
In non-government colleges 29.1% are unemployed, 43.6% are salaried employed, 18.0% are self-employed and 9.3% are the Graduates with part-time employment status. Like in government colleges, female graduates from non-government colleges seem to have greater share in the unemployment status than the male graduates from the same colleges. Noticeably, unemployment rate does not vary much by college types, i.e., government versus non-government colleges.

Table 5.7: Graduates (%) by employment status and gender

Government Colleges									
Employment Status	GH			GM			Total (Government)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Salaried Employed	59.8	27.4	38.2	59.7	29.9	41.4	59.7	28.8	40.0
Self-employed	22.3	11.5	18.7	17.8	0.7	11.2	19.8	5.0	14.4
Graduates with part time work and study	14.9	11.5	13.7	23.4	14.2	19.8	19.5	13.1	17.2
Unemployed	17.2	35.4	29.4	25.4	29.0	27.6	22.2	31.9	28.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Non-government Colleges									
Employment Status	NGH			NGM			Total (Non-government)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Salaried Employed	73.0	27.9	47.1	50.0	14.3	27.3	69.4	25.3	43.6
Self-employed	27.2	6.0	18.2	17.1	17.5	17.3	25.3	7.8	18.0
Graduates with part time work and study	12.8	5.1	9.5	11.4	2.5	8.2	12.5	4.7	9.3
Unemployed	15.8	32.1	25.1	30.0	57.1	47.3	18.0	36.9	29.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All Colleges									
Employment Status	Male	Female	Total						
Salaried Employed	64.92	27.10	42.28						
Self-employed	22.43	6.51	16.24						
Graduates with part time work and study	16.15	8.61	13.22						
Unemployed	19.96	34.31	28.20						
Total	100.0	100.0	100.0						

Note: GH=government honors, GM=government masters, TG=total government colleges, NGH=non-government honors, NGM=non-government masters, TNG=total non-government colleges.
Source: Calculation based on primary data.

Figure 5.5: Employment status of graduates



Source: Calculation based on primary data.

Overall, in all the colleges, the results show that a much higher share of male graduates is employed compared to their female counterparts. Male graduates find it less difficult to enter in to the labor market. They have engaged themselves either in job or self-employment activities. Meanwhile, a higher share of male graduates is still pursuing further education, practically further forgoing their entrance into the labor market. It would be reasonable to think that some of them lack the intention of joining the labor force in the first place or might have gotten discouraged by earlier experience of job search. Whatever the case might be, it is evident that jobs are extremely hard to come by for female graduates from the affiliated colleges. These findings are in-line with the study findings of World Bank (2019).

5.3. Employment Status and Related Information

5.3.1. Graduates with Salaried Employment

Table 5.8 shows that among the salaried employment, almost 64 percent of graduates are working as a full-time job holder, where NU affiliated non-govt. colleges have more full-time paid graduates than govt. colleges (65 percent and 62 percent respectively). There are almost 28% graduates who are working part time and seeking full-time employment, where the percentage of govt. college graduates is higher than those of non-govt. colleges (30.06 and 25.70 respectively).

Table 5.8: Distribution (%) of Graduates by Type of Paid Work

Type of Salaried Work	Government Colleges	Non-government Colleges	All Colleges
Only working full-time	61.85	65.36	63.64
Working full-time along with part-time	4.62	6.15	5.40
Working part-time and seeking full-time job	30.06	25.70	27.84
Working a part-time and not seeking full-time job	3.47	2.79	3.13

Source: Calculation based on primary data.

The salaried employed graduates were also asked about their average work experience monthly (Table 5.9). It has been reported that NU affiliated non-govt. college graduates have more experience that govt. colleges in question of full-time employment, working full time along with part time and working part time only (i.e., 32.13, 35 and 44.29 respectively).

Table 5.9: Average Work Experience (Month) by Type of Salaried Work and College Category

Type of Salaried Work	Average work experience in months		
	Government Colleges	Non-government Colleges	All Colleges
Only working full-time	28.97	32.13	30.63
Working full-time along with part-time	22.63	35.00	29.79
Working part-time and seeking full-time job	39.90	44.29	41.96
Working a part-time and not seeking full-time job	31.33	18.20	25.36

Source: Calculation based on primary data.

From the table 5.10, it is seen that more female has engaged in working as a full-time employee (65%) and working both full-time and part-time (6%) compared to the male graduates (i.e., 63% and 5%). While, on the other hand, male graduates have been reported to do more part time jobs than female (i.e., 28.40 and 26.32 respectively).

Table 5.10: Gender Wise Distribution (%) of Graduates by Type of Salaried Work

Type of Salaried Work	Male (%)	Female (%)
Only working full-time	63.04	65.26
Working full-time along with part-time	5.06	6.32
Working part-time and seeking full-time job	28.40	26.32
Working a part-time and not seeking full-time job	3.50	2.11

Source: Calculation based on primary data.

Education and Financial/Insurance activities have been come up as two major employers of full-time employees (Table 5.11). Around 29 percent of graduates are engaged in the education sector and 12 percent are engaged in different financial activities. Along with education, graduates those working both full-time and part-time have been reported to engage in national or international NGO or social works (40 percent).

The major portion of part-time graduates are involved in education sector such as tuition (51%) and in health services (almost 11 percent).

Table 5.11: Sector Wise Distribution (%) of Graduates by Type of Salaried

Name of sector	Only working full-time	Working full-time along with part-time	Working part-time and seeking full-time job	Working a part-time and not seeking full-time job
Agriculture, forestry, and fishing	5.13	0.00	0.00	0.00
Construction	0.00	0.00	2.70	0.00
Manufacturing	10.26	10.00	0.00	0.00
Garment	7.69	0.00	0.00	0.00
Food processing	0.00	0.00	5.41	0.00
Wholesale and retail trade	6.41	0.00	5.41	0.00
Transportation	1.28	0.00	0.00	0.00
Restaurant and food services	3.85	0.00	2.70	0.00
Information and communication	3.85	0.00	0.00	0.00
Financial and insurance activities	11.54	0.00	5.41	0.00
Real estate activities	-	-	-	-
Professional, scientific and technical activities	0.00	0.00	2.70	0.00
Education	29.49	40.00	51.35	100.00
Health	7.69	10.00	10.81	0.00
Social work/NGOs	7.69	40.00	5.41	0.00
Arts, entertainment and recreation	0.00	0.00	2.70	0.00
E-commerce	1.28	0.00	0.00	0.00
Others	1.28	0.00	5.41	0.00
Total	100.00	100.00	100.00	100.00

Source: Calculation based on primary data.

Among the salaried employers, almost 60 percent of NU graduates have been working under different private enterprises, where non-govt. graduates seem higher in this sector by 3 percent than govt. (i.e., 60.94 and 58.33 respectively). In general, in the government sectors, there are more graduate employees from NU affiliated govt. colleges than non-govt. colleges. On the contrary, non-govt. college graduates are more likely to engage in several NGO/Trust or Foundation (Table 5.12).

Table 5.12: Type of Employers for Salaried Employed Graduates (%)

Type of Employer	Government Colleges	Non-government colleges	All colleges
Government	15.00	4.69	9.68
Autonomous	5.00	7.81	6.45
Private Enterprise	58.33	60.94	59.68
Multinational Company	1.67	7.81	4.84
NGO/Trust/Foundation	8.33	14.06	11.29
Unofficial	10.00	4.69	7.26
Others	1.67	0.00	0.81
Total	100.00	100.00	100.00

Source: Calculation based on primary data.

Table 5.13 provides information about the graduates' first starting job. From the table, it is seen that most of the graduates (41 percent) have started their first job after completing graduation, where the percentage of NU non-govt. college graduates is higher than govt. college graduates (i.e., 45 percent and 37 percent respectively). Around 20 percent of graduates have been reported to start their professional career (Govt. College 26.32 and non-govt. College 13.41) after completing the post-graduation program.

Table 5.13: Graduates (%) with the Time of Starting Their First Job

Time of starting their first job	Government Colleges	Non-government Colleges	All Colleges
After passing HSC but before getting into undergraduate college	12.28	10.61	11.43
While studying in undergraduate college	17.54	21.23	19.43
After completing graduation level	36.84	45.25	41.14
While studying in postgraduate college	7.02	9.50	8.29
After completing postgraduate	26.32	13.41	19.71
Total	100.00	100.00	100.00

Source: Calculation based on primary data.

It has been reported from the graduates that the most used information source about current job application is media advertisement or job posting (23 percent), where the differences between NU affiliated govt. and non-govt. college is slightly vary (i.e., 25 percent and 22 percent respectively). Apart from that non-govt. college graduates are using more social networking include social media and personal network and job fairs than govt. college graduates (Table 5.14).

Table 5.14: Source of Information about Application of Current Job

Source	Government Colleges (%)	Non-government Colleges (%)	All Colleges (%)
Media advertisement/posting	24.05	22.47	23.25
Social media/networking	18.70	19.85	19.28
Through the college	1.15	1.12	1.13
Job fairs	0.38	2.25	1.32
Internet job posting	22.52	21.35	21.93
Through friends/relatives	30.53	32.96	31.76
Others	0.76	-	0.38
Total	100.00	100.00	100.00

Source: Calculation based on primary data.

Graduates were also asked the reasons for choosing their current job. The majority of the graduates have stated that they had no other options (22 percent). Here, the govt. college graduates have to put up with the situation more than non-govt. colleges (i.e., 24 percent and 20 percent respectively). The second option goes for a suitable location, almost 18 percent, where there seem no significant differences between the NU affiliated govt. and non-govt. colleges.

Table 5.15: Reasons for Choosing Current Job

Reasons	Government Colleges (%)	Non-government Colleges (%)	All Colleges (%)
Handsome salary	8.22	9.66	8.97
Suitable location	17.85	17.49	17.66
Good working condition	15.01	18.02	16.58
Reputed organization	8.50	12.79	10.73
Most suitable for my educational background	6.52	5.48	5.98
My interest area	9.35	10.44	9.92
No other alternatives	24.36	19.06	21.60
Job security	8.78	5.48	7.07
Good post/designation	1.13	1.04	1.09
Others	-	-	-

Source: Calculation based on primary data.

The following table gives us information about the current salaried employment such as work experience, working timetable, income, and information about other employees with the same academic background. From the table, it is seen that average work experience is higher in NU affiliated non-govt. college employees (30.83) than govt. college employees (21.33). The similarity seems in average working hours and working days. In question of monthly income, the non-govt. graduates earn more income in comparison to govt. college (i.e., 14678.59 and 17271.27 respectively). Average % of Employees with same educational subject of the salaried employee also seem higher among NU affiliated non-govt. college graduates.

Table 5.16: Current Salaried Employment Related Information

Variables	Estimates	Government Colleges	Non-government Colleges	All Colleges
Average work experience in months	Mean	21.33	30.83	26.35
	SD	24.94	86.93	65.40
	N	58.00	65.00	123.00
Average work hours in a day	Mean	7.27	8.30	7.78
	SD	2.51	2.24	2.43
	N	170.00	170.00	340.00
Average workdays in a week	Mean	5.52	5.64	5.58
	SD	0.82	0.74	0.79
	N	170.00	169.00	339.00
Average monthly income	Mean	14678.59	17271.27	15974.93
	SD	7343.68	12102.02	10078.72
	N	168.00	168.00	336.00
Average % of Employees with same educational subject of the salaried employee	Mean	14.93	23.97	19.52
	SD	15.99	26.29	22.25
	N	106.00	109.00	215.00

Source: Calculation based on primary data.

Almost 38 percent of graduates are currently working in the same area of their academic specialization where govt. college graduates have been reported more involvement with their academic preference jobs compared to non-govt. graduates. A large portion of graduates eagerly waiting to work in their related field of the study (87 percent).

Table 5.17: Salaried Graduates (%) Employed in Same Area of Academic Specialization

Information	Government Colleges (%)	Non-government Colleges (%)	All Colleges (%)
Working in the same area of academic specialization	46.51	30.18	38.42
Willingness to work in the area of academic specialization	90.71	83.67	87.11

Source: Calculation based on primary data.

The respondents who have reported that they are not involved in the same area of their academic specializations also stated the reasons for not working in area of specialization. Around 65 percent of graduates have identified the lack of related job opportunities is one of the main reasons for not being employed in the relevant areas where govt college 62% and non-govt. college 67% (Table 5.18). The NU affiliated non-govt. College graduates seem lack of career progression in the related field more than the govt. college graduates (i.e., 17 percent and 15 percent respectively).

Table 5.18: Reasons for Not Working in Area of Specialization

Reasons	Government Colleges (%)	Non-government Colleges (%)	All Colleges (%)
Lack of relevant Job	61.59	66.86	64.52
Lack of career progression	15.22	17.44	16.45
Poor remuneration	10.87	9.30	10.00
Lack of job satisfaction	10.87	6.40	8.39
Others	0.72	-	0.32

Source: Calculation based on primary data.

It is seen that only 13 percent of graduates have been promoted at their current workplace where there is no significant difference between the govt. and non-govt. colleges. (See table 5.19).

Table 5.19: Salaried Graduates (%) with Promotions in Current and Former Workplace

Promotion Status	Government Colleges (%)	Non-government Colleges (%)	All Colleges (%)
Has been Promoted at current workplace	12.74	13.17	12.96
Average number of promotions	1.2	1.2	1.2

Source: Calculation based on primary data.

For most of the graduates, the main factor to get a promotion in their work is their own expertise, intellectual and hard work (69 percent almost). Roughly 59 percent of graduates have been reported that the training offered by the respective colleges hardly prepare them to work efficiently to be promoted (Table 5.20).

Table 5.20: Factors Contributing to Promotion in Current Job

Contributing Factors (In Graduates' Wordings)	Fully Disagree (%)	Somewhat Disagree (%)	Agree (%)	Fully Agree (%)
The training provided by my college adequately prepared me to work efficiently to be promoted	58.82	5.88	17.65	17.65
Participated in some trainings apart from those provided by college which adequately prepared me to work efficiently to be promoted	41.18	17.65	29.41	11.76
My own expertise, intellect and hard work contributed to get promotion	12.50	-	18.75	68.75

Source: Calculation based on primary data.

The graduates were also asked about the facilities in their current job place where it has been reported that around 29 percent of graduates including govt. and non-govt. colleges get transportation benefit from their office and the average amount is close to BDT 3600. Other important amenities provided by the office include housing (21%), pension (19%), and health insurance (10%) and so on.

Table 5.21: Benefits at Current Job

Type of Benefits	Benefit provided (%)	Average Amount (in BDT)
Pension benefit	18.96	286375
Health insurance (complete)	10.27	3150
Health Insurance (partial)	9.38	11446
Transport benefit	28.68	3680
Housing Benefit	20.80	4287
Other	13.86	4180

Source: Calculation based on primary data.

5.3.2. Graduates with Self-Employment

27 percent of graduates have been engaged in wholesale and retail trade and other 14 percent of graduates are in the agriculture, forestry, or fishing industry. More NU affiliated govt. college graduates are involved in garment, food processing, education, and health sector compared to non-govt. graduates. While, on the other hand, more non-govt. college graduates are involved in the sectors of manufacturing, construction, ICT, E-commerce and restaurants and food services (See Table 5.22).

Table 5.22: Sector of Self-Employed Graduates' (%) Business/Enterprise

Type of Enterprise	Government College Graduates (%)	Non-government College Graduates (%)	All
Agriculture, forestry, and fishing	13.2	15.1	14.3
Construction	1.9	2.7	2.4
Manufacturing	0.0	5.5	3.2
Garment	9.4	8.2	8.7
Food processing	7.6	0.0	3.2
Wholesale and retail trade	20.8	31.5	27.0
Transportation	0.0	0.0	0.0
Restaurant and food services	1.9	4.1	3.2
Information and communication	5.7	12.3	9.5
Financial and insurance activities	1.9	1.4	1.6
Real estate activities	0.0	0.0	0.0
Professional, scientific, and technical activities	0.0	0.0	0.0
Education	13.2	4.1	7.9
Health	17.0	4.1	9.5
Social work/NGOs			
Arts, entertainment, and recreation	0.0	1.4	0.8
E-commerce	0.0	1.4	0.8
Manufacture and repair	0.0	2.7	1.6
Shoe factory	1.9	0.0	0.8
Grocery store	0.0	1.4	0.8
Land survey	1.9	0.0	0.8
Outsource	0.0	1.4	0.8
Others	3.8	2.7	3.2

Source: Calculation based on primary data.

Among the self-employed graduates, most of them have got trainings from private trainer (38 percent) and government running training center (31 percent). Overall, govt. college graduates have gotten more trainings from private institution, govt. running training center and NGO compared to non-govt. college graduates (i.e., 29 percent, 43 percent and 7 percent respectively).

Table 5.23: Self-Employed Graduates (%) with Skill Trainings Provided by Different Entities

Trainer Type	Government College Graduates (%)	Non-government College Graduates (%)	All
Private trainer (not institutional)	21.4	50.0	37.5
Private training institute	28.6	22.2	25.0
Government running training center	42.9	22.2	31.3
NGO running training centre	7.1	0.0	3.1
Others	0.0	5.6	3.1
Total	100.0	100.0	100.0

Source: Calculation based on primary data.

The graduates have also asked why they have started their business and it come up that one of the major reasons for initiating a business is, they couldn't find a suitable job (48 percent). The case seems higher in govt. colleges (52%) than non-govt. colleges (44%). 23 percent of graduates always wanted to start a business where govt. and non-govt. college varies by 5 percent only (i.e., 20% and 25% respectively).

Table 5.24: Reasons for Starting Business/Own Enterprises

Reasons	Government Colleges	Non-government Colleges	All
Always wanted to start a business	19.8	24.6	22.6
Could not find a good job	52.3	44.3	47.6
Saw good business opportunities	20.9	22.1	21.6
Was invited by partner	7.0	5.7	6.3
To meet family expenses.	-	0.8	0.5
Self-interest	-	0.8	0.5
Others	-	1.6	1.0
Total	100.0	100.0	100.0

Source: Calculation based on primary data.

The respondents also stated about the average duration spent in the business, income, and number of employees with the same educational background. From the survey it is seen that the average duration of running a business is 36, where govt. graduates are comparatively higher than non-govt. (i.e., 41 and 33 respectively). On average, among 113 graduates, non-govt. college graduates (67) are more likely to have employees than govt. (46). Employees or partners with same academic background in business is seen halftime, non-govt. college graduates have been reported more colleagues with same study area compared to the govt. colleges (i.e., 54 and 40 respectively)

In question of the average income, the govt. college graduates are earning more than non-govt. college graduates.

Table 5.25: Business Income Related Information

Indicators		Government Colleges	Non-government Colleges	All
Average duration of the business run	Mean	41	33	36
	SD	51	21	37
	N	53	72	125
Average no. of employees in the business	Mean	3	5	5
	SD	4	13	10
	N	46	67	113
Average % of employees with same educational subject of the employer	Mean	40	54	50
	SD	48	46	46
	N	9	19	28
Average hours spent by the self-employed graduate	Mean	9	9	9
	SD	10	9	9
	N	54	74	128
Average days in a week worked by the self-employed graduates	Mean	6	6	6
	SD	1	1	1
	N	54	74	128
Monthly profit from the business	Less than 30,000	67.3	69.4	68.6
	30,001-60,000	21.2	25.0	23.4
	60,001-90,000	3.9	1.4	2.4
	90,001-1,20,000	5.8	2.8	4.0
	1,20,001-1,50,000	1.9	0.0	0.8
	1,50,001-1,80,000	0.0	0.0	0.0
	More than 1,80,000	0.0	1.4	0.8
Average income of the self-employed graduate	Mean	41028	24322	31425
	SD	161173	36108	108354
	N	54	73	127

Source: Calculation based on primary data.

82 percent of self-employed graduates have expressed to work in the area of their academic specialization and 12 percent of them are currently working in the same field, where there is negligible difference between the NU affiliated govt. and non-govt. colleges (i.e., 12% and 11% respectively).

Table 5.26: Self-Employed Graduates (%) Working in the Same Area of Academic Specialization

	Government College Graduates (%)	Non-government College Graduates (%)	All
Working in the same area of academic specialization (Yes=1, %)	11.3	12.2	11.8
Willingness to work in the area of academic specialization (Yes=1, %)	81.1	82.4	81.9

Source: Calculation based on primary data.

There are several reasons why self-employed graduates are losing interest for not working in their academic areas, one of the major reasons is lack of career opportunities (87%). The second is poor working conditions (7%). Here, there is no significant difference between the govt. and non-govt. colleges. Lack of job satisfaction is higher among self-employed govt. graduates.

Table 5.27: Reasons for Not Working in Area of Specialization

Reasons	Government College Graduates (%)	Non-government College Graduates (%)	All (%)
Lack of career opportunities	84.9	88.2	86.9
Poor remuneration	-	-	-
Poor working condition	6.1	7.8	7.1
Lack of job satisfaction	9.1	2.0	4.8
Others	0.0	2.0	1.2

Source: Calculation based on primary data.

51 percent of self-employed graduates have stated that they want to continue their work in their existing business, the variation between the govt. and non-govt. college graduates is 46 percent and 55 percent. Almost 24 percent of graduates want to find employment in other companies where non-govt graduates are more interested than govt. graduates.

Table 5.28: Future Plan of the Self-Employed Graduates

Future Plan	Government College Graduates (%)	Non-government College Graduates (%)	All (%)
Continue to work in this business	46.3	54.8	51.2
Want to start up my own business	5.6	13.7	10.2
Want to find employment in other companies	20.4	26.0	23.6
Want to go back to full-time study	3.7	2.7	3.2
Want full-time job	1.9	1.4	1.6
I will do it if I get a good job	1.9	1.4	1.6
Want to do job alongside the current business	1.9	0.0	0.8
Want to be a teacher	1.9	0.0	0.8
Want to be a govt. employee	1.9	0.0	0.8
Want to get into any kind of job	0.0	0.0	0.0
Others	14.8	0.0	6.3
Total	100.0	100.0	100.0

Source: Calculation based on primary data.

Table 5.29 and 5.30 provide information about the experiences that the self-employed graduates had to face while starting their business/enterprises. From the data, it is seen that the major challenge for both of the college graduates was getting access to the funds. Only a few graduates have agreed that the training provided by the respective colleges is useful to start a business.

Table 5.29: Experience of Self-Employed Graduates (%) from Government Colleges

Statements	Fully Disagree	Somewhat Disagree	Agree	Fully Agree	Total
Had adequate knowledge and skills needed to start a business	15.1	34.0	41.5	9.4	100.0
The knowledge and skills gained from college was useful in starting the business	43.4	39.6	15.1	1.9	100.0
The networks to which they were exposed to at college supported them to start my own business	41.5	41.5	17.0		100.0
Access to funds was a big challenge	17.0	11.3	34.0	37.7	100.0

Source: Calculation based on primary data.

Table 5.30: Experience of Self-Employed Graduates (%) from Non-Government Colleges

Statements	**Fully Disagree**	**Somewhat Disagree**	**Agree**	**Fully Agree**	**Total**
Had adequate knowledge and skills needed to start a business	11.4	25.7	54.3	8.6	100.0
The knowledge and skills gained from college was useful in starting the business	39.4	26.8	31.0	2.8	100.0
The networks to which they were exposed to at college supported them to start my own business	59.2	22.5	18.3		100.0
Access to funds was a big challenge	16.9	8.5	43.7	31.0	100.0

Source: Calculation based on primary data.

5.3.3. Graduates with Part-time Work and Study Status

Most of the graduates (30.46%) in this category are currently pursuing their master's degree (Table 5.31). About 11% of the graduates from this category stated that they are also obtaining some kind of professional training. A very few (about 5%) of them are pursuing some kind of short-term technical training.

Table 5.31: Type of studies for graduates with part-time work

Type of Study	Government College Graduates (%)	Non-government College Graduates (%)	All Colleges (%)
Master program	29.77	31.82	30.46
Short-term technical training	5.34	4.55	5.08
Professional training	5.34	21.21	10.66
Others	34.35	18.18	29.29

Source: Calculated from primary data

Reason for getting enrolled in study

Around 44% of the graduates enrolled in study after graduation or post-graduation with the intension of getting better job (Table 5.32). 22% of the graduates perceive that an undergraduate degree is not adequate to get an expected job, and hence they decided to pursue advanced studies. 19.80% surmised that they would need some kind of technical skill for a better job and enrolled in part-time study whereas, 11.17% enrolled because of their parents' wishes.

Table 5.32: Reason for getting enrolled in study

Reason	Government College Graduates (%)	Non-government College Graduates (%)	All Colleges (%)
My parents recommended	11.63	10.29	11.17
My friends encouraged me	1.55	0.00	1.02
An undergraduate degree would be inadequate in finding a job	21.71	23.53	22.34
I will get a better job if I have a higher degree	43.41	44.12	43.65
I needed additional technical skills to look for a better job	19.38	20.59	19.80
Others	2.33	1.47	2.03

Source: Calculated from primary data

Relevance of Current Study to Previous Study at Colleges

Major percentage (38%) of the graduates pursued their higher studies in those disciplines that are "somewhat relevant" to their previous study (Table 5.33), and 5% of the respondents' current study is "highly relevant" to their previous study, while 29% of the graduates mentioned their higher studies are 'Not related at all' to their previous study.

Table 5.33: Relevance of present study of graduates (%) to their previous study experience in colleges

	Government College Graduates (%)	Non-government College Graduates (%)	All Colleges (%)
Not related at all	31.54	24.24	29.08
Not so related	12.31	21.21	15.31
Somewhat related	35.38	42.42	38.07
Very related	20.77	12.12	17.86
Total	100.00	100.00	100.00

Source: Calculated from primary data

Type of work done by the graduates involved in study and part-time work

Graduates who are still studying part-time and working mostly are involved in tutoring (83.95%) as has been shown in Table 5.34. Others are involved in part-time salaried work (9.88%), family business (2.47%), self-administered business (1.85%) and part-time unpaid voluntary work (1.23%).

Table 5.34: Type of work done by the graduates involved in part-time work

	Government College Graduates (%)	Non-government College Graduates (%)	All Colleges (%)
Tutoring by private initiative	87.62	77.19	83.95
Part-time salaried employee	6.67	15.79	9.88
Part-time unpaid voluntary work	0.95	1.75	1.23
Family Business	2.86	1.75	2.47
Self-administrative business	0.95	3.51	1.85
Others	0.95	0.00	0.62
Total	100.00	100.00	100.00

Source: Calculated from primary data

The graduates studying part-time while working earn a sum of 7305 BDT on an average (Table 5.35). The earnings of graduates from non-government colleges seem to be higher than that of the graduates from government colleges.

Table 5.35: Income Earned by the graduates involved in part-time work and study

Income Earned	Government College Graduates	Non-government College Graduates	All Colleges
Taka per month	6823	8202	7305
SD	4497	4702	4603
N	106	57	163

Source: Calculated from primary data

5.3.4. Graduates Who Are Unemployed

Frequency of Job Searching Activities

Overall, a majority (52%) of total unemployed graduates stated that they do not have any definite time span for searching a job, while 24% of them search for a job almost every day and 9.6% search for jobs several times in a week (Table 5.36). Most unemployed graduates tend to search for jobs intermittently without specifying a set schedule, but there are discernible differences in job search patterns between those who attended Government Colleges and those from Non-government Colleges, with the latter often showing a higher level of periodic job searching. Also, graduates that are from government colleges show more tendency to search for jobs regularly than the graduates from non-government colleges.

Table 5.36: Unemployed graduates (%) with frequency of job search

Frequency of Job Searching Activities	Government Colleges	Non-government Colleges	All Colleges
Almost daily	26.8	20.5	23.5
Several times in a week	13.5	5.9	9.6
Once in a week	7.1	5.1	6.0
Once in fortnight (15 days)	3.8	3.6	3.7
Once in a month	4.5	6.6	5.6
Not specified, periodically	44.5	58.4	51.7

Source: Calculated from primary data

Duration of being unemployed after graduation/post-graduation

Almost 60% of the unemployed graduates surveyed seem to have been unemployed for more than two years after graduation (Table 5.37). The duration of being unemployed is slightly higher for non-government college graduates (61%) compared to government college graduates (60%). Only 3% of the graduates whether, they graduate from government or non-government colleges, seem to find jobs within 1-6 months after their graduation.

Table 5.37: Time Duration during which the unemployed graduates has been looking for and are ready to join the workforce

Time Duration	Government Colleges (%)	Non-government Colleges (%)	All Colleges (%)
1-6 months	3.1	3.0	3.1
7-12 months	8.7	7.9	8.3
1-2 years	30.3	27.6	28.9
2+ years	58.1	61.4	59.9

Source: Calculated from primary data

Main Mode of Job Search

In Table 5.38, we show the main modes of job search for graduates from government and non-government colleges. Internet seems to be the most popular mode of job-searching activities for graduates (49.27%), followed by newspaper advertisements (25%) and government employment centers (20.68%). These three mediums are the most popular among graduates of both government and non-government colleges.

Table 5.38: Main Mode of Job Search for the Unemployed Graduates (%)

Mode	Government Colleges (%)	Non-government Colleges (%)	All Colleges (%)
Government employment center	22.3	19.06	20.68
Private employer	0.72	2.22	1.47
Private employment center	1.08	1.11	1.26
Friends/relatives	0.72	2.59	1.65
Newspaper advertisement	21.22	28.78	25.00
Internet	53.99	44.44	49.27
Exploring opportunities to set up own firm / business	0.36	1.11	0.73

Source: Calculated from primary data

Aspired Type of Work

For graduates, government full-time jobs seem to be the most coveted ones (Table 5.39). 43.13% graduates from all colleges, 43.50% from the government colleges and 42.80% from the non-government colleges seem to aspire working in these government offices. Among the other preferred jobs, private full-time jobs are more preferable for graduates from these colleges. This is a clear indication towards the graduates' preference for full-time jobs, rather than part-time jobs, businesses or even overseas jobs.

Table 5.39: Aspired Type of Work by the Unemployed Graduates (%)

Type of Job	Government Colleges (%)	Non-government Colleges (%)	All Colleges (%)
Government Full-time job	43.50	42.80	43.13
Private full-time job	36.47	35.60	36.02
Part-time Job	5.38	6.09	5.75
Freelancing	4.48	3.05	3.74
Business/entrepreneur (full-time)	2.84	5.40	4.17
Business/entrepreneur (part-time)	1.05	1.39	1.22
Agriculture/farming	0.90	0.83	0.86
Job at overseas	3.89	2.77	3.31
Others	1.05	0.83	0.93

Source: Calculated from primary data

Aspired Sector of Work

Table 5.40 presents the information on the preferred job sector for unemployed graduates. When asked about the preferred sector of work of the unemployed graduates, we find that most of them want to pursue a career in education (42.48%). While 47.86% of the graduates from non-government colleges would like to work in education sector, 37.18% of the graduates from the government colleges would like to work in the same. Among the graduates of the government colleges, sectors like health, financial and insurance activities and social work/NGOs seem to be more popular (11.13%, 10.29% and 10.29% respectively). And for unemployed graduates from non-government colleges, the sector preference order is financial and insurance activities (12.08%), health (10.26%) and social work/NGOs (9.40%).

Table 5.40: Aspired Sector of Work by the Unemployed Graduates (%)

Sector of Work	Government Colleges (%)	Non-government Colleges (%)	All Colleges (%)
Agriculture, forestry, and fishing	4.02	2.56	3.28
Construction	2.31	0.21	1.27
Manufacturing	1.89	1.07	1.48
Garment	3.57	2.78	3.18
Food processing	1.05	0.85	0.95
Wholesale and retail trade	0.63	0.85	0.74
Transportation	0.84	0.21	0.53
Restaurant and food services	0.21	0.21	0.21
Information and communication	4.83	4.91	4.87
Financial and insurance activities	10.29	12.08	11.12
Real estate activities	0.42	0.43	0.42
Professional, scientific, and technical activities	5.25	1.92	3.60
Education	37.18	47.86	42.48
Health	11.13	10.26	10.70
Social work/NGOs	10.29	9.40	9.85
Arts, entertainment, and recreation	0.84	0.43	0.64
E-commerce	0.42	0.85	0.64
Others	0.84	0.85	0.85
Total	100.00	100.00	100.00

Source: Calculated from primary data

In Table 5.41 we show the data on the difference in the job searching related other activities between the unemployed graduates from government and non-government colleges and see that, after their honors and master's graduation government college graduates reported to have applied for jobs and appeared in job interviews more times than the graduates from non-government colleges.

Table 5.41: Comparative statistics of unemployed graduates by college type

		Government Colleges	Non-government Colleges	Mean difference	P-value
Average times applied for job after honor's	Mean	18.42	13.98	4.42***	0.0073
	SD	26.05	14.24		
Average times applied for job after master's	Mean	10.77	9.99	0.65	0.6216
	SD	13.26	10.99		
Average no. of interviews appeared after honor's	Mean	8.07	5.77	2.35**	0.0290
	SD	16.22	7.72		
Average no. of interviews appeared after Master's	Mean	5.78	4.27	1.49*	0.0851
	SD	8.68	4.12		

Note: *, **, *** indicates significant at 10, 5 and 1% level.

Source: Calculated from primary data

Other Sources of Income

Among the unemployed graduates only some have some kind of income coming from different sources (Table 5.42). Around 2% of the unemployed graduates get some money by renting houses and earn 15000 BDT on an average. Besides, 1% of them incoming from Land Leasing which is around 10000 BDT and income from saving account equal to 10000 BDT.

Table 5.42: Unemployed Graduates with Other Sources of Income

Income Source	% of unemployed graduates with income	Average Income (Tk.)
House rent	1.73	15000
Land lease	0.87	10000
Pension or allowance of parents	0.29	5000
Income from saving account	1.44	10000

Note: Average income is calculated summing up income of only those unemployed graduates who reported to have income.

Source: Calculated from primary data

Time Spent by the unemployed graduates

Most of the surveyed unemployed graduates spend most of their time in searching for a job (45.74%), though the activity has higher frequency among the graduates from the government colleges (52.04% of the government college graduates compared to 39.82% graduates from the non-government colleges). Apart from that, most of them also spend almost an equal amount

of their time in helping their family with the household chores. This indicates that, they want to be useful and prefers helping their families to doing anything else or being idle.

Table 5.43: Time Spent by the unemployed graduates

Activities	Government Colleges (%)	Non-government Colleges (%)	All Colleges (%)
	%	%	%
Seeking for opportunities of higher studies	1.25	1.77	1.52
Preparing to go abroad	6.58	2.95	4.71
Looking for a job	52.04	39.82	45.74
Helping my family members with household chores	36.99	49.56	43.47
Being involved in some volunteering activities	1.25	2.06	1.67

Source: Calculated from primary data

Future preferred activity

Almost, 92% of the unemployed graduates from the government colleges plans to find jobs in other companies while 87% of the graduates from Non-government College plans to do the same (Table 5.44). However, a very few of them (around 5%) of the total unemployed graduates desired to start up their own businesses.

Table 5.44: Future preferred activity for unemployed graduates

Preferred Working Plan for Future	Government Colleges	Non-government Colleges	All Colleges
	%	%	%
Want to start up my own business	2.64	6.54	4.65
Want to find employment in other companies	91.75	86.92	89.26
Want to go back to full-time study	0.99	0.93	0.96
Want to do training/course	1.98	4.36	3.21
Others	0.66	0.00	0.32

Source: Calculated from primary data

5.4. Demographic and Socio-Economic Attributes

The graduates who were interviewed in our survey seem to be of an average of 27 years old (Table 5.45). There seem to be almost no differences in the ages of the graduates across different employment status. As all NUs follow the same exam schedule for the gradates in the same year, this age dimension seems to be okay across different colleges and degree types.

Table 5.45: Average age of graduates by employment status

Employment Status		Government			Non-government			All Colleges
		GH	GM	All	NGH	NGM	All	
Salaried employed	Mean	27.04	27.28	27.17	27.11	27.88	27.34	27.26
	S. D	0.98	0.94	0.96	1.30	1.88	1.52	1.28
Self-employed	Mean	26.92	27.33	27.10	27.23	27.42	27.26	27.19
	S. D	1.38	0.84	1.18	1.04	1.46	1.12	1.15
Graduates with part time study and working	Mean	27.44	26.80	27.02	26.94	28.33	27.16	27.07
	S. D	1.11	1.31	1.28	1.06	0.71	1.13	1.23
Unemployed	Mean	26.93	26.72	26.81	26.76	27.50	26.84	26.83
	S. D	1.34	1.21	1.26	1.01	0.86	1.02	1.14

Source: Calculation based on primary data.

In Table 5.46, we present the education and occupation of the graduates' parents. The fathers of surveyed NU graduates mostly have completed their SSC education (26%), followed by primary education (15.1%) and so on. The mothers of the surveyed graduates mostly have completed their primary education (41.7%), followed by no education (26.4%) and SSC level education (24.8%). Most father are engaged in agriculture and agro-based occupations (29.45%) and most mothers are homemakers (97.61%).

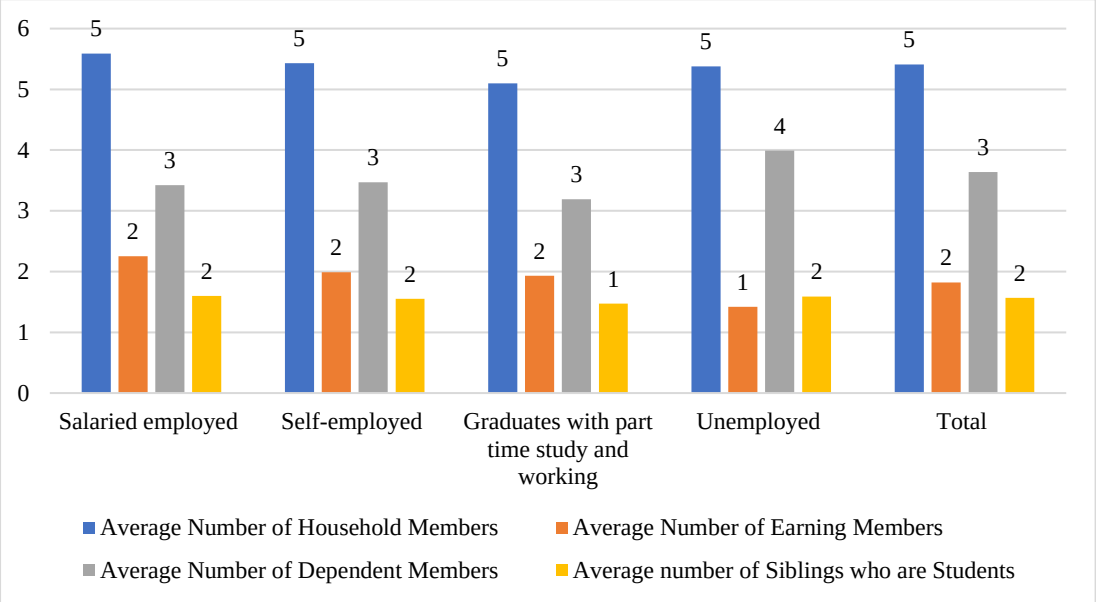
Table 5.46: Graduates (%) with parent's education and parent's occupation

Graduates (%) with Parent's Education			Graduates (%) with Parent's Occupation		
Level of Education	Fathers' Education	Mothers' Education	Occupation	Fathers' Occupation	Mothers' Occupation
No education	15.1	26.4	Homemaker	0	97.61
Primary	25.1	41.7	Professional (Doctor, Lawyer, Engineer, etc.)	4.12	0.54
SSC/Equivalent	26.0	24.8	Government employee	13.99	0.92
HSC/Equivalent	11.5	5.0	Private sector employee	13.60	0.39
Bachelor degree	13.3	1.6	Autonomous institution employee	2.10	0.08
Master's degree	8.5	0.4	Bank/Insurance institution employee	1.17	0.15
Others	0.5	0.2	NGO/Trust/Foundation employee	1.79	0.08
			Business (Large, Medium, Micro and Cottage)	26.96	0.15
			Self Employed Activities	6.84	0.08
			Agriculture and agro-based occupations	29.45	

Source: Calculation based on primary data.

On an average, all graduates' families have 5 members of whom 2 are earning members and others are the dependents. These numbers are similar for all types of graduates other than the unemployed ones who have more dependents in their families including themselves (Figure 5.6).

Figure 5.6: Graduates' Household Size



Source: Calculation based on primary data.

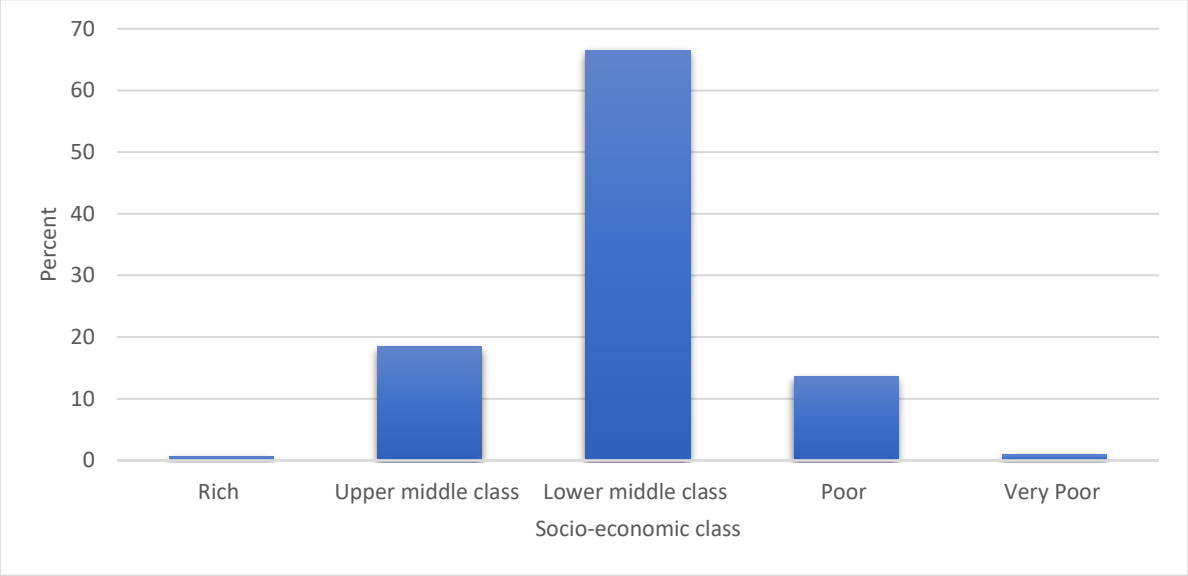
To understand the employment choices of graduates, they were asked about their family status. This answer was solely based on the graduates' own perspective of the socio-economic standing. Table 5.47 depicts these responses from the graduates' point of view. The table provides a breakdown of graduates' employment status and their categorization into different socioeconomic classes, including Rich, Upper Middle Class, Lower Middle Class, Poor, and Very Poor. Class stratification mostly depends on economic differences among groups reflected by the difference in income and wealth, possession of material goods, profession and life chances. It seems that most of the graduates who have salaried employment, self-employment and are unemployed deem their families to be in the lower middle-class status. Graduates with part-time employment status deem their family status to be poor.

Table 5.47: Graduates (%) Perception of Their Family Status

Employment Status	Rich	Upper middle class	Lower middle class	Poor	Very Poor	Total
Salaried employed	0.9	23.0	64.8	10.3	1.2	100.0
Self-employed	0.51	19.70	69.19	9.60	1.01	100.0
Graduates with part-time work and study	0.6	9.26	61.73	27.78	0.6	100.0
Unemployed	0.39	17.75	68.24	12.82	0.79	100.0
Total	0.6	18.42	66.53	13.57	0.9	100.0

Source: Calculation based on primary data.

Figure 5.7: Socio-economic class of graduates' family



Source: Calculation based on primary data.

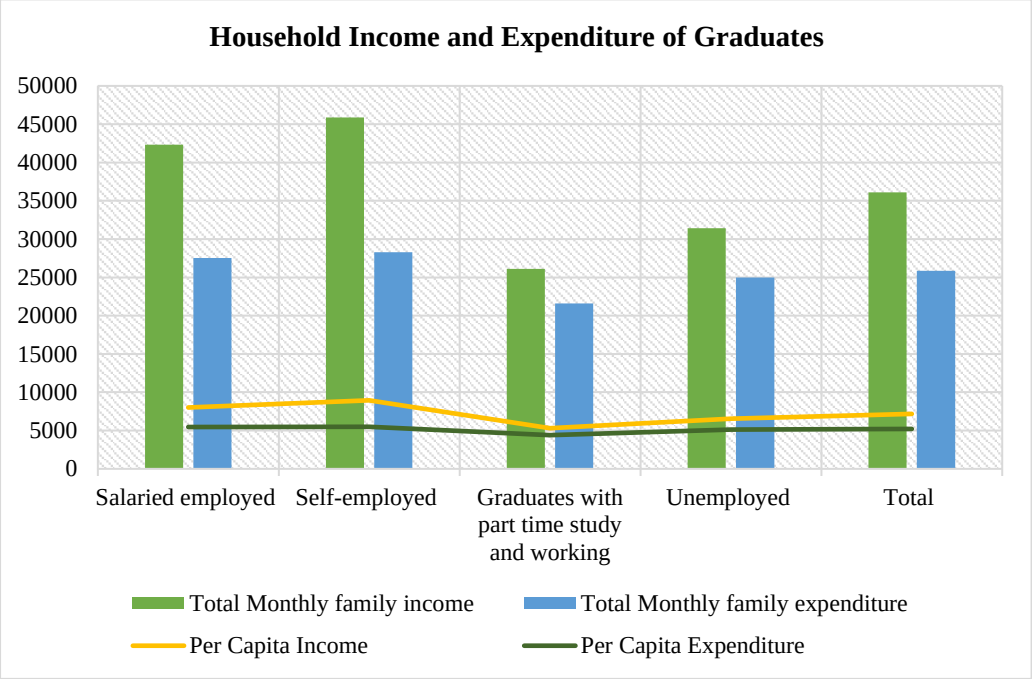
For all graduates, their average household income and expenditures are Tk. 36109 and Tk. 25871 respectively (Table 5.48). It shows that self-employed graduates tend to have the highest mean monthly family income and expenditure among the categories, while graduates with part-time study and working have the lowest family income. Families of unemployed graduates fall in between. Per capita income and expenditure follow a similar trend, with self-employed graduates having the highest and graduates with part-time study and working having the lowest amounts.

Table 5.48: Household's Mean Income & Expenditure of Graduates

Employment Type	Total Monthly family income (Tk.)	Total Monthly family expenditure (Tk.)	Per-capita Income (Tk.)	Per-capita Expenditure (Tk.)
Salaried employed	42317	27512	8011	5463
Self-employed	45893	28292	8944	5491
Graduates with part time study and working	26099	21582	5306	4397
Unemployed	31430	24974	6560	5141
Total	36109	25871	7184	5190

Source: Calculation based on primary data.

Figure 5.8: Household's Mean Income & Expenditure of Graduates



Source: Calculation based on primary data.

5.5. Graduates' Educational and Other Related Background

In this sub-section we provide information on experience of NU graduates from their Pre-NU Education. As NU education is the tertiary level, here we include information for the secondary and higher secondary level education of graduates. Table 5.49 provides information about the percentage distribution of graduates based on the type of secondary degree they obtained (SSC, SSC Vocational, or Dakhil). The data is categorized according to different employment statuses of the NU graduates. Among salaried employed graduates, 28.03% have an SSC, 45.45% have an SSC (vocational), and 37.68% have a dakhil degree. Self-employed graduates consist of 16.24% with an SSC, 18.18% with an SSC (vocational), and 15.94% with a dakhil degree. Graduates with part-time study and working include 13.36% with an SSC, 9.09% with an SSC (vocational), and 11.59% with a dakhil degree. Among the unemployed graduates, 42.36% have an SSC, 27.27% have an SSC (vocational), and 34.78% have a dakhil degree.

Table 5.49: Graduates' Percentage of the Type of Secondary Degree

Employment Status	SSC	SSC (Vocational)	Dakhil
Salaried employed	28.03	45.45	37.68
Self-employed	16.24	18.18	15.94
Graduates with part time work and study	13.36	9.09	11.59
Unemployed	42.36	27.27	34.78
Total	100.0	100.0	100.0

Note: Secondary School Certificate (SSC), Secondary School Certificate with vocational education system (SSC-Vocational), and SSC equivalent Islamic education system (Dakhil).
Source: Calculation based on primary data.

Table 5.50 shares information on the percentage distribution of graduates based on the subject division of their secondary degree. 33.81% of the salaried employed, 39.70% of the self-employed, 24.07% of the part time employed and 41.99% of the unemployed graduates studied arts/humanities during their secondary education. 29.90% of the salaried employed, 22.11% of the self-employed, 21.60% of the part time employed and 27.34% of the unemployed graduates studied science during their secondary education. And, 35.80% of the salaried employed, 37.69% of the self-employed, 54.32% of the part time employed and 30.27% of the unemployed graduates studied commerce during their secondary education.

Table 5.50: Graduates' Percentage of the Subject Division of Secondary Degree

Employment Status	Arts/Humanities	Science	Commerce	No specific stream	Vocational	Others
Salaried employed	33.81	29.90	35.80	0.0	0.28	0.28
Self-employed	39.70	22.11	37.69	0.50	0.0	0.0
Graduates with part time work and study	24.07	21.60	54.32	0.0	0.0	0.0
Unemployed	41.99	27.34	30.27	0.39	0.0	0.0
Total	36.80	26.45	36.24	0.24	0.08	0.08

Source: Calculation based on primary data.

Among the graduates, the self-employed had the best results (CGPA 4.30) in their secondary degree exam, followed by Graduates with part-time status (CGPA 4.21), salaried employed (4.13) and unemployed (4.08) as has been shown in Table 5.51.

Table 5.51: Graduates' Average CGPA in Secondary Degree

Employment Status	Mean	SD	N
Salaried employed	4.13	0.56	352
Self-employed	4.30	2.60	199
Graduates with part time work and study	4.21	0.46	162
Unemployed	4.08	0.54	512

Source: Calculation based on primary data.

Table 5.52 showcases the percentages of graduates with different types of higher secondary degrees (HSC, HSC Vocational, and Alim) within various employment status categories. Among salaried employed graduates, 28.17% have an HSC, 23.50% have an HSC (vocational), and 47.50% have an alim degree. Self-employed graduates consist of 16.27% with an HSC, 5.90% with an HSC (vocational), and 15.00% with an alim degree. Graduates with part-time study and working include 13.27% with an HSC, 17.65% with an HSC (vocational), and 15.00% with an alim degree. Among the unemployed graduates, 42.29% have an HSC, 52.94% have an HSC (vocational), and 22.50% have an alim degree.

Table 5.52: Graduates' Percentage of the Type of Higher Secondary Degree

Employment Status	HSC	HSC (Vocational)	Alim
Salaried employed	28.17	23.50	47.50
Self-employed	16.27	5.90	15.00
Graduates with part time work and study	13.27	17.65	15.00
Unemployed	42.29	52.94	22.50
Total	100.0	100.0	100.0

Source: Calculation based on primary data.

Table 5.53 presents information on the percentage distribution of graduates based on the subject division of their higher secondary degree. 28.02% of the salaried employed, 15.13% of the self-employed, 9.41% of the part time employed and 47.44% of the unemployed graduates studied arts/humanities during their higher secondary education. 31.16% of the salaried employed, 15.81% of the self-employed, 13.02% of the part time employed and 40.00% of the unemployed graduates studied science during their higher secondary education. And, 28.05% of the salaried employed, 17.41% of the self-employed, 17.02% of the part time employed and 37.52% of the unemployed graduates studied commerce during their higher secondary education.

Table 5.53: Graduates' Percentage of the Subject Division of Higher Secondary Degree

Employment Status	Arts/Humanities	Science	Commerce	No specific stream
Salaried employed	28.02	31.16	28.05	66.70
Self-employed	15.13	15.81	17.41	33.33
Graduates with part time work and study	9.41	13.02	17.02	0.00
Unemployed	47.44	40.00	37.52	0.00

Source: Calculation based on primary data.

Among the graduates, Graduates with part-time status have the best CGPA (3.96) in their higher secondary degree exam, followed by salaried and self-employed graduates (with both having CGPA 3.94) and unemployed graduates with CGPA 3.90. (Table 5.54)

Table 5.54: Graduates' Average CGPA in Higher Secondary Degree

Employment Status	Mean	SD	N
Salaried employed	3.94	0.59	352
Self-employed	3.94	0.58	199
Graduates with part time work and study	3.96	0.54	162
Unemployed	3.90	0.59	512

Source: Calculation based on primary data.

Table 5.55: Graduates' Percentage of the Type of Secondary and Higher Secondary Degree

Employment Status	SSC	SSC (Vocational)	Dakhil	HSC	HSC (Vocational)	Alim
Salaried employed	28.03	45.45	37.68	28.17	23.50	47.50
Self-employed	16.24	18.18	15.94	16.27	5.90	15.00
Graduates with part time work and study	13.36	9.09	11.59	13.27	17.65	15.00
Unemployed	42.36	27.27	34.78	42.29	52.94	22.50
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 5.56 shows that the average salary of graduates passed from different education system varies much. The students graduated from general educational background such as SSC and HSC, have higher salary than vocational and Islamic educational background.

Table 5.56: Average Salary of Graduates' Having Different Educational Background

Employment Status	SSC	SSC (Vocational)	Dakhil	HSC	HSC (Vocational)	Alim
Salaried employed	16,327	11,200	12,620	16,244	13,875	11,750
Self-employed	30,063	10,000	11,444	31,777	20,000	25,200
Graduates with part time work and study	7,423	15,000	4,625	7,466	2,000	4,750

5.6. Experience in their NU-Education

In this sub-section we discuss the experiences of the graduates in their respective colleges. For doing that, we collect information on their reason behind studying in the particular colleges and experience from the learnings in the colleges. Most NU graduates (1117 graduates) agree that they studied in their respective colleges in the hope of getting a good job (Table 5.55). 988 (25.83% of the interviewed graduates) studied to improve their inherent quality, 847 (22.14%) studied to improve their social status, and 841 (21.99%) to get a degree for recognition. The

most popular motivation for graduates who now have salaried employment was to improve their inherent quality. And for the self-employed, Graduates with part-time and unemployed graduates, the most prioritized motivation was to get a good job (Table 5.55).

Table 5.57: Reasons for Studying in Particular Colleges

Reasons	Number	%
To get a degree	841	21.99
To get a good job	1117	29.20
To increase social status	847	22.14
To improve inherent quality	988	25.83
To marry well	24	0.63
To be self-sufficient	1	0.03
Others	7	0.18

Source: Calculation based on primary data.

Table 5.58: Reasons for Studying in Particular Colleges

Employment Status	To get a degree	To get a good job	To increase social status	To improve inherent quality	To marry well	To be self-sufficient	Others
Salaried employed	21.00	30.00	23.30	25.40	0.30	-	0.10
Self-employed	21.50	28.77	24.87	24.51	0.18	-	0.18
Graduates with part time study and working	25.38	29.30	17.57	27.11	0.40	-	0.20
Unemployed	21.26	30.36	21.39	25.84	0.90	0.07	0.20
Total	22.00	29.20	22.10	25.80	0.60	0.03	0.18

Source: Calculation based on primary data.

For graduates from government colleges, the education provided by their colleges seem to be irrelevant to their present employment/working status (Table 5.57). The ICT knowledge provided through the college also seems inadequate from the graduates' point of view. Graduates from the government colleges in our study, do not think that their respective colleges have made them worse off than other NU colleges in providing education. This means that, all graduates in government NU colleges though are not satisfied with the education and technological knowledge that they get from their own colleges, they do not think that other colleges in the same umbrella i.e., other NU colleges would do them any good either. The

usefulness of education and ICT knowledge received in government honors colleges have significant difference than that of the master's colleges.

Table 5.59: Extent of agreement on training provided by the Government colleges

	Government Honors			Government Masters			Diff	p-value
	Mean	S.D.	N	Mean	S.D.	N		
Education provided by the college is relevant to do our work	2.14	0.870	274	2.41	0.964	374	-0.273***	0.000
ICT skills learned provided a good basis for computer skills for my work	1.43	0.644	274	1.74	1.030	374	-0.309***	0.000
If I were admitted to a different college with the same subject, the training and skill acquired would have contributed more effectively on my present responsibilities	1.94	1.002	274	2.05	1.031	374	-0.107	-0.185

Source: Calculation based on primary data. Note: The mean values are the average values calculated for estimating the level of agreement among the respondents/graduates. For that, we had a four-scale agreement level where 1 denoted fully disagree, 2 denoted somewhat disagree, 3 denoted agree and 4 denoted fully agree. *, **, *** indicates significant at 10, 5 and 1% level respectively.

Graduates from non-government colleges have similar views about their colleges as graduates from government colleges. They also think that their college education is irrelevant to their work status, ICT education does not contribute much to their basic knowledge and though their college education seems inadequate, they are not much hopeful about getting better education if they change their colleges (Table 5.58).

Table 5.60: Extent of agreement on training provided by the non-government colleges

	Non-government Honors			Non-government Masters			Diff	p-value
	Mean	S.D.	N	Mean	S.D.	N		
Education provided by the college is relevant to do our work	2.20	0.969	551	2.38	0.920	116	-0.180	-0.067
ICT skills learned provided a good basis for computer skills for my work	1.61	0.783	551	1.54	0.739	116	0.069	-0.387
If I were admitted to a different college with the same subject, the training and skill acquired would have contributed more effectively on my present responsibilities	2.26	1.004	551	1.66	1.008	115	0.599***	0.000

Source: Calculation based on primary data. Note: The mean values are the average values calculated for estimating the level of agreement among the respondents/graduates. For that, we had a four-scale agreement level where 1 denoted fully disagree, 2 denoted somewhat disagree, 3 denoted agree and 4 denoted fully agree. . *, **, *** indicates significant at 10, 5 and 1% level respectively.

5.7. Training Received Apart from the College and Related Attributes

Graduates were asked if they have got training from any other institutes apart from their colleges. This is included in the analysis to understand the need for other training for graduates' employability. In Table 5.59 we see that, though overall 43.7% graduates among our surveyed ones did not receive any kind of additional training, 24.9% received skill development training while they were studying the colleges, 19.8% received skill development training after they left college and 11.5% received skill development training before they started their tertiary education. Though most graduates from government colleges did not get any training before starting college, their share (compared to the graduates of non-government colleges) of getting trainings increased while they were in college and after they finished their college education.

Table 5.61: Graduates (%) with additional skills trainings at different time periods

Status of additional skill training	GH	GM	TG	NGH	NGM	TNG	ALL
Additional skills training received before joining college	8.1	10.7	9.6	12.6	17.5	13.4	11.5
Additional skills training received after leaving college	25.7	18.1	21.3	18.6	17.5	18.4	19.8
Additional skills training received while in college	28.9	27.0	27.8	18.0	40.8	22.1	24.9
No additional training received	37.3	44.2	41.3	50.9	24.2	46.1	43.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: GH=government honors, GM=government masters, TG=total government colleges, NGH=non-government honors, NGM=non-government masters, TNG=total non-government colleges.
Source: Calculation based on primary data.

Among different kinds of trainings, trainings in information and communication technology (ICT) and technical/vocational training in trade/business seem to be the most popular ones. Training preferences for these two types seem to be more among the non-government college graduates than the government ones (Table 5.60).

Table 5.62: Graduate (%) with type of training received (apart from colleges) for skill development

Type of Training	GH	GM	TG	NGH	NGM	TNG	ALL
Communications	0.0	1.5	0.8	1.9	0.0	1.4	1.1
Information & Communications Technology (ICT)	64.0	83.3	74.3	73.9	84.6	76.6	75.4
Technical/Vocational Training in a trade/business	12.0	9.9	10.9	17.1	9.9	15.2	13.0
Business Management	0.0	0.5	0.3	1.5	1.1	1.4	0.8
Livestock training	2.3	0.0	1.1	-	-	-	0.6
Health service training	-	-	-	0.4	0.0	0.3	0.1
Diploma/training in dance art	-	-	-	0.4	0.0	0.3	0.1
Basic computer operation	14.9	0.0	6.9	1.9	0.0	1.4	4.2
Driving	1.1	0.5	0.8	-	-	-	0.4

Catering	0.6	0.0	0.3	-	-	-	0.1
Training in cooking	0.6	0.0	0.3	-	-	-	0.1
Website design and de	0.6	0.0	0.3	-	-	-	0.1
Entrepreneurship	0.6	0.0	0.3	-	-	-	0.1
Education system	1.1	0.0	0.5	-	-	-	0.3
Land survey	0.6	0.0	0.3	-	-	-	0.1
Imamate	0.6	0.0	0.3	-	-	-	0.1
Agriculture	0.0	0.5	0.3	-	-	-	0.1
Community development	-	-	-	0.4	0.0	0.3	0.1
Marketing	-	-	-	0.4	0.0	0.3	0.1
Workshop under the Mi	-	-	-	0.4	0.0	0.3	0.1
Pharmaceutical	-	-	-	0.4	0.0	0.3	0.1
Others	1.1	3.9	2.7	1.5	4.4	2.3	2.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: GH=government honors, GM=government masters, TG=total government colleges, NGH=non-government honors, NGM=non-government masters, TNG=total non-government colleges.
Source: Calculation based on primary data.

Table 5.61 showcases, different training sources for the graduates of government and non-government colleges. It is evident from the table that, more than 90% of the trainings outside colleges have been organize by different private and public training institutes. Overall, private training institutes (49.7% graduates getting training from there) seem to be more popular for trainings than public training institutes (45.1% graduates getting training from there). Though graduates from government colleges seem to have preferred public training institutes than the private ones, whereas, graduates from non-government colleges seem to have preferred private training institutes than the public ones.

Table 5.63: Graduate (%) with different sources of training received (apart from colleges)

Type of Training Institutions	No. of Graduates (%)						
	GH	GM	TG	NGH	NGM	TNG	ALL
Private training institute	38.3	54.4	47.0	49.1	63.3	52.7	49.7
Public training institute	56.0	44.6	49.9	43.1	31.1	40.1	45.1
NGO provider	5.1	0.5	2.6	2.6	4.4	3.1	2.9
Employer	0.0	0.5	0.3	3.0	1.1	2.5	1.4
Personal	-	-	-	0.8	0.0	0.6	0.3
Business organization	-	-	-	0.4	0.0	0.3	0.1
CV writing program	0.6	0.0	0.3	-	-	-	0.1
Post office	-	-	-	0.4	0.0	0.3	0.1
Others	-	-	-	0.8	0.0	0.6	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Calculation based on primary data.

5.8. Co-curriculum Activities

Participation in co-curriculum activities has been seen higher among unemployed graduates both of govt. and non-govt. colleges (i.e., 48.25 and 41.21 respectively). The scenario is similar in case of getting awards from the activities.

More salaried and self-employed graduates have engaged in co-curriculum activities in NU affiliated non-govt. colleges (i.e., 31.16 and 11.06) compared to govt. colleges (19.74 and 6.14) percent. In question of receiving prizes, salaried and self-employed graduates in non-govt. colleges have received more prizes than others (i.e., 35.37 and 12.24 respectively).

Table 5.64: Percentage of graduates involved in co-curriculum activities

Type of Graduates	Have involvement in co-curriculum activities (%)		Have won any prizes in any co-curriculum activities (%)	
	Government Colleges	Non-government Colleges	Government Colleges	Non-government Colleges
Salaried employed	19.74	31.16	23.03	35.37
Unemployed	48.25	41.21	41.45	36.05
Self-employed	6.14	11.06	5.26	12.24
Part-time/ full-time study	21.93	14.57	24.34	14.29
Not in labor force	3.95	2.01	5.92	2.04
Total	100.00	100.00	100.00	100.00

Source: Calculation based on primary data.

Graduates have been asked if they need any training opportunities in their respective colleges. From table 32, it is seen that almost 43 percent of unemployed graduates demanded training needs, where govt. colleges seem higher than non-govt. colleges (45 percent and 42 percent respectively). Graduates who are salaried, self-employed, and not in the labor force from non-govt. colleges need more training sessions than govt. colleges.

Table 5.65: Need for Training Information

Employment Status	% of Graduates with Training Needs		
	Government Colleges	Non-government Colleges	All Colleges
Salaried employed	25.27	29.49	27.38
Unemployed	44.51	41.94	43.22
Self-employed	8.42	11.54	9.98
Part-time/ full-time study	19.96	11.72	15.84
Not in labor force	1.83	5.31	3.57
Total	100.00	100.00	100.00

Source: Calculation based on primary data.

Graduates have stated the need for specific training courses where it is seen that all categories of graduates need mostly Information, Communication and Technology training. The ICT training is highly needed for salaried and unemployed graduates under NU govt. colleges (i.e., 51.45 and 55.80 respectively). Other kinds of training that are required by the overall graduates are Technical/Vocational and training opportunities in Business Management.

Table 5.66: Graduates' Need for Specific Trainings

Employment Status	Type of Training Needed/Preferred	% of Graduates		
		Government Colleges	Non-government Colleges	All Colleges
Salaried employed	Communications	1.16	2.25	1.71
	Information Communication & Technology (ICT)	51.45	40.45	45.87
	Technical/Vocational Training in a trade	10.98	24.16	17.66
	Business Management	10.40	18.54	14.53
	Others	26.01	14.61	20.23
Unemployed	Communications	4.35	2.24	3.31
	Information Communication & Technology (ICT)	55.80	47.39	51.65
	Technical/Vocational Training in a trade	24.64	26.12	25.37
	Business Management	3.62	7.46	5.51
	Others	11.59	16.79	14.15
Self-employed	Communications	5.36	4.00	4.58
	Information Communication & Technology (ICT)	19.64	30.67	25.95
	Technical/Vocational Training in a trade	10.71	25.33	19.08
	Business Management	35.71	26.67	30.53
	Others	28.57	13.33	19.85
Part-time/ full-time study	Communications	8.55	1.49	5.98
	Information Communication & Technology (ICT)	44.44	52.24	47.28
	Technical/Vocational Training in a trade	29.91	35.82	32.07
	Business Management	11.11	2.99	8.15
	Others	5.98	7.46	6.52
Not in labor force	Communications	0.00	6.67	3.85
	Information Communication & Technology (ICT)	15.15	35.56	26.92
	Technical/Vocational Training in a trade	18.18	20.00	19.23
	Business Management	0.00	2.22	1.28
	Others	66.67	35.56	48.72
Others	Communications	-	-	-
	Information Communication & Technology (ICT)	76.47	47.50	56.14
	Technical/Vocational Training in a trade	17.65	22.50	21.05
	Business Management	0.00	20.00	14.04
	Others	5.88	10.00	8.77

Source: Calculation based on primary data.

5.9. Job Searching Activities

The following table gives information about the job search facilities by the graduates where it is seen that graduates apply different methods to search for a job such as apply through social media, web page or internet, clubs, direct contact with the HR, alumni, job through friends and family and so on. Most of the graduates have followed applications through internet (almost 87 percent). Other major job search media are job sites (77%), social media (75%), newspaper advertisement (74%) and through relatives and friends (58%).

Table 5.67: Job Searching Activities (%) by Graduates in All Colleges

Job Search Activities	Number of Graduates	%
Used employment support service of the college	12	0.89
Job fair	136	10.11
Social media (Facebook, LinkedIn, etc.)	1,004	74.65
Applied to a job opening through internet	1,164	86.54
Job sites	1,031	76.65
Applied to job opening advertisement in newspapers	996	74.05
Contacted employers directly	161	11.97
Career club membership	47	3.49
Other social and cultural clubs	54	4.01
Alumni association	127	9.44
People from my village/town	265	19.70
Family members	635	47.21
Relatives/ Friends	777	57.77
Political person	53	3.94
Other (please specify)	5	0.37

Source: Calculation based on primary data.

From the data, it is seen that the part time or full-time studied graduates have applied different job searching techniques which is higher than other graduates (i.e., apply through job fair 19%, internet 95%, job sites 93%, newspaper advertisement 88%, direct contact 18%, career club 14%, alumni 16%) etc.

On the other hand, jobs through different social media such as Facebook or LinkedIn have been widely used by the unemployed graduates, almost 78 percent. The self-employed graduates

have access to more family job search support (almost 52 percent) than others. The salaried have mostly applied jobs through internet (83 percent) and lastly, graduates those are not in the labor force have asked for relatives' or friends' assistance to search for a specific job by 63 percent.

Table 5.68: Job Searching Activities (%) by Graduates' Employment Category in All Colleges

Job Search Activities	Salaried employed	Unemployed	Self-employed	Part-time/ full-time study	Not in labor force
Used employment support service of the college	0.57	1.10	0.76	1.63	0.00
Job fair	8.26	9.38	12.98	19.02	3.85
Social media (Facebook, LinkedIn, etc.)	72.65	77.57	72.52	77.17	57.69
Applied to a job opening through internet	83.19	87.32	83.97	95.11	78.21
Job sites	71.51	77.02	70.99	93.48	66.67
Applied to job opening advertisement in newspapers	69.52	77.76	69.47	87.50	57.69
Contacted employers directly	14.25	10.66	9.16	17.93	7.69
Career club membership	1.71	2.39	2.29	13.59	0.00
Other social and cultural clubs	2.56	3.86	3.05	10.87	0.00
Alumni association	5.41	12.68	6.11	15.76	0.00
People from my village/town	15.67	20.04	18.32	27.17	20.51
Family members	41.88	48.71	51.91	47.28	48.72
Relatives/ Friends	56.98	57.54	54.20	59.24	62.82
Political person	2.85	3.86	6.11	7.07	1.28
Other (please specify)	0.00	0.37	0.00	1.63	0.00

Source: Calculation based on primary data.

In conclusion, it can be said that employment outcomes differ significantly across gender. A much higher share of male graduates is employed compared to their female counterparts. After three years of graduation, more than one fourth of the graduates are still unemployed. This share is very high compared to the labor market outcome of the general population. The national unemployment rate for the age group 18 to 24 is 12.3, and it is 10.1 for male and 16.8 for females (BBS, 2017). Therefore, it can be said that current employment outcomes of college graduates are below satisfactory. This level of unemployment is extremely concerning and raises serious concerns about willingness to search job and skills to manage job among the college graduates in Bangladesh.

CHAPTER VI: CURRENT STUDENTS' SOCIO-ECONOMIC BACKGROUNDS, MOTIVATION, PERCEPTIONS, AND MARKET RELEVANCE OF COLLEGE EDUCATION

Our study includes the current students in survey as a valuable approach for gaining insights into the prevailing teaching and learning dynamics within NU colleges. Including the current students into the survey also helps us to understand the demographic and socio-economic characteristics of the students that generally study in those colleges and understand their views on what they think may make them more employable. It is also a way of learning about their perception on NU college facilities and teachings. To this end, in this chapter we discuss the findings from surveying the current students in government and non-government Honors and Masters colleges.

6.1. Respondent's Institutional Information

Table 6.1 presents the student population distribution across different colleges and faculties by college type (Government and Non-Government) and faculty (Science, Arts, Business, and Social Science). Overall, among 675 students, 33.92% students study arts, 28.14% students study business, 22.96% study social science and 14.96% study science. In government and non-government colleges, 245 and 430 study respectively. In Government colleges, there are 124 students pursuing Honors degrees and 121 students pursuing Masters degrees of all 245 students whereas in non-government colleges, 370 of the 430 are pursuing Honors degrees and 60 are pursuing Masters degrees.

For government colleges the distribution of students studying arts, social science, business and arts are respectively 55.37%, 25%, 19.35% and 16.19%. And for non-government colleges, the distribution of students studying business, arts, social science and science are respectively, 35.58%, 29.76%, 22.96% and 12.32%. In our survey sample we also get that, in Arts, there is a notable number of students (101 in Govt. and 128 in Non-Govt.), making it the largest faculty in terms of student enrollment.

Table 6.1: Distribution of Students by College Type and Faculty

Faculty of the college	Govt.			Non-Govt.			All colleges
	Honors	Masters	Total	Honors	Masters	Total	
Science	2 (1.61)	46 (38.02)	48 (16.19)	36 (9.72)	17 (28.33)	53 (12.32)	101 (14.96)
Arts	67 (54.03)	34 (55.37)	101 (55.37)	124 (33.51)	4 (6.66)	128 (29.76)	229 (33.92)
Business	24 (19.35)	13 (19.35)	37 (19.35)	130 (35.13)	23 (38.33)	153 (35.58)	190 (28.14)
Social Science	31 (25.00)	28 (25.00)	59 (25.00)	80 (21.62)	16 (26.66)	96 (22.32)	155 (22.96)
Total	124 (100.00)	121 (100.00)	245 (100.00)	370 (100.00)	60 (100.00)	430 (100.00)	675 (100.00)

Source: Calculation based on primary data.

Table 6.2 presents the distribution of students by their age and gender, with percentages indicating the proportion of male, female, and total students within each age group. We see that, the most prominent age category among students is 23 years old, where there is a substantial presence of female students (32.11%), indicating that this particular age bracket likely comprises a significant number of individuals pursuing advanced education. Conversely, the youngest age group, those aged 20, has the smallest representation in the student population. The table also indicates that, most surveyed students in our study belong to ages ranged between 22 and 25 with female students having greater percentage in participation and from age 25 onwards, there are lower percentages of female than their male counterparts.

Table 6.2: Distribution of Students by Gender and Age

Distribution of age	Gender		
	Male (%)	Female (%)	All (%)
20	0.00	1.53	0.74
21	3.74	4.89	4.30
22	11.78	16.82	14.22
23	22.41	32.11	27.11
24	22.41	22.94	22.67
25	25.57	16.51	21.19
Above 25	14.08	5.20	9.78

Source: Calculation based on primary data.

We also see that for younger students (ages 20-22) there is a higher representation of females in Honors programs, while males are slightly more prevalent in Masters programs. It can also be surmised that most students complete their honors by ages 23 and 24 and commence with their Masters degrees after 24 (Table 6.3).

Table 6.3: Distribution of Students by Age, Gender, and Degree

Distribution of age	Honors		Masters		All college	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
20	-	2.0	-	-	-	1.5
21	5.0	6.0	0.9	1.3	3.7	4.9
22	15.3	21.0	3.8	2.7	11.8	16.8
23	30.6	40.1	3.8	5.3	22.4	32.1
24	23.1	19.8	20.8	33.3	22.4	22.9
25	20.2	7.9	37.7	45.3	25.6	16.5
Above 25	5.8	3.2	33.0	12.0	14.1	5.2

Source: Calculation based on primary data.

In Table 6.4, we show the variations in the distribution of students across academic disciplines, highlighting differences in program preferences and enrollments among males and females. It specifically provides insights into the gender-specific patterns in academic discipline selection and enrollment preferences. Within the Science discipline, a greater number of female students are enrolled in both Honors and Masters Programs, indicating a robust female presence in scientific fields. Conversely, in the Arts discipline, there is a relatively equitable distribution between male and female students, suggesting a similar level of interest in this academic domain among both genders. Meanwhile, Business programs exhibit a higher concentration of male students in both Honors and Masters programs, notably with a larger number of male students pursuing Honors degrees. On the other hand, in the Social Science discipline, there is a fairly even distribution of male and female students, with a slight predominance of female students in both Honors and Masters programs.

Table 6.4: Distribution of Students by Academic Disciplines

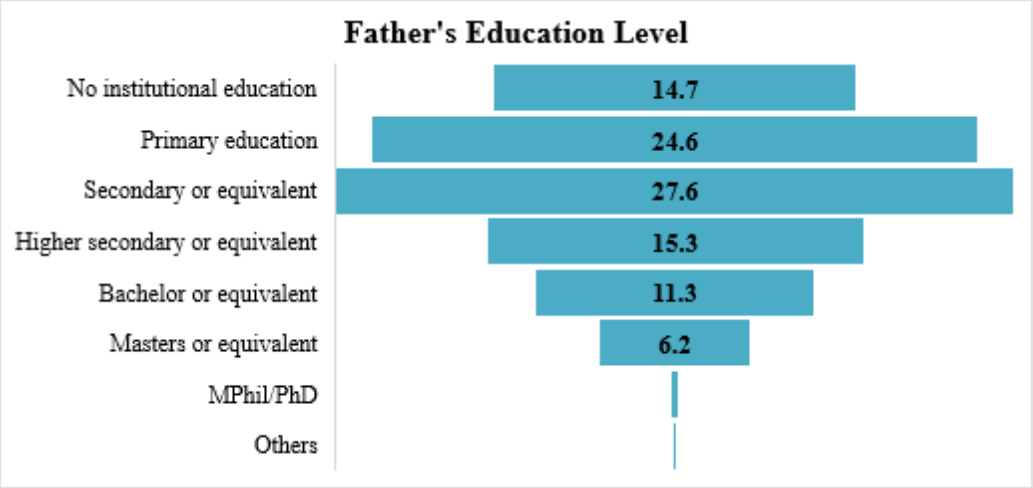
Currently enrolled semester/year	Honors		Masters		All college	
	Male	Female	Male	Female	Male	Female
Science	10	28	37	26	47	54
Arts	89	103	26	11	115	114
Business	85	68	23	14	108	82
Social Science	61	58	17	19	78	77

Source: Follow-up Tracer Study on Graduates of Tertiary Level Colleges, BIDS-2023.

6.2. Family Background

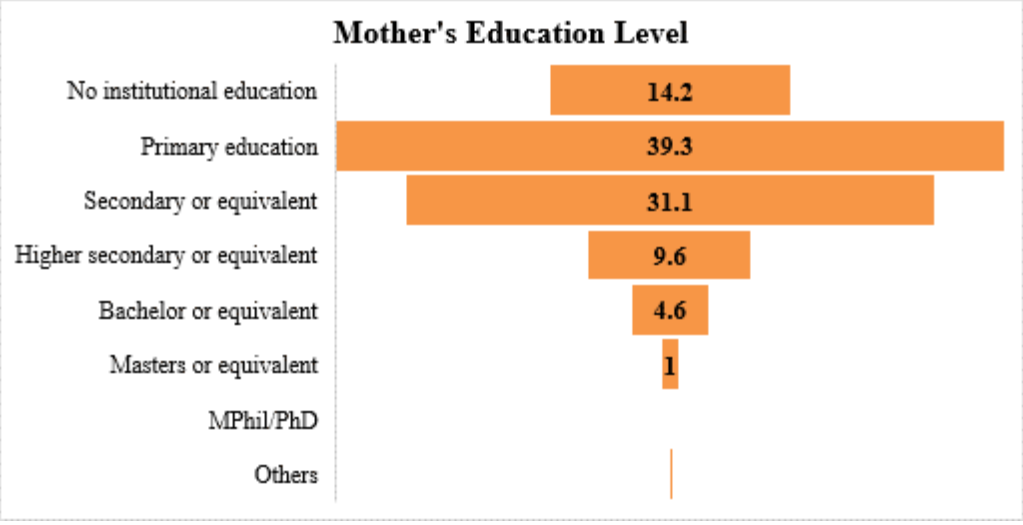
Most students in the NU colleges have parents with primary and secondary education (Table 6.5). Government colleges have a higher percentage of students with parents who have lower levels of education (no institutional education, primary education), whereas non-government colleges have a higher percentage of students with parents who have attained higher education levels (Honors and Masters). In figure 6.1 and 6.2 we see that, among their parents, fathers have greater percentages of higher secondary and progressively higher degrees than their mothers.

Figure 6.1: Students' Fathers' Education Level



Source: Calculation based on primary data.

Figure 6.2: Students' Mothers' Education Level



Source: Calculation based on primary data.

Table 6.5: Percentage of Students with their Parent's Education (%)

Educational level	Father's education									Mother's education								
	Govt.			Non-Govt.			All college			Govt.			Non-Govt.			All college		
	H	M	T	H	M	T	H	M	T	H	M	T	H	M	T	H	M	T
No institutional education	23.4	14.9	19.2	12.2	11.7	12.1	15.0	13.8	14.7	18.5	14.0	16.3	13.8	8.3	13.0	15.0	12.2	14.2
Primary education	20.2	26.4	23.3	26.8	16.7	25.3	25.1	23.2	24.6	43.5	34.7	39.2	38.4	45.0	39.3	39.7	38.1	39.3
Secondary or equivalent	34.7	20.7	27.8	26.8	31.7	27.4	28.7	24.3	27.6	28.2	33.1	30.6	31.1	33.3	31.4	30.4	33.1	31.1
Higher secondary or equivalent	10.5	16.5	13.5	16.5	15.0	16.3	15.0	16.0	15.3	8.1	11.6	9.8	9.5	10.0	9.5	9.1	11.0	9.6
Bachelor or equivalent	4.8	13.2	9.0	11.6	18.3	12.6	9.9	14.9	11.3	0.8	4.1	2.4	6.2	3.3	5.8	4.9	3.9	4.6
Masters or equivalent	6.5	6.6	6.5	5.9	6.7	6.0	6.1	6.6	6.2	-	2.5	1.2	1.1		0.9	0.8	1.7	1.0
MPhil/PhD	-	0.8	0.4	0.3	-	0.2	0.2	0.6	0.3	-	-	-	-	-	-	-	-	-
Others	-	0.8	0.4	-	-	-	-	0.6	0.1	0.8	-	0.4	-	-	-	0.2	-	0.1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: Calculation based on primary data.

Table 6.6 presents data on the distribution of students' parents' occupations, categorized by the type of occupation and separated into government and non-government college settings. The data is provided as percentages and includes both fathers' and mothers' occupations. The majority of mothers in both Govt. and Non-Govt. college settings are homemakers or housewives, with percentages ranging from 93.2% to 97.6%. Among their fathers' occupation, doing business is a predominant category. Also, many seem to be involved in agricultural and agro-based occupations. Occupational percentages for fathers also include being professionals, government and private sector employees, retired personnel, being involved in self-employment activities, day labourers etc. in smaller numbers of observations to mention a few.

Table 6.6: Percentage of Students with their Parent's Occupation

Occupation	Father's occupation									Mother's occupation								
	Govt.			Non-Govt.			All college			Govt.			Non-Govt.			All college		
	H	M	T	H	M	T	H	M	T	H	M	T	H	M	T	H	M	T
Homemaker/Housewife										97.6	95.9	96.7	93.2	96.7	93.7	94.3	96.1	94.8
Professional (Doctor, Lawyer, Engineer, Teacher)	4.0	3.3	3.7	2.4	6.7	3.0	2.8	4.4	3.3	0.8	2.5	1.6	1.4	-	1.2	1.2	1.7	1.3
Government employee	3.2	5.8	4.5	10.3	5.0	9.5	8.5	5.5	7.7	-	-	-	2.4		2.1	1.8		1.3
Private sector employee (including multinational companies)	4.0	9.9	6.9	9.5	15.0	10.2	8.1	11.6	9.0	-	-	-	0.5	1.7	0.7	0.4	0.6	0.4
Autonomous institution employee	1.6	1.7	1.6	1.1	1.7	1.2	1.2	1.7	1.3	-	-	-	-	-	-	-	-	-
Bank/Insurance institution employee				1.1	1.7	1.2	0.8	0.6	0.7	-	-	-	0.3	-	0.2	0.2	-	0.1
NGO/Trust/Foundation employee	1.6	0.8	1.2	0.3	3.3	0.7	0.6	1.7	0.9	-	0.8	0.4	-	-	-	-	0.6	0.1
Business (Large, Medium and Cottage Industries)	30.6	21.5	26.1	22.2	20.0	21.9	24.3	21.0	23.4	-	-	-	1.1	-	0.9	0.8	-	0.6

Self Employed Activities (Shop, Rickshaw Driving, Van Driving etc.)	8.9	5.8	7.3	5.7	6.7	5.8	6.5	6.1	6.4	-	-	-	0.5	-	0.5	0.4	-	0.3
Agriculture and agro-based occupations (farmers, fishermen etc.)	26.6	31.4	29.0	30.3	20.0	28.8	29.4	27.6	28.9	-	-	-	-	1.7	0.2	-	0.6	0.1
Service personnel (nurses, security personnel)	1.6	1.7	1.6	1.6	1.7	1.6	1.6	1.7	1.6	-	-	-	-	-	-	-	-	-
Day labourer	7.3	5.0	6.1	4.6	10.0	5.3	5.3	6.6	5.6		0.8	0.4	0.3	-	0.2	0.2	0.6	0.3
Retired	8.9	9.1	9.0	8.06	8.03	8.6	8.7	8.8	8.7	0.8	-	0.4	-	-	-	0.2	-	0.1
Others	1.6	4.1	2.9	2.4	-	2.1	2.2	2.8	2.4	0.8	-	0.4	0.3	-	0.2	0.4	-	0.3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: Calculation based on primary data.

Most students i.e., almost 94% of the surveyed ones live in male-dominated households (Appendix Table A2). Average number of members per household of the students is 5 where 3 are dependents (Table 6.7). Monthly income per household is approximately Tk. 31878.81 on an average and monthly expenditure is Tk. 25974.81 on an average. The main source of income for households is full-time employment of the members (Tk. 12646.81) followed by their income from agriculture/farm (Tk. 3840.89), part-time employment (Tk. 1782.97) and income from other sources (Tk. 1648.45). Families also earn from house rent, tuition, full-time and part-time businesses etc. which are all listed in Table 6.8.

Table 6.7: Other Family Information

Serial	Question	Answer
1.	Age of father or main guardian	56.44
2.	Mother's age	47.79
3.	Monthly family income (all the family members)	31878.81
4.	Own monthly income of the household head	19698.52
5.	Monthly family expenditure (For all the family members)	25974.81
6.	Number of family members (including you)	5.12
7.	Number of earning family members	1.65
8.	Number of dependents in the family	3.47
9.	Number of siblings studying currently	1.65

Source: Calculation based on primary data.

Table 6.8: Level of Income

Serial	Source of income	Average Income
1.	Full-time employment	12646.81
2.	Part-time employment	1782.97
3.	Full-time Business/entrepreneurship	6779.86
4.	Part-time Business/entrepreneurship	1069.19
5.	Income from Agriculture/Farm	3840.89
6.	Income from tuition	1481.34
7.	Income from house rent	1494.82
8.	Income from rental of machinery/vehicles	125.93
9.	Income from freelancing.	128.89
10.	Income from e-commerce	53.34
11.	Income from daily wage basis	826.38
12.	Others (please mention)	1648.45
Total income		31878.82

Source: Calculation based on primary data.

Apart from trying to understand the students' actual familial earnings and expenditures, we asked them to share their perception on their own familial class standing and related family status. Most students in the survey perceive themselves to hail from lower middle-class families (73%), followed by belonging to upper middle-class families (13.95%) and poor families (10.83%). The percentage of students' families being rich or very poor is negligible among our sample students. As this is a perception-based calculation, we prefer not to delve much into the understanding of their college specific information and their specific types through these numbers or percentages (Table 6.9).

Table 6.9: Household Categories

According to you, your house belongs to which one of the following categories?	Govt.		Non-Govt.		All college	
	Num	%	Num	%	Num	%
Rich	0	0.00	2	0.47	2	0.30
Upper middle class	37	15.16	57	13.26	94	13.95
Lower middle class	171	70.08	321	74.65	492	73.00
Poor	30	12.30	43	10.00	73	10.83
Very poor	6	2.46	7 |	1.63	13	1.93

Source: Calculation based on primary data.

6.3. Respondent's General Information

Table 6.10 provides information on the distribution of currently enrolled students based on their last academic Cumulative Grade Point Average (CGPA). The data is segmented by degree type (Honors and Masters) and distinguishes between government and non-government colleges. Most students (48.3%) obtained CGPA 3.0 to 3.4 in their last academic examination, although a closer percentage obtained CGPA ranged between 2.5 and 2.9. The students in government colleges performed better than the students in non-government colleges with 58.8% of the students obtaining CGPA above 3 in government colleges and 52.3% of the students obtaining CGPA above 3 in non-government colleges. The results in colleges having Masters degrees seem to be better than in the colleges having Honors degrees only.

Table 6.10: Percentage of Currently Enrolled Students with Last Academic CGPA (%)

CGPA	Honors			Masters			All college		
	Govt.	Non-Govt.	Total	Govt.	Non-Govt.	Total	Govt.	Non-Govt.	Total
Below 2.5	4.5	7.0	6.4	0.9	-	0.6	2.9	6.0	4.9
2.5 to 2.9	39.4	41.6	41.0	37.2	41.7	38.7	38.4	41.6	40.4
3.0 to 3.4	48.5	46.8	47.2	52.2	50.0	51.4	50.2	47.2	48.3
3.5 to 3.9	6.8	4.3	5.0	9.7	3.3	7.5	8.2	4.2	5.6
4 (out of CGPA 4)	0.8	0.3	0.4	-	5.0	1.7	0.4	0.9	0.7

Source: Calculation based on primary data.

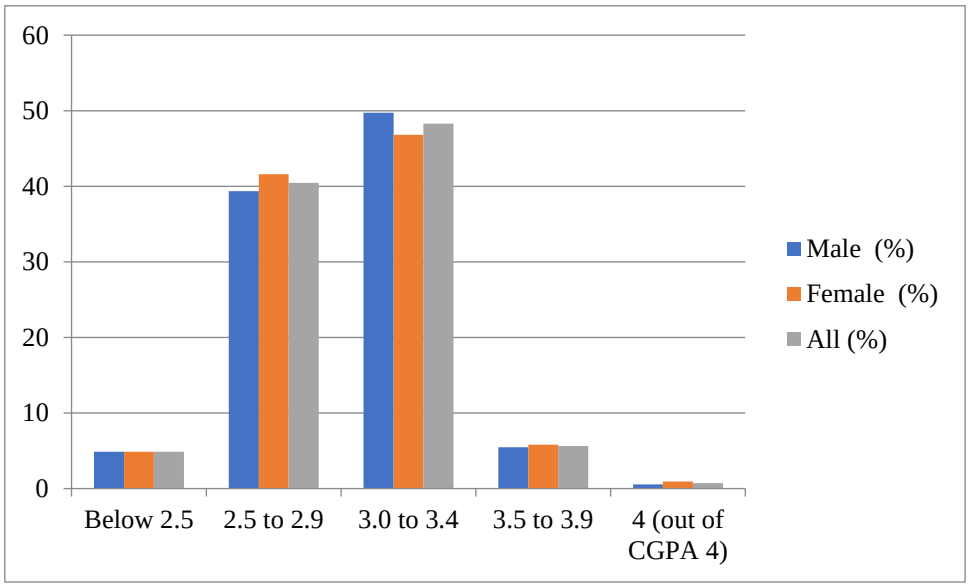
Female students in the surveyed colleges did much better than the male students there (Table 6.11). In all colleges, 80% or more students obtained between CGPA 2.5 to 3.4. It's also evident that a higher percentage of female students fall into the 2.5 to 2.9 and 3.0 to 3.4 CGPA categories compared to male students. This suggests that, on average, female students tend to have a slightly better academic performance in these CGPA ranges.

Table 6.11: Percentage of Currently Enrolled Students with Last Academic CGPA and Gender

CGPA	Male (%)	Female (%)	All (%)
Below 2.5	4.89	4.89	4.89
2.5 to 2.9	39.37	41.59	40.44
3.0 to 3.4	49.71	46.79	48.30
3.5 to 3.9	5.46	5.81	5.63
4 (out of CGPA 4)	0.57	0.92	0.74

Source: Calculation based on primary data.

Figure 6.3: Percentage of Currently Enrolled Students with Last Academic CGPA and Gender



Source: Calculation based on primary data.

According to data shown in Table 6.12, most students in the surveyed colleges study Arts (33.9%), followed by Business (28.1%), Social Science (23%) and Science (15%). Students in Honors colleges mostly study Arts (38.2%) and Business (30.5%) whereas, students in Masters colleges study Arts (21.4%), Business (21.4%) and Social Science (20.8%). Compared to non-government colleges, more students in government colleges tend to study arts and social science, though business is more popular among students of non-government colleges.

Table 6.12: Percentage of Students with Academic Discipline

Faculty	Honors			Masters			All college		
	Govt.	Non-Govt.	Total	Govt.	Non-Govt.	Total	Govt.	Non-Govt.	Total
Science	1.5	9.7	7.6	40.7	28.3	36.4	19.6	12.3	15.0
Arts	51.5	33.5	38.2	29.2	6.7	21.4	41.2	29.8	33.9
Business	17.4	35.1	30.5	12.4	38.3	21.4	15.1	35.6	28.1
Social Science	29.5	21.6	23.7	17.7	26.7	20.8	24.1	22.3	23.0

Source: Calculation based on primary data.

6.4 Information about Previous Education and Work Experience

Most students studying in NU colleges have passed the general SSC and HSC examination (Table 6.13). Though there are some students from Vocational SSC and HSC examination system (with average CGPA 4.10 and 3.67 respectively) and Dakhil and Alim system (with average CGPA 4.34 and 3.85 respectively), the number of students from Open SSC and HSC examination system and O-levels or A-levels examination is very negligible.

Table 6.13: Information about SSC and HSC Degree Level

Type of secondary degree	Percentage	Average CGPA	Type of higher secondary degree	Percentage	Average CGPA
SSC	92.74	4.10	HSC	96.15	3.67
SSC (Vocational)	1.48	4.53	HSC (Vocational)	1.78	4.37
SSC (Open)	0.44	2.5	HSC (Open)	0.30	3.52
Dakhil	5.19	4.34	Alim	1.78	3.85
O-Level	0.15	5	Diploma	-	-
Others	-	-	A-Level	-	-
-	-	-	Others	-	-

Source: Calculation based on primary data.

23.41% students from all colleges have had some kind of work experience after their higher secondary studies and before their honors degree studies (Table 6.14). The percentage among the students in Honors colleges is higher (25.71%) than that of the students in Master's colleges (17.13%). 88.61% of all colleges were being paid for their jobs whereas, 89.76% and 83.87% of the students in Honors colleges and Masters colleges were being paid respectively for their specific jobs. On an average, students from Masters colleges used to be paid higher than the

students in Honors colleges (Tk. 6315 per month vs. Tk. 4453 per month respectively). As these jobs were done before joining their colleges, the gap in their pays do not bear any meaning for us. But we can assume that may be having a higher pay in their earlier lives motivate them to pursue higher studies more. Among all students, students studying social science, business, and arts seem to have had more percentages of having some kind of work experience in their lives (Table 6.15).

Table 6.14: Work Experience before Attending Honors Degree College

Statements	Honors	Masters	All college
Did you have any work experience before you started the Honor's degree at your college? (Yes=1, %)	25.71	17.13	23.41
Was it a paid job? (Yes=1, %)	89.76	83.87	88.61
How much was being paid? (Avg. income)	4453	6315	4799

Source: Calculation based on primary data.

Table 6.15: Work Experience by academic disciplines

Having work experience before starting the Honors degree at the colleges (among students of different academic disciplines)	Honors (%)	Masters (%)	All college (%)
Science	3.15	3.23	3.16
Arts	25.98	35.48	27.85
Business	35.43	32.26	34.81
Social Science	35.43	29.03	34.18

Source: Calculation based on primary data.

In Table 6.16, we enlist the number and percentage of students' types of jobs before starting their graduation (Honors) degree. We find that, 57.59% of all students in all colleges used to have some kind of part-time work and 20.89% of them were involved in some kind of self-employment activities. The percentage for the same among students in government and non-government colleges were 67.39% vs. 53.57% and 19.57% vs. 21.43% respectively. Very few had some kind of full-time work experience under their belt.

Table 6.16: Type of Work Experience before Attending Honors Degree College

What kind of work experience was that?	Govt.		Non-Govt.		All college	
	Number	%	Number	%	Number	%
Full-time work	2	4.35	8	7.14	10	6.33
Part-time work	31	67.39	60	53.57	91	57.59
Temporary/seasonal work	3	6.52	14	12.50	17	10.76
Family business	0	0.00	5	4.46	5	3.16
Self-employed	9	19.57	24	21.43	33	20.89
Others (Please specify)	1	2.17	1	0.89	2	1.27

Source: Calculation based on primary data.

Though more percentage of students had part-time jobs before their Honors degree studies, average income for those jobs used to be less than the other students having other kinds of jobs (Table 6.17). overall, for all students, family business made them better off by generating an average income of Tk.10500, followed by seasonal work with average income of Tk. 6875 and full-time work with Tk. 5992. In case of prior income for students from Honors and Masters colleges, it is gathered that the students from Masters students were paid more than the students of Honors colleges.

Table 6.17: Student's prior Work Experience with Average Income

Honors			Masters		All college	
What kind of work experience was that?	Was it a paid job? (in %)	Average Income (taka)	Was it a paid job? (in %)	Average Income (taka)	Was it a paid job? (in %)	Average Income (taka)
Full-time work	8.77	5992	-	-	7.14	5992
Part-time work	62.28	4315	73.08	5405	64.29	4546
Temporary/seasonal work	9.65	6409	3.84	12000	8.57	6875
Family business	0.88	9000	3.84	12000	1.43	10500
Self-employed	18.42	2943	15.38	9000	17.86	3912
Others (Please specify)	-	-	3.84	1500	0.71	1500
Total	100	4453	100	6315	100	4799

Source: Calculation based on primary data.

To see if the students' prior work experience had any kind of sway or influence on their current studies, we asked the students about the relevance of their prior work experience to their current discipline or degree. In Table 6.18, we find that, In the "Not related at all" category, a significant percentage of Arts and Business students in both Honors and Masters programs indicate that their previous work experience is entirely unrelated to their current studies. In the "Only a little related" category, Arts students in both Honors and Masters programs dominate, suggesting that many Arts students perceive their prior work experience as having minimal relevance to their academic discipline. The "Somewhat related" category exhibits diverse responses, with students from various disciplines considering their past work experience moderately relevant to their studies. In the "Fully related" category, there are students in each discipline who find their work experience highly relevant, with particularly strong alignment in Business and Social Science.

Table 6.18: Students (%) with Relevance of Prior Work Experience to Current Study

Work experience related to study	Honors				Masters				All college			
	Science	Arts	Business	Social Science	Science	Arts	Business	Social Science	Science	Arts	Business	Social Science
Not related at all	-	24.2	26.7	40.9	100.0		50.0	30.0	20.0	18.2	30.9	38.9
Only a little related		54.5	17.8	25.0	-	-	-	-	-	40.9	14.5	25.9
Somewhat related	50.0	12.1	37.8	27.3	-	100	40.0	20.0	40.0	34.1	38.2	25.9
Fully related	50.0	9.1	17.8	6.8	-	-	10.0	20.0	40.0	6.8	16.4	9.3

Source: Calculation based on primary data.

6.5 Education & Learning Experience at College

We also asked the students about their reasons for coming to NU colleges for obtaining their tertiary studies. In Table 6.19, we present the findings from our survey for that enquiry. Across the students of both Honors and Masters programs, the most common reasons for attending college are "To get a good job" and "To improve your (their) quality." These aspirations indicate that a significant portion of students views higher education as a means to enhance their career prospects and overall life quality. While "To obtain a degree or certificate" is a prominent reason for coming to college, it is slightly more prevalent among students from Masters colleges (22.4%) compared to the students from Honors colleges (20.0%). Though increasing social status works as a good motivation for many of the students, "To marry well" is a less popular motivation, collectively representing a relatively small percentage of students across both college types.

Table 6.19: Reasons for Coming to the College

Reasons for Coming to the College	Honors		Masters		All college	
	n	%	n	%	n	%
To obtain a degree or certificate	289	20.0	119	22.4	408	20.7
To get a good job	443	30.7	156	29.4	599	30.4
To increase social status	300	20.8	101	19.0	401	20.3
To improve your quality	385	26.7	148	27.9	533	27.0
To marry well	14	1.0	4	0.8	18	0.9
Others	11	0.8	3	0.6	14	0.7

Source: Calculation based on primary data.

Among their reasons for choosing to study a particular subject, students answered that, in most cases, they take interest in pursuing tertiary degrees in their particular subject matter because that is most relevant to what they studied earlier. They also prioritize their choice on subject according to their future job interest and based on the demanding condition of the job market. Matters like having no other choice, being influenced by other people in this regard and finding the subject easier to study, seem to be irrelevant to the current students under the study.

Table 6.20: Reasons for Selecting Studied Subject

Serial	Reasons for subject choice	Honors (Mean of scale)	Masters (Mean of scale)	All college (Mean of scale)
1.	The subject area is most relevant to what I studied in my earlier education	3.13	3.32	3.18
2.	The subject area is most relevant to the work I would like to do in future	3.35	3.19	3.31
3.	The subject area is highly demanded in the job market	3.09	2.10	3.04
4.	The subject area was easy to get accepted into	2.43	2.28	2.39
5.	I did not choose the subject myself; someone else influenced me to choose	1.65	1.66	1.65
6.	I was not interested in studying this subject. However, I did not get the opportunity to choose another subject	1.73	1.82	1.76
7.	I found this subject easier to study relative to other subjects to get a Bachelor's degree certificate	2.45	2.35	2.42

Source: Calculation based on primary data.

To understand the extent of the fruitfulness of their college education, we asked the current students about the academic and skill training provided by and in their colleges (Table 6.21). Government and Non-Government colleges differ significantly in terms of students' perception regarding the adequacy of knowledge and technical skills learned for future work. Government colleges have a lower mean agreement score (2.76) compared to non-government colleges (3.21). This difference is statistically significant (P-value < 0.001), indicating that students in non-government colleges have a more positive view of the relevance of their education to their future work. There is a significant difference in students' perceptions of ICT skills for computer use between government and non-government colleges. Non-government college students (mean 2.88) have a slightly more positive view than government college students (mean 2.61), with a statistically significant difference. Both types of colleges have relatively similar perceptions regarding the adequacy and usefulness of soft skills for future work success. Students in non-government colleges tend to have a significantly more favorable perception of access to the internet and computers, as well as access to books, journals, and databases, and the up-to-datedness of lab equipment and facilities compared to government college students. Overall, the data suggests that students in non-government colleges tend to have more positive perceptions of the education and resources provided by their institutions, particularly regarding the relevance of their education to future work and access to technology and research materials. These differences in perception could have economic implications as graduates who believe their education is more relevant to their future work may be better prepared for the job market, potentially leading to better employment prospects and higher earnings.

Table 6.21: Mean Level of Agreement regarding Academic and Skill Training provided by the College

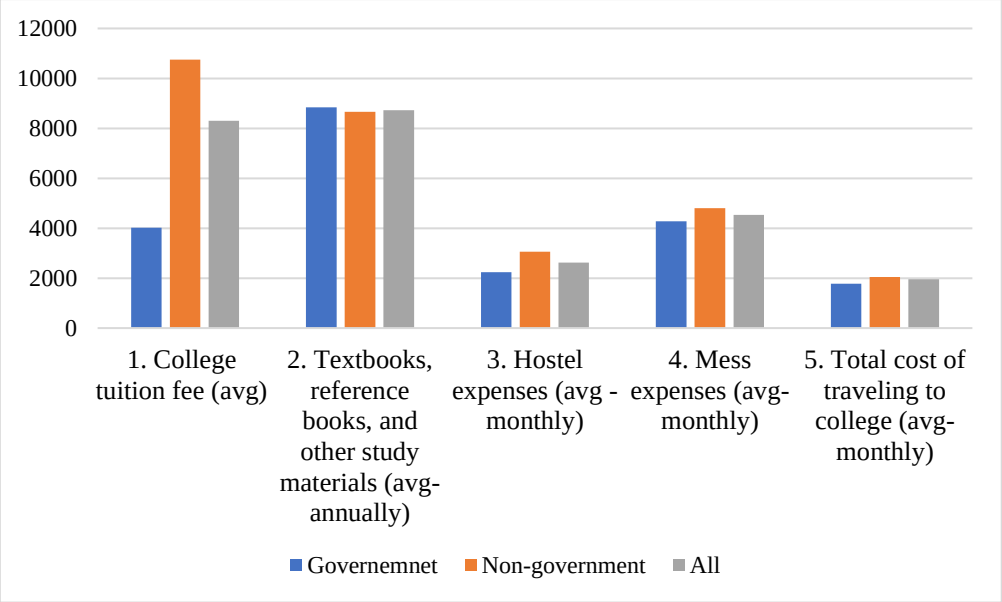
Statement	Govt.		Non-Govt.		Diff	P-value
	Mean	SD	Mean	SD		
The knowledge and technical skills I am learning at the college will likely provide a good basis for the skills I need for my work	2.76	1.18	3.21	1.04	-0.445***	(0.000)
ICT (information and Communications Technology) skills that I am learning at the college will likely provide a good basis for computer skills for my future work	2.61	1.28	2.88	1.10	-0.270*	(0.006)
Soft skills (teamwork, communication skills, problem solving) that I am learning at the college is adequate and useful for my future work success	2.63	1.14	2.79	1.11	-0.161	(0.072)

Access to the internet and computers are adequate in the program	2.03	1.18	2.32	1.19	-0.290**	(0.002)
Access to books, journals and databases is adequate for research projects and learning purposes	2.15	1.13	2.32	1.17	-0.169	(0.068)
The labs, equipment, and facilities we use at the department are sufficiently up-to-date relative to the real technologies used in the industry	2.16	1.09	2.37	1.15	-0.209*	(0.020)

Source: Calculation based on primary data.

In Fig 6.4, we try to identify the costing of tertiary education for students in NU colleges. We see that among all the costs, expenses on textbooks, reference books, and other study materials and students' tuition fees are among the highest (Tk. 8727.79 and Tk. 8299.76 on an average respectively). Compared to government colleges, tuition fees and expenses on hostel and mess are notably higher in non-government institutions. Though the costs of textbooks and related study materials cost more for students in government colleges.

Figure 6.4: Family's Average Educational Expenses for Students of NU Colleges



Source: Follow-up Tracer Study on Graduates of Tertiary Level Colleges, BIDS-2023.

6.6. Job Searching Sources

Among different medium for job searching activities, we tried to find which are more effective from students' point of view and find several opinions. In general, students think of finding jobs through job sites like bdjobs and unjobs etc. to be very effective. They also think that job advertisements in the newspapers and social media like facebook, linkedin etc. are also good job searching options. Apart from those, finding jobs through job fairs, and via family members and other relatives seem interesting and effective from their point of view. Students give less importance to routes like career club membership, or other social or cultural clubs and alumni associations.

Table 6.22: Effective Source of Job Search

Serial	Statement	Honors (Avg score)	Masters (Avg score)	All college (Avg score)
1.	Job fair	2.73	2.19	2.59
2.	Social media (Facebook, LinkedIn etc.)	2.84	2.88	2.85
3.	Career club membership	1.98	1.77	1.93
4.	Job site (bdjobs, unjobs, etc.)	3.18	3.28	3.10
5.	Other social and cultural clubs	1.97	1.84	1.94
6.	Alumni association	2.06	1.85	1.10
7.	Family members	2.51	2.51	2.51
8.	Relatives/friends	2.22	2.03	2.17
9.	Political person	1.86	1.63	1.80
10.	Job Advertisement in Newspaper	3.05	3.13	3.07
11.	Other	2.21	1.82	2.14

Source: Calculation based on primary data.

6.7. Employment Status

44.30% of students from all surveyed colleges have some kind of employment at present with an average earing of Tk. 6657.10. 50.83% of the students at Masters colleges and 41,.90% of the students of Honors colleges are involved in employment while earning Tk. 7782.61 and Tk. 6157.01 on an average respectively. The working hours are almost 5 per day for all students (Table 6.23).

Table 6.23: Students Information about their Works besides Studies

Serial	Question	Honors	Masters	All college
1.	Are you currently doing any work besides studies? **Yes=1, (%)**	41.90	50.83	44.30
2.	About how much do you earn per month on an **average** (in Taka)?	6157.01	7782.61	6657.10
3.	About how many hours (per day) do you work?	4.99	4.98	4.98

Source: Calculation based on primary data.

Most NU students (46.15%) are involved in some kind of part-time job (Table 6.24). Students at Masters colleges have a higher percentage engaged in full-time work compared to Honors college students, resulting in an overall college average of 6.69%. Their percentage for working in family businesses is also slightly higher than the students in Honors colleges. Temporary or seasonal work is more common among Honors college students and they tend to be involved in more self-employment activities compared to the Masters college students.

Table 6.24: Students' Current Type of Work

Serial	Work type	Honors **(%)**	Masters **(%)**	All college **(%)**
1.	Full-time work	5.31	9.78	6.69
2.	Part-time work	44.93	48.91	46.15
3.	Temporary/seasonal work	6.28	2.17	5.02
4.	Family business	5.31	8.70	6.35
5.	Self-employment	29.47	25.00	28.09
6.	Others	8.70	5.43	7.69

Source: Calculation based on primary data.

Table 6.25 provides insights into the relevance of students' ongoing work with their academic study. The "Somewhat Related" category shows that a considerable percentage of Honors college students (28.99%) and a higher percentage (38.04%) of Masters college students find some level of relevance between their ongoing work and academic studies. Also, notable portion of both Honors (18.84%) and Masters (20.65%) college students believe that their ongoing work is highly relevant to their academic studies. A significant proportion of Honors college students (29.95%) and a slightly lower percentage of Masters students (22.83%) consider their ongoing work to be entirely unrelated to their academic studies. However,

22.22% students from Honors colleges and 18.48% students from Masters colleges perceive their ongoing work as having only a slight connection to their academic studies.

Table 6.25: Relevance of Ongoing Work with Study

Serial	Work type	Honors **(%)**	Masters **(%)**	All college **(%)**
1.	Not related at all	29.95	22.83	27.76
2.	Only a little related	22.22	18.48	21.07
3.	Somewhat related	28.99	38.04	31.77
4.	Very much related	18.84	20.65	19.40

Source: Calculation based on primary data.

Data in Table 6.26 sheds light on the multifaceted reasons why students engage in employment, emphasizing their commitment to financial responsibilities, education, and gaining practical experience. Most of them actually work to pay for the cost of their studies (35.26%), followed by to gain work experience (28.96%), and to pay for their family's living expenses (24.07%). Some also work to pay for the cost of their siblings' studies (7.59%) and for other reasons (4.12%).

Table 6.26: Main Purpose of Working (%)

Main Purpose of Working	**Honors**		**Masters**		**All college**	
	n	**%**	**n**	**%**	**n**	**%**
To pay for my family's living expenses	127	23.52	60	25.32	187	24.07
To pay for the cost of my study	189	35.00	85	35.86	274	35.26
To pay for the cost of my siblings' study	37	6.85	22	9.28	59	7.59
To gain work experience	163	30.19	62	26.16	225	28.96
Others	24	4.44	8	3.38	32	4.12

Source: Calculation based on primary data.

Table 6.27 presents data on the perceived impact of current employment on students' education. It breaks down the responses into four categories—Significantly Negative, Negative to Some Extent, Not Affecting at All, and Effecting Positively—and provides the percentage of students in Honors, Masters, and the entire college population within each category. The majority of students, both in Honors (35.27%) and Masters (46.74%) college programs, report that their work has a negative impact on their education, though to varying extents. The overall college average for this category is 38.80%. However, a significant percentage of both Honors (41.55%) and Masters (39.13%) college students perceive that their current work is positively affecting their education making the overall college average for this category to be 40.80%. A

small percentage of both Honors (5.80%) and Masters (3.26%) college students feel that their current work has a significantly negative impact on their education.

Table 6.27: Impact of Current Work on Education

Serial	Impact	Honors **(%)**	Masters **(%)**	All college **(%)**
1.	Significantly negative	5.80	3.26	5.02
2.	Negative to some extent	35.27	46.74	38.80
3.	Not affecting at all	17.39	10.87	15.38
4.	Effecting positively	41.55	39.13	40.80

Source: Calculation based on primary data.

6.8. Job Supporting Services at College

Among the students of all colleges 13.3% said that they have career counselling services in their college premises. The percentage is higher for students at non-government colleges. The students at all types of colleges think that there should be a career counselling service at every college (Table 6.28).

Table 6.28: Availability of Career Counseling Services at College

Serial	Questions	Govt.			Non-Govt.			All college		
		H	M	T	H	M	T	H	M	T
1.	Is there a counselling service (career counselling) or job placement office at your college? **Yes=1**	12.9	9.1	11.0	13.5	21.7	14.7	13.4	13.3	13.3
2.	Do you think that there should be one such counselling service in every college? **Yes=1**	99.2	99.2	99.2	98.9	98.3	98.8	99.0	98.9	99.0

Source: Calculation based on primary data.

Though most suggested in favor of introducing career counselling services at college level, only 42% students in all college think that this would be effectively helpful for students' job perspective (Table 6.29). In consideration of the matter of effectiveness of such a service, students in non-government colleges seem to be more inclined towards this service than students in government colleges.

Table 6.29: Effectiveness of Career Counseling Services at College

Serial	Effectiveness	Govt.			Non-Govt.			All college		
		H	M	T	H	M	T	H	M	T
1.	Not effective at all	12.5	90.9	44.4	16.0	46.2	22.2	15.2	66.7	28.9
2.	Somewhat effective	37.5	-	22.2	36.0	15.4	31.7	36.4	8.3	28.9
3.	Effective	25.0	-	14.8	26.0	15.4	23.8	25.8	8.3	21.1
4.	Very effective	25.0	9.1	18.5	22.0	23.1	22.2	22.7	16.7	21.1

Source: Follow-up Tracer Study on Graduates of Tertiary Level Colleges, BIDS-2023.

6.9. Co-curriculum Activities and Future Aspiration

31% among all students at different colleges, 32.2% of students in government colleges and 30.2% of students in non-government colleges take part in co-curriculum activities according to our survey data (Table 6.30). Among them, 75.1% of all students, 74.7% of government college students and 75.4% of non-government college students have received awards and other certifications.

Table 6.30: Students' Participation in Co-curriculum Activities

Serial	Questions	Govt.			Non-Govt.			All college		
		H	M	T	H	M	T	H	M	T
1.	Are you involved in any co-curriculum activities in or outside the college (e.g., debating, sports and cultural activities, student council etc.)? **Yes=1**	32.3	32.2	32.2	31.4	23.3	30.2	31.6	29.3	31.0
2.	If yes, then have you received any award or certificate? **Yes=1**	72.5	76.9	74.7	73.3	92.9	75.4	73.1	81.1	75.1

Note: GH=government honors, GM=government masters, TG=total government colleges, NGH=non-government honors, NGM=non-government masters, TNG=total non-government colleges.

Source: Calculation based on primary data.

Most students (76.9%) in our surveyed colleges seem to be optimistic about their future prospects in life (Table 6.31). The majority of students in all categories consider themselves "Optimistic/Hopeful" about the future, with government college students having the highest percentage in this category. Correspondingly, a significant portion of students express being

"Very optimistic" about the future, with non-government college students having the highest percentage in this category. The percentages for “Not optimistic at all” and “Careless about the future” are very low indicating present youths’ relative awareness of themselves and their happiness and positive view of life.

Table 6.31: Student’s Perception about their Future

Serial	How optimistic are you about the future?	Govt.			Non-Govt.			All college		
		H	M	T	H	M	T	H	M	T
1.	Not optimistic at all	2.4	1.7	2.0	3.2	8.3	4.0	3.0	3.9	3.3
2.	Somewhat optimistic	13.7	8.3	11.0	17.3	18.3	17.4	16.4	11.6	15.1
3.	Careless about the future	2.4	4.1	3.3	5.1	8.3	5.6	4.5	5.5	4.7
4.	Optimistic/Hopeful	48.4	44.6	46.5	40.5	48.3	41.6	42.5	45.9	43.4
5.	Very optimistic	33.1	41.3	37.1	33.8	16.7	31.4	33.6	33.1	33.5

Note: GH=government honors, GM=government masters, TG=total government colleges, NGH=non-government honors, NGM=non-government masters, TNG=total non-government colleges.

Source: Calculation based on primary data.

Most students perceive their life to be good and very good compared to their parents’ lives (Table 6.32). The majority of students across all categories expect their lives to be "Good" in comparison to their parents, with non-government students having the highest percentage in this category. A significant percentage of government students believe that their lives will be "Very good" compared to their parents. Non- government students also express optimism, but to a lesser extent. A small percentage of students believe that their lives will "Remain the same" as that of their parents, while even smaller percentages think that their lives will be "Bad" or "Very bad".

Table 6.32: Students’ Lifestyle compared to their Parents

Serial	How do you think your life will be compared to your parents?	Govt.			Non-Govt.			All college		
		H	M	T	H	M	T	H	M	T
1.	Very good	36.3	18.2	27.3	30.3	15.0	28.1	31.8	17.1	27.9
2.	Good	55.6	76.0	65.7	57.8	63.3	58.6	57.3	71.8	61.2
3.	Remain the same	3.2	3.3	3.3	7.0	8.3	7.2	6.1	5.0	5.8
4.	Bad	1.6	2.5	2.0	2.7	11.7	4.0	2.4	5.5	3.3
5.	Very bad	3.2	-	1.6	2.2	1.7	2.1	2.4	0.6	1.9

Note: GH=government honors, GM=government masters, TG=total government colleges, NGH=non-government honors, NGM=non-government masters, TNG=total non-government colleges.

Source: Calculation based on primary data.

6.10. Impact of Covid-19

During the ongoing onslaught of covid-19 pandemic, students suffered from various bad situations. Though only a small proportion of students were affected by covid, the pandemic itself had a severe effect on their academic and personal life. The majority of students in both government and non-government institutions experienced an academic session drop due to the Covid-19 pandemic (89.39% and 77.44% respectively) and a downward change in the quality of education. Nearly all students reported having their concentration on studies diverted due to the pandemic, indicating the challenges they faced in maintaining focus. A significant percentage of students experienced worse academic results and reduced study time than before the pandemic. Loss of family members, including earning family members, was reported by a substantial portion of students. Loss of jobs, reduction in salary, loss of other benefits, sale of family and personal assets, and other challenges such as financial difficulties were experienced by a notable percentage of students.

Table 6.33: Impact of Covid-19 on Students Life

Impact of Covid-19 on academic and personal life of the current students	Govt. **(%)**	Non-Govt. **(%)**	All college **(%)**
Academic session drop	89.39	77.44	81.78
Diverted concentration from the study	92.24	88.37	89.78
Worse academic result than before	66.94	70.93	69.48
Downward change in the quality of education	87.35	83.26	84.74
Curbed study time	72.24	74.65	73.78
Suffered from covid	8.57	12.79	11.26
Suffered from other illness	38.78	35.58	36.74
Loss of earning family member (s)	2.86	12.33	8.89
Loss of other family members	10.20	16.98	14.52
Loss of jobs	11.02	16.05	14.22
Loss (reduction) of salary	19.59	21.63	20.89
Loss of other benefits	33.47	31.63	32.30
Sale of family assets	18.78	22.79	21.33
Sale of personal assets	9.80	13.26	12.00
Others	40.00	32.50	34.00

Source: Calculation based on primary data.

In conclusion, it can be said that affiliated colleges of the NU in Bangladesh serve secondary graduates of average academic qualification from decent family backgrounds to achieve tertiary education qualifications. Overall, students in non-government colleges tend to have more positive perceptions of the education and resources provided by their institutions, particularly regarding the relevance of their education to future work and access to technology and research materials.

CHAPTER VII: PRINCIPALS' OPINION ON COLLEGE GRADUATE

The survey has been conducted in 61 NU affiliated colleges. In this section, we have summarized the findings from interviewing college principals. The survey takes the principal's opinion based on the understanding of institutional identification, college profile, job-related information about students, facilities in the college premises and information about existing problems etc.

7.1. Institutional Identification

Table 7.1 provides general information about the designation of the college principals. In the sample colleges, almost 57 percent of the principals are designated as professors, 13 percent are associate professors and 30 percent are designated as assistant professors. At a disaggregated level, NU affiliated govt. colleges have higher professors (75 percent) than non-govt. colleges (49 percent). On the other hand, non-govt. colleges have more associate and assistant professors than govt. colleges.

Table 7.1: Distribution of Principals across Designation and College Type

Designation	**Govt. College (%)**			**Non-Govt. College (%)**			**ALL College (%)**
	Hons.	*Masters*	*Total*	*Hons.*	*Masters*	*Total*	
Professor	66.67	87.5	75	45.95	75	48.78	57.38
Associate Professor	16.67	-	10	13.51	25	14.63	13.11
Assistant Professor	20	12.5	15	40.54	-	36.59	29.51
Lecturer	-	-	-	-	-	-	-
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: Calculation based on primary data.

Table 7.2 shows us the experience level of principals of current colleges as well as total years of experience of teaching in their entire career. Average years of experience of professor, associated professor and assistant professor at their current college are 16 years, 26 years, and

Table 7.2: Experience of Principals

Designation	Years of experience in present college					Total years of experience				
	Govt. College		*Non-Govt. College*		*ALL College*	*Govt. College*		*Non-Govt. College*		*ALL College*
	H	M	H	M		H	M	H	M	
Professor	14.29	13.00	18.94	12.67	16.12	30.29	30.00	28.00	38.33	29.85
Associate Professor	16.00	-	30.00	26.00	26.00	23.50	-	31.20	26.00	28.63
Assistant Professor	28.00	15.00	22.33	-	22.56	33.50	30.00	27.53	-	28.33
Lecturer	-	-	-	-	-	-	-	-	-	-

Source: Calculation based on primary data.

23 years respectively. At a disaggregated level, professor, and associate professor of non-govt.

Hons. colleges (i.e.,19 years and 30 years) are higher in comparison to the govt. colleges and non.-govt. masters colleges. But the experience of assistant professor is highest (28 years) in govt. Hons. colleges.

On the other hand, total years of experience of professor, associate professor and assistant professor are 30 years, 29 years, and 28 years respectively where at disaggregated level, total experiences of professor and associate professor are highest in non-govt. colleges (i.e., professor in non-govt. master's college is almost 38 years and associate professor in non-govt. hons. college is almost 31 years respectively).

7.2. College Profile

The survey has been conducted on 20 NU affiliated govt. colleges and 41 NU affiliated non-govt. colleges, where the total number of departments is almost 14 on average. Among them, govt. colleges have 23 department whereas non-government colleges have 9 department on average. At a disaggregated level, colleges those are provided hons. programs have more departments compared to masters' colleges.

Table 7.3: Total Number of Department

No. of Department	Govt. College (Avg)	Non-Govt. College (Avg)	Total (Avg)
Honor's College	13.00	7.41	**9.25**
Master's College	9.90	1.44	**4.21**
Total	**22.90**	**8.85**	**13.46**

Source: Calculation based on primary data.

Table 7.3 provides the information about current student ratio on both NU affiliated govt. and non-govt. colleges. From the table, it is clearly seen that the total number of students on average is 4100. Honors colleges have more students than master's colleges (i.e., 3387 and 707 respectively). At a disaggregated level, NU affiliated govt. colleges have more students that of non-govt. colleges. In question of gender ratio, the proportion of male is higher than female.

Table 7.3: Information on Current Students (Avg)

Department	**Govt. College (N)**		**Non-Govt. College (N)**		**All College (N)**
	Male	*Female*	*Male*	*Female*	
Honor's	3855	3524	860	580	3387
Masters'	987	941	65	47	707
Total	**4842**	**4465**	**925**	**626**	**4094**

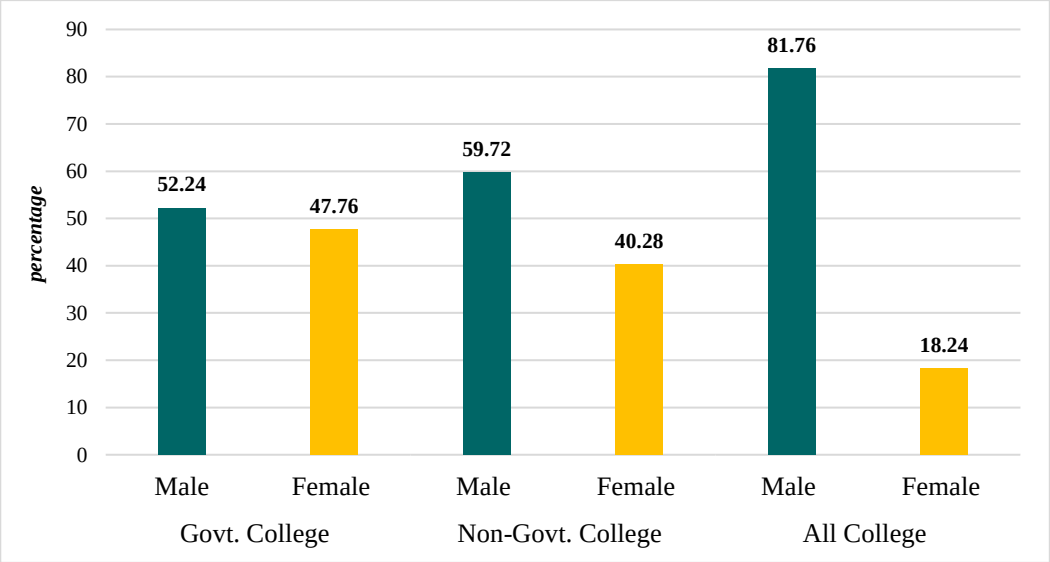
Source: Calculation based on primary data.

Table 7.4: Information on Current Students (Percentage)

Department	**Govt. College (%)**		**Non-Govt. College (%)**		**All College (%)**	
	Male	*Female*	*Male*	*Female*	*Male*	*Female*
Honor's	52.24	47.76	59.72	40.28	81.76	18.24
Masters'	51.19	48.81	58.04	41.96	93.82	6.18

Source: Calculation based on primary data.

Figure 7.1: Ratio of Students in Hons. Colleges

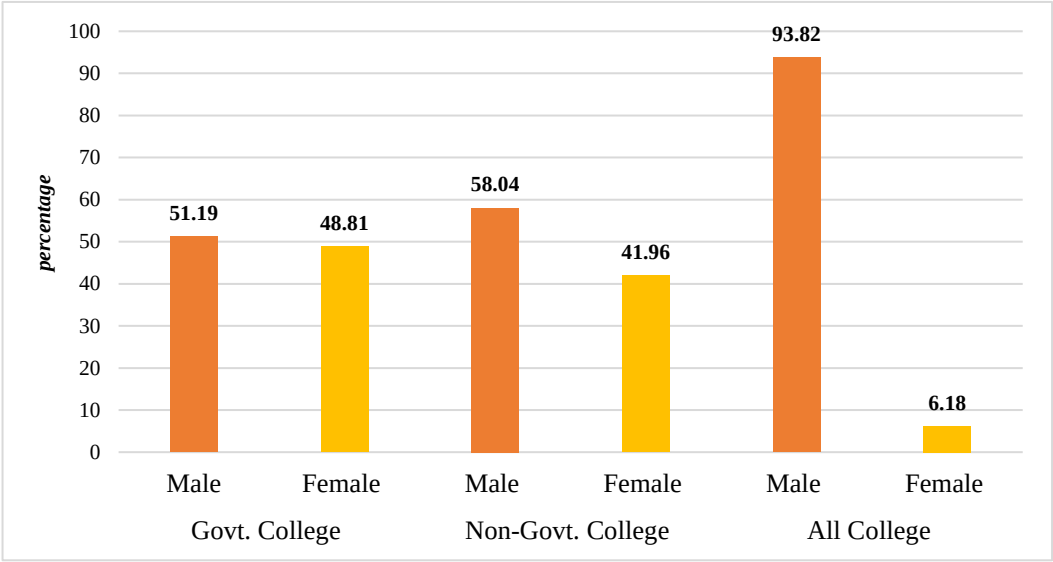


Source: Follow-up Tracer Study on Graduates of Tertiary Level Colleges, BIDS-2023.

From the figure 7.1 it is seen that the proportion of male is higher than female in the surveyed colleges (i.e., 82 percent and 18 percent respectively). At a disaggregated level, non-govt. hons.

colleges have higher male (almost 60 percent) and govt. hons. colleges have higher female (48 percent) compared to others.

Figure 7.2: Ratio of Students in Masters Colleges



Source: Follow-up Tracer Study on Graduates of Tertiary Level Colleges, BIDS-2023.

A similar pattern is seen in the master's colleges where, male student is almost fifteen times more than female (94 percent and 6 percent respectively). Some of the possible reasons of why less female has completed their post-graduation might be family pressurization on girls to get marry, to have a baby or the in-laws do not permit to carry on their housewives' career etc.

At a disaggregated level, non-govt. master's colleges have more male students (58.04 percent) than govt. colleges (51.19 percent) while more girls have been graduated from govt. master's colleges (48.81 percent) than non-govt. master's colleges (41.96 percent).

Table 7.5 and table 7.6 provide a general overview of current teachers' gender ratio with their educational obtained degree in the surveyed institutions. If we closely look at the data, most of the teachers are holding a master's degree, where average of male is little more than double than female (i.e., 38.16 and 16.44 respectively). At a disaggregated level, govt. colleges have more masters teachers (i.e., male-66.95 and female-22.50) than non-govt. colleges (i.e., male-24.12 and female-13.49). When talking about PhD, average number of male teacher seems to higher than female teachers. Some of probable reasons for this- after completing a master's degree in this country, parents are very much concern about tightening the knot of their daughters and as a result, due to family maintenance, the academic career for further study, on the other side has to be paused. At a disaggregated level, male teachers at the govt. colleges held more PhD degree (i.e., 2.45 on average) than those of female (i.e., 0.60 on average) and non-govt. colleges (i.e., male-0.46 and female-0.15 respectively).

Table 7.5: Educational Qualification of Current Teachers

Educational level	Govt. College (Avg)		Non-Govt. College (Avg)		All College (Avg)			
	Male	*Female*	*Male*	*Female*	*Male*	*%*	*Female*	*%*
Degree	1.05	0.45	1.76	0.76	1.52	3.3	0.66	3.0
Hons.	0.65	0.35	7.44	5.83	5.21	11.2	4.03	18.7
Masters	66.95	22.50	24.12	13.49	38.16	82.3	16.44	76.4
M.Phil.	0.25	0.05	0.41	0.12	0.36	0.8	0.10	0.5
PhD	2.45	0.60	0.46	0.15	1.11	2.4	0.30	1.4
Total	**71.35**	**23.95**	**34.20**	**20.34**	**46.38**	**100.0**	**21.52**	**100.0**

Source: Calculation based on primary data.

The following table represents a clearer picture about teachers according to their gender and obtained degree.

Table 7.6: Educational Qualification of Current Teachers

Educational level	Govt. College (%)		Non-Govt. College (%)		All College (%)	
	Male	*Female*	*Male*	*Female*	*Male*	*Female*
Degree	1.5	1.9	5.1	3.7	3.3	3.0
Hons.	0.9	1.5	21.8	28.7	11.2	18.7
Masters	93.8	93.9	70.5	66.3	82.3	76.4
M.Phil.	0.4	0.2	1.2	0.6	0.8	0.5
PhD	3.4	2.5	1.4	0.7	2.4	1.4
All	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Calculation based on primary data.

It is clearly observed from the data that in the NU affiliated non-govt. colleges, there are more teachers both male and female who have completed a degree or a honors level education compared to govt. colleges. While on the contrary, the situation seems reverse in case of Master's, M.Phill. and PhD holding teachers.

Besides, when talking about male-female ratio among the teachers, more female teachers have been recruited in the NU affiliated govt. colleges who are holding a degree, honors or master's level education than compared to male.

Table 7.7 gives information about student's average pass rate in NU affiliated govt. and non-govt. colleges according to the honors or master's level. In case of both male and female

students, the pass rate of honors or master's are quite similar, ranging from 74 to 72 on average. At a disaggregated level, the pass rate of NU affiliated non-govt. college is comparatively higher for male (i.e., honors-77.88 and master's-77.90 respectively) than others.

Table 7.7: Students Pass Rate

Department	Govt. College (Avg)		Non-Govt. College (Avg)		All College (Avg)	
	Male	*Female*	*Male*	*Female*	*Male*	*Female*
Honors	68.08	70.74	77.88	75.92	74.00	74.02
Masters	67.96	73.41	77.90	71.40	72.10	72.57

Source: Calculation based on primary data.

7.3. Job Related Information of the Students

In this section, we are basically focuses on perception about graduates being employed in the employment sectors, type of their employment, graduate's information before entering the labor market, average duration of getting a job after completing academic distinction, departments that are not very friendly to get an employment etc.

When the principals were asked if they knew which employment sectors often employ graduates upon completion, 80 percent of them responded affirmatively, almost 17 percent negatively and 3 percent of principals remained neutral (Table 7.8). At a disaggregated level, NU affiliated govt. colleges have higher positive answer, 90 percent than non-govt. colleges 75 percent.

Table 7.8: Perception about Graduates being Employed in Employment Sector

Principals' knowledge about employment sector that often employs their graduates	Govt. College (%)			Non-Govt. College (%)			ALL College (%)
	Honors	*Masters*	*Total*	*Honors*	*Masters*	*Total*	
Yes	91.7	87.5	90.0	72.2	100.0	75.0	80.0
No	8.3	12.5	10.0	22.2	-	20.0	16.7
Don't know	-	-	-	5.6	-	5.0	3.3

Source: Calculation based on primary data.

Table 7.9 illustrates the information about graduates being employed in different employment sectors according to the govt. and non-govt. colleges, disaggregated by honors and master's levels. From the table, it is clearly seen that among various employment categories, private companies employ more NU graduates (almost 21 percent) than any other type of organizations. Among of them, there are no significant differences between govt. and non-govt. colleges (21.9 percent and 20.2 percent respectively). At a disaggregated level, NU affiliated

govt. hons. college graduates (23 percent) are employed higher than those of masters and non-govt. colleges.

According to the principals' perception, the second highest employment category is the teaching profession where almost 17 percent of graduates are employed (govt. college-18 percent and non-govt. college-16 percent respectively). At a disaggregated level, NU affiliated govt. master's colleges seem to recruit higher graduates upon competition.

Table 7.9: Type of Employment

Employment category	**Govt. College (%)**			**Non-Govt. College (%)**			**ALL College (%)**
	Honors	*Masters*	*Total*	*Honors*	*Masters*	*Total*	
Govt. organization	11.9	12.9	12.3	10.0	3.3	9.1	10.3
Teaching	16.3	20.7	18.0	16.0	14.3	15.8	16.6
Banking sector	5.9	12.4	8.4	7.6	4.8	7.2	7.7
Multinational companies	5.8	9.7	7.3	10.9	6.8	10.4	9.2
Engineering	0.1	0.1	0.1	0.8	0.5	0.7	0.5
IT	2.6	5.7	3.8	3.9	3.8	3.9	3.9
Private companies	23.0	20.3	21.9	20.0	21.5	20.2	20.9
NGO	13.6	8.6	11.6	12.9	19.0	13.7	12.9
Self-employed (farm, agro-business, supply, transport)	13.0	6.0	10.3	11.1	19.0	12.1	11.4
Foreign service/Remittance worker	5.9	3.6	5.0	5.1	5.0	5.1	5.1
Others	1.9	0.0	1.2	1.7	2.3	1.7	1.5

Source: Calculation based on primary data.

The following table gives information about college programs that are adequate enough to prepare the graduates to get into the labor market, principal's perception about graduates' desired employment and the duration that graduates have to face to get their desired jobs.

A total of 69 percent of principals from NU affiliated non-govt. colleges answered positively when they were asked about their quality of programs for getting a job. On the other hand, the govt. colleges (52.6 percent) are lagging behind in terms of their programs' quality. At a disaggregated level, NU affiliated non-govt. master's colleges have ensured 100 percent of academic programs' quality so that the graduates can enter easily to the job market after competition of their study.

It is miserable that although 64 percent of graduates get into the labor market after their study but only 17 percent of them get their expected job in the related field. In this circumstance, the

NU affiliated govt. and non-govt. colleges vary between 16 percent and 18 percent respectively. At a disaggregated level, the master's department of both college categories is similar (25 percent of each govt. and non-govt. colleges) in question of getting a desired job after graduation.

When the principals of the respective colleges, were asked to comment about the waiting duration of the graduates before getting desired job, it is seen that on an average, the graduates need to wait almost 2 years. At a disaggregated level, govt. college graduates need more time to get a desired job than non-govt. colleges.

Table 7.10: Information about Graduates before Entering Labor Market

Statements	**Govt. College**			**Non-Govt. College**			**ALL College**
	Honors	*Masters*	*Total*	*Honors*	*Masters*	*Total*	
Principal's perception about the college programs that are adequate enough to prepare the graduates for the labor market (%)	54.6	50.0	52.6	65.7	100.0	69.2	63.8
Principal's perception about graduates to get desired employment on completion (%)	9.1	25.0	15.8	17.1	25.0	18.0	17.2
Waiting duration of graduates to get a desire job after completion (mean)	19.80	26.75	22.89	20.59	14.00	19.97	21.02

Source: Calculation based on primary data.

Table 7.11 discusses about the average time duration of graduates to be employed after completing their academic degree. From the table, it is clearly seen that more than half of the population (57.6) need to wait longer than 6 months after graduation. Here, there is no significant differences between NU affiliated govt. and non-govt. colleges (i.e., 58.7 and 57 respectively). Only 11 percent of NU graduates get a job within the first three months after completing their studies. At a disaggregated level, NU affiliated non-govt. college graduates are employed slightly higher than govt. college graduates (i.e., 11.9 percent and 7.8 percent respectively).

Table 7.11: Average Duration of Getting a Job after Completion of Academic Degree

Duration of getting a job	Govt. College (%)			Non-Govt. College (%)			ALL College (%)
	Honors	*Masters*	*Total*	*Honors*	*Masters*	*Total*	
Within 3 months	5.1	11.3	7.8	9.2	33.7	11.9	10.5
Within 4-6 months	12.3	26.3	18.1	18.3	21.8	18.8	18.5
More than 6 months	60.3	56.6	58.7	62.8	14.5	57.0	57.6

Source: Calculation based on primary data.

From table 7.12, we can get information about subjects that are not suitable for today's job market. For example, subjects like History, Islamic History and Culture, Philosophy, Sanskrit, Political Science, Bangla etc. are not competent enough compared to ICT/Business or Science related subjects, which are most demanding in the labor market. For all NU affiliated colleges (including both govt. and non-govt.) the subject of Philosophy is the least suitable than any other subjects from the result (23.4). At a disaggregated level, in govt. colleges History (26.7), Islamic History (26.7), Islamic Studies (13.3) are not competent enough to get a job while on the contrary, in non-govt. colleges, apart from these subjects, there are also includes i.e., Bangla (12.5), Political Science (18.8) etc.

Table 7.12: List of Departments that are not suitable for Workforce

List of departments which the graduates can't find proper jobs after they pass and whose curriculum are not conductive to joining the workforce	Govt. College (%)	Non-Govt. College (%)	ALL College (%)
Sociology	-	3.1	2.1
Bangla	-	12.5	8.5
History	26.7	12.5	17.0
Islamic History	26.7	12.5	17.0
Philosophy	26.7	21.9	23.4
Political Science	6.7	18.8	14.9
Social Work	-	6.3	4.3
Islamic History and Culture	-	6.3	4.3
Environmental Science	-	3.1	2.1
Islamic Studies	13.3	-	4.3
Sanskrit Department	-	3.1	2.1

Source: Calculation based on primary data.

7.4. Facilities in the College Premises

Table 7.13 discusses the overall NU affiliated college facilities provided by the respective colleges, for example adequate and quality library resources, lab and equipment facilities, internet accessibility and research activities etc. From the mentioned four category of facilities, it is seen that the resource of library (3.02) is rich for both of NU affiliated govt. (3.05) and non-govt. colleges (3.00) which differs only by 0.05 percent. When talking about lab and equipment facilities including access to computer and other e-resources for both teachers and students, the govt. and non-govt. varies highly by 0.32 (govt. college-3.05 and non-govt. college-2.73). There is also a similar pattern of differences between both college categories, where NU affiliated govt. colleges seem higher in giving facilities to the students and teachers in question of internet access, research activities and supervision.

Table 7.13: Mean Level of Agreement on Facilities provided by the College

Important amenities of the college	**Govt.**		**Non-Govt.**		**Diff**	**p-value**	**All College (mean)**
	Mean	*SD*	*Mean*	*SD*			
Access to adequate and quality library resources (books, journals etc.)	3.05	0.61	3.00	0.71	0.05	(0.787)	3.02
Lab facilities and equipment (including computers and other e-sources) to support teaching, learning and research activities	3.05	0.61	2.73	0.92	0.32	(0.167)	2.84
Internet connection to support teaching-learning environment	2.85	0.75	2.71	1.03	0.14	(0.583)	2.75
Teachers involve in research and provide guidance and supervision to the students	2.30	0.98	2.12	1.10	0.18	(0.541)	2.18

Source: Calculation based on primary data.

The following table indicates the current skill level of the students at NU affiliated colleges in the country. These skills are based on principals' perception about their students where, it is seen that, according to most of the principals, communication in Bangla is highly skilled by the students, 3.38 on an average. It is obvious because Bangali is our mother tongue. Apart from this, there are also several skills that students acquire from the college to get into themselves in the job market such as- presentation skill (2.67), basic computer skill (2.66), time management (2.53), writing and verbal communication in English that are 2.30 and 2.18 respectively. The result shows us that students at NU affiliated govt. colleges are higher skilled than non-govt. colleges in respect of all the skills mentioned.

Table 7.14: Current Skill Level of the Students

Principal's perception about current level of skill of the students in this college	Govt. College		Non-Govt. College		Diff	p-value	All College (mean)
	Mean	*SD*	*Mean*	*SD*			
Entrepreneurship skills	2.20	0.696	2.08	0.632	0.121	(0.506)	2.12
Time management	2.55	0.605	2.51	0.756	0.037	(0.850)	2.53
Basic computer skill	2.80	0.616	2.59	0.715	0.210	(0.268)	2.66
Advanced computer skills	2.30	0.733	1.90	0.754	0.403	(0.055)	2.03
Writing skill in English	2.50	0.607	2.20	0.648	0.300	(0.090)	2.30
Verbal communication skill in English	2.40	0.503	2.08	0.526	0.325*	(0.026)	2.18
Communication skill in Bangla	3.50	0.513	3.33	0.572	0.175	(0.253)	3.38
Presentation skill	2.72	0.575	2.64	0.628	0.081	(0.643)	2.67

Source: Calculation based on primary data.

When the principals were asked about the mentioned skills which are being covered by the offered course curriculum, half of them have stated that Bangla communication (overall 54.2 percent) is widely used in the lectures or daily conversation. Here, non-govt. colleges have covered more sophisticated Bangali language than govt. colleges i.e., 54.5 percent and 53.6 percent respectively. Apart from that, non-govt. colleges have covered other skills higher than govt. colleges such as-time management (33.7 percent), basic computer skills (33.5 percent) and presentation skills (35.9 percent).

On the other hand, govt. colleges have addressed entrepreneurship skills (26.1 percent), advanced computer skills (15.1 percent), writing and verbal communication in English (34.6 percent and 29.1 percent) respectively higher than non-govt. colleges.

Table 7.15: Skills that are being addressed in the Offered Course Curriculum

Skills are being addressed/covered in the offered course curriculum	Govt. College (%)	Non-Govt. College (%)	All College (%)
Entrepreneurship skills	26.1	21.2	22.8
Time management	32.6	33.7	33.3
Basic computer skill	30.6	33.5	32.5
Advanced computer skills	15.1	14.1	14.4
Writing skill in English	34.6	32.0	32.8
Verbal communication skill in English	29.1	26.3	27.2
Communication skill in Bangla	53.6	54.5	54.2
Presentation skill	32.1	35.9	34.6
Total			

Source: Calculation based on primary data.

Table 7.16 provides a record of workforce facilities of the graduates by the respective department or college for example if the graduates have offered any additional trainings for job preparation, college's collaboration with the industry, job placement facilities, alumni association etc.

From the data it is clearly seen that almost 42 percent of colleges provide additional skills training to their graduates, where the govt. and non-govt. colleges differ by 5 percent (45 percent and 40 percent respectively). Some of the Principals reported to provide limited job placement facility to the students through career counseling and advice, job fairs, and career seminars or workshops. However, these colleges neither have any job placement unit for graduates nor any staff assigned to provide the service.

On the other hand, keeping track of graduates is not a common practice among the colleges. However, college principals reported to track the graduates mainly through personal network and communication.

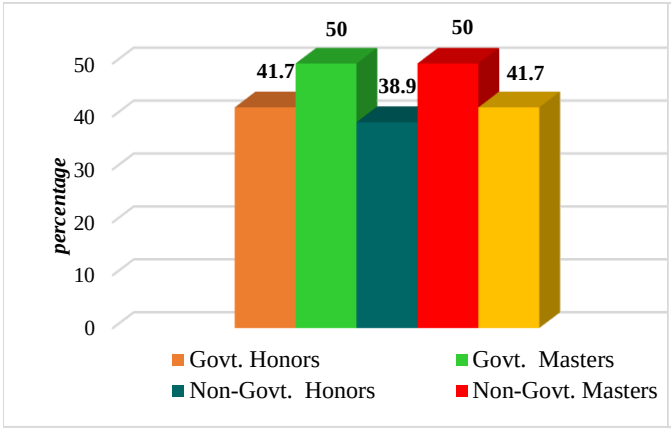
Collaboration with the industry is relatively low among the sampled colleges. The colleges reported to have some industry collaboration is through only workplace visit by students. Only 6.6 percent of the college principals reported to have some kind of collaboration with the industry.

Table 7.16: Tracking of Workforce Facilities of the Graduates

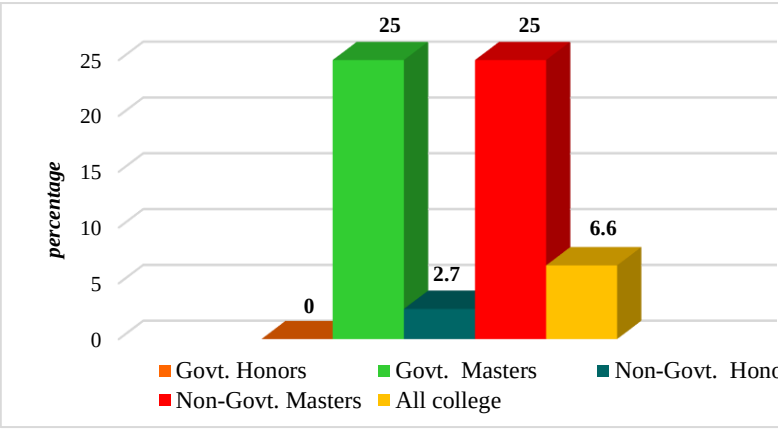
Statements	Govt. College (%)			Non-Govt. College (%)			All college (%)
	Honors	*Masters*	*Total*	*Honors*	*Masters*	*Total*	
Additional skills training (except course curriculum)	41.7	50.0	45.0	38.9	50.0	40.0	41.7
Collaboration with the industry	-	25.0	10.0	2.7	25.0	4.9	6.6
Job placement facilities	33.3	37.5	35.0	29.7	25.0	29.3	31.2
Tracking of the employment status of graduates	33.3	25.0	30.0	25.7	50.0	28.2	28.8

Source: Calculation based on primary data.

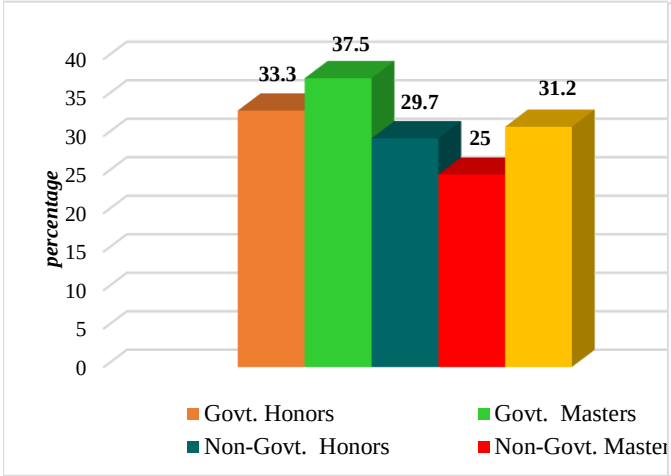
Figure 7.3: Tracking of Workforce Facilities of the Graduates



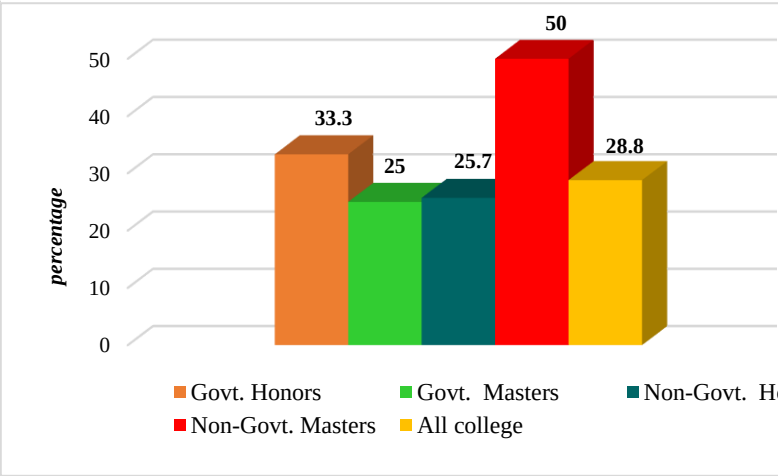
Additional Skills Training



Collaboration with Industry



Job Placement Facilities



Tracking of Employment Status after Graduation

Source: Follow-up Tracer Study on Graduates of Tertiary Level Colleges, BIDS-2023.

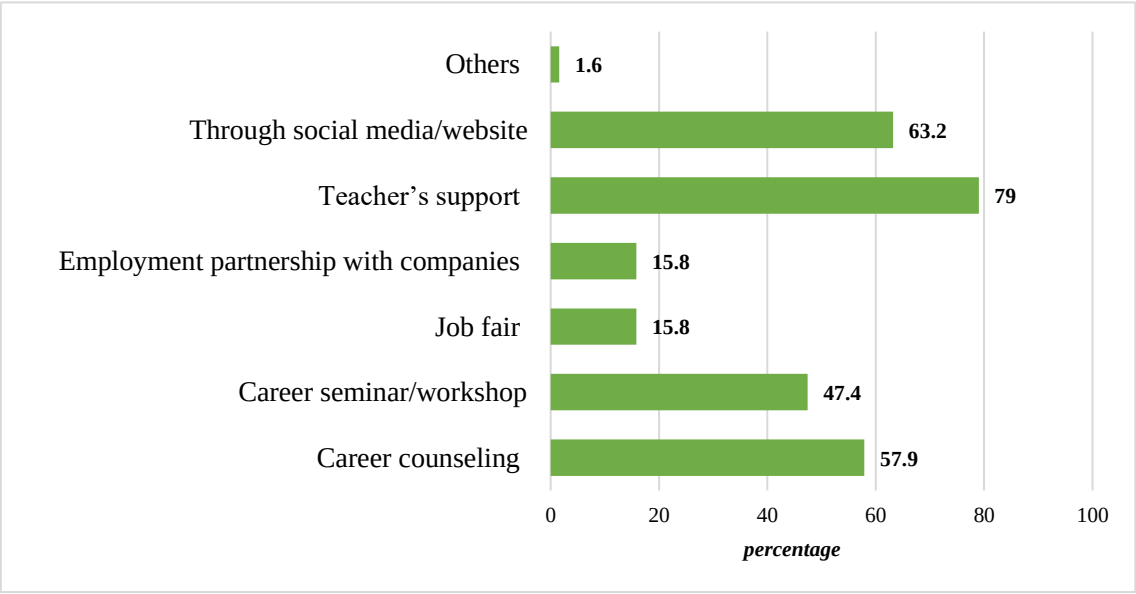
The following table is about principals' perception of job search facilities provided by the NU affiliated colleges. From the table, it is clearly seen that teachers provide a huge contribution (overall 79 percent), to the students about how to search for jobs appropriately, job sources, cv writing, tips about interview etc. NU affiliated non-govt. colleges have higher support facilities in comparison to govt. colleges (i.e., 83.3 percent and 71.4 percent respectively). Job search by different social media/website (63.2 percent) and career counseling (57.9 percent) also contributed students to getting a particular job. In this case, the non-govt. colleges (66.7 percent and 58.3 percent) also put higher contribution than those of govt. colleges (57 percent). The NU affiliated govt. colleges (28.6 percent) have more MoU or employment partnership treaty with the companies than NU affiliated non-govt. colleges (8.3 percent only).

Table 7.17: Principals stating about Job Search Support provided by the College

Type of job search support does the dept. provide to the students	Govt. College (%)	Non-Govt. College (%)	All College (%)
Career counseling	57.1	58.3	57.9
Career seminar/workshop	28.6	58.3	47.4
Job fair	14.3	16.7	15.8
Employment partnership with companies	28.6	8.3	15.8
Teacher's support	71.4	83.3	79.0
Through social media/own website or web portal	57.1	66.7	63.2
Others	5.0	-	1.6

Source: Follow-up Tracer Study on Graduates of Tertiary Level Colleges, BIDS-2023.

Figure 7.4: Job Support Facilities provided by the College



Source: Follow-up Tracer Study on Graduates of Tertiary Level Colleges, BIDS-2023.

Table 7.18 gives us information about the way through which a specific college/dept. notify students about the job opportunities such as personal network, partner organization, alumni association, official announcement etc. Among all the ways mentioned above, job notification through personal network seems higher in percentage (almost 42) than other kinds of strategies. This personal network varies between govt. and non-govt. colleges, where non-govt. college teachers have more access to the surrounding job networks for the students (i.e., govt. college-33.3 percent and non-govt. college-46.2 percent). Other kind of sources such as alumni association (24.5 percent) and partner organization (10 percent) also help teachers to give job information to their current students. Here, it is also seen that NU affiliated govt. college teachers have contributed higher than those of non-govt. colleges.

Table 7.18: Information Collection about Job Opportunities

Dept.'s strategy to collect information about job opportunities for the students	**Govt. College**		**Non-Govt. College**		**All College**	
	N	*%*	*N*	*%*	*N*	*%*
Through the personal network of teachers	11	33.3	30	46.2	41	41.8
Through partner organization	4	12.1	5	7.7	9	9.2
Through alumni association	10	30.3	14	21.5	24	24.5
Through an official announcement on newspaper etc.	4	12.1	8	12.3	12	12.2
Others	4	12.1	8	12.3	12	12.2
Total	**33**	**100.0**	**65**	**100.0**	**98**	**100.0**

Source: Follow-up Tracer Study on Graduates of Tertiary Level Colleges, BIDS-2023.

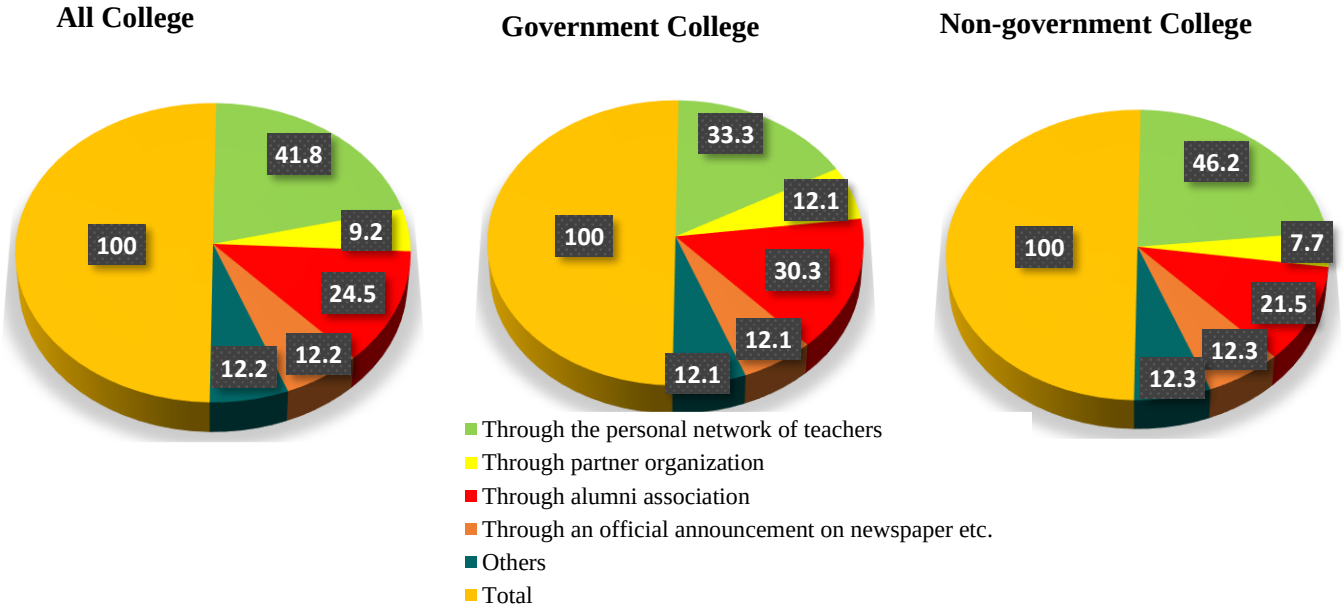


Figure 7.5: Information Collection about Job Opportunities

Source: Follow-up Tracer Study on Graduates of Tertiary Level Colleges, BIDS-2023.

7.5. Information on the Existing Problems

This section includes problems with the impact of Covid-19 and institutional own challenges. From the table 7.19 it is seen that concentration from the study has been diverted in all colleges due to the impact of Covid-19. Apart from that colleges also have to face academic session drop (85 percent), students' dropout (81.7 percent), downward changes in the quality of education (76.7 percent) etc. Overall, NU affiliated govt. colleges have to tackle more challenges in the time of Covid-19 than non-govt. colleges.

Table 7.19: Impact of Covid-19

Impact of Covid-19 on academic and personal life of the current students	**Govt. College (%)**	**Non-Govt. College (%)**	**All College (%)**
Academic session drop	95.0	80.0	85.0
Diverted concentration from the study	100.0	100.0	100.0
Worse academic result than before	70.0	62.5	65.0
Downward change in the quality of education	80.0	75.0	76.7
Curbed study time	60.0	72.5	68.3
Drop out of students	80.0	82.5	81.7
Suffered from covid	80.0	70.0	73.3
Suffered from other illness	60.0	72.5	68.3
Loss of earning family member (s)	75.0	67.5	70.0
Loss of other family members	80.0	72.5	75.0
Loss of jobs	65.0	64.1	64.4
Loss (reduction) of salary	70.0	65.0	66.7
Loss of other benefits	75.0	70.0	71.7
Sale of family assets	55.0	42.5	46.7
Sale of personal assets	45.0	37.5	40.0
Others	-	-	-

Source: Calculation based on primary data.

Table 7.20 gives us information about the extent of institutional problems and challenges by college govt. type in a scale of 1 to 4, where 1 means the colleges have no problem and 4 means there are severe problems. In the sample colleges, it is seen that students' unemployment rate (on an average of 3.00) is higher than other existing problems, where govt. colleges have to face more student unemployability than non-govt. colleges (i.e., 3.30 and 2.85 respectively). Other existing problems such as- absence of career club in National University (3.08), difficulties in finding employer partner (2.75), lack of operating funds (2.61), lack of training opportunities for teachers (2.55), absence of students (2.40) are seeming major issues in the surveyed colleges. Above the stated major problems, non-govt. colleges are lagging behind in terms of operating funds than govt. colleges while in contrast, govt. colleges have to endure more existing challenges in comparison to non-govt. colleges.

Table 7.20: Extent of Institutional Problems and Challenges by College Govt. Type

Statements	**Govt. College (Avg)**		**Non-Govt. College (Avg)**		**Mean Diff**	**p-value**	**All College (mean)**
	Mean	*SD*	*Mean*	*SD*			
Teacher shortage	2.60	0.94	1.98	0.86	0.625*	0.013	2.18
Overcrowded classrooms	2.80	1.11	1.71	0.90	1.093***	0.000	2.07
Lack of operating funds	2.35	0.99	2.73	1.05	-0.382	0.179	2.61
Lack of labs, proper machinery and equipment and workshops	2.45	0.95	2.34	0.99	0.109	0.685	2.38
Lack of access to ICT equipment and facilities	2.30	0.80	2.22	1.01	0.080	0.757	2.25
Absence of students	2.55	0.76	2.33	0.73	0.225	0.271	2.40
Unsafe college environment	1.15	0.49	1.15	0.36	0.000	1.000	1.15
Drop-out of students	2.26	0.65	2.25	0.67	0.013	0.944	2.25
Failure in the examination of the students	2.20	0.70	1.98	0.62	0.225	0.208	2.05
Unemployment of the students	3.30	0.80	2.85	1.00	0.450	0.086	3.00
Disruption due to student politics in the college	1.50	0.69	1.30	0.61	0.200	0.255	1.37
Difficulties in finding employer partner	2.95	0.69	2.65	0.98	0.300	0.224	2.75
Absence of career club in National University	2.95	1.05	3.15	0.86	-0.200	0.435	3.08
Lack of training opportunities for teachers	2.45	0.95	2.60	0.98	-0.150	0.574	2.55
Session jam	2.30	0.73	2.10	0.86	0.202	0.370	2.16
Others	-	-	-	-	-	-	-

Source: Calculation based on primary data.

Table 7.21 and 7.22 give information about existing problems in honors and master's level respectively, where the responses are given on a scale of 4 (1 means there is no problem at all and 4 means there is severe problem). From the sample of honors colleges, it is seen that severe problems remain in the area of students' unemployability, difficulties in finding employer partner and absence of career club in NU i.e., (3.33, 3.17 and 3.17 respectively). Apart from these, the honors colleges have to face challenges like overcrowded classrooms, lack of labs and proper equipment, student absenteeism, teacher shortage and lack of proper teachers' training etc.

Table 7.21: Extent of Institutional Problems and Challenges in Hons. Colleges

Statements	**Govt. Honors College**		**Non-Govt. Honors College**		**Diff**	**p-value**	**All Honors College (mean)**	
	Mean	*SD*	*Mean*	*SD*			*Mean*	*SD*
Teacher shortage	2.417	0.996	1.972	0.878	0.444	0.149	2.08	0.92
Overcrowded classrooms	2.583	1.240	1.703	0.909	0.881*	0.011	1.92	1.06
Lack of operating funds	2.417	0.996	2.703	1.102	-0.286	0.429	2.63	1.07
Lack of labs, proper machinery and equipment and workshops	2.500	1.087	2.351	0.949	0.149	0.651	2.39	0.98
Lack of access to ICT equipment and facilities	2.333	0.888	2.216	0.976	0.117	0.714	2.24	0.95
Absence of students	2.417	0.793	2.306	0.749	0.111	0.663	2.33	0.75
Unsafe college environment	1.083	0.289	1.139	0.351	-0.056	0.623	1.13	0.33
Drop-out of students	2.364	0.674	2.250	0.692	0.114	0.634	2.28	0.68
Failure in the examination of the students	2.250	0.754	1.944	0.583	0.306	0.151	2.02	0.64
Unemployment of the students	3.333	0.985	2.972	0.941	0.361	0.261	3.06	0.95
Disruption due to student politics in the college	1.333	0.651	1.194	0.467	0.139	0.425	1.23	0.52
Difficulties in finding employer partner	3.167	0.718	2.750	0.937	0.417	0.167	2.85	0.90
Absence of career club in National University	3.167	1.030	3.167	0.910	0.000	1.000	3.17	0.93
Lack of training opportunities for teachers	2.417	0.996	2.611	0.964	-0.194	0.551	2.56	0.97
Session jam	2.333	0.651	2.135	0.855	0.198	0.466	2.18	0.81
Others	-	-	-	-	-	-	3.67	0.58

Source: Calculation based on primary data.

In the master's colleges from the sample, it is found that mild to severe problems remain in the students' unemployability (govt master's college-3.25, non-govt master's college-1.75) and overcrowded classrooms (govt. master's college-3.13 and non-govt. master's college-1.75 respectively). Furthermore, NU affiliated govt. master's colleges also have to face extra challenges such as teacher shortage, student absenteeism, difficulties in finding employer partner, absence of career club etc. in compared to non-govt. master's college. On the other hand, non-govt. master's colleges have severe challenges like lack of operating funds, absence of career club, student dropout, failure in the examination, disruption due to student politics etc. In conclusion, inadequate teachers' training is the same for both types of the college (2.50).

Table 7.22: Extent of Institutional Problems and Challenges in Master's Level

Statements	**Govt. Master's College**		**Non-Govt. Master's College**		**All Masters College**	
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*
Teacher shortage	2.88	2.88	2.00	0.82	2.58	0.90
Overcrowded classrooms	3.13	3.13	1.75	0.96	2.67	1.07
Lack of operating funds	2.25	2.25	3.00	0.00	2.50	0.90
Lack of labs, proper machinery and equipment and workshops	2.38	2.38	2.25	1.50	2.33	0.98
Lack of access to ICT equipment and facilities	2.25	2.25	2.25	1.50	2.25	0.97
Absence of students	2.75	2.75	2.50	0.58	2.67	0.65
Unsafe college environment	1.25	1.25	1.25	0.50	1.25	0.62
Drop-out of students	2.13	2.13	2.25	0.50	2.17	0.58
Failure in the examination of the students	2.13	2.13	2.25	0.96	2.17	0.72
Unemployment of the students	3.25	3.25	1.75	0.96	2.75	0.97
Disruption due to student politics in the college	1.75	1.75	2.25	0.96	1.92	0.79
Difficulties in finding employer partner	2.63	2.63	1.75	0.96	2.33	0.78
Absence of career club in National University	2.63	2.63	3.00	0.00	2.75	0.87
Lack of training opportunities for teachers	2.50	2.50	2.50	1.29	2.50	1.00
Session jam	2.25	2.25	1.75	0.96	2.08	0.90

Source: Calculation based on primary data.

CHAPTER VIII: EMPLOYERS' OPINION ABOUT GRADUATES PERFORMANCE

8.1. Type of Employers' Institutions in the Survey

Employers from different types of institutions were interviewed, as seen in Table 8.1. The majority were private enterprises (57%), while the fewest among our listed types were Government Organization (17%) and NGO/Trust/ Foundation/Microfinance Institutions (8%).

Table 8.1: Type of Management

Type of Employers' Institution	N	%
Government Organization	18	16.8
Private Organization	61	57.0
Autonomous/Attached Institution	6	5.6
Local Government	-	-
NGO/Trust/Foundation/Microfinance Institutions	8	7.5
Private Enterprise	10	9.4
Family Business	2	1.9
Self-Employed (Farm, Agro-Business, Supply, Transport)	-	-
Others	2	1.9

Source: Calculation based on primary data.

8.2. Number of Full-time Employees

Total number of full-time employees are reported here. In total number of full-time employees is 6511, where Male employees are 3969 (61%) and Female employees are 2542 (39%). Total number of NU College graduates recruited in 2021 at the current office is 536 and 287 of NU College graduates recruited in 2022.

Table 8.2: Numbers of Employees

Description	Male (N)	Female (N)	Total (N)	Male (%)	Female (%)	Total (%)
Total number of employees in current office	3969	2542	6511	61.0	39.0	100.0
Total number of NU college graduates in current office.	1839	1206	3045	60.4	39.6	100.0
Total number of employees recruited in 2021	536	321	857	62.5	37.5	100.0
Total number of NU college graduates recruited in 2021	265	152	417	63.5	36.5	100.0
Total number of employees recruited in 2022	434	217	651	66.7	33.3	100.0
Total number of NU college graduates recruited in 2022	287	161	448	64.1	35.9	100.0

Source: Calculation based on primary data.

8.3. Important Skills that Influence Hiring a Skilled New Graduate

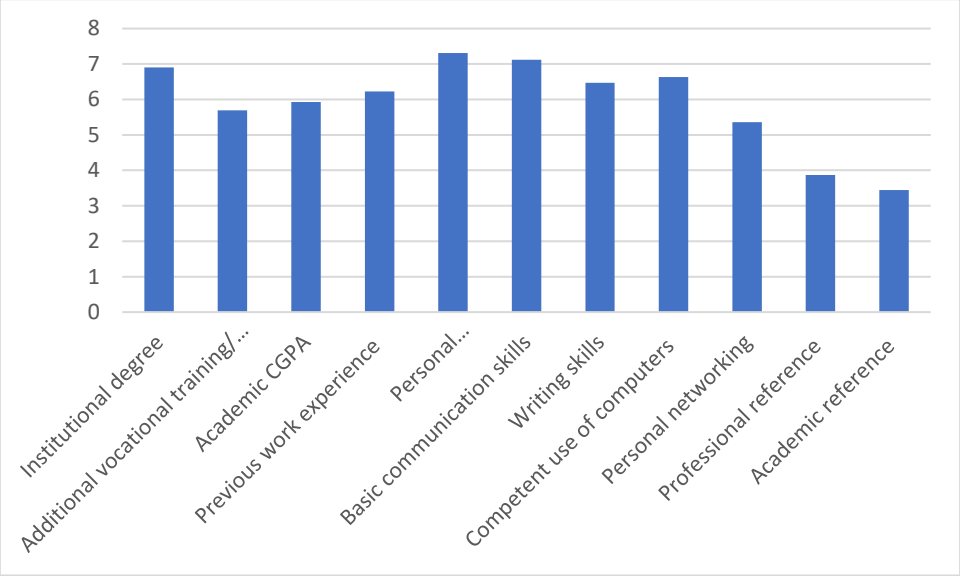
Most of the issues and skills are seen to be judged by employers as at least somewhat important or most important when it comes to hiring a new graduate (Table 8.3). Only recommendations (both non-academic and academic) are seen to hold overall lower importance.

Table 8.3: Important Skills in Hiring New Graduates

Employment Criteria	Mean Value	Standard deviation
Institutional degree	6.90	2.27
Additional vocational training/ technical diploma/ technical degree/certificate/professional certificate	5.69	2.52
Academic CGPA	5.93	2.22
Previous work experience	6.23	2.39
Personal attributes(smartness/promptness/flexibility)	7.31	2.01
Basic communication skills	7.12	2.11
Writing skills	6.47	2.07
Competent use of computers	6.63	2.46
Personal networking	5.36	2.60
Professional reference	3.87	2.67
Academic reference	3.44	2.47

Source: Calculation based on primary data.

Figure 8.1: Important Skills in Hiring New Graduates (Mean Value)



Source: Calculation based on primary data.

8.4. Recruitment Methods Used by Employers

Employers were asked to mention the frequency of their institution's usage of different modes of recruiting employees. The answer options for each mode were: never used, rarely used, sometimes used, and often used. As seen from Table 8.4, company websites and job sites are the most often used modes for recruiting new staff (36% and 40% of employees use this), immediately after other unlisted methods and followed by advertisement in national newspapers and employers personal network (34% and 24%). The majority of the employers reported never using partnerships with college or training institutes, or job fairs for recruitment (81% and 79%). Seventy one percent of employers also reported never using internship for recruitment.

Table 8.4: How frequently your organization use each of the following in the recruitment

Recruitment process	Scale=1 (Never Use)		Scale =4 (Often Use)	
	N	%	N	%
Advertisement in national newspapers	22	20.6	36	33.6
Internet posting(Company website)	28	26.2	38	35.5
Internet advertising (job sites)	25	23.4	43	40.2
Employer's personal networks	37	34.6	26	24.3
Job fair	85	79.4	2	1.9
Formal MoU with academic institutions	87	81.3	1	0.9
Internship	76	71.0	0	0.0

Source: Calculation based on primary data.

8.5. Decisions regarding Recruitment

Employers were, at first, asked whether their recruitment and training are handled by the entire institution or by any third party. Next, we asked them whether head offices made primary decision or the entire decision. The next question asked if the recruitment and training decisions are taken entirely by the branch office. Although there was an "Others" option, in many government offices decision regarding recruitment is usually taken by its public administration department. Hence, a separate option "Decisions are taken by a central authority" was kept. We see that majority of the decisions (64% to 52%) regarding both recruitment and training are done by either the recruitment committee or the head offices (Table 8.5). Only a small minority reported these decisions being taken by either a central authority or the branch office (25%).

Table 8.5: Who takes the recruitment related decisions?

Recruitment Decision taker	Answer (if yes=1)	
	N	%
The recruitment committee	68	63.6
The head office	56	52.3
The branch office	27	25.2
Others	4	3.7

Source: Calculation based on primary data.

8.6. Subject Matter of Training Provided by the Employers for Newly Hired Employees

About 70 percent said their establishment arranged or funded any job training for newly hired staff over the past 12 months (Table 8.6) and more than 70% respected employers stated that (Table 6.7) all new employees usually get training. Moreover, Table 6.8 shows the distribution of subject matter of such training across employers. Most of the training is seen to cover basic business or technical knowledge of the job (36%), Administrative process of the establishment (28%), followed by Basic practical or technical skills for the job (22%), workplace security (6%), and Computer skills (6%). Out of the listed subject matter, English language skills (2%) was seen to be the least covered training matter.

Table 8.6: Post Employment Training

SL NO	Description	Answer (if yes=1)	
01	Does your organization arrange training for the new recruits?	%	66.4
03	Over the past 12 months have your establishment arranged or funded any job training for the newly hired staff?	%	70.4
04	If yes, for how long the training was organized?	Average days	27.6
06	If the employees want to get training from elsewhere, do you grant them paid leaves?	%	52.0
07	If yes, for how many days do you grant these paid leaves?	Average days	35.19
08	Overall, how effective was the training(s) in terms of improving certain skill of the employee who received the training?	Average days	10.00

Source: Calculation based on primary data.

Table 8.7: Employees selection for training in the institute

SL NO	Codes	N	%
01.	All new employees get training	50	70.4
02.	Management selects them	5	7.0
03.	The administrative office selects them	9	12.7
04.	The superiors select them	6	8.5
05.	They decide on their own	-	-
06.	Others	1.0	1.4

Source: Calculation based on primary data.

Table 8.8: About the training

SL NO	Codes	N	%
01.	Administrative process of the establishment	35	28.2
02.	Basic theoretical knowledge of the job	44	35.5
03.	Basic practical or technical skills for the job	27	21.8
04.	Workplace security	7	5.7
05.	English language skill	3	2.4
06.	Computer skills	7	5.7
07.	Others	1	0.8

Source: Calculation based on primary data.

8.7. Special Interest in Hiring NU Graduates

Though 81% employers stated they recruit based on qualifications not Institutes. Nevertheless, almost every employer reported that their establishment has a special interest in recruiting NU graduates (Table 8.9). These 107 employers were asked about the different reasons why their institution considered recruiting NU graduates. The best reason is that they do not switch jobs frequently (91%) and enthusiasm of working with low salary (84%). NU graduates' conscientiousness (hard work) and good work ethics was the most cited reason (82%), followed by Easy to train up (68%), Team worker (56%). The other cited reasons were also high: innovativeness of graduates (31%) and good soft skills (42%).

Table 8.9: Special Interest in Hiring National University Graduates

SL NO	Codes	N	%
01.	Yes, we are especially interested in hiring them	17	15.9
02.	No, we don't have any special interest	3	2.8
03.	We recruit based on qualifications after analyzing the candidates (university/college does not get any predominance in this case)	87	81.3

Source: Calculation based on primary data.

Table 8.10: Unique Abilities and Skills of the NU graduates which make them more employable

Sl. No.	Skills and Abilities	N	%
01	NU college graduates are skilful and knowledgeable	55	51.4
02	They possess recommendable soft skills	45	42.1
03	Hardworking and willing to learn new things	88	82.2
04	Easy to train up	73	68.2
05	Innovative	33	30.8
06	Team worker (working in a team while maintaining mutual relations)	60	56.1
07	They do not switch jobs frequently	97	90.7
08	Willing to work with lower salary	90	84.1

Source: Calculation based on primary data.

8.8. Current Designation of the Graduates

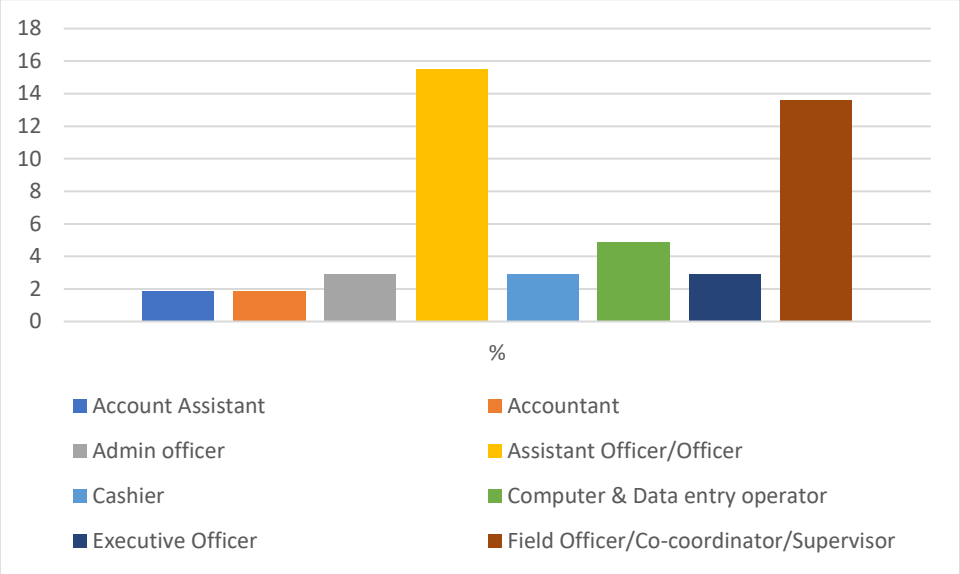
A major proportion of the NU Graduates are working as teacher or assistant teacher in schools (36%). Apart from that, 16% of employees are working as officer or assistant officer in different government and non-government organizations, 14% of employees are working as supervisor, coordinator or field officers and the rest are in other professions.

Table 8.11: Current Designation of the Graduates

Designation	**N**	**%**
Accountant	2	1.9
Account assistant	2	1.9
Admin officer	3	2.9
Officer/assistant officer	16	15.5
Cashier	3	2.9
Computer & data entry operator	5	4.9
Executive officer	3	2.9
Supervisor/co-coordinator/ field officer	14	13.6
Manager/assistant manager	7	6.8
Office assistant	6	5.8
Professor/associate/assistant professor	5	4.9
Teacher/assistant teacher	37	35.9

Source: Calculation based on primary data.

Figure 8.2: Current Designation of the Graduates



Source: Calculation based on primary data.

8.9. Aspects of graduates considered by employers during recruitment

The majority of employers (33%) reported that the academic achievement at college qualification of currently employed NU graduates matches the desired qualification of the employer's institution (Table 8.12). Only 14% reported a mismatch. The 33 employers (14%), who reported a mismatch between the hired NU graduates' qualification and the institution's desired qualification, were asked to share the different reasons for hiring the graduates despite the mismatch. The reason cited by the majority was that the graduate had prior experience (79%) (Table 8.13). The next two most cited reasons were outstanding performance at job interviews and that they seemed efficient and capable of performing the job (both 43%). The reason least reported by employers was that they had a reference from experts in the field (11%).

Table 8.12: Aspects of graduates considered by employers during recruitment

Aspects	N	%
Academic achievement at college	18	33.3
Work experience	18	33.3
Technical knowledge	8	14.8
Communication skill	8	14.8
Political affiliation	-	-
Apprenticeship	1	1.9
Others	1	1.9

Source: Calculation based on primary data.

Table 8.13: Graduates Qualifications

Education Qualifications	Desired Qualifications		Actual Qualifications	
	N	%	N	%
No education (0)	-	-	-	-
From class 1 to 5	-	-	-	-
From class 6 to 8	-	-	-	-
From class 9 to 10	-	-	-	-
S.S.C	5	4.7		
H.S.C	12	11.2	2	1.9
Diploma				
Vocational Education				
Skills training	3	2.8		
Bachelor's degree	69	64.5	47	43.9
Master's degree	18	16.8	58	54.2
PhD				

Source: Calculation based on primary data.

Table 8.14: Reasons for Recruiting NU Graduates

Does the employee's institutional qualifications match these recruitment needs?	N	%
Yes	95	88.8
No	12	11.2
Reasons for Recruiting despite mismatch	N	%
He has prior experience	3	25.0
His performance was outstanding at the job interview	2	16.7
He seemed efficient and capable of doing the job	3	25.0
Communication skill		
Political affiliation		
He had the reference from experts in this field		
He is my relative or had been referred by relative/friends	4	33.3

Source: Calculation based on primary data.

8.10. Types of University Preferred for the posts where NU graduates are currently employed

Employers were asked to mention the different universities from which they would prefer graduates for posts currently held by NU graduates though, the highest percentages were reported for no choice at all (81%). Preference for public NU-affiliated colleges and public universities was cited the least (9% and 5%) by the employers.

Table 8.15: Types of University Preferred for the posts where NU graduates are currently employed

Universities preferred	N	%
Public university	3	2.8
Private university		
Public NU affiliated college	10	9.4
Private NU affiliated college	5	4.7
Open university		
No choice at all	87	81.3
Others	2	1.9

Source: Calculation based on primary data.

8.11. Difficulty in filling positions where NU graduates are currently employed

It is clear that despite majority of employers stating that their institution has particular interest in hiring NU graduates, 63% of employers said that NU graduates in current posts are not difficult to replace (Table 8.16). Only 2% of employers stated that it was very difficult to fill their posts where NU graduates were currently in employment.

Table 8.16: Difficulty in filling positions where NU graduates are currently employed

Difficulty	N	%
Very Difficult	2	1.9
Difficult	26	24.3
Easy	67	62.6

Source: Calculation based on primary data.

8.12. To fill up the position if vacancy occurred

Most of the Employers assessed (38%), it will take more than a week but less than a month to fill up the position if vacancy occurred where NU graduates are currently employed. 38% employers also reported, it will take more than a month actually. Only 4% of employers stated that the position can be filled up immediately if vacancy occurred where NU graduates are currently employment.

Table 8.17: To fill up the position if vacancy occurred

Filling up the position	N	%
immediately	4	3.7
Less than a week	21	19.6
More than a week but less than a month	41	38.3
one month or more	41	38.3

Source: Calculation based on primary data.

8.13. Suggestion & Recommendations

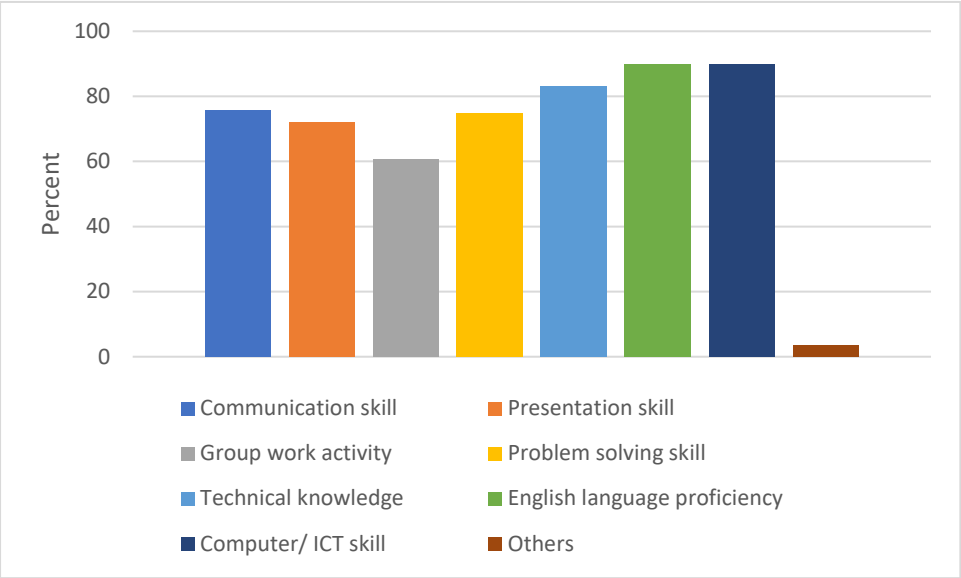
From Table 8.18, we see that ICT (90%), English (90%), Communication (78%), Problem-solving (75%), and Teamwork (61%) were cited as the most important areas that universities should train students on. None of the skill sets was reported as "not important" by more than 3% of the employers, which shows that all employers consider every skill set to be at least somewhat important, and most consider them to be very important.

Table 8.18: Suggestion & Recommendations

SL NO.	Skill and abilities	N	%
01.	Communication skill	81	75.7
02.	Presentation skill	77	72.0
03.	Group work activity	65	60.8
04.	Problem solving skill	80	74.8
05.	Technical knowledge	89	83.2
06.	English language proficiency	96	89.7
07.	Computer/ ICT skill	96	89.7
08.	Others	4	3.7

Source: Calculation based on primary data.

Figure 8.3: Suggestion & Recommendations



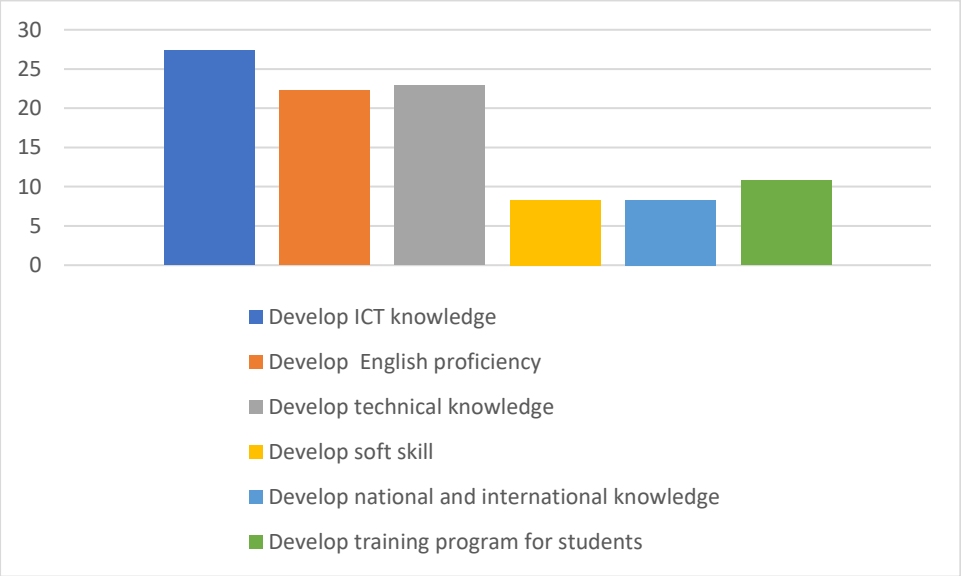
Source: Calculation based on primary data.

Table 8.19: Top-3 suggestions

SL NO.	Suggestions	N	%
01.	Develop ICT knowledge	43	27.4
02.	Develop English proficiency	35	22.3
03.	Develop technical knowledge	36	22.9
04.	Develop soft skill	13	8.3
05.	Develop national and international knowledge	13	8.3
06.	Develop training program for students	17	10.8

Source: Calculation based on primary data.

Figure 8.4: Top-3 suggestions



Source: Calculation based on primary data.

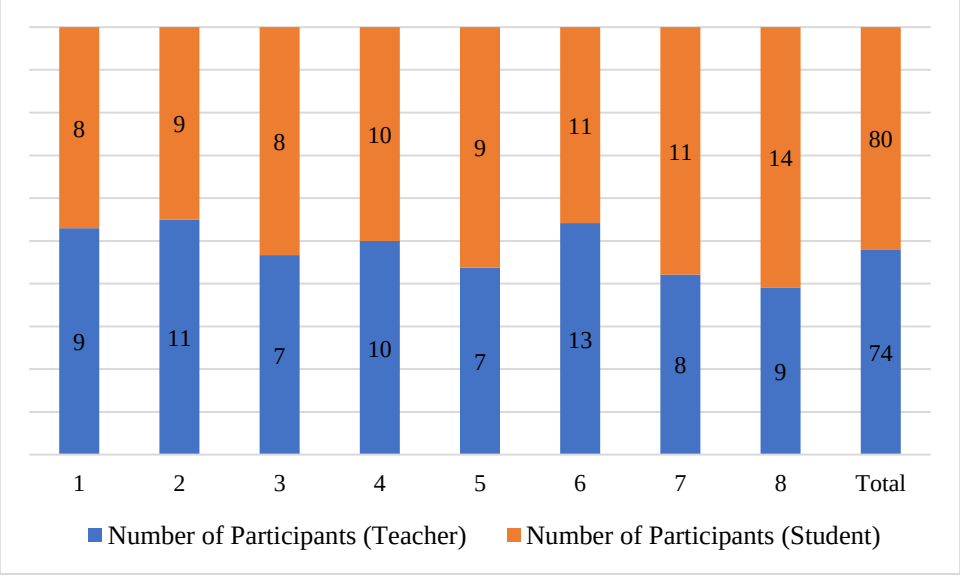
Overall, it can be said that employers value soft skills in addition to academic qualifications and would like the colleges to strengthen training on ICT, communication, and language skills. College graduates are strong in Bangla, possess suitable work attitude, and team working skills. By improving ICT skills and English language and communication skills, college graduates may position themselves in a better position in the job market and fill in a good share of the skills gap that exists in the workforce.

CHAPTER IX: FINDING FROM THE QUALITATIVE INTERVIEWS

In this chapter we present our findings from the qualitative survey part of our study. We have conducted eight Focused Group discussions (FGDs) with teachers and eight with the students of NU colleges. Qualitative findings come a long way in compensating for the information gaps that usually appear during the explanation of quantitative survey findings. It is important to note that all the information presented in this section is the unaltered perspective of the participants, and we have taken measures to ensure that they were not coerced or guided in any specific direction during the course of these surveys. In total, 74 teachers and 80 students participated in the qualitative survey. We had a checklist questionnaire which we used to conduct the FGDs. The teachers and students participated independently in different set ups within the college premises. In Figure 9.1, we present the participant quotient per FGD.

Picture 9.1: FGD session with the teachers.

Figure 9.1: Number of Participants in FGDs



Source: Follow-up Tracer Study on Graduates of Tertiary Level Colleges, BIDS-2023.

9.1. Existing Teaching-Learning Condition in NU Colleges

All the teachers and students who participated in FGDs in the NU colleges are quite optimistic about the class and examination schedule and timing. There were next to no complaints about

the time they get to take or participate in classes and prepare for the examinations. Though, absenteeism among the students is still an issue for the teachers. Teachers view that the time allocated for each completion is enough if the students regularly attend their classes. Moreover, not attending their classes give them ammunitions to use their own understanding of the courses and move towards being dependent on guide books rather than actual references. These consequently makes studying unappetizing for them and many of them drop out (in case of girls, they get married rather than finishing their studies). Thus, quality of distributed knowledge diminishes and not much is being added to their education portfolio.

Both teachers and students in NU colleges agree that the education system lacks an up-to-date syllabus and practical teachings necessary for the job market. Students believe that achieving a balance between coursework and job preparation is vital. To enhance job readiness, they suggest incorporating general knowledge, basic ICT, computer skills, mathematics, and English learning into the curriculum. There is a strong demand for a modernized education system that includes practical technical courses alongside the traditional academic curriculum to equip students with job-relevant skills. It's also crucial for students to align their studies with the job market's demands.

Many students feel that the academic knowledge they gain in college is insufficient for securing employment, highlighting a gap between education and job readiness. After graduation, some students even pursue additional studies unrelated to their university education to improve their job prospects, emphasizing the divide between academia and real-world employment. The prevailing sentiment is that colleges prioritize theoretical and descriptive aspects of education, which, while sufficient for obtaining certificates, fall short in terms of employability.

Considering the need for restructuring and renovation at NU colleges for ensuring a better teaching-learning environment, notable strides have been introduced by the colleges. Through their own funding and funding available from CEDP, the surveyed colleges have brought about certain changes in their premises. The changes thus introduced have not been unrecognized or unappreciated. When asked about the initiatives and infrastructure we found that, the colleges' ICT labs, while available, struggle to accommodate the needs of all students. At the honors level, students are limited to theoretical instruction when it comes to ICT knowledge. The curriculum lacks practical courses that would provide hands-on experience in this domain. A notable gap exists in terms of compulsory English language courses across departments. This omission becomes particularly problematic when students are called upon to present their work in English during presentations, presenting a significant hurdle for those who lack a solid grasp of the language.

9.2. Current Employability of NU Graduates

We gather certain insight from the perspective of the FGD participants about the employment landscape for NU college graduates, emphasizing the challenges they face in attaining desired jobs, prolonged waiting periods, and the significance of subject choice in job market dynamics. In a consistent pattern across various FGDs, a significant proportion of NU college graduates said to have faced difficulties in obtaining their desired jobs. In some discussions with the teachers, they reported to have witnessed that a staggering 60% to 97% of students couldn't secure the positions they aspired to. This underlines a challenging scenario where a substantial majority of graduates find themselves struggling in the job market. Moreover, the duration of time graduates had to wait before securing their desired jobs varied considerably also according to the teachers. They claim that, in some instances, only 20% to 33% managed to find jobs within a year after graduation, while a more significant percentage, ranging from 30% to 90%, students had to wait for a more extended period, often exceeding a year. This protracted waiting period for employment underscores the difficulties faced by NU college graduates in aligning their education with job opportunities.

Furthermore, the FGD discussions unveiled a subject-specific aspect concerning the waiting periods for job opportunities. Graduates from subjects such as Philosophy, History, Islamic History and Culture, and Social Science generally had to endure longer waiting periods for job opportunities. In contrast, graduates from subjects like Bangla, English, Management, Accounting, Math, Economics, Social Work, Marketing, Finance, Physics, Chemistry, and Statistics were often able to secure jobs more quickly, reflecting a higher demand for these fields in the job market.

9.3. Issues Related to Covid-19 Pandemic and Future Preparedness of NU Colleges

During the pandemic, some of the colleges reported to have introduced online classes. The fact that most colleges could not do so was due to the lack of digital connectivity and amenities such as internet, wi-fi-, desktop, smart boards etc. at the college premises. When the classes started after the pandemic, health related safety measures were taken in all of the surveyed colleges. The use of face masks and hand sanitizers were the most common and essential measures ensured by the colleges. Also, social distancing, hand washing, free delivery of masks, soaps and sanitizers etc. and awareness building on pandemic were also confirmed at the college premises. In case of any such extreme and unprecedented circumstances, students and teachers suggested that provision of online classes and distribution of online reading materials would benefit the uninterrupted service of education at NU colleges.

9.4. Improving the Teaching-Learning Environment at NU Colleges

Improving the quality of education in NU colleges necessitates a holistic approach that addresses curriculum, teaching quality, student accountability, practical education, updated resources, session management, teacher recognition, student welfare, and infrastructure. This multifaceted endeavor is included below as suggested by various key factors that emerged from the FGDs:

9.4.1 Measures to Reduce Session Delays: Minimizing session jam, ensuring timely exams, and stabilizing syllabus changes are essential for a structured academic calendar. These measures create a predictable and efficient learning environment.

9.4.2 Curriculum Enhancement: Participants stressed the need for regular curriculum updates, ensuring its relevance by incorporating contemporary knowledge and skills. Streamlining the syllabus to emphasize essential topics and reduce unnecessary content was also recommended. These steps aim to create a more focused and up-to-date learning experience.

9.4.3 Practical and Job-Oriented Education: Promoting short, job-focused syllabi and practical learning experiences prepares students for real-world applications. This approach aligns education with employment prospects, minimizing the gap between academia and the job market.

9.4.4 Student Accountability: Creating mechanisms for student accountability is essential. It ensures that students pursue accurate knowledge, not just certificates. Regular attendance, compulsory class participation, and careful examination of in-course assessments are ways to achieve this goal.

9.4.5 Language Proficiency: A compulsory English learning course for each department was proposed to enhance students' communication skills. Proficiency in English can empower graduates to excel in a global job market where English is often a preferred language.

9.4.6 Teacher Training and Subject Expertise: Effective teaching plays a pivotal role in education quality. Subject-based training for teachers can enhance their expertise and classroom effectiveness. Additionally, involving educators in curriculum development allows them to contribute valuable insights and align the courses with practical needs.

9.4.7 Teacher Recognition and Compensation: Recognizing teachers as crucial stakeholders and ensuring their affiliation with the Monthly Pay Order (MPO) system, alongside proper salary benefits, incentivizes teaching as a profession.

9.4.8 Student Welfare: Introducing stipends or scholarship programs for honors students helps motivate and reward academic excellence, making higher education more accessible and affordable. Providing free meals or snacks (tiffin) and addressing nutritional needs during study hours supports student welfare and well-being.

9.4.9 Infrastructure and Resources: Providing adequate resources, such as infrastructure, classrooms, books, libraries, and online library facilities, creates a conducive learning environment. It ensures that students have access to essential materials and modern learning technologies.

9.4.10 Transportation and Infrastructure Development: Improving transportation options and investing in structural development make educational institutions more accessible and conducive to learning.

9.5. Facilitating Employability of NU Graduates

The quest to improve the employability of graduates from National University (NU) colleges yielded a multitude of valuable insights from discussions conducted on various fronts:

Firstly, participants emphasized the significance of internship programs, specifically within sectors like food industries and banking, as vital avenues to bolster students' employability prospects. These internship opportunities were regarded as practical pathways for students to gain a foothold in the job market and reduce future unemployment rates. The idea of facilitating internships was closely tied to the notion that it would minimize the period graduates had to wait before securing desirable jobs. This sentiment further highlighted the urgency in bridging the gap between academic pursuits and practical career opportunities. To enact these changes, the college's role was deemed to be pivotal. Participants urged colleges to take proactive measures in creating internship opportunities. This entailed forging partnerships with local government bodies or private organizations, thereby offering students short-term exposure to real-world work environments.

The value of alumni associations emerged as a powerful resource in enhancing employability. These associations were envisioned as platforms for current students to communicate with alumni, seek job opportunities in companies where alumni were employed, and receive invaluable guidance on various aspects of job-seeking, from interviews to examinations. Alumni were also seen as potential sources of motivation and mentors who could provide insights into navigating careers effectively. However, the absence of an alumni association in some cases was noted as a missed opportunity to tap into this valuable resource.

The significance of job fairs was also highlighted. Participants stressed that job fairs could only be effective if they offered comprehensive services and guidance. The regular organization of such fairs, free from corruption, was seen as crucial to benefit students. Regrettably, most colleges lacked arrangements for job fairs, depriving students of the opportunity to learn about companies, available job roles, application procedures, and more.

Lastly, there was a unanimous call for structured career counseling services within colleges. These services were deemed essential to guide students in securing suitable jobs, keeping them informed about the job market landscape, various job types, working environments, and preparing them effectively for their career journeys. Inclusion of compulsory technical courses like English courses, basic computer and ICT courses would also help the students to grow their soft-skill sets.

CHAPTER X: SUMMARY, CONCLUSION AND RECOMMENDATIONS

BIDS has conducted the Follow-up Tracer Study in May-June 2023 with a new cohort of graduates, students, teachers, and employers to assess how college graduate job market outcomes have changed. The follow-up tracer study assesses the overtime labour market relevance of tertiary college-level education. It also analyses the contribution of tertiary education to developing a highly-skilled, well-educated workforce and accelerated job creation in Bangladesh.

The population for the study is around 608 colleges under the NU with Honors and Master's program. For the purpose of this study, a total of 61 colleges (using 10 percent sample) were selected through stratified sampling. The stratification categories include (1) ownership (government or non-government) and (2) College Type (Honours or Master's), and (3) Geographical area (all administrative divisions)

We prepared 4 sets of structured questionnaires for the graduates, current students, principals and the potential employers of the National University graduates. We aimed to survey (actually surveyed) 1340 (1345) graduates and 675 students from the 61 sample colleges; 61 principals from each of the colleges along with 100 (107) employers. To complement the quantitative surveys, qualitative approaches were employed including 8 focus group discussions (FGDs) with students, 8 FGDs with teachers and 15 key informant interviews of the employers.

10.1. Summary and Conclusions

Graduate Employability of NU-Affiliated Colleges

A total of 1345 graduates' information has been collected under this study. They are either currently active graduates or not active in the labor force. It is found that the majority of graduates are active in the labor force (91 percent). It is necessary to mention that the percentage of the total labor force for male graduates is higher than that of female graduates, i.e., 96 percent and 84 percent respectively.

A total of 879 graduates are employed in our survey with the male is 652 and female is 227. This reflects the employment rate is 71.76 including 80 percent male and 65.69 female. On the other hand, a total of 346 graduates are found to be unemployed providing 97 male and 249 female graduates. Therefore, the average unemployment rate turns to be 28.24 percent including 19.96 percent male and 34.31 female. This result shows that employment outcomes differ significantly across genders. A much higher share of male graduates is employed compared to their female counterparts.

Among the employed graduates, wage employment is the main form of employment. Only 16.2 percent of graduates are currently being engaged in self-employment. What is most striking is that more than one-fourth of the graduates (28.24 percent) are still unemployed and looking for jobs, even after spending three to four years since first graduating from their colleges.

In the tracer study (2021), the current status of graduates shows that 21 percent of graduates are salaried employed, while 66 percent are unemployed; 1.5 percent are self-employed and 7 percent are involved in full-time/part-time study. On the other hand, follow-up tracer study results show that 42 percent of graduates are salaried employed, while 28 percent are unemployed; 16 percent are self-employed, and 13 percent are involved in part-time work and study.

The disaggregated picture shows that in the tracer study (2021), the proportion of females among salaried graduates is 11.64%, while it is 30.74% for males; the proportion of females not in the labor force is 9% which is only 0.6% for males. But the proportion of unemployed females and female graduates in part-time/full-time study is higher than unemployed males and male graduates (70.3% vs 61%; 8.55% vs 5.14%). However, in follow-up tracer study (2023) unemployment rate among female and male graduates has decreased. More male graduates are engaged in self-employed activities and are involved in further study to increase their job opportunities.

The summary of these results shows that employment outcomes differ significantly across genders. A much higher share of male graduates is employed compared to their female counterparts. After three years of graduation, more than one-fourth of the graduates are still unemployed. This share is very high compared to the labor market outcome of the general population. According to the Labour Force Survey 2016–2017, the unemployment rate among those with tertiary education qualifications was 11.2 percent, much higher than the national average of 4.2 percent in 2017. The unemployment rate for females stands at 21.4 percent, nearly three times higher than that of males (8.3 percent). This level of unemployment is extremely concerning and raises serious concerns about the willingness to search for jobs and skills to manage jobs among college graduates in Bangladesh.

Labor Market Outcome and Economic Activities of Graduates

We have interviewed 1345 graduates coming from 61 colleges across all administrative divisions of Bangladesh. These graduates come from four types of colleges under the National University affiliation: Government-Honors (GH), Non-Government Honors (NGH), Government Masters (GM), and Non-Government Masters (NGM).

For graduates from government honor’s colleges, 38.2% of graduates are salaried employed, 18.7% are self-employed, 13.7% are graduates with part-time work and study, and 29.4% are unemployed. For graduates from Government Master's colleges, 41.4% are salaried employed, 11.2% are self-employed, 19.8% are graduates with part-time study and working, and 27.6% are unemployed. Combining Government Honor’s and Master’s, 40% of graduates are salaried employed, 14.4% are self-employed, 17.2% are graduates with part-time study and working, and 28.4% are unemployed. Among Non-Government Honors graduates, 47.1% are salaried employed, 18.2% are self-employed, 9.5% are graduates with part-time study and working, and 25.1% are unemployed. In the case of Non-Government Master's graduates, 27.3% are salaried employed, 17.3% are self-employed, 8.2% are graduates with part-time study and working, and 47.3% are unemployed. When considering all graduates, irrespective of college type of the

surveyed graduates, 42.28% are salaried employed, 16.2% are self-employed, 13.2% are graduates with part-time study and working, and 28.2% are unemployed.

Graduates who are unemployed, majority of them graduate from BA (pass) course, Political science, Library Management, Bangla, and Islamic history and culture. On the other hand, English, Economics, Accounting, Sociology and Finance and Banking graduates are less unemployed.

A majority (52%) of total unemployed graduates stated that they do not have any definite time span for searching for a job while 24% of them search for a job almost every day and 9.6% search for jobs several times a week. Almost 60% of the unemployed graduates surveyed seem to have been unemployed for more than two years after graduation.

Most of the surveyed unemployed graduates spend most of their time searching for a job (45.74%), though the activity has a higher frequency among the graduates from government colleges (52.04% of the government college graduates compared to 39.82% of non-government colleges). Apart from that, most of them also spend almost an equal amount of time helping their family with the household chores. This indicates that they want to be useful and prefer helping their families to do anything else or being idle.

Among the salaried employers, almost 60 percent of NU graduates have been working in private enterprises, where graduates from non-government colleges seem higher in this sector by 3 percent than graduates from government colleges (i.e., 60.94 and 58.33 respectively). In general, in the government sector, there are more graduate employees from NU-affiliated government colleges than non-government colleges. On the contrary, graduates from non-government colleges are more likely to engage in NGO/Trust or Foundation.

For self-employed activities, 27 percent of graduates have been engaged in wholesale and retail trade and the other 14 percent of graduates are in the agriculture, forestry, or fishing industry. More NU-affiliated govt. college graduates are involved in the garment, food processing, education, and health sectors compared to non-govt. graduates. While, on the other hand, more non-govt. college graduates are involved in the sectors of manufacturing, construction, ICT, E-commerce, and restaurant and food services

It is evident that, graduates who are still studying with some sort of part-time work, around 44% of the graduates enrolled in the study after graduation or post-graduation with the intention of getting a better job. 22% of the graduates perceive that an undergraduate degree is not adequate to get an expected job, and hence they decided to pursue advanced studies. 19.80% surmised that they would need some kind of technical skill for a better job and enrolled in part-time study whereas, 11.17% enrolled because of their parents' wishes.

There is a need for other training for graduates' employability. Overall, 43.7% of graduates among our surveyed ones did not receive any kind of additional training, 24.9% received skill development training while they were studying the college, 19.8% received skill development training after they left college and 11.5% received skill development training such as information and communication technology (ICT) training, technical/vocational training, basic computer skill training etc. before they started their tertiary education. Though most graduates

from government colleges did not get any training before starting college, their share (compared to the graduates of non-government colleges) of getting training increased while they were in college and after they finished their college education.

Graduates have been asked if they feel that need for any training opportunities in their respective colleges to make them more capable of getting jobs. It is found that almost 43 percent of unemployed graduates demanded training needs. Graduates have stated the need for specific training courses where it is found that all categories of graduates need mostly Information, Communication, and Technology training (ICT).

Current Students' Socio-Economic Backgrounds, Motivation, Perceptions, and Market Relevance of College Education

Affiliated colleges of the NU in Bangladesh serve secondary graduates of average academic qualifications from decent family backgrounds to achieve tertiary education qualifications. Most students in the survey perceive themselves to hail from lower-middle-class families (73%), followed by belonging to upper-middle-class families (13.95%) and poor families (10.83%). Most students in the NU colleges have parents with primary and secondary education. Government colleges have a higher percentage of students with parents who have lower levels of education (no institutional education, primary education), whereas non-government colleges have a higher percentage of students with parents who have attained higher education levels (Honors and Masters).

Overall, among 675 students, 33.92% students study arts, 28.14% students study business, 22.96% study social science and 14.96% study science. The study findings show the variations in the distribution of students across academic disciplines, highlighting differences in program preferences and enrollments among males and females.

It is evident that current students try to engage themselves in some kind of activities to generate income. 44.30% of students from all surveyed colleges have some kind of employment at present with an average earning of BDT. 6657. 50.83% of the students at Masters colleges and 41,.90% of the students of Honors colleges are involved in employment while earning BDT. 7782.61 and BDT. 6157.01 on average respectively. The working hours are almost 5 per day for all students. Students are also involved in different co-curriculum activities e.g., debating, sports, and cultural activities, student council, etc. 31% of all students at different colleges, 32.2% of students in government colleges, and 30.2% of students in non-government colleges take part in co-curriculum activities according to our survey data.

About the fruitfulness of their college education, government and non-government colleges differ significantly in terms of students' perception regarding the adequacy of knowledge and technical skills learned for future work. Government colleges have a lower mean agreement score (2.76) compared to non-government colleges (3.21). This difference is statistically significant, indicating that students in non-government colleges have a more positive view of the relevance of their education to their future work.

Among the students of all colleges, only 13.3% said they have career counseling services on their college premises. The percentage is higher for students at non-government colleges.

However, students at all types of colleges think that there should be a career counseling service at every college

Overall, the data suggests that students in non-government colleges tend to have more positive perceptions of the education and resources provided by their institutions, particularly regarding the relevance of their education to future work and access to technology and research materials

Challenges in Education Quality and Relevance of College Education

About 69 percent of college principals from NU-affiliated non-government colleges think that the college programs are adequate enough to prepare the graduates for the labor market. On the other hand, only 52 percent of principals from government colleges think that the quality of education is good enough to prepare the graduates for the labor market. However, according to them only 17 percent of the graduates get their expected job on completion. They have to wait almost 2 years to get the desired job.

The principals stated some subjects they taught which have very low demand in the job market. It's one of the prime barriers in the job market to get a suitable job if they didn't learn job-oriented subjects. Subjects like History, Islamic History and Culture, Philosophy, Sanskrit, Political Science, Bangla, etc. are not competent enough compared to ICT/Business or Science-related subjects, which are most demanding in the labor market.

When the principals were asked about the mentioned skills that are being covered by the offered course curriculum, half of them stated that Bangla communication (overall 54.2 percent) is widely used in lectures or daily conversation. Here, non-govt. colleges have covered more sophisticated Bengali language than govt. colleges i.e., 54.5 percent and 53.6 percent respectively. Apart from that, non-govt. colleges have covered other skills higher than govt. colleges such as-time management (33.7 percent), basic computer skills (33.5 percent), and presentation skills (35.9 percent).

Teachers provide a huge contribution (overall 79 percent), to the students about how to search for jobs appropriately, job sources, CV writing, tips about interviews, etc. NU affiliated non-govt. colleges have higher support facilities compared to govt. colleges (i.e., 83.3 percent and 71.4 percent respectively). Job search by different social media/websites (63.2 percent) and career counseling (57.9 percent) also contributed students to getting a particular job.

Besides, almost 42 percent of colleges provide additional skills training to their graduates, where the govt. and non-govt. colleges differ by 5 percent (45 percent and 40 percent respectively). Some of the Principals reported providing limited job placement facilities to the students through career counseling and advice, job fairs, and career seminars or workshops. However, these colleges neither have any job placement unit for graduates nor any staff assigned to provide the service.

On the other hand, keeping track of graduates is not a common practice among the colleges. However, college principals reported tracking the graduates mainly through personal networks and communication.

Collaboration with the industry is relatively low among the sampled colleges. The colleges reported to have some industry collaboration through only workplace visits by students. Only

6.6 percent of the college principals reported having some kind of collaboration with the industry.

According to the principals, students' unemployment rate is more severe than other existing problems, where govt. colleges have to face more student unemployability than non-govt. Other existing problems such as the absence of career clubs in the National University, difficulties in finding employer partners, lack of operating funds, lack of training opportunities for teachers, and absence of students are major issues in the surveyed colleges.

Employers' Views on Post-Secondary Education

Most of the employers, stated they recruit the graduates based on qualifications not based on institutes. Nevertheless, almost every employer reported that their establishment has a special interest in recruiting NU graduates. These employers were asked about the different reasons why their institution considered recruiting NU graduates. The best reason is they do not switch jobs frequently (91%) and have enthusiasm for working with a low salary (84%).

A major proportion of the NU Graduates are working as teachers or assistant teachers (36%). Apart from that, 16% of employees are working as officers or assistant officers in different government and non-government organizations, 14% of employees are working as supervisors, coordinators or field officers and the rest are in other professions.

It is clear that despite a majority of employers stating that their institution has a particular interest in hiring NU graduates, 63% of employers said that NU graduates in current posts are not difficult to replace. Only 2% of employers stated that it is very difficult to fill their posts where NU graduates are currently in employment.

For most of the employers assessed (38%), it will take more than a week but less than a month to fill up the position if a vacancy occurs where NU graduates are currently employed. 38% of employers also reported it will take more than a month actually. Only 4% of employers stated that they would fill the position immediately if a vacancy occurred where NU graduates are currently employed.

According to the employers, ICT (90%), English Language (90%), Communication (78%), Problem-solving (75%), and Teamwork (61%) are the most important areas that universities should train students in. That means employers value soft skills in addition to academic qualifications and would like the colleges to strengthen training in ICT, communication, and language skills. College graduates are strong in Bangla, possess suitable work attitudes, and team working skills. By improving ICT skills and English language and communication skills, college graduates may position themselves in a better position in the job market and fill in a good share of the skills gap that exists in the workforce.

Facilitating the Employability of NU Graduates

The quest to improve the employability of graduates from National University (NU) colleges yielded a multitude of valuable insights from discussions conducted on various fronts:

Firstly, participants emphasized the significance of internship programs, specifically within sectors like food industries and banking, as vital avenues to bolster students' employability

prospects. These internship opportunities were regarded as practical pathways for students to gain a foothold in the job market and reduce future unemployment rates.

The value of alumni associations emerged as a powerful resource in enhancing employability. These associations have been envisioned as platforms for current students to communicate with alumni, seek job opportunities in companies where alumni were employed, and receive invaluable guidance on various aspects of job-seeking, from interviews to examinations. Alumni were also seen as potential sources of motivation and mentors who could provide insights into navigating careers effectively. However, the absence of an alumni association in some cases was noted as a missed opportunity to tap into this valuable resource.

The significance of job fairs was also highlighted. Participants stressed that job fairs could only be effective if they offered comprehensive services and guidance. The regular organization of such fairs, free from corruption, was crucial to benefit students. Regrettably, most colleges lacked arrangements for job fairs, depriving students of the opportunity to learn about companies, available job roles, application procedures, and more.

Lastly, there was a unanimous call for structured career counseling services within colleges. These services were deemed essential to guide students in securing suitable jobs, keeping them informed about the job market landscape, various job types, and working environments, and preparing them effectively for their career journeys. The inclusion of compulsory technical courses like English courses, and basic computer and ICT courses would also help the students to grow their soft skill sets.

10.2.Major Findings

The major findings from our analysis are as follow:

- ✓ After three years of graduation, more than one fourth of the graduates are still unemployed.
- ✓ Male graduates find it less difficult to enter into the labor market. It is evident that jobs are extremely hard for female graduates from the affiliated colleges.
- ✓ Graduates from non-government colleges are relatively successful in the labor market when it comes to salaried employment.
- ✓ Graduates who are unemployed, majority of them graduate from BA (pass) course, Political science, Library Management, Bangla, and Islamic history and culture. On the other hand, English, Economics, Accounting, Sociology and Finance and Banking graduates are less unemployed.
- ✓ Among the salaried employers, almost 60 percent of NU graduates have been working under different private enterprises. For self-employed activities, 27 percent of graduates have been engaged in wholesale and retail trade and the other 14 percent of graduates are in the agriculture, forestry, or fishing industry.
- ✓ It is evident that, graduates who are still studying with some sort of part-time work, around 44% of the graduates enrolled in the study after graduation or post-graduation with the intention of getting a better job.

- ✓ Almost 43 percent of unemployed graduates demanded training needs. Graduates have stated the need for specific training courses where it is found that all categories of graduates need mostly Information, Communication, and Technology training (ICT).
- ✓ Affiliated colleges of the NU in Bangladesh serve secondary graduates of average academic qualification from decent family backgrounds to achieve tertiary education qualifications.
- ✓ Most students in the NU colleges have parents with primary and secondary education.
- ✓ Government colleges have a higher percentage of students with parents who have lower levels of education (no institutional education, primary education), whereas non-government colleges have a higher percentage of students with parents who have attained higher education levels (Honors and Masters).
- ✓ About the fruitfulness of their college education, government and non-Government colleges differ significantly in terms of students' perception regarding the adequacy of knowledge and technical skills learned for future work.
- ✓ Teachers provide a huge contribution (overall 79 percent) to the students about how to search for jobs appropriately, job sources, cv writing, tips about interview etc.
- ✓ Students' unemployment rate is severe than other existing problems, where govt. colleges have to face more student unemployability than non-govt.
- ✓ Other existing problems such as- absence of career club in National University, difficulties in finding employer partner, lack of operating funds, lack of training opportunities for teachers, absence of students are seeming major issues in the surveyed colleges.
- ✓ Almost every employer reported that their establishment has a special interest in recruiting NU graduates. The best reason is that they do not switch jobs frequently (91%) and enthusiasm of working with low salary (84%).
- ✓ According to the employer, ICT (90%), English Language (90%), Communication (78%), Problem-solving (75%), and Teamwork (61%) are the most important areas that universities should train students on.
- ✓ Employers value soft skills in addition to academic qualifications and would like the colleges to strengthen training on ICT, communication, and language skills.
- ✓ College graduates are strong in Bangla, possess suitable work attitude, and team working skills.
- ✓ By improving ICT skills and English language and communication skills, college graduates may position themselves in a better position in the job market and fill in a good share of the skills gap that exists in the workforce.

10.3. Recommendations

This study highlights some issues for improvement in the overall teaching and learning environment of NU affiliated colleges.

- Enhance the use of ICT in teaching, provide ICT skills training, and upgrade ICT facilities: Teachers need to acquire ICT knowledge fast to guide their students wherever appropriate. For example, digital skill development courses or ICT training courses deserve priority as reflected in graduates, current students, and employers' opinions.
- Training for the NU teachers is highly recommended.
    - Teachers need to be well trained alongside training abroad.
    - Arrangement of training before the process of teacher recruitment.
    - Long-term subject-based training and pedagogical training should be arranged for the teachers for quality teaching.
- Conduct periodic institution-level graduate tracking.
- Set up job placement support services and carrier counselling within colleges.
- Job fairs should be organized every year, preferably at the district level, to facilitate industry collaboration.
- Encourage greater student enrollment in more market-demanded courses such as Economics, Accounting, English, Finance and Banking in the NU-affiliated colleges.
- Introducing short course facilities can increase the job market opportunities of the NU affiliated colleges.
- As the graduates reported to have lack of English language and communication skills, by improving those college graduates may position themselves in a better position in the job market.
- The value of alumni associations emerged as a powerful resource in enhancing employability. Strengthening these associations have been envisioned as platforms for current students to communicate with alumni, seek job opportunities in companies where alumni were employed, and receive invaluable guidance on various aspects of job-seeking, from interviews to examinations.
- Most tertiary education academic programs do not provide students with the opportunities to gain practical exposure to their field of study. Therefore, practical assessments through presentations, team work, research and internships should be included in academia to evaluate students' performance.

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APPENDIX

Appendix A

A1: List of Sample Colleges

Division	District	College name	Ownership	Degree
Dhaka	Gazipur	Pear Ali College	Non-government	Honours
	Dhaka	Pubail Adarsha College	Non-government	Honours
	Manikganj	Govt. Debendra College	Government	Honours
	Gopalganj	Govt. Bangabandhu College	Government	Honours
	Dhaka	Savar College	Government	Masters
	Dhaka	New Model Degree College	Non-government	Masters
	Dhaka	Sk. Borhanuddin College	Non-government	Honours
	Dhaka	Khilgaon Model College	Non-government	Masters
	Dhaka	Dhaka Commerce College	Non-government	Honours
	Dhaka	Tejgaon Mahila College	Non-government	Honours
Chattogram	Brahmanbaria	Kasba T Ali College	Non-government	Honours
	Laksmipur	Kafil Uddin Degree College, Chandagonj	Non-government	Honours
	Chattogram	Govt. City College	Government	Honours
	Chattogram	Quaish Burischar Sheikh Mohammed City Corporation Degree College	Non-government	Honours
	Chattogram	Noapara College	Non-government	Honours
	Cox`s Bazar	Cox's Bazar City College	Non-government	Masters
	Chattogram	Chittagong College	Government	Masters
	Chadpur	Hajigonj Model College	Non-government	Honours
Barisal	Barishal	Govt. B. M. College	Government	Masters
	Barishal	Islamia College	Non-government	Honours
	Pirozpur	Dr. Rustum Ali Faraji Degree College	Non-government	Honours
	Patuakhali	Abdul Karim Mridha College	Non-government	Honours
	Pirozpur	Akhtar Hossain Choudhury Memorial College	Non-government	Honours
	Bhola	Abdul Jabbar College	Government	Honours
	Barishal	Babuganj Degree College	Non-government	Honours
Khulna	Satkhira	Satkhira Govt. College	Government	Masters
	Satkhira	Satkhira City College	Non-government	Masters
	Jessore	Shahid Suhrawardy College, Khulna	Non-government	Honours
	Jessore	M. M. College	Government	Honours
	Jessore	Muktijoddha College	Non-government	Honours
	Jessore	Upashahar Mahila Degree College	Non-government	Honours
	Jehenaidah	Sheikpara Dukhi Mahmud College	Non-government	Honours

	Kustia	Kumarkhali College (Govt.)	Government	Honours
Maymensingh	Jamalpur	Govt. Ashek Mahmud College	Government	Masters
	Jamalpur	Sarishabari College	Non-government	Honours
	Jamalpur	Mirza Azam College	Non-government	Honours
	Maymensingh	Govt. Mominunnessa Mahila College	Government	Honours
	Maymensingh	Nasirabad College	Non-government	Honours
	Maymensingh	Gouripur Mahila College	Non-government	Honours
	Maymensingh	Pulbaria College	Non-government	Honours
Rajshahi	Rajshahi	Rajshahi Court College	Non-government	Honours
	Bogura	Shibganj M. H. College	Government	Honours
	Bogura	Mahasthan Mahisawar College	Non-government	Honours
	Rajshahi	Akkelpur M. R. College (Govt College)	Government	Honours
	Bogura	Govt. Azizul Haque College	Government	Masters
	Bogura	Adam Dighi College	Non-government	Honours
	Joypurhat	Kalai Mohila College	Non-government	Honours
Rangpur	Lalmonirhat	Lalmonirhat Adarsha Degree College	Non-government	Honours
	Rangpur	Haragachh College	Government	Honours
	Gaibandha	Gaibandha Govt. College	Government	Masters
	Gaibandha	Bonarpara College	Government	Honours
	Dinajpur	Joynanda Degree College	Non-government	Honours
	Dinajpur	Birol Degree College	Non-government	Honours
	Rangpur	Mahigonj College	Non-government	Honours
Sylhet	Sylhet	Bhadeswar Mahila College	Non-government	Honours
	Sylhet	Beanibazar Govt. College	Government	Honours
	Sunamganj	Gobindoganj Abdul Haque Smriti College	Non-government	Honours
	Maulavibazar	Moulvibazar Govt. College	Government	Masters
	Maulavibazar	Lungla Adhunik Degree College	Non-government	Honours
	Sylhet	Tajpur College	Non-government	Honours
	Sunamganj	Moinul Haque College	Non-government	Honours

Source: CEDP tracer study 2023.

A2: Additional Tables

Chapter 5

Table 1: Distribution of graduates by academic department

Subjects	Salaried Employment	Self-Employment	Part time Study and Work	Unemployment	All
Botany	3.13	2.24	6.34	2.43	3.23
Sociology	1.99	2.24	0.00	0.69	1.1
Chemistry	0.28	0.75	0.98	1.04	0.79
Bangla	9.09	12.69	9.27	8.49	9.23
Mathematics	2.56	0.75	3.90	2.08	2.37
English	4.83	2.24	4.39	0.17	3.79
Physics	2.27	0.00	3.41	3.29	1.26
History	2.84	2.99	0.49	2.95	2.52
Soil science	1.99	0.75	0.98	5.03	3.08
Zoology	3.41	3.73	2.93	1.04	2.29
Philosophy	3.13	4.48	0.98	4.51	3.55
Economics	4.83	5.22	6.34	0.35	5.13
Accounting	0.28	0.75	0.00	0.35	0.32
Geography	0.28	1.49	2.44	1.04	1.1
Finance	0.28	0.00	0.49	1.56	0.87
Political science	9.66	17.16	2.93	13.00	10.88
Finance and banking	1.70	1.49	0.00	0.72	1.03
Psychology	1.14	0.75	0.49	0.87	0.87
Library Management	11.08	13.43	14.63	10.57	11.67
Social work	2.27	1.49	0.98	5.03	3.23
Marketing	0.57	0.00	7.32	1.04	1.81
Islamic history and culture	7.39	3.73	1.95	7.45	6.15
Islamic studies	0.85	0.00	0.98	4.85	0.55
Social science	3.98	3.73	4.39	4.51	4.26
Anthropology	0.00	0.00	0.00	1.17	0.38
Soil science	0.00	0.00	0.00	0.87	0.24
BA (pass)	20.17	17.91	23.41	16.12	18.61
Total	100.00	100.00	100.00	100.00	100.00

Source: Calculation based on primary data.

Table 2: Graduates (%) across academic discipline and CGPA obtained at honor's and master's level in Government Colleges

Faculty	CGPA (Honor's Level)					CGPA (Master's Level)				
	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4
Science	3.6	31.4	56.8	8.3	-	3.08	26.92	60.00	10.00	-
Social Science	4.6	58.5	35.4	1.5	-	2.33	58.14	39.53	0.00	-
Arts	5.5	60.7	30.6	3.3	-	3.21	55.61	39.04	2.14	-
Business Studies	1.2	49.7	48.5	0.6	-	1.45	43.48	53.62	1.45	-

Source: Calculation based on primary data.

Table 3: Graduates (%) across academic discipline and CGPA obtained at honor's and master's level in Non-government Colleges

Faculty	CGPA (Honor's Level)					CGPA (Master's Level)				
	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4
Science	0.0	24.0	72.0	4.0	-	0.0	17.4	78.3	4.4	-
Social Science	0.0	46.0	52.6	1.5	-	0.0	34.2	63.2	2.6	-
Arts	4.06	67.0	25.9	3.1	-	0.0	58.2	38.8	3.0	-
Business Studies	3.2	60.7	33.9	2.2	-	2.3	49.7	45.0	2.9	-

Source: Calculation based on primary data.

Table 4: Salaried Employee Graduates (%) across different academic disciplines and CGPA bands at Honor's level in Government Colleges

Faculty	CGPA (Honor's Level)					CGPA (Master's Level)				
	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4
Science	0.0	30.4	58.7	10.9	-	0.0	23.5	61.8	14.7	-
Social Science	11.8	41.2	47.1	0.0	-	7.7	30.8	61.5	0.0	-
Arts	4.9	54.3	34.6	6.2	-	1.8	50.9	43.9	3.5	-
Business Studies	0.0	62.1	34.5	3.5	-	0.0	47.1	47.1	5.9	-

Source: Calculation based on primary data.

Table 5: Salaried Employee Graduates (%) across different academic disciplines and CGPA bands at Master's level in Non-government Colleges

Faculty	CGPA (Honor's Level)					CGPA (Master's Level)				
	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4
Science	0.0	40.0	60.0	0.0	-	0.0	25.0	75.0	0.0	-
Social Science	0.0	43.75	56.25	0.0	-	0.0	35.00	65.00	0.0	-
Arts	0.0	56.3	39.6	4.2	-	0.0	39.1	56.5	4.4	-
Business Studies	2.1	63.8	31.9	2.1	-	3.5	55.2	41.4	0.0	-

Source: Calculation based on primary data.

Table 6: Unemployed Graduates (%) across different academic disciplines and CGPA bands at Honor's level in Government Colleges

Faculty	CGPA (Honor's Level)					CGPA (Master's Level)				
	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4
Science	3.57	23.21	64.29	8.93	-	2.38	16.67	71.43	9.52	-
Social Science	3.57	60.71	32.14	3.57	-	0.0	70.59	29.41	0.0	-
Arts	7.50	61.67	30.00	0.83	-	6.76	52.70	40.54	0.0	-
Business Studies	5.00	55.00	40.0	0.0	-	5.26	42.11	52.36	0.0	-

Source: Calculation based on primary data.

Table 6.1: Unemployed Graduates (%) across different academic disciplines and CGPA bands at Master's level in Non-government Colleges

Faculty	CGPA (Honor's Level)					CGPA (Master's Level)				
	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4
Science	0.0	0.0	100.0	0.0	-	-	0.0	100.0	0.0	-
Social Science	0.0	45.59	53.9	1.5	-	-	31.4	65.7	2.9	-
Arts	6.00	65.5	25.0	3.6	-	-	47.62	47.62	4.8	-
Business Studies	1.9	60.36	36.04	1.80	-	-	46.97	50.0	3.03	-

Source: Calculation based on primary data.

Table 7: Self-employed Graduates (%) across different academic disciplines and CGPA bands at Honor's level in Government Colleges

Faculty	CGPA (Honor's Level)					CGPA (Master's Level)				
	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4
Science	0.0	50.0	40.91	9.09	-	-	46.15	38.46	15.38	-
Social Science	0.0	100.0	0.0	0.0	-	-	100.0	0.0	0.0	-
Arts	2.86	60.0	31.43	5.71	-	-	60.0	33.33	6.67	-
Business Studies	0.0	65.22	34.78	0.0	-	-	46.15	53.85	0.0	-

Source: Calculation based on primary data.

Table 8: Self-employed Graduates (%) across different academic disciplines and CGPA bands at Master's level in Non-government Colleges

Faculty	CGPA (Honor's Level)					CGPA (Master's Level)				
	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4
Science	0.0	33.33	66.67	0.0	-	0.0	28.57	71.43	0.0	-
Social Science	0.0	45.45	50.0	4.55	-	0.0	35.71	57.14	7.14	-
Arts	2.86	82.86	14.29	0.0	-	0.0	88.24	11.76	0.0	-
Business Studies	2.08	56.25	37.50	4.17	-	4.00	36.00	52.00	8.00	-

Source: Calculation based on primary data.

Table 9: Graduates with part-time work and study (%) across different academic disciplines and CGPA bands at Honor's level in Government Colleges

Faculty	CGPA (Honor's Level)					CGPA (Master's Level)				
	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4
Science	0.0	42.31	53.85	3.85	-	-	43.48	52.17	4.35	-
Social Science	0.0	57.14	42.86	0.0	-	-	60.0	40.0	0.0	-
Arts	4.35	65.22	20.09	4.35	-	-	62.50	37.50	0.0	-
Business Studies	0.0	20.41	79.59	0.0	-	-	27.27	72.73	0.0	-

Source: Calculation based on primary data.

Table 10: Graduates with part-time work and study (%) across different academic disciplines and CGPA bands at Master's level in Non-government Colleges

Faculty	CGPA (Honor's Level)					CGPA (Master's Level)				
	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4	Below 2.5	2.5-2.9	3.0-3.4	3.5-3.9	4
Science	0.0	20.0	80.0	0.0	-	-	20.0	80.0	-	-
Social Science	0.0	71.43	28.57	0.0	-	-	100	00.0	-	-
Arts	7.69	53.4	30.77	7.69	-	-	66.7	33.3	-	
Business Studies	3.13	62.50	34.38	0.0	-	-	78.6	21.4	-	-

Source: Calculation based on primary data.

Table 11: Employment status of graduates and graduates' fathers' education (in %)

Employment Status	No education	Primary	SSC/Equivalent	HSC/Equivalent	Bachelor degree	Master's degree	Others	All
Salaried employed	16.8	28.69	25.10	11.8	11.36	6.53	0.57	100.0
Self-employed	19.10	31.66	26.13	10.05	6.53	6.03	0.50	100.0
Graduates with part-time	18.52	24.69	28.40	11.11	13.58	3.70	0.0	100.0
Unemployed	11.52	22.46	27.34	11.52	16.02	10.55	0.59	100.0
Total	15.18	26.04	26.61	11.10	12.82	7.76	0.49	100.0

Source: Calculation based on primary data.

Table 12: Employment status of graduates and graduates' mothers' education (in %)

Employment Status	No education	Primary	SSC/Equivalent	HSC/Equivalent	Bachelor degree	Master's degree	Others	All
Salaried employed	28.13	36.08	25.05	6.53	3.13	0.3	0.0	100.0
Self-employed	27.14	47.24	21.11	2.51	1.01	1.01	0.0	100.0
Graduates with part-time	35.80	37.65	20.37	4.94	0.62	0.0	0.62	100.0
Unemployed	21.88	43.55	21.93	4.88	1.17	0.4	0.20	100.0
Total	26.37	41.22	25.2	4.98	1.6	0.4	0.2	100.0

Source: Calculation based on primary data.

Table 13: Graduates' Household Size

Employment Status	Average Number of Household Members	Average Number of Earning Members	Average Number of Dependent Members	Average number of Siblings who are Students
Salaried employed	5.59	2.25	3.42	1.60
Self-employed	5.43	1.99	3.47	1.55
Part-time/ full-time study	5.10	1.93	3.19	1.47
Unemployed	5.38	1.42	3.99	1.59
Total	5.41	1.82	3.64	1.57

Graduates Who Are Not in the Labor Force

Table 14: Willingness to work in Future for Graduates who are currently not in the labor force

	Government Colleges	Non-government Colleges	All Colleges
	%	%	%
Willing to work in the future	86.56	85.04	85.78
Willing to work in the future only if current situation changes	5.00	7.62	6.35
Unwilling to work in the future	8.44	7.33	7.87

Source: Calculated from primary data

Table 15: Reasons for unwillingness to work in the future

Reasons	Government Colleges	Non-governmen t Colleges	All Colleges
	%	%	%
I have acquired a substantial amount of family wealth and asset	0.00	3.85	1.96
I only want to stay at home and look after my family	48.00	50.00	49.02
I don't think I can find any work here	36.00	23.08	29.41
My family does not like me working	8.00	23.08	15.69
Others	4.00	0.00	1.96

Source: Calculated from primary data

Table 16: Time Spent by the graduates who are not in the labor force

Activities	Government Colleges	Non-government Colleges	All Colleges
	%	%	%
Seeking for opportunities of higher studies	3.33	6.67	8.33
Preparing to go abroad	17.5	8.33	25.83
Helping my family members with household chores	75.84	79.17	56.67
Being involved in some volunteering activities	3.33	5.83	9.17

Source: Calculated from primary data

Table 17: Future activity for graduates who are not in the labor force now but want work in the future

Preferred Working Plan for Future	Government Colleges	Non-government Colleges	All Colleges
	%	%	%
Want to start up my own business	2.64	6.54	4.65
Want to find employment in other companies	91.75	86.92	89.26
Want to go back to full-time study	0.99	1.93	1.96
Want to do training/course	2.90	4.36	3.71
Others	0.66	0.00	0.32

Source: Calculated from primary data

Chapter 6

Table 18: Gender of the Household Head

Gender of household.	Number	Percentage
Male	636	94.22
Female	39	5.78

Source: Follow-up Tracer Study on Graduates of Tertiary Level Colleges, BIDS-2023

Table 19: Mean Level of Agreement (Honors Student) regarding Academic and Skill Training provided by the College

Statement	Hons. Govt.		Hons. Non-Govt.		Diff	P-value
	Mean	SD	Mean	SD		
The knowledge and technical skills I am learning at the college will likely provide a good basis for the skills I need for my work	2.97	1.23	3.17	1.07	-0.205	(0.075)
ICT (information and Communications Technology) skills that I am learning at the college will likely provide a good basis for computer skills for my future work	2.84	1.21	2.81	1.21	0.033	(0.790)
Soft skills (teamwork, communication skills, problem solving) that I am learning at the college is adequate and useful for my future work success	2.72	1.06	2.74	1.12	-0.028	(0.806)
Access to the internet and computers are adequate in the program	2.32	1.26	2.25	1.10	0.071	(0.569)
Access to books, journals and databases is adequate for research projects and learning purposes	2.23	1.26	2.27	1.18	-0.036	(0.769)
The labs, equipment, and facilities we use at the department are sufficiently up-to-date relative to the real technologies used in the industry	2.13	1.14	2.31	1.16	-0.187	(0.116)

Source: Calculation based on primary data.

Table 20: Mean Level of Agreement (Masters Student) regarding Academic and Skill Training provided by the College

Statement	Masters Govt.		Masters Non-Govt.		Diff	P-value
	Mean	SD	Mean	SD		
The knowledge and technical skills I am learning at the college will likely provide a good basis for the skills I need for my work	2.55	1.09	3.42	0.81	-0.871***	(0.000)
ICT (information and Communications Technology) skills that I am learning at the college will likely provide a good basis for computer skills for my future work	2.36	1.20	3.27	1.04	-0.911***	(0.000)
Soft skills (teamwork, communication skills, problem solving) that I am learning at the college is adequate and useful for my future work success	2.53	1.21	3.06	0.10	-0.521**	(0.004)
Access to the internet and computers are adequate in the program	1.74	1.02	2.79	1.08	-1.048***	(0.000)
Access to books, journals and databases is adequate for research projects and learning purposes	2.06	0.98	2.62	1.10	-0.559***	(0.001)
The labs, equipment, and facilities we use at the department are sufficiently up-to-date relative to the real technologies used in the industry	2.19	1.05	2.69	1.05	-0.502**	(0.003)

Source: Calculation based on primary data.

Table 21: Family's Average Educational Expenses of College

Type of expenses	Govt.			Non-Govt.			All college		
	H	M	T	H	M	T	H	M	T
1. College tuition fee (avg)	1996.10	6088.19	4017.09	9456.36	19012.08	10751.30	7583.74	10275.82	8299.76
2. Textbooks, reference books, and other study materials (avg-annually)	6557.26	11191.67	8836.48	8686.49	8537.29	8665.97	8152.03	10316.76	8727.79
3. Hostel expenses (avg - monthly)	2070	2437.5	2233.34	1963.89	6333.34	3056.25	2012.13	3736.12	2620.59
4. Mess expenses (avg- monthly)	4121.29	4377.78	4279.71	4273.98	6657.15	4806.39	4220.81	4947.62	4532.20
5. Total cost of traveling to college (avg-monthly)	1624.87	1937.74	1774.94	2012.37	2235	2044.56	1917.56	2045.19	1950.87

Source: Calculation based on primary data.

Table: 22: Rating skills from joining the establishment and now

SL NO	Descriptions	At the time of joining(Mean & SD)		At present (Mean & SD)		Differences	P-value
		Mean	SD	Mean	SD		
01.	Theoretical knowledge about the subject area	4.84	1.68	7.65	1.30	2.81	0.0000
02.	Practical skills for the position	4.76	1.66	7.48	1.44	2.72	0.0000
03.	Communication skill	5.45	1.69	7.89	1.38	2.44	0.0000
04.	Problem solving and independent thinking	4.89	1.78	7.29	1.57	2.41	0.0000
05.	Work attitude	5.44	1.93	7.87	1.49	2.43	0.0000
06.	English writing skill	4.64	2.00	6.08	1.90	1.43	0.0000
07.	Communication skill in English	3.87	1.68	5.19	1.97	1.32	0.0000
08.	Basic computer skill	4.73	1.96	6.72	2.13	1.99	0.0000
09.	Advanced computer skill	4.01	2.16	5.62	2.71	1.61	0.0000
10.	Others						

Source: Calculation based on primary data.

Table 23: General information of respected Employers

SL NO	Name Of The Organization	Year of establishment	Location	Respondent's designation	Type of management
1	Polashpol Maddomik High School	1975	Polashpur, Khulna Road, Sadar, Stakhira	Institution Head	Private Organization
2	A.K. Holdings Ltd.	2006	69,Bahaddahat, Chattogram	Branch Head	Private Organization
3	Boilsori Govt. Primary School	1988	Boilsori, Bashkhali, Chattogram	Institution Head	Government Organization
4	Baklia Residential Model School	2014	Kb Aman Ali Road, Chattogram	Institution Head	Private Organization
5	Kattoli Ideal K.G & High School	2015	Akbar Shah, Uttar Kattali, Chattogram	Institution Head	Private Organization
6	Vur Ghata Govt.Primary School	1973	Nagmori Chai Vurghata, Shibganj, Bagura	Institution Head	Government Organization
7	Kalshimati Dakhil Madarasa	1945	Kalshimati, Sadar, Bagura	Institution Head	Private Organization
8	Nobel Education & Literary Society	2007	Mohasthan	Branch Head	NGO/Trust/Foundation/Microfinance Institutions
9	Sabuj Nursery	1982	Gokul, Bagura Sadar	Institution Head	Private Organization
10	Infinix Mobile	2022	Mawna, Gazipur	Others	Private Organization
11	Piyar Ali College	1993	Mawna, Sreepur, Gazipur	Others	Private Organization
12	Ca. Kasba T. Ali Degree College	1985	Kasba B. Baria	Department Head	Private Organization
13	Islam Electric House	2016	Akhaura Cng Stand, Kasba, B.Baria	Institution Head	Family Business
14	Mohasthan Mahisawa College	1972	Mohasthan, Shibganj, Bagura	Others	Private Organization
15	Shikkha Prokaushal Adhidaptor	1972	Satkura Sador	Branch Head	Government Organization
16	Gabindakati Govt. Primary School	1945	Gabindakati Jhaudanga, Satkhira	Institution Head	Government Organization
17	K. Garments Ltd.	2008	Didar Marketer Pashe, Dewan Bazar, Chattogram	Department Head	Private Organization
18	Bangladesh Navy School & College	1977	Sailors Colony, M.A. Aziz Road, Chattogram	Institution Head	Autonomous/Attached Institution
19	Union Health & Family Welfare Centre	1990	Kallyani, Pirgacha, Rangpur	Human Resource Officer	Government Organization
20	West Baklia Govt. Primary School, Chandgaon	1939	K.B. Aman Ali Road, Chakbazar, -4203, Chattogram	Institution Head	Government Organization
21	Gul Ezar Begum C.K Muslim Bou	1963	Chandanpura, Chakbazar, Chattogram	Institution Head	Autonomous/Attached Institution
22	Pekua Panchogram Sommeloni Secondary School	1968	Pekua, Banaripara Barishal Pgs	Department Head	Private Organization
23	Fortune Shoes Ltd	2013	Bisic Kawnia	Others	Private Organization
24	Ankur Shishu Niketan & High School	2006	Lutfur Rahman Sarak, Nothullabaad, Barisal	Department Head	Private Organization
25	Senguin English Version School	2009	West Chadkathi Barisal	Department Head	Private Organization
26	Bushra Hospital	2014	Palash Pole, Sadar , Satkhira	Project Director/ Manager	Private Organization
27	National Orthopaedic Hospital (Nitor)_	1972	Agargaon, Dhaka-1207	Department Head	Government Organization
28	Butterfly Marketing Ltd	1987	Bazar Kalkata, New Market, Satkhira	Branch Head	Private Organization
29	Lab Aid Hospital	2013	Kakolir Mor, Barisal Sadar	Institution Head	Private Organization
30	Innovision Consulting Private Ltd	2021	Pti Road, Patuakhali	Branch Head	NGO/Trust/Foundation/Microfinance Institutions

31	Abdul Rashid Khan Higher Secondary School	1966	Vola Lonchghater Pashe, Barisal Sadar	Institution Head	Private Organization
32	Bismillah Traders	1990	Jhalkathi Bazar Road	Institution Head	Private Enterprise
33	Rebeka Logistics	2	Pti Road, Patuakhali	Department Head	Private Organization
34	54 No. Rada Pasha Govt. Primary School	1946	Siddhakathi, Upa Narcity, Vola, Jhalokathi	Institution Head	Government Organization
35	Giridharipur Govt. Primary School	1990	Polashbari, Gaibandha	Institution Head	Government Organization
36	The Acme Laboratory Ltd	1954	Sks Hospital Base, Rangpur, Depo	Others	Private Organization
37	Green Library	1973	Munsipara, Dinajpur	Department Head	Family Business
38	Rifaidpur Mondolpara Govt. Primary School	1989	Podiakhali, Gaibandha	Institution Head	Government Organization
39	Bank Asia Ltd. Gaibandha	2016	Nakaihat, Gobindaganj, Gaibandha	Project Director/ Manager	Autonomous/Attached Institution
40	Snigdha Gyaner Alo Bidyapith	2014	Moddhyopara	Project Director/ Manager	Private Organization
41	Partners In Health And Development			Institution Head	Private Organization
42	Pouro Preparatory High School, Cox's Bazar	1966	Sadar, Hospital, Cox's Bazar	Institution Head	Autonomous/Attached Institution
43	First Security Islami Bank Ltd		Puratan Bazar, Sadar, Gopalganj	Branch Head	Private Organization
44	Kabi Sukanta Ict Training Centre	2018	Amtoli, Kotalipara, Gopalganj	Project Director/ Manager	Government Organization
45	Mk Engineering	2019	H-183, R-2, Mirpur, Dohs	Others	Private Enterprise
46	Kofil Uddin	1972	Chandraganj, Lakshmipur	Department Head	Private Organization
47	Khalekganj Sufi Rowshon Ali Alim Madrasa	1993	Khalekganj, Chandraganj, Lakshmipur	Others	Autonomous/Attached Institution
48	North Point Public School	1995	12/C Road, 3/20, Pallabi	Branch Head	Autonomous/Attached Institution
49	Icddr'b Mirpur Branch	1996	Section-11/House-13, Block-C, Av-5	Others	Others (Please Mention) ????
50	Shakti Foundation	2000	Shakti Bhaban, House-4, Road-1, Pallabi, Dhaka-1216	Branch Head	NGO/Trust/Foundation/Microfinance Institutions
51	Walton	2005	House-21, Main Road-3	Branch Head	Private Organization
52	Popular Life Insurance	2001		Human Resource Officer	Private Organization
53	Hasil Higher Secondary School	1999	Jamalpur Sadar	Institution Head	Private Organization
54	Transcom Beverage Ltd. (Pepsico)	1986	Agrabad, Chattogram	Department Head	Private Organization
55	Mutual Trust Agent Banking	2021	Sithil Bazar, Hathazari, Chattogram	Branch Head	Private Organization
56	Proshanti School & Cadet Academy	2013	Melandoho, Jamalpur	Institution Head	Private Organization
57	Lab Science Diagnostic	2001	153/1, Green Road, Panthapath	Human Resource Officer	Private Organization
58	Shakti Foundation	1994	8 No. Shahid Faruk Road, West Jatrabari, Dhaka	Project Director/ Manager	NGO/Trust/Foundation/Microfinance Institutions
59	Meghna Group Of Industries	1976	Houe No:15, Road: 34, Gulshan, Dhaka	Project Director/ Manager	Private Organization
60	Al Madina Rorkha Bazar	2010	L-4, B-D, Basundhara City	Project Director/ Manager	Private Organization

61	Muktijoddha College	1995	Ruppur, Rupganj, Jessore	Institution Head	Private Organization
62	Rasel Sir Academy Care	2023	Siddheshwari Joykoli Mondirer Pashe	Institution Head	Private Organization
63	Afiluddin Degree College	2001	Nadaron, Jessore	Others	Private Organization
64	Aci Motors	2005	Jessore City Bypass, Jessore	Others	Private Organization
65	Picaso Coaching Centre	2000	Railgate, Jessore	Others	Private Organization
66	Picaso Coaching Centre	2000	Railgate, Jessore	Others	Private Organization
67	Jessore Collectorate School	2010	Ms Ali Road, Jessore	Others	Private Organization
68	Tecno Drag	2001	Shelkopa, Jhenidah	Branch Head	Private Organization
69	Jakir Mobile Centre	2005	5 No. Zilla Parishad Market, Jhenidah	Institution Head	Private Enterprise
70	Islamia Bank Agent Bank	2022	Hawragram, Shelkopa	Others	Private Organization
71	Ab Bank	2019	Vatoi Bazar, Shailkopa, Jhenidah	Branch Head	Private Organization
72	Technical Training Centre	1967	Sapura Rajshahi	Project Director/ Manager	Government Organization
73	Reneta Pharmaceutical Ltd	1993	Nowhata, Rajshahi	Branch Head	Private Enterprise
74	Learning Point School & College	1994	Bangikata, Fulbaria, Mymensingh	Institution Head	Private Organization
75	Marcel Company Ltd		Sathmatha, Bagura	Branch Head	Private Enterprise
76	Mirpur Dakkhinpara Govt. Primary School	1979	Mirpur Mohasthan Shibganj, Bagura	Others	Government Organization
77	Grameen Seba Unnayan	2020	Chokkola Godagari Rajshahi	Project Director/ Manager	NGO/Trust/Foundation/Microfinance Institutions
78	Trusted It Institute	2015	Manikganj	Institution Head	Private Enterprise
79	Satarn Textile Ltd	2010	Gazipura-27, Gazipur	Others	Private Organization
80	Jannat Industries Bd.	2010	Nabinagar, Savar	Human Resource Officer	Private Organization
81	Burger King	2016	Sony Square, Mirpur-2	Branch Head	Private Organization
82	Bcc Degree College, Manikganj	2000	Manikganj	Branch Head	Private Organization
83	Sapla Bahomukhi Samobay Somity		Ramganj, Chadpur	Institution Head	Private Enterprise
84	Haziganj Model Govt. College	1987	Haziganj, Chadpur	Department Head	Government Organization
85	Al-Haz Dr. Anwar Ali Govt. Primary School	2002	Pubail Gazipur	Others	Government Organization
86	Ghughurkandi Nayapara Govt. Primary School	2013	Ghughurkandi, Nayapara, Sherpur	Institution Head	Government Organization
87	Julekha Central School	2001	Motherganj, Jamalpur	Institution Head	Private Organization
88	Sq Group	2003	Mawna Chowrasta	Project Director/ Manager	Private Organization
89	Abu Musa It Centre	2020	Mymensingh Sadar	Institution Head	Private Organization
90	Zilla Lawyers Society	1861	Mymensingh, Sadar	Institution Head	Private Organization
91	Rahela Hajrat Model School	2013	Trishal, Mymensingh	Institution Head	Private Organization
92	World Vision Bangladesh	1950	Fulbaria, Mymensingh	Branch Head	NGO/Trust/Foundation/Microfinance Institutions
93	Bank Asia (Agent Bank)	2014	Fulbaria Mymensingh	Branch Head	Private Organization
94	Anik Computer & Networking	2012	Anondo Mohon College Road, Mymensingh	Institution Head	Private Organization
95	No Name	2017	University Road, Mymensingh	Institution Head	Others
96	Techno Drugs Ltd	1996	J.K Tower, 31, Segunbagicha, Dhaka-1000	Project Director/ Manager	Private Organization
97	Shovon Group Of Companies	1991	West Masdari, Fatullah, Narayanganj	Branch Head	Private Enterprise
98	Life Traders	2016	Latif Real Estate, Basila Road, Mohammadpur	Institution Head	Private Organization

99	Data Analysis Technical Assistant	1995	Mohammadpur 8/4, Lalmatia	Department Head	Private Organization
100	The Flowers K.G & High School	1979	Court Road, Mowlovibazar-3200	Institution Head	Private Organization
101	Brac		Jaintapur	Project Director/ Manager	NGO/Trust/Foundation/Microfinance Institutions
102	Luaiuni Cha Bagan Primary School	2011	Kulaura, Mowlovibazar	Institution Head	Government Organization
103	Brac Bank		Sreemangal, Mowlovibazar	Branch Head	NGO/Trust/Foundation/Microfinance Institutions
104	Pran	1981	Upshohor G Block	Branch Head	Private Enterprise
105	Gobindaganj Girls High School	2001	Chatak, Sunamganj	Others	Private Organization
106	Keya Group	1996	Abmerkhana, Sylhet	Project Director/ Manager	Private Enterprise
107	Lauta Govt. Primary School	1803	Bianibazar, Sylhet	Others	Government Organization

Appendix B: Survey Questionnaires

Interview Number	

Bangladesh Institute of Development Studies (BIDS)

E-17 Agargaon, Sher-e-Bangla Nagar, Dhaka-1207

Follow-up Tracer Study on Graduates of Tertiary-Level Colleges-2023

Survey Questionnaire for Graduates of National University

Assalamu-alaikum, I am from the Bangladesh Institute of Development Studies (BIDS), Dhaka. Currently, BIDS is conducting the follow-up Tracer Study on Graduates of Tertiary-Level Colleges which is being implemented in National University-affiliated colleges throughout the country.

One of the objectives of the project is to know and analyse the condition and opinions of the graduates of NU regarding teaching-learning environment of the NU colleges. In this perspective, you have been selected following a sampling frame designed by the researcher. Your responses and opinions will also be valuable for understanding labour market relevance of our NU graduates and the existing NU education system.

The information that you provide in this survey will be treated strictly as confidential and will be used for research purposes only. The survey will take around 30 minutes to complete.

Thank you in advance for your kind cooperation.

Section A1: Respondent's Institutional Identification [To be filled up by the Field Investigator]

Question no.	Question	Answer	Use Code
A1.01	Division		Use division code
A1.02	District		Use district code
A1.03	Location		Rural=1 Urban=2 Suburban=3
A1.04	College Name		Use college code
A1.05	Type of Management		1=Government College 2=Non-Government College
A1.06	NU Registration Number		Use code
A1.07	Faculty		Use code
A1.08	Department		Use code

Section A2: Information of the Data Processing Team (To be filled up by the enumerators)

Question no.	Designation	Name	ID	Signature	Date
A2.01	Data Collector				
A2.02	Field Supervisor				

Section A3: Date and Time of Interview (To be filled up by the enumerators)

Question no.	Question	Date of Interview		
		Day	**Month**	**Year**
A3.01	Date of Interview			2023
A3.02	Starting time of the Interview			

SECTION B1: BASIC PROFILE [Use code where necessary]

SL	Question	Code	Response
B1.1	Full Name of the Respondent		
B1.2	Gender		Male =1 Female =2 Transgender =3
B1.3	Age (in complete years)	……years	
B1.4	Marital Status		Married =1 Unmarried =2 Divorced =3 Separated =4 Widowed =5
B1.5	If married, do you have any children?		Yes =1 No =2 **[If no, skip to B1.7]**
B1.6	If you have children, how many children do you have?	Number …….	
B1.7	If single, then do you have someone special in your life?	Yes=1 No=2 No comment=3	
B1.8	Email Address		
B1.9	Contact Number		
B1.10	Current Address		

SECTION B2: ACADEMIC PROFILE

Question no.	Questions	Code	Response
B2.1	Admission session of college		
B2.2	What is the highest level of degree completed at college?		Bachelor in Science=1 Bachelor in Social Science=2, Bachelor in Arts=3, Bachelor in Business Administration/Commerce=4, Master in Science=5, Master in Social Science=6, Master in Arts=7, Master in Business Administration/Commerce=8, Others (specify) =99 _____
B2.3	Passing year of Bachelor (honour's) degree	Exam held on (year):	
B2.4		Result published on (year):	
B2.5	What was your discipline in Undergraduate (Bachelor/Honour's) level?		Bachelor in Science=1, Bachelor in Social Science=2, Bachelor in Arts=3, Bachelor in Business Administration/Commerce=4, Others (specify) =99 ----------
B2.6	What was the final CGPA that you achieved in your undergraduate program (i.e., Bachelor degree)?	CGPA obtained:	
B2.7		In a scale of:	
Skip to next section if "Bachelor" is the highest degree			
B2.8	Passing year of Master degree:	Exam held on (year):	
B2.9		Result published on (year):	
B2.10	What was your discipline in Master's level?		Master in Science=1, Master in Social Science=2, Master in Arts=3, Master in Business Administration/Commerce=4, Others (specify)=99 _____
B2.11	What was the final CGPA that you achieved in your master's program?	CGPA obtained:	
B2.12		In a scale of:	

SECTION C: PRIOR EDUCATION & EXPERIENCE [Use code where necessary]

Question no.	Questions	Answer	Code
C1	What was the type of your secondary education (SSC) degree?		SSC=1, SSC (Vocational)=2, Dakhil=3, Diploma=4, Other (specify) =99 ……
C2	In which stream, did you obtain your secondary education (SSC) degree?		Humanities=1, Science=2, Commerce=3, No specific stream=4, Others (please specify) =99 ----------
C3.01	What was your GPA in secondary level (SSC)?	GPA obtained:	
C3.02		In scale:	
C4	In which District was your secondary school (from where you passed SSC) located?		Use district code
C5	What was the type of your higher secondary (HSC) degree?		HSC=1, HSC (Vocational)=2, Alim=3, Diploma=4, Other (specify)=99 _____
C6	In which stream/branch/division did you obtain your higher secondary (HSC) degree?		Humanities=1, Science=2, Commerce=3, No specific stream=4, Other (specify) =99 _____
C7.01	What was your final GPA at higher secondary level (HSC)?	GPA obtained:	
C7.02		In a scale of:	
C8	In which District was your higher secondary school located?		Use district code
C9	Did you have any work experience before coming to the college?		Yes=1, No=2 **(If No, Skip to Section D)**
C10	Duration of that work (in month)	---------- months	
C11	What kind of work experience was that?		Full-time work=1, Part-time work=2,

			Temporary/seasonal work=3, Family business=4, Self-employment=5, Others (Please Specify) =99 ……
C12	Was your previous work experience related to your study subject at the college?		Not relevant at all=1 Somewhat relevant=2 Relevant=3 Very relevant=4
C13	Was that a paid job?		Yes=1 No=2
C14	If yes, then how much did you get paid per month?	……. Taka	

C15. How relevant are the following sentences as your reasons for getting involved in work before joining undergraduate studies?

Question no.	**Reasons for getting involved in work before joining undergraduate studies**	**<u>Scale</u> Not relevant at all =1 Somewhat relevant =2 Relevant=3 Very relevant =4**
C15.1	I needed to earn money at that time	
C15.2	I could not afford higher education at that time	
C15.3	I found working more interesting than pursuing higher education	
C15.4	My family did not allow me to pursue higher education at that time	
C15.5	My family persuaded me to be involved in family business/family work	
C15.6	I could not pursue education due to my health conditions (sickness/ physical disability etc.)	
C15.7	I could not pursue education for family crisis (loss of family members, migration of family etc.)	

SECTION D: EDUCATION EXPERIENCE AT COLLEGE

D1. Below is listed some reasons for studying in a college, all of which may or may not apply to you. Please mention the codes for the top 3 most important reasons that may apply to you, from most to least important.

Question no.	Answer (Top3)	Code
D1.01		To get a degree=1 To get a good job=2 To increase social status=3 To improve inherent quality=4 To marry well=5 Others (please mention) =6…….
D1.02		
D1.03		

D2. Please provide your opinion about the college you have graduated from [please note that the graduate college should be our sample college]

Question no.	Question	**Level of Agreement** Fully disagree=1 Somewhat disagree=2 Agree=3 Fully agree=4
D2.01	Overall, the education provided by the college is relevant to what we need to know to do our work	
D2.02	ICT (Information and Communications Technology) skills that I learned at the college provided a good basis for computer skills for my work	
D2.03	If I were admitted to a different college with the same subject, the training and skill acquired from that college would have contributed more effectively to carry on my present responsibilities	

SECTION E: WORK-RELATED INFORMATION

Question no.	Question	Answer/code	
E1.01	In the last 7 (seven) days did you work for at least 1 (one) hour in return for pay or profit or to produce goods and services for your own household?		Yes=1 No=2
E1.02	How many hours (in total) did you work in the last 7 days?	----------hour(s)	
E2	In the last 7 days did you have a job or business for pay or profit or in which you produce goods and services for your own household where you were absent temporarily and to which you will return to work?		Yes=1 No=2

Note:
If the answers are "No" for both questions (E1.01 & E2), then move to the next section E3.
If the answer is "Yes" for any of the two questions (E1 & E2), then move to the next section E4.

Section E3: Information on the Graduates Who are Unemployed and Not in the Labor Force

Question no.	Question	Answer	Code
E3.1	In the last 30 (thirty) days did you look for work in return for pay or profit or the household's own consumption?		Yes=1 No=2 **If Yes, answer the next question.** **If no, go to E3.3**
E3.2	What was the main mode of looking for work? **[After answering this, go to question E3.4]**		Government employment center =1 Private employer=2 Private employment center=3, Directly applied to factory/farm=4 Friends/relatives=5 Newspaper advertisement=6 Internet=7 Exploring opportunities to set up own firm / business=8, Waited on the street to be recruited for casual work=9 Other (please specify) =99……

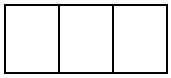
E3.3	Why did not you look for any job/business in last 30 (thirty) days?		Waiting to join the workplace=1 No jobs available=2 Off-season=3 Waiting for setting self-business=4 Illness/injury/disability=5 In school/training=6 Housework/family work=7 Starting of study=8 Dissatisfaction at work=9 No desire to work=10 Other (please specify) =99 ……
E3.4	Were you available to work during the last 7 (seven) days if you had gotten any kind of opportunity?		Yes=1 No=2 **If Yes, answer the next question E3.5. Otherwise (If No), answer E3.6**
E3.5	How long have you been seeking and been available to work? **[After answering this, go to E3.7]**		<1 month=1 1-6 months=2 7-12 months=3 1-2 years=4 2+ years=5
E3.6	What was the main reason for you not being available to work in the last 7 days?		In school/training=1 Housework/family work=2 Illness/injury/disability=3 Retired, too old for work=4 Too young=5 Off-season=6 Not interested to work=7 Other (please specify) =99 ……
E3.7	In the last 30 (thirty) days, how many hours did you spend for your own household activities? (Applicable for all)	…… Hour on an average daily	

E3.7.1	Household work (cooking, washing, cleaning etc.)	…… Hour on an average daily
E3.7.2	Nurturing or looking after (children, elderly, sick, disabled)	…… Hour on an average daily
E3.7.3	Education of children or other family members	…… Hour on an average daily
E3.7.4	Ancillary activities (paying bills, electrical repairs, and purchases etc.)	…… Hour on an average daily
E3.7.5	Others (please mention)	…… Hour on an average daily

Question no.	Question	Answer	Code
E3.8	How frequently do you search for a job?		Almost daily=1 Several times in a week=2 Once in a week=3 Once in a fortnight (15 days) =4 Once in a month=5 Not specified, sporadically=6
E3.9	What type of job are you expecting? [multiple answers applicable]		Government Full-time job=1 Private full-time job=2 Part-time Job=3 Freelancing=4 Business/entrepreneur (full-time)=5 Business/entrepreneur (part-time)=6 Agriculture/farming=7 Overseas job=8 Other (specify)=99 ……
E3.10	Which one best explains the sector/industry of your expected job?		Agriculture, forestry, and fishing=1 Construction=2 Manufacturing=3 Garment=4 Food processing=5 Wholesale and retail trade=6 Transportation=7 Restaurant and food services=8 Information and communication=9 Financial and insurance activities=10 Real estate activities=11 Professional, scientific, and technical activities=12 Education=13 Health=14 Social work/NGOs =15 Arts, entertainment, and recreation=16 E-commerce=17

			Other (specify)=99 ……
E3.11	How many times did you apply for jobs after Honor's?	…….. **Times**	
E3.12	How many times did you apply for jobs after Masters?	…….. **Times**	
E3.13	How many job exams/interviews did you attend after Honor's?	…….. **Times**	
E3.14	How many job exams/interviews did you attend after Masters?	…….. **Times**	
E3.15	Have you ever not joined to a job even after getting a valid job offer?		Yes=1 No=2 **[If no, then go to E3.17]**
E3.16	If E3.15= Yes, why did you not join? [Multiple responses possible]	 **(Top 3)**	Lower wage=1 Location of the workplace=2 Inapt terms and conditions of work=3 The work was not relevant to my graduate studies=4 Did not get any good job offer from any good company=5 Did not get any job offer, for which I would feel encouraged=6 Other (please specify) =99 ……
E3.17	Have you ever been involved in any work after graduating from this college?		Yes=1 No=2 **[If no go to E3.22]**
E3.18	What type of job/work it was?		Full time paid job=1 Part-time paid job=2 Self-Employment by own initiative=3 Involvement in an already established family business/enterprise=4 Involvement in an already established business/enterprise run by an individual other than family=5 Other (please specify) =99 ……
E3.19	If your first job was a full-time paid job **(E3.18=1)** or a part-time paid job **(E3.18 =2),** why did you leave that job?		Employer decided to let me go=1 I quit for low salary=2 It was end of contract=3 I was not interested=4 Due to unfavorable working condition (working hour/duty station) =5 Lack of career progression=6 Lack of job satisfaction=7

			Wanted a new challenge=8 Retrenched/dismissed=9 Found employment in my area of specialization=10 Unsuitable location=11 Other (please specify) =99 ……
E3.20	If you were self-employed by own initiative **(E3.18=3)** or were involved in the already established family business/enterprise **(E3.18=4)** or were involved in an already established business/enterprise run by a non-family individual **(E3.18=5),** why did you leave the first business?		I felt that I could earn more profit by utilizing my expertise properly=1, The business was owned by others, and I wanted to start my own business=2, Because I saw other good business opportunities=3, Invited by other partner=4, Wanted to start business utilizing my academic skill=5, Other (please specify) =99 ……
E3.21	What were your monthly earnings from your previous/last job or business?	…….. Taka	
E3.22	At present, do you have any monthly income?		Yes=1 No=2 **[If no go to E3.25]**
E3.23	Income source		House rent=1 Land lease=2 Machinery/vehicle rental=3 Pension or allowance=4 Income from saving account/insurance=5 Others (please specify)=99 ……
E3.24	Monthly Income (Total Amount in taka)	----------Taka	
E3.24.1	House rent	----------Taka	
E3.24.2	Land lease	----------Taka	
E3.24.3	Machinery/vehicle rental	----------Taka	
E3.24.4	Pension or allowance	----------Taka	
E3.24.5	Income from saving account/insurance	----------Taka	
E3.24.6	Others (please specify)	----------Taka	
E3.25	Are you planning to look for work in the foreseeable future?		Yes=1, I would like to, if the situation changes= 2, Most likely no=3

E3.26	If E3.25=3 (you do not want to look for jobs anymore), why is that?		I have acquired a substantial amount of family wealth and asset=1 I only want to stay at home and look after my family=2 I don't think I can find any work here=3 My family does not like me working=4 Other (please specify) =99 ……
E3.27	If E3.25=1 or 2, what is your future plan?		Want to start up my own business=1, Want to find employment in other companies=2, Want to go back to full-time study=3, Want to get training/ complete any course=4, Other (please specify) =99 ……
E3.28	Would you like to have any training opportunity to improve your skills?		Yes=1 No=2 **[If the answer is No, skip to E3.31]**
E3.29	If E3.28=Yes, what kinds of training would you like to have? [Multiple responses possible]	 **(Top 3)**	Short-term course (1-3 months) =1, Mid-term course (4-6 months) =2, Long-term course (more than 6 months) =3, Professional certification=4, Other (please specify) =99 ……
E3.30	In which area do you want to have the additional training most?		Communications=1, Information Communication and Technology (ICT)=2, Technical/Vocational Training=3, Business Management=4, Other (please specify) =99 ……
E3.31	How are you passing time, as you do not have any work now?		I am seeking for opportunities of higher studies=1 I am preparing myself for going abroad=2 I am looking for a job=3 I am helping my family members with household chores=4 I am involved in some volunteering activities=5 Other (please specify) =99

			……

Section E4: Information on the Graduates Who are Working or in the Labour Force

Question no.	Question	Answer	Code
E4.	Which of the following best describes your current working status? [Multiple responses possible]		Salaried employment=1 Self-employed /Entrepreneur/Businessman=2 Graduates who are studying full-time or part time=3

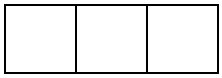
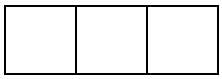
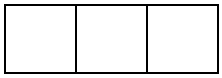
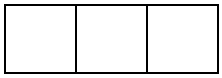
Note:
If the answer to E4=1, move to Section E5 (Then Skip to Section F)
If the answer to E4=2, move to Section E6 (Then Skip to Section F)
If the answer to E4=3, move to Section E7 (Then Skip to Section F)

SECTION E5: INFORMATION ON THE GRADUATES WHO HAVE SALARIED EMPLOYMENT

Question no.	Question	Answer	Code
E5.1	Which of the following best describes your current job type?		Only working full-time =1, Working full-time and part-time =2, Working part-time and seeking full-time job=3, Working part-time and not seeking any full-time job =4, Working several part-time jobs and not seeking any full-time job = 5, Others (please mention) ……=6
E5.2	What is the total length of your work experience as a paid employee?	**…….. Months**	
E5.3	When did you join your first job?		After passing HSC but before getting into undergraduate college While studying in undergraduate college=2 After completing graduation level=3 While studying in postgraduate college=4 After completing postgraduate=5
E5.4	Mention the month and year of your first job	**E5.4.1 Month ……** **E5.4.2 Year ……..**	

E5.5	Title of your position in the first job		
E5.6	Monthly Salary of the first job	**…….. Taka**	
E5.7	How long had you been working for this employer?	**…….. Months**	
E5.8	Which industry did your then employment is related to?		Agriculture, forestry, and fishing=1 Construction=2 Manufacturing=3 Garment=4 Food processing=5 Wholesale and retail trade=6 Transportation=7 Restaurant and food services=8 Information and communication=9 Financial and insurance activities=10 Real estate activities=11 Professional, scientific and technical activities=12 Education=13 Health=14 Social work/NGOs =15 Arts, entertainment and recreation=16 E-commerce=17 Other (specify)=99 ……
E5.9	Type of the first employer		Government=1 Autonomous=2 Private Enterprise=3 Multinational Company=4 NGO/Trust/Foundation=5 Unofficial=6 Other (specify)=99 ……
Information on the Current Job **Note: If your current job is your first one, skip to E5.16**			
E5.10	When did you join your current job/main part-time job? [Major job will be selected based on income]		After passing HSC but before getting into undergraduate college =1 While studying in undergraduate college=2 After completing graduation level=3 While studying in postgraduate college=4 After completing postgraduate=5
E5.11	Mention the duration (month and year of your current job)	**E5.4.1 Month ……** **E5.4.2 Year ……...**	

E5.12	Title of your current position		
E5.13	How long have you been working for this employer?	**…….. Months**	
E5.14	Which industry does your current employment is related to?		Agriculture, forestry, and fishing=1 Construction=2 Manufacturing=3 Garment=4 Food processing=5 Wholesale and retail trade=6 Transportation=7 Restaurant and food services=8 Information and communication=9 Financial and insurance activities=10 Real estate activities=11 Professional, scientific and technical activities=12 Education=13 Health=14 Social work/NGOs =15 Arts, entertainment, and recreation=16 E-commerce=17 Other (specify)=99 ……
E5.15	Type of current employer		Government=1 Autonomous=2 Private Enterprise=3 Multinational Company=4 NGO/Trust/Foundation=5 Unofficial/Informal=6 Other (Please specify)=99 ……
E5.16	How many employers/job interviews you had attended to get the current job offer?	**…….. (Mention Numbers)**	
E5.17	Name of your current employer/enterprise		
E5.18	Size of the current employer organization (how many staff does your employer institute have)?		1-10 staffs=1 11-50 staffs=2 51-100 staffs=3 101-250 staffs=4 251-400 staffs=5 401-500 staffs=6 501-700 staffs=7 701-1000 staffs=8 More than 1000 staffs=9

E5.19	What is the contract type of your current employment?		Full-time open employment=1 Fixed-term job =2 Short-time contractual job (<1 year) =3 Long term contractual job (>1 year) =4 Part-time=5 Daily basis=6 Other (please specify)=99 ……
E5.20	Do you think you are employed in the area of your academic specialization?		Yes=1 No=2
E5.21	If E5.20=2, then why are you not working in your area of specialization? [Multiple answers possible]	 **(Top 3)**	Lack of relevant Job=1 Lack of career progression=2 Poor remuneration=3 Lack of job satisfaction=4 Other (please specify)=99 ……
E5.22	Do you prefer to be employed in the area of your academic specialization?		Yes=1 No=2 **(If Yes, skip to E5.24)**
E5.23	Why do you not prefer to work in your area of specialization? [Multiple answers possible] **(Then answer E5.24)**	 **(Top 3)**	My academic performance (results) are not up to mark to get a good job in my area of specialization=1 I have no interest in working in this area as selecting this academic stream had never been my preference=2 I think I can earn more from other employment opportunities=3 I think that my career progression in this area would not be up to mark =4 My area of specialization does not offer any lucrative employment=5 Other (specify)=99 ……
E5.24	How did you find this employment? [Multiple answers possible]	 **(Top 3)**	Media advertisement/posting=1 Social media/networking=2 Through the college=3 Job fair= 4 Internet job posting=5 Through friends/relatives=6 Other (please specify)=99 ……
E5.25	What is the most important reason for choosing this job? [Multiple answers possible]	 **(Top 3)**	Handsome salary=1 Suitable location=2 Good working condition=3 Reputed organization=4 Most suitable for my educational background=5

			My interest area=6 No other alternatives=7 Job security=8 Good post/designation=9 Other (specify)=99 ……
E5.26	What is the proportion of employees in your company/organization having the same discipline/subject as yours?	**…….. Percent (%)**	
E5.27	On average, how many hours per day do you work?	**…….. Hours**	
E5.28	On average, how many days per week do you work?	**…….. Days**	
E5.39	How much was your starting monthly salary in this institute (in BDT)?	**…….. Taka**	
E5.30	How much is your current monthly salary (in BDT)?	**…….. Taka**	
E5.31	Is your current job the first formal job of your career after graduation?		Yes=1 No=2
E5.32	If you had searched for jobs after your graduation, how many months did it take for you to get one?	**…….. Months**	
E5.33	If you had searched for jobs after your post-graduation, how many months did it take for you to get one?	**…….. Months**	
E5.34	How many job interviews have you attended (including for the current one)?	**…….. (Mention the number)**	
E5.35	How many Jobs did you have till now (including this one)?	**…….. (Mention the number)**	
E5.36	What is the most important reason for leaving the previous job (the job before this one)?	Sought improved wage=1, Sought improved working conditions=2 Needed to change environment=3 Wanted a new challenge=4 Retrenched/dismissed=5	

		Found employment in my area of specialization=6 Unsuitable location=7 Other (specify)=99 ……
E5.37	How much was your salary when you left your last employment?	**…….. Taka**

E5.38 Does your current job provide the following benefits?

Question no.	Type of Expenditure	Yes=1 No=2	Benefits in BDT (if yes)
E5.38.1	Pension benefit		
E5.38.2	Health insurance (complete)		
E5.38.3	Health Insurance (partial)		
E5.38.4	Transport benefit		
E5.38.5	Housing Benefit		
E5.38.6	Other (specify)		

Note: If the graduate has had only one employment (the current one), skip to E5.40

E5.39 Did your first job provide the following benefits?

Question no.	Type of Expenditure	Yes=1 No=2	Monthly Benefits in BDT (if yes)
E5.39.1	Pension benefit		
E5.39.2	Health insurance (complete)		
E5.39.3	Health Insurance (partial)		
E5.39.4	Transport benefit		
E5.39.5	Housing Benefit		
E5.39.6	Other (specify)		

Question no.	Question	Answer	Code
E5.40	Have you got any promotion in this current company/organization?		Yes=1 No=2 **(If no, skip to E5.43)**
E5.41	If yes, how many times?		

E5.42 If E5.40=yes, how much would you agree with the following statements?

Question no.	Factors contributing to promotion	**Scale** **Fully Disagree=1** **Somewhat Disagree=2** **Agree=3** **Fully Agree=4**

E5.42.1	The training provided by my college adequately prepared me to work efficiently to be promoted	
E5.42.2	I participated in some trainings apart from those provided by my college which adequately prepared me to work efficiently to be promoted	
E5.42.3	My own expertise, intellect and hard work contributed to get promotion	

Note: If the graduate has had only one employment (the current one), skip to Section F

Question no.	Question	Answer	Code
E5.43	Had you got any promotion in the previous institute?		Yes=1 No=2 **(If no, skip to Section F)**
E5.44	If yes, how many times?		

E5.45 If E5.43=yes, how much would you agree with the following statements?

Question no.	Factors contributing to promotion	**Scale** **Fully Disagree=1** **Somewhat Disagree=2** **Agree=3** **Fully Agree=4**
E5.45.1	The training provided by my college adequately prepared me to work efficiently to be promoted	
E5.45.2	I participated in some trainings apart from those provided by my college which adequately prepared me to work efficiently to be promoted	
E5.45.3	My own expertise, intellect and hard work contributed to get promotion	

SECTION E6: INFORMATION ON THE GRADUATES WHO ARE SELF-EMPLOYED

Question no.	Questions	Response	Code
E6.1	Did you ever search for a job?		Yes=1 No=2 **[If no, then go to E6.7]**
E6.2	How many months have you searched for a job?	…….. **Months**	
E6.3	How many times did you apply for jobs?	…….. **Times**	
E6.4	How many job interviews did you attend?	…….. **Times**	
E6.5	How many job offers have you received?	…….. **Times**	
E6.6	If you have not joined a job after getting a job offer, why did not you accept the job offer? [Multiple selections allowed, write in order of importance]	☐☐☐ **(Top 3)**	Lower wage=1 Location of the workplace=2 Inapt terms and conditions of work=3 Related work is not relevant to my studies=4 Did not get any good job offer from a good company=5 Did not get any job offer, for which I would feel encouraged=6 Other (please specify) =99 ……
E6.7	Did you start up your own business or joined an already established one?		Opened a new business myself=1 Joined an already established family business=2 Joined an already established business run by non-family individual=3
E6.8	Is this your first job/business after graduating from college?		Yes=1 No=2 **If E6.8= yes, skip to E6.10**
E6.9	If E6.8= No, what was your first job?		Full time paid job=1 Part-time paid job=2 Self-Employment by own initiative=3 Involved in an already established family business/enterprise=4 Involved in an already established business/enterprise run by non-family individual=5 Others (please specify) =99 ……..
E6.10	If your first job was full time paid job (E6.9=1) or part-time paid job	…… **Months**	

	(E6.9=2), then how many months did it take to find the first job after finishing college?		
E6.11	If your first job was full time paid job (E6.9=1) or part-time paid job (E6.9=2), then how many employers have you contacted to get the first job?	…… (**Mention numbers)**	
E6.12	If your first job was full time paid job (E6.9=1) or part-time paid job (E6.9=2), then what was your monthly salary (BDT) in your first job?	……. **Taka**	
E6.13	If you had a job after graduation, what was your most important reason for leaving the job?		Sought improved wage =1 Sought improved working conditions =2 Needed to change environment=3, Wanted a new challenge=4 Retrenched/dismissed=5 Found employment in my area of specialization=6 Unsuitable location=7 Others (please specify) =99 ……..
E6.14	If you were self-employed by own initiative (E6.9=3) or were involved in an already established family business/enterprise (E6.9=4) or were involved in already established business/enterprise run by non-family individual (E6.9=5), then why did you leave the first business?		I felt that I could earn more profit by utilizing my expertise properly=1 The business was owned by others, and I wanted to start my own business=2 Because I saw other good business opportunities =3, Invited by other partner=4, Wanted to start a business utilizing my academic skill =5 Others (please specify) =99 ……..
E6.15	If you were self-employed by own initiative (E6.9=3) or were involved in already established family business/enterprise (E6.9=4) or were involved in already established business/enterprise run by non-family individual (E6.9=5), what was your monthly earning (BDT) from your first self-employment?	……..…. **Taka**	
E6.16	Which industry did your first business belong to?		Agriculture, forestry and fishing=1 Construction=2 Manufacturing=3

			Garment=4 Food processing=5 Wholesale and retail trade=6 Transportation=7 Restaurant and food services=8 Information and communication=9 Financial and insurance activities=10 Real estate activities=11 Professional, scientific and technical activities=12 Education=13 Health=14 Social work/NGOs=15 Arts, entertainment and recreation=16 Others (please specify) =99 ……..
E6.17	Did you receive entrepreneurship/ business start-up skill training?		Yes=1 No=2 **(If no, skip to E6.20)**
E6.18	If yes, who was the organizer of that training?		Private trainer (not institutional) =1 Private training institute=2 Government training center=3 NGO run training centre=4 Others (please specify) =99 ……..
E6.19	How use useful do you think the training was?		Not helpful at all=1 Little helpful=2 Helpful=3 Very helpful=4
E6.20	What is the name of your current institute/employer?		
E6.21	Which industry does your current institute/employer belong to		Agriculture, forestry and fishing=1 Construction=2 Manufacturing=3 Garment=4 Food processing=5 Wholesale and retail trade=6 Transportation=7 Restaurant and food services=8 Information and communication=9 Financial and insurance activities=10 Real estate activities=11

			Professional, scientific and technical activities=12 Education=13 Health=14 Social work/NGOs=15 Arts, entertainment and recreation=16 Others (please specify) =99 ……..
E6.22	For how many months has the business been operating so far?	…… **Months**	
E6.23	How long have you been involved in the current business?	…… **Months**	
E6.24	Why did you decide to start up your own business? [Multiple selections allowed]	☐☐☐ **(Top 3)**	Always wanted to start a business=1 Because I could not find a good employment=2 Because I saw good business opportunities=3 Invited by my partner=4 Others (please specify) =99 ……..
E6.25	How would you describe your position in your current business? [Multiple selections allowed]	☐☐☐ **(Top 3)**	Regular staff=1, Supervisor=2, Administrative staff=3, Manager=4, Institute head=5, Others (please specify) =99 ……..
E6.26	What type of activity do you perform at your workplace?		
E6.27	On average, how much gross profit does the business make every month (in Taka)? (Gross profit = total sales - direct cost)		**Income Code:** Less than 30,000=1 30,001 – 60,000=2 60,001 – 90,000=3 90,001- 1,20,000=4 1,20,001 – 1,50,000=5 1,50,001 – 1,80,000=6 More than 1,80,000=7
E6.28	How much do you earn monthly from this self-employment?	…….….. **Taka**	
E6.29	Did you start the current business with any partners?		Yes=1 No=2 **(If no, skip to E6.31)**
E6.30	Who is your co-founder?		Family member=1 Relatives=2 Friend=3 Former co-workers=4 Others (please specify) =99

			……..
E6.31	Did you get any funding from external sources?		Yes=1 No, because large funding was not necessary for my business=2 No, because my partner and I were able to finance all the necessary investment with our own money=3 No, for another reason=4
E6.32	If E6.31= yes, who provided initial funding to your business? [Multiple selections allowed]	☐☐☐ **(Top 3)**	My family or relatives=1 Family or relatives of my partner=2 Private bank=3 Public bank=4 Individuals who know me/us through family or personal network=5 Other business stakeholders=6 Government special program for entrepreneurs=7 NGO programs=8 Others (please specify) =99 ……..
E6.33	If E6.31 = yes, approximately how much funding did you receive from external sources to start up your business (in Taka)?	…….…… **Taka**	
E6.34	How many staff do you have in your business including yourself?	…….…… **(Mention numbers)**	
E6.35	What is the proportion of employees in your institutions having the same discipline/subject as yours?	_____ percent (%)	
E6.36	On average, how many hours per day do you work?	_____ hours	
E6.37	On average, how many days per week do you work?	_____ days	
E6.38	Are you working in the area of your academic specialization?		Yes=1 No=2 **(If yes, skip to E6.40)**
E6.39	Why are you not working in your area of specialization?		Lack of career=1 Poor remuneration=2 Poor working conditions=3 Lack of job satisfaction=4 Others (please specify) =99 ……..
E6.40	Do you prefer to be employed in the area of your academic specialization?		Yes=1 No=2 **(If yes, skip to E6.42)**
E6.41	Why do you not prefer to work in your area of specialization?		My academic performance (results) is not up to mark to get

			a good job in my area of specialization=1 I do not have the interest to work in this area as selecting this academic stream had never been my preference=2 I think can earn more from other employment opportunities=3 I think that my career progression in this area would not be up to mark=4 My area of specialization does not offer any lucrative employment=5 Others (please specify) =99 ……..
E6.42	What is your future plan?		Continue to work in this business=1, Want to start up my own business=2, Want to find employment in other companies=3, Want to go back to full-time study=4, Others (please specify) =99 ……..

E6.43 Looking back, how much would you agree with the following statements on your experiences on starting your own business?

Question no.	**Statement**	**<u>Agreement Scale</u> Fully Disagree=1 Somewhat Disagree=2 Agree=3 Fully Agree=4**
E6.43.1	I had adequate knowledge and skills needed to start a business	
E6.43.2	The knowledge and skills I gained from college was useful in starting my business	
E6.43.3	The networks I was exposed to at college supported me to start my own business	
E6.43.4	Access to funds was a big challenge	

SECTION E7: INFORMATION ON THE GRADUATES WHO ARE STUDYING FULL-TIME OR PART-TIME

Question no.	Questions	Response	Code
E7.1	What is the type of training/education that you are undertaking?		PhD=1 M Phil=2 Master program=3, Short-term technical training=4, Professional training=5, Others (please specify) =99 ……..
E7.2	Did you ever search for a job?		Yes=1 No=2 **(Skip to question E7.5)**
E7.3	Did you receive any job offer?		Yes=1 No=2
E7.4	If you had got a job offer, why did not you accept any job offer?		Lower wage=1 Location of the workplace=2 Inapt terms and conditions of work=3 Related work is not relevant to my studies=4 Duty station was far away from my place=5 Duty station not being in expected location=6 Did not get any good job offer from a good company =7 Did not get any job offer, for which I would feel encouraged=8 Other (specify)=99 ……..
E7.5	Why did you decide to study further after getting a graduate degree?		My parents recommended=1 My friends encouraged me=2 An undergraduate degree would be inadequate in finding a job=3 I will get a better job if I have a higher degree=4 I needed additional technical skills to look for a better job=5 Other (specify)=99 ……..
E7.6	Is your current study related to your training at the college?		Not related at all=1 Not so related=2 Somewhat related=3 Very related=4
E7.7	Which one of the following subjects is closest to what you are studying now?		Business & Management =1 Economics, Finance =2 Computing =3 Law =4 Design, Graphic Design =5 Education, Teaching =6

			Engineering, Civil Works, Architecture= 7 English, Language =8 Environment, Health, Safety, Nursing =9 Anthropology, Cultural Studies, History=10 Natural Science (Physics, Chemistry, Biology) = 11 Garment, Glass and Ceramics= 12 Pharmacy, Pharmaceutical and Clinical Sciences= 13 Fine Art, Drama and Music= 14 Journalism, Mass Media=15 Other Social Sciences= 16 Sport and Exercise Sciences= 17 Tourism= 18 International Relations, Social & Economic Development= 19 Other (specify)=99 ……..
E7.8	Are you taking up any part-time work now?		Yes=1 No=2 **(If no, skip to E7.11)**
E7.9	What is the type of your job		Tutoring by private initiative=1 Part-time salaried employee=2 Part-time non-paid voluntary work=3 Family Business=4 Self-administrative business=5 Other (specify)=99 ……..
E7.10	Approximately how much are you earning per month (in Taka)?	…….. **Taka**	
E7.11	Have you ever been involved in any work after graduating from your college?		Yes=1 No=2 **(Skip to question E7.16)**
E7.12	If yes, what type of job/work it was?		Full time paid job=1 Part-time salaried employee=2 Part-time non-paid voluntary work=3 Family Business=4 Self-administrative business=5 Tutoring by private initiative= 6 Other (specify)=99 ……..
E7.13	If your first job was full time paid job (**E7.12=1**) or part-time salaried job (**E7.12=2**), or part-time non-paid voluntary job (**E7.12=3**) or, tutoring by private initiative (**E7.12=6**) then why did you leave that job?		Sought improved wage =1 Sought improved working conditions =2 Needed to change environment=3 Wanted a new challenge=4 Retrenched/dismissed=5 Wanted to find employment in my area of specialization=6 Unsuitable location=7 wanted to start my own business=8

			Other (specify)=99 ……..
E7.14	If you were involved into family business **(E7.12=4)** or were involved in self-administered business **(E7.12=5),** then why did you leave the first business?		I felt that I could earn more profit by utilizing my expertise properly=1 The business was owned by others, and I wanted to start my own business=2 Because I saw other good business opportunities =3, Invited by other partner=4, Wanted to start business utilizing my academic skill =5 Other (specify)=99 ……..
E7.15	What was your monthly earnings from your previous job?	…….…… **Taka**	
E7.16	What is your future plan?		Continue to work in this business=1 Want to start up my own business=2, Want to find full-time employment in any enterprise/companies=3, Want to find part-time employment in any enterprise/companies=4 Want to go back to full-time study=5, Other (specify)=99 ……..

SECTION F: SUGGESTIONS FROM GRADUATES (applicable for all)

F1	Will you recommend the course (Honor's/Master's) you studied in your college to others?		Yes=1 No=2 Don't Know=3
F2	Will you recommend others to study the subject that you graduated from?		Yes=1 No=2 Don't Know=3

SECTION G: ON-THE-JOB TRAINING AND OTHER TRAINING EXPERIENCE (Applicable for all)

Question no.	Question	Answer	Code
G1	Do you have any additional skills training (other than college degree)?		Yes, I got it before joining college =1 Yes, I got it after leaving college =2 Yes, I got it while in college =3 No=4 **If no, skip to G5**
G2	Who was the provider of the training?		Private training institute=1 Public training institute =2 NGO run training=3 Employer =4 Others (specify) = 99

			…….
G3	If G1=1, 2 or 3, then what type of training?		Communications=1 Information Communication & Technology (ICT)=2 Technical/Vocational Training in a trade=3 Business Management =4 Others (specify) = 99 _____
G4	About for how long it continued?	……. weeks	
G5	Do you have any vision about further training and education to acquire for your career development?		Yes=1 No=2
G6	If G5=Yes, What kinds of training/education do you want in the near future?		Communications=1 Information Communication & Technology (ICT)=2 Technical/Vocational Training in a trade=3 Business Management =4 Others (specify) = 99 ……_____

SECTION H: JOB SEARCH STRATEGIES & JOB SEARCH SUPPORT AT COLLEGE (applicable for all)

H1. Which of the following job search activities did you try when searching for work? Please select all that apply. [Multiple selections allowed]

Question no.	Job Search Strategies	Yes=1 No=2
H1.01	Used employment support service of the college	
H1.02	Job fair	
H1.03	Social media (Facebook, LinkedIn, etc.)	
H1.04	Applied to a job opening through internet	
H1.05	Job sites	
H1.06	Applied to job opening advertisement in newspapers	
H1.07	Contacted employers directly	
H1.08	Career club membership	
H1.09	Other social and cultural clubs	
H1.10	Alumni association	
H1.11	People from my village/town	

H1.12	Family members	
H1.13	Relatives/ Friends	
H1.14	Political person	
H1.15	Other (please specify)	

Question no.	Questions	Answer	Code
H2	Did your college offer any job search support?		Yes=1, No=2 **(If no, go to Section I)**
H3	If your college offer any job search support then, what kind of job search support service did you receive? [Multiple selections allowed]	☐☐☐ **(Top 3)**	Information about job openings=1 Job search skills training=2 Career counselling=3 Providing references for recruitment=4 Others (specify) = 99 …….....
H4	How frequent did you benefit from such services during your job search activities?		Never=1 Rarely=2 Sometimes=3 Almost all the time=4
H5	How are you satisfied with the services you received?		Very Dissatisfied =1, Dissatisfied =2, Somewhat satisfied =3, Very satisfied =4, Don't know =5, No comments =99

Section I: Extracurricular Activities and Future Aspiration

Question no	Question	Answer	Code
I1	Are you involved in any extracurricular activities in or outside the college (e.g., debating, sports and cultural activities, student council etc.)?		Yes=1 No=2 **[If no=2, go to I3]**
I2	If yes, then received any award or certificate?		Yes=1 No=2
I3	How optimistic are you about the future?		Not optimistic at all=1 Somewhat optimistic=2 Careless about the future=3

			Optimistic/Hopeful=4 Very optimistic=5
I4	How do you think your life will be compared to your parents?		Very good=1 Good=2 Remain the same=3 Bad=4 Very bad=5

Section J: Family Background (Applicable for all)

We are aware that the following information are personal and sensitive, but we ensure you that this information will be kept strictly confidential and will be used only for research purpose. (Please write down the answer/ use tick mark where applicable)

Question no.	Question	Code	Description of Codes
J.01	Age of father or main guardian (in years)		
J.02	Father's education/Main guardian's education (*Highest level completed)*	1	No institutional education
		2	Primary education
		3	Secondary or equivalent
		4	Higher secondary or equivalent
		5	Bachelor or equivalent
		6	Masters or equivalent
		7	MPhil/ PhD
		8	Others (please specify) …….
J.03	Father/ principal guardian's profession (For a better understanding of the code feel free to take help from the data collector in the class)	1	Professional (Doctor, Lawyer, Engineer, Teacher)
		2	Government employee
		3	Private sector employee (including multinational companies)
		4	Autonomous institution employee
		5	Bank/Insurance institution employee
		6	NGO/Trust/Foundation employee
		7	Business (Large, Medium, Micro and Cottage Industries)
		8	Self Employed Activities (Shop, Rickshaw Driving, Van Driving etc.)
		9	Agriculture and agro-based occupations (farmers, fishermen etc.)
		10	Service personnel (nurses, security personnel)
		11	Day labourer
		12	Retired
		13	Others (please specify) …….
J.04	Mother's age (in years)		

J.05	Mother's education (*Highest level completed*)	1	No institutional education
		2	Primary education
		3	Secondary or equivalent
		4	Higher secondary or equivalent
		5	Bachelor or equivalent
		6	Masters or equivalent
		7	MPhil/ PhD
		8	Others (please specify) ……...
J.06	Mother's occupation	1	Housewife
		2	Professional (Doctor, Lawyer, Engineer, Teacher)
		3	Government employee
		4	Private sector employee (including multinational companies)
		5	Autonomous institution employee
		6	Bank/Insurance institution employee
		7	NGO/Trust/Foundation employee
		8	Business (Large, Medium, Micro and Cottage Industries)
		9	Self Employed Activities (Shop, Rickshaw Driving, Van Driving etc.)
		10	Agriculture and agro-based occupations (farmers, fishermen etc.)
		11	Service personnel (nurses, security personnel)
		12	Day labourer
		13	Retired
		14	Others (please specify) …….
J.07	Monthly family income of all the family members	----------Taka	
J.07.01	Full-time employment	----------Taka	
J.07.02	Part-time employment	----------Taka	
J.07.03	Full-time Business/entrepreneur	----------Taka	
J.07.04	Part-time Business/entrepreneur	----------Taka	
J.07.05	Income from Agriculture/Farm	----------Taka	
J.07.06	Income from tuition	----------Taka	
J.07.07	Income from house rent	----------Taka	
J.07.08	Income from rental of machinery/vehicles	----------Taka	
J.07.09	Income from freelancing	----------Taka	
J.07.10	Income from e-commerce	----------Taka	
J.07.11	Income from daily wage basis	----------Taka	
J.07.12	Others (please mention)	----------Taka	

J.08	Own Income of the Household head	----------Taka	
J.09	Gender of the household head		1=Male 2=Female
J.10	Monthly family Expenditure (For all of the family members)	----------Taka	
J.11	Number of family members (including you)		
J.12	Number of earning family members		
J.13	Number of dependents in the family		
J.14	Number of siblings studying currently		
J.15	According to you, your house belongs to which one of the following categories?		1=Rich 2=Upper middle class 3=Lower middle class 4=Poor 5=Very poor

Section K: Interview End Time

Interview End Time	
Signature of the Respondent	
Date	

Thank you very much once again for your kind participation in the Follow-up Tracer Study on Graduates of Tertiary-Level Colleges-2023.

Interview Number	

Bangladesh Institute of Development Studies (BIDS)

E-17 Agargaon, Sher-e-Bangla Nagar, Dhaka-1207

Follow-up Tracer Study on Graduates of Tertiary-Level Colleges-2023

Survey Questionnaire for Current Students

Assalamu-alaikum, I am from the Bangladesh Institute of Development Studies (BIDS), Dhaka. Currently, BIDS is conducting the 'Follow-up Tracer Study on Graduates of Tertiary-Level Colleges' which is being implemented in National University (NU) affiliated colleges throughout the country.

One of the objectives of the project is to know the opinions of the current students of NU regarding the existing teaching-learning environment of the NU affiliated colleges. You have been selected following a sampling frame designed by the researcher. Your responses and opinions will also be valuable for understanding the labour market relevance of our NU graduates and the existing NU education system.

The information that you provide in this survey will be treated strictly as confidential and will be used for research purpose only. The survey will take around 20 minutes to complete.

Thank you in advance for your kind cooperation.

Section A1: Information of the Data Processing Team (To be filled up by the enumerators)

Question no.	Designation	Name	ID	Signature	Date
A1.01	Data Collector				
A1.02	Field Supervisor				

Section A2: Date and Time of Interview (To be filled up by the enumerators)

Question no.	Question	Date of Interview		
		Day	Month	Year
A2.01	Date of Interview			2023
A2.02	Starting time of the Interview			

Section A3: Respondent's Institutional Information **(To be filled up by the enumerators)**

Question no.	Question	Answer	Use Code
A3.01	Division		
A3.02	District		
A3.03	Name of the College		
A3.04	NU College Registration Number		
A3.05	Type of Management (Code)		1= Government 2= Non-government
A3.06	Name of the Department		
A3.07	Type of the Group/ Faculty (Code)		1= Science, 2= Arts, 3= Business, 4=Social Science

Section B: Respondent's Personal Information

(Please write down the answer/use the tick marks where applicable. Please write the digits in English)

Question no.	Question	Answer	
B.01	Name of the Student		
B.02	Gender	1	Male
		2	Female
		3	Transgender
B.03	Age (in complete years)		
B.04	Marital Status	Married=1 Single=2 Divorced=3 Separated=4 Widow=5	
B.05	If married, do you have children?	Yes=1 No=2 **[If no=2, skip to B.07]**	
B.06	If you have children, how many children do you have?	Number:	
B.07	If single, then do you have someone special in your life?	Yes=1 No=2 No comments=3	
B.08	Email Address (If you have any)		

B.09	Contact Number		
B.10	Admission session		
B.11	Examination system of the college	1	Yearly
		2	Semester-wise (2 exams per year)
B.12	Which year/ semester are you currently enrolled in?	1	3rd year
		2	4th year
		3	Master's
B.13	Did you complete your Honours from the same college (applicable for Masters' students only)	1	Yes
		2	No
B.14	Last GPA/CGPA (up to last academic year)	GPA	
		Out of	

Section C: Previous Education & Employment Information

(Please write down the answer/use the tick marks where applicable)

Question no.	Question	Answer	
C.01	What was the type of your secondary (SSC) degree?	1	SSC
		2	SSC (Vocational)
		3	SSC (Open)
		4	Dakhil
		5	O Level
		6	Others (specify) ……
C.02	In which stream have you obtained your secondary education (SSC) degree?	1	Humanities
		2	Science
		3	Business Studies/ Commerce
		4	Others (specify) ……
C.03	What was your GPA at the secondary level (SSC)?	GPA	
		Out of	
C.04	What was the type of your higher secondary (HSC) degree?	1	HSC
		2	HSC (Vocational)
		3	HSC (Open)
		4	Alim
		5	Diploma

		6	A Level
		7	Others (specify) ……
C.05	In which stream have you obtained your higher secondary (HSC) degree?	1	Humanities
		2	Science
		3	Business Studies/ Commerce
		4	Others (please specify) ……
C.06	What was your GPA in the higher secondary (HSC) examination?	GPA	
		Out of	
C.07	Did you have any work experience before you started the Honor's degree at your college?	1	Yes
		2	No **[If no, go to Section D]**
C.08	What kind of work experience was that?		Full-time work =1, Part-time work =2, Temporary/seasonal work =3, Family business =4, Self-employed =5, Others (Please specify) =99 ……
C.09	Was your previous work experience related to your study subject at the Honours college?		Not related at all=1 Only a little related=2 Somewhat related=3 Fully related=4
C.10	Was it a paid job?	1	Yes
		2	No
C.11	How much was being paid?	…… Taka	

Section D: Education & Learning Experience at College

D1. With what expectations have you come to this college and study this particular subject?

Some expectations are listed, not all of which may apply to you. List the top three factors that might apply to you in order of importance.

(From most to least important)

Question no.	**Answer (top 3)**	**Reasons (Code)**
D1.01		To obtain a degree or certificate=1 To get a good job=2
D1.02		

D1.03		To increase social status=3 To improve your quality=4 To marry well=5 Other (Please specify) =6……

D2. Why have you agreed to choose this subject?

Question no.	Statement	**Agreement level** Strongly disagree=1 Somewhat disagree=2 Somewhat agree=3 Strongly agree=4
D2.01	The subject area is most relevant to what I studied in my earlier education	
D2.02	The subject area is most relevant to the work I would like to do in future	
D2.03	The subject area is highly demanded in the job market	
D2.04	The subject area was easy to get accepted into	
D2.05	I did not choose the subject myself; someone else influenced me to choose	
D2.06	I was not interested in studying this subject. However, I did not get the opportunity to choose another subject	
D2.07	I found this subject easier to study relative to other subjects to get a Bachelor's degree certificate	

D3. Based on your experience in the academic program so far, to what extent do you agree to the following sentences? Use the given scale to express your level of agreement.

Question no.	Statement	**Agreement level** Strongly disagree=1 Somewhat disagree=2 Somewhat agree=3 Strongly agree=4
D3.01	The knowledge and technical skills I am learning at the college will likely provide a good basis for the skills I need for my work	
D3.02	ICT (information and Communications Technology) skills that I am learning at the college will likely provide a good basis for computer skills for my future work	
D3.03	Soft skills (teamwork, communication skills, problem solving) that I am learning at the college is adequate and useful for my future work success	

D3.04	Access to the internet and computers are adequate in the program	
D3.05	Access to books, journals and databases is adequate for research projects and learning purposes	
D3.06	The labs, equipment, and facilities we use at the department are sufficiently up-to-date relative to the real technologies used in the industry	

D4. Approximately how much are your family paying for the following expenses of college education (in Taka)?

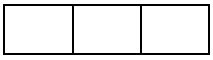
Type of expenses	Amount paid (in taka)
1. College tuition fee (annually)	
2. Textbooks, reference books, and other study materials (annually)	
3. Hostel expenses (monthly)	
4. Mess expenses (monthly)	
5. Total cost of traveling to college (monthly)	

Section E: Job Searching Sources

E1. To what extent the following sources are effective for your job search purposes?

Question no.	Statement	**Agreement level** Not at all effective=1 Somewhat effective=2 Effective=3 Very effective=4
E1.01	Job fair	
E1.02	Social media (Facebook, LinkedIn etc.)	
E1.03	Career club membership	
E1.04	Job site (bdjobs, unjobs, etc.)	
E1.05	Other social and cultural clubs	
E1.06	Alumni association	
E1.07	Family members	
E1.08	Relatives/friends	
E1.09	Political person	
E1.10	Job Advertisement in Newspaper	
E1.11	Other (please specify) ……..……	

Section F: Employment Status

Question no.	Question	Answer	Code
F1	Are you currently doing any work besides studies?		Yes=1 No=2 **[If no, go to Section G]**
F2	If yes, what kind of work experience is it?		Full-time work=1, Part-time work=2, Temporary/seasonal work=3, Family business=4, Self-employment=5, Others (Please Specify) =99 **…….**
F3	To what extent is your work related to the area of your training (study) at college?		Not related at all =1 Only a little related=2 Somewhat related=3 Very much related=4
F4	About how much do you earn per month on an average (in Taka)?	**……. Taka**	
F5	About how many hours (per day) do you work?	**……. Hour(s)**	
F6	What is the main purpose of working? [Multiple answers allowed]	 **(Top 3)**	To pay for my family's living expenses=1 To pay for the cost of my study=2 To pay for the cost of my siblings' study=3 To gain work experience=4 Others (please specify) =5 …….
F7	To what extent do you think your work is affecting your study at college?		Significantly negative=1 Negative to some extent=2 Not affecting at all=3 Effecting positively=4

Section G: Job Supporting Services at College

Question no.	Question	Answer	Code
G1	Is there a counselling service (career counselling) or job placement office at your college?		Yes=1 No=2 **(If No, Skip to G3)**
G2	If yes, how effective the counselling		Not effective at all=1

	service it is in helping the students in finding a job?		Somewhat effective=2 Effective=3 Very effective=4
G3	Do you think that there should be one such counselling service in every college?		Yes=1 No=2

Section H: Extracurricular Activities and Future Aspiration

Question no.	Question	Answer	Code
H1	Are you involved in any extracurricular activities in or outside the college (e.g., debating, sports and cultural activities, student council etc.)?		Yes=1 No=2 **[If no=2, go to H3]**
H2	If yes, then have you received any award or certificate?		Yes=1 No=2
H3	How optimistic are you about the future?		Not optimistic at all=1 Somewhat optimistic=2 Careless about the future=3 Optimistic/Hopeful=4 Very optimistic=5
H4	How do you think your life will be compared to your parents?		Very good=1 Good=2 Remain the same=3 Bad=4 Very bad=5

Section I: Impact of Covid-19

Question no.	Impact of Covid-19 in your Academic and Personal life	Yes=1 No=2 Not Applicable=3
I1.01	Academic session drop	
I1.02	Diverted concentration from study	
I1.03	Worse academic result than before	
I1.04	Downward change in the quality of education	
I1.05	Curbed study time	
I1.06	Suffered from Covid-19	
I1.07	Suffered from other illness	

I1.08	Loss of earning family member(s)	
I1.09	Loss of other family members	
I1.10	Loss of jobs	
I1.11	Loss (reduction) of salary	
I1.12	Loss of other benefits	
I1.13	Sale of family assets	
I1.14	Sale of personal assets	
I1.15	Others (please specify) …….	

Section J: Family Background

We are aware that the following information are personal and sensitive, but we ensure you that this information will be kept strictly confidential and will be used only for research purpose.
(Please write down the answer/ use tick mark where applicable)

Question no.	Question	Code	Description of Codes
J.01	Age of father or main guardian (in years)		
J.02	Father's education/Main guardian's education (*Highest level completed)*	1	No institutional education
		2	Primary education
		3	Secondary or equivalent
		4	Higher secondary or equivalent
		5	Bachelor or equivalent
		6	Masters or equivalent
		7	MPhil/ PhD
		8	Others (please specify) …….
J.03	Father/ principal guardian's profession (For a better understanding of the code feel free to take help from the data collector in the class)	1	Professional (Doctor, Lawyer, Engineer, Teacher)
		2	Government employee
		3	Private sector employee (including multinational companies)
		4	Autonomous institution employee
		5	Bank/Insurance institution employee
		6	NGO/Trust/Foundation employee
		7	Business (Large, Medium and Cottage Industries)
		8	Self Employed Activities (Shop, Rickshaw Driving, Van Driving etc.)
		9	Agriculture and agro-based occupations (farmers, fishermen etc.)
		10	Service personnel (nurses, security personnel)
		11	Day labourer
		12	Retired
		13	Others (please specify) …….
J.04	Mother's age (in years)		
J.05		1	No institutional education

	Mother's education (*Highest level completed*)	2	Primary education
		3	Secondary or equivalent
		4	Higher secondary or equivalent
		5	Bachelor or equivalent
		6	Masters or equivalent
		7	MPhil/ PhD
		8	Others (please specify) ……...
J.06	Mother's occupation	1	Homemaker/Housewife
		2	Professional (Doctor, Lawyer, Engineer, Teacher)
		3	Government employee
		4	Private sector employee (including multinational companies)
		5	Autonomous institution employee
		6	Bank/Insurance institution employee
		7	NGO/Trust/Foundation employee
		8	Business (Large, Medium and Cottage Industries)
		9	Self Employed Activities (Shop, Rickshaw Driving, Van Driving etc.)
		10	Agriculture and agro-based occupations (farmers, fishermen etc.)
		11	Service personnel (nurses, security personnel)
		12	Day labourer
		13	Retired
		14	Others (please specify) ……...……
J.07	Monthly family income (Of all the family members)	…….. Taka	
J.07.01	Full-time employment	…….. Taka	
J.07.02	Part-time employment	…….. Taka	
J.07.03	Full-time Business/entrepreneurship	…….. Taka	
J.07.04	Part-time Business/entrepreneurship	…….. Taka	
J.07.05	Income from Agriculture/Farm	…….. Taka	
J.07.06	Income from tuition	…….. Taka	
J.07.07	Income from house rent	…….. Taka	
J.07.08	Income from rental of machinery/vehicles	…….. Taka	
J.07.09	Income from freelancing	…….. Taka	
J.07.10	Income from e-commerce	…….. Taka	

J.07.11	Income from daily wage basis	…….. Taka	
J.07.12	Others (please mention)	…….. Taka	
J.08	Own monthly income of the household head	…….. Taka	
J.09	Gender of the household head		1=Male 2=Female
J.10	Monthly family Expenditure (For all of the family members)	…….. Taka	
J.11	Number of family members (including you)		
J.12	Number of earning family members		
J.13	Number of dependents in the family		
J.14	Number of siblings studying currently		
J.15	According to you, your house belongs to which one of the following categories?		1=Rich 2=Upper middle class 3=Lower middle class 4=Poor 5=Very poor

Section K: Interview End Time

Interview End Time	
Date	

Thank you very much once again for your kind participation in the Follow-up Tracer Study on Graduates of Tertiary-Level Colleges-2023.

Interview Number	

Bangladesh Institute of Development Studies (BIDS)

E-17 Agargaon, Sher-e-Bangla Nagar, Dhaka-1207

Follow-up Tracer Study on Graduates of Tertiary-Level Colleges-2023

Survey Questionnaire for Head of the Institution

(Principal/Vice-Principal/Head of the Department)

Assalamu-alaikum, I am from the Bangladesh Institute of Development Studies (BIDS), Dhaka. Currently, BIDS is conducting the 'Follow-up Tracer Study on Graduates of Tertiary-level Colleges' which is being implemented in National University-affiliated colleges throughout the country.

One of the objectives of the project is to know the opinions of the Principal/Vice- Principal/Head of Departments of NU graduates in terms of their skills and knowledge. Your institute has been selected following a sampling frame designed by the researcher. Your responses and opinions will be valuable for understanding labour market relevance of our NU graduates and the existing NU education system. You have been selected for this survey by the research team as your institution has experience in dealing with NU students and graduates.

The information that you provide in this survey will be treated strictly as confidential and will be used for research purpose only. The survey will take around 20 minutes to complete.

Thank you in advance for your kind cooperation.

Section A: Respondent's Institutional Identification [To be filled up by the enumerators]

Section A1: Respondent's and Institutional Identification

Question no.	Question	Name	Code
A1.01	Division		Use division code
A1.02	District		Use district code
A1.03	Location		Rural=1 Urban=2 Suburban=3
A1.04	Name of college		Use college code
A1.05	College governance type		1=Government College 2=Non-government College
A1.06	NU registration number		
A1.07	Name of the respondent		
A1.08	Current position held		Principal=1

			Principal in charge=2 Vice-principal=3 Head of the department=4
A1.09	Designation of the respondent		Professor=1 Associate professor=2 Assistant professor=3 Lecturer=4
A1.10	Name of the Department (code)		
A1.11	Year of experience in the present college	_____ year(s)	
A1.12	Total year of experience	_____ year(s)	

Section A2: Information of the Data Processing Team (To be filled up by the enumerators)

Question no.	Designation	Name	ID	Signature	Date
A2.01	Data Collector				
A2.02	Field Supervisor				

Section A3: Date and Time of Interview (To be filled up by the enumerators)

Question no.	Question	Date of Interview		
		Day	**Month**	**Year**
A3.01	Date of interview			2023
A3.02	Starting time of the interview			

Section B: College Profile

[Only applicable for Honor's and Master's level activities. Kindly write the answers/information in the specific blank spaces]

Question no.	Description		Number	
B1	In which year was the college established?			
B2.01	Total Number of Departments		Honor's	
B2.02			Master's	
B3	**Information on Current Students**		Male	Female
B3.01	Number of current students enrolled	Honor's		
B3.02		Master's		
Information on Current Teachers			Male	Female
B3.03	Number of teachers along with their educational qualifications and gender	Degree		
B3.04		Honor's		

B3.05		Master's		
B3.06		M.Phil		
B3.07		PhD		
B3.08	Students pass rate (average last 5 years)	Honor's		
		Master's		

Section C: Job Related Information of the Students

C1	Do you know which employment sector often employs your graduates upon completion?		Yes=1, No=2, Don't Know=3, **(If the answer is no or don't know, skip to question C3)**	
C2	If yes, then state the approximate proportion of your students being employed by the following employment categories from below:			
	Type of Employment		**Proportion of your students being employed (write down the %)**	
C2.01	Government Organization			
C2.02	Teaching			
C2.03	Banking Sector			
C2.04	Multinational Companies			
C2.05	Engineering			
C2.06	IT			
C2.07	Private Companies			
C2.08	NGO			
C2.09	Self-employed (farm, agro-business, supply, transport)			
C2.10	Foreign Service/ Remittance Workers			
C2.11	Others (please specify) ……			
C3	Do you feel that your programs adequately prepare graduates for the labour market?		Yes=1 No=2	
C4	Do you think your graduates get desired employment on completion?		Yes=1 No=2	
C5	What is the percentage of graduates that get employment after the completion of their studies? (Write down the %)	Within 3 months	Within 4-6 months	More than 6 months
C6	Name three departments in your college, from which the graduates cannot find proper jobs after they pass and whose curriculum are not conductive to joining the workforce.	1. 2. 3.		
C7	How long do the graduates need to wait before they get desired employment?	_____ months on an average		

Section D: Facilities in the College Premises

Section D1: How much do you agree with the following statements?

Question no.	Important amenities of the college	**Scale of Reasons** Fully Disagree=1, Somewhat Disagree=2, Agree=3, Fully Agree=4
D1.01	The college/department has access to adequate and quality library resources (books, journals, etc.)	
D1.02	The lab facilities and equipment (including access to computers and other e-resources) are adequate to support teaching, learning and research activities	
D1.03	Access to internet is good and adequate in supporting teachers' teaching and students' learning processes	
D1.04	Teachers are involved in research and also provide guidance and supervision to the students with research interests	

Section D2: General Soft Skills Development & Other Information

Question no.	Type of skills	According to you, what is the current level of skill of the students in this college?	How much of these skills are being addressed/covered in the offered course curriculum?
		Scale of Skill Not Skilled at all=1 Somewhat Skilled=2 Skilled=3 Very Skilled=4	Percentage (%)
D2.01	Entrepreneurship skills		
D2.02	Time management		
D2.03	Basic computer skill		
D2.04	Advanced computer skill		
D2.05	Writing skill in English		
D2.06	Verbal communication skill in English		
D2.07	Communication skill in Bangla		
D2.08	Presentation Skill		

D3	Does your college/department provide any additional skills training (other than course curriculum)?		Yes=1 No=2
D4	Does your department have any collaboration with the industry?		Yes=1 No=2
D5	Does the department provide job placement facilities?		Yes=1 No=2
D6	**If D5 =Yes (the department provides job placement facilities), what kind of job-search support does the department provide to students?**		**Yes=1 No=2**
D6.01	Career Counseling		
D6.02	Career Seminar/ Workshop		
D6.03	Job fair		
D6.04	Employment partnership with companies		
D6.05	Teachers' support		
D6.06	Through social media/own website or web portal		
D6.07	Others (please specify) ……..		

D7	How does the department usually collect information about job opportunities for students? (Multiple answers are acceptable)	☐☐☐ (Top 3)	Through the personal network of teachers=1, Through partner organizations=2, Through alumni association =3, Through an official announcement on newspaper, etc.=4 Others (Please specify) =5 ……
D8	Does your department keep track of the employment status of graduates after their graduation?		Yes=1 No=2 **(If no=2, skip to Section E)**
D9	**If D8=Yes,** how is the information collected and updated? (Official record of the whole department)		

Section E: Information on the Existing Problems

Section E1: Impact of Covid-19

E1	**Provide your observation on: Impact of Covid-19 in Academic and Personal life of the Current Students**	Yes=1 No=2 Not Applicable=3
E1.01	Academic session drop	
E1.02	Diverted concentration from study	
E1.03	Worse academic result than before	

E1.04	Downward change in the quality of education	
E1.05	Curbed study time	
E1.06	Drop out of students	
E1.07	Suffered from Covid	
E1.08	Suffered from other illness	
E1.09	Loss of earning family member(s)	
E1.10	Loss of other family members	
E1.11	Loss of jobs	
E1.12	Loss (reduction) of salary	
E1.13	Loss of other benefits	
E1.14	Sale of family assets	
E1.15	Sale of personal assets	
E1.16	Others (specify) …….	

Section E2: How would you rate the following problems in your institution?

E2.01	Statement	**Scale** No problem at all=1 Very less problematic=2 Quite Problematic=3 Very Problematic=4
E2.01	Teacher shortage	
E2.02	Overcrowded classrooms	
E2.03	Lack of operating funds	
E2.04	Lack of labs, proper machinery and equipment and workshops	
E2.05	Lack of access to ICT equipment and facilities	
E2.06	Absence of students	
E2.07	Unsafe college environment	
E2.08	Drop-out of students	
E2.09	Failure in the examination of students	
E2.10	Unemployment of students	
E2.11	Disruption due to student politics in the college	
E2.12	Difficulties in finding employer partners	
E2.13	Absence of career club in National University	
E2.14	Lack of training opportunities for teachers	

E2.15	Session jam	
E2.16	Others (please specify)…….	

Section F: Interview End Time

Interview End Time	
Date	

Name of the Principal of the College:

Mobile No:

E-mail Address (If any):

Signature of the Principal of the College:

Date:

Thank you very much once again for your kind participation in the Follow-up Tracer Study on Graduates of Tertiary-Level Colleges-2023.

Interview Number	

Bangladesh Institute of Development Studies (BIDS)

E-17 Agargaon, Sher-e-Bangla Nagar, Dhaka-1207

Follow-up Tracer Study on Graduates of Tertiary-Level Colleges-2023
Employer Survey Questionnaire

Assalamu-alaikum, I am from the Bangladesh Institute of Development Studies (BIDS), Dhaka. Currently, BIDS is conducting the follow-up Tracer Study on Graduates of Tertiary-Level Colleges which is being implemented in National University-affiliated colleges throughout the country.

One of the objectives of the project is to know the opinions of current employers of NU graduates in terms of their skills and knowledge. Your organization/institute has been selected following a sampling frame designed by the researcher. Your responses and opinions will be valuable for understanding labour market relevance of our NU education system. You have been selected for this survey by the research team as your organization/institution has experience working with NU graduates.

The information that you provide in this survey will be treated strictly as confidential and will be used for research purpose only. The survey will take around 20 minutes to complete.

Thank you in advance for your kind cooperation.

Section A1: Information of the Data Processing Team (To be filled up by the enumerators)

Question no.	Designation	Name	ID	Signature	Date
A1.01	Data Collector				
A1.02	Field Supervisor				

Section A2: Date and Time of Interview (To be filled up by the enumerators)

Question no.	Question	Date of Interview		
		Day	Month	Year
A2.01	Date of Interview			2023
A2.02	Starting time of the Interview			

Section B: General Information of Organization

(Please write down the answer/circle the number of the code, where appropriate)

Question no.	Question	Answer	
B.01	Name of the Organization		
B.02	Address		
B.03	Year of Establishment		
B.04	Respondent's Name		
B.05	Location	1	Rural
		2	Urban
		3	Suburban
B.06	Mobile/Phone Number		
B.07	Email ID		
B.08	Respondent's Designation	1	Institution Head
		2	Department Head
		3	Branch Head
		4	Project Director/Manager
		5	Human Resource Officer
		6	Others (please specify) _____
B.09	Type of Management	1	Government Organization
		2	Private Organization
		3	Autonomous/Attached Institution
		4	Local Government
		5	NGO/Trust/Foundation/Microfinance Institutions
		6	Private Enterprise
		7	Family Business
		8	Self-employed (Farm, agro-business, supply, transport)
		9	Others (Please Mention) ……
B.10	Total number of employees in current office	Male	
		Female	
B.11	Total number of NU college graduates in current office	Male	
		Female	
B.12	Total number of employees recruited in 2021	Male	
		Female	
B.13	Total number of NU college graduates' recruited in 2021	Male	
		Female	
B.14	Total number of employees recruited in 2022	Male	
		Female	
B.15	Total number of NU college graduates' recruited in 2022	Male	
		Female	

Section C1: Recruitment Criteria

(Please rank the importance of the qualities which your organization perceive as essential when recruiting using a scale of 1 to 10)

Question no.	Skills/Criteria	Scale 1 ⟷ 10 1=Not Important 10=Very Important
C1.01	Institutional degree	
C1.02	Additional vocational training/ technical diploma/ technical degree/certificate/professional certificate	
C1.03	Academic CGPA	
C1.04	Previous work experience	
C1.05	Personal attributes (smartness/ promptness/ flexibility)	
C1.06	Basic communication skills	
C1.07	Writing skills	
C1.08	Competent use of computers	
C1.09	Personal networking	
C1.10	Professional reference	
C1.11	Academic reference	

C2. How frequently your organization use each of the following in the recruitment process?

Question no.	Recruitment Process	Scale 1=Never used 2=Rarely used 3=Sometimes used 4=Often used
C2.01	Advertisement in national newspapers	
C2.02	Internet Posting (Company website)	
C2.03	Internet advertising (Job sites)	
C2.04	Employer's personal networks	
C2.05	Job fair	
C2.06	Formal MoU with academic institutions	
C2.07	Internship	
C2.08	Others (please specify)	

C3. Who takes the recruitment related decisions?

(Write response code 1 or 2 if the following statements are applicable for recruitment)

Question no.	Recruitment Decision Taker	Response: Yes=1 No=2
C3.01	The recruitment committee	
C3.02	The head office	
C3.03	The branch office	
C3.04	Others (Please Specify) ……	

Section D1: Post–Employment Training

Question no.	Question	Answer	
D1.01	Does your organization arrange training for the new recruits?		Yes=1 No=2 **(If No, Skip to the next Section E)**
D1.02	How are the employees selected for the training in the institute?		All new employees get trainings=1 Management selects them=2 The Administrative office selects them=3 Their superiors select them=4 They decide on their own=5 Others (please specify)=6 ……
D1.03	Over the last 12 months have your establishment arranged or funded any job training for the newly hired staff?		Yes=1 No=2 **(If No, Skip to the next Section E)**
D1.04	If yes, for how long was the duration of the training?		……Days
D1.05	What was the training about? (Multiple selections allowed)	☐☐☐ **(Top 3)**	Administrative process of the establishment=1,

			Basic theoretical knowledge of the job=2, Basic practical or technical skills for the job=3, Workplace security=4, English language skill=5, Computer skills=6, Others (please specify) =99 ……..
D1.06	If the employees want to get training from elsewhere, do you grant them paid leaves?		Yes=1 No=2 **(If No, Skip to Question D1.08)**
D1.07	If yes, for how many days do you grant these paid leaves?		……Days
D1.08	Overall, how effective are the training(s) in terms of improving certain skills of the employees who receive the trainings?		**Scale** **1 ⟷ 10** **1=Not effective at all, 10=Very effective**

Section E: Recruitment of NU College Graduate

Question no.	Question	Answer	
E1	Does your organization have special interest in hiring national university graduates?	1	Yes, we are especially interested in hiring them
		2	No, we don't have any special interest
		3	After analysing the candidates, we recruit them on the basis of their qualifications (university/college does not play any role in this case)

E2. What are the unique opportunities, skills and abilities of the NU graduates which make them more employable?

(Multiple answers acceptable)

Question no.	Skills and Abilities	Tick Mark
E2.01	NU college graduates are skilful and knowledgeable	
E2.02	They possess recommendable soft skills	
E2.03	Hardworking and willing to learn new things	
E2.04	Easy to train up	
E2.05	Innovative	
E2.06	Team worker (working in a team while maintaining mutual relations)	
E2.07	They do not switch jobs frequently	
E2.08	Willing to work with lower salary	
E2.09	Others (please specify) _____	

Section F: Information on NU Graduates

Question no.	Question	Answer	
F1	In this establishment, what is the current designation of the graduate?		
F2	For this specific post, were you particularly looking for any NU graduate?		Yes=1 No=2 **(If no, skip to F4)**
F3	If F2=Yes, then what were the factors that made you decide to hire him/her? (Multiple selections allowed)	☐☐☐ **(Top 3)**	Academic achievement at college =1 Work experience =2 Technical Knowhow =3 Communication skill =4 Political affiliation =5 Apprenticeship =6 Others (please specify) =99 ……..
F4	What is the desired educational qualification for that position?		0 No Class Passed 1 Class 1 2 Class 2

			3	Class 3
			4	Class 4
			5	PSC/ Class 5
			6	Class 6
			7	Class 7
			8	JSC/ Class 8
			9	Class 9
			10	SSC/ Equivalent
			11	HSC/ Equivalent
			12	Diploma
			13	Vocational Education
			14	Skills Training
			15	Bachelor’s degree
			16	Master's degree
			17	PhD
F5	What is the qualification of the respective employee (Mr/Ms…….)?		0	No Class Passed
			1	Class 1
			2	Class 2
			3	Class 3
			4	Class 4
			5	PSC/ Class 5
			6	Class 6
			7	Class 7
			8	JSC/ Class 8
			9	Class 9
			10	SSC/ Equivalent
			11	HSC/ Equivalent
			12	Diploma
			13	Vocational Education
			14	Skills Training
			15	Bachelor’s degree

			16	Master's degree
			17	PhD
F6	Does the qualification of Mr/Ms…….. match with the desired qualification?		Yes=1 No=2 **(If Yes, Skip to Question F8)**	
F7	If no, then why have you recruited him?		He has prior experience=1 His performance was outstanding at the job interview=2 He seemed efficient and capable of doing the job= 3 Communication skill =4 Political affiliation =5 He had the reference from experts in this field=6 He is my relative or had been referred by relative/friends=7 Others (specify) =99 ……	
F8	What is the preferred academic institute of the employees for this position?		Public University=1 Private University=2 Public NU affiliated College=3 Private NU affiliated College=4 Open university=5 No choice at all=6 Others (specify) =99 …….….	
F9	Rate the level of difficulties in filling up the vacancies at this position?		**<u>Scale</u>** **1=Very Easy** **2=Easy** **3= Difficult** **4=Very Difficult**	
F10	Number of unfilled/empty vacancies at present in this position			
F11	If the vacancy is occurred/ posted/advertised today, how long will it take to fill up this position?		Immediately=1 Less than a week=2 More than a week but less than a month=3 One month or more=4	

F12	How would you rate his/her following skills at the time of joining the establishment and now? **Scale** **1 ⟷ 10** **1=Unskilled 10=Very Skilled**	**At the time of joining**	**At present**
F12.01	Theoretical knowledge about the subject area		
F12.02	Practical skills for the position		
F12.03	Communication skill		
F12.04	Problem solving and independent thinking		
F12.05	Work attitude (team spirit, sincerity, diligence, motivation)		
F12.06	English writing skill		
F12.07	Communication skill in English		
F12.08	Basic computer skill		
F12.09	Advanced computer skill (PowerPoint, MS Office, Google Sheet, Hyperlink, Finetune etc.)		
F12.10	Others (Specify)		

Section G: Industry Collaboration

Question no.	Question	Response	Code
G1	Does your entity/organization have any kind of partnership with NU colleges?		Yes=1 No=2 **(If no=2, skip to Section H)**
G2	**If yes, for what purpose does your entity/organization maintain contacts with the department/college?**		
G2.01.2	Internship opportunities		Yes=1 No=2
G2.02.2	If yes, how many interns have you recruited in the last 5 years?	…….. (number)	
G2.02.1	Industry attachment (bilateral or other kind of agreement)		Yes=1 No=2
G2.02.2	If yes, how many agreements have you signed in the last 5 years?	…….. (number)	
G2.03	Guest lecturer		Yes=1 No=2
G2.04	Curriculum updating		Yes=1 No=2
G2.05	Asking for suggestions from teachers about future recruitment (reference purposes)		Yes=1 No=2
G2.06	Improving professional network with teachers		Yes=1 No=2
G2.07	Others (please specify) …….		Yes=1 No=2

Section H: Suggestions & Recommendations

H1. Based on the experience of working with NU graduates, please rate which aspects of their skills need improvements (Multiple answers acceptable)

Question no.	Skills and Abilities	Tick Mark
H1.01	Communication skill	
H1.02	Presentation skill	
H1.03	Group work activity	
H1.04	Problem solving skill	
H1.05	Technical knowledge	
H1.06	English language proficiency	
H1.07	Computer/ ICT skill	
H1.08	Others (please specify)……	

Section H2: Please give your suggestions **(TOP 3)** and advice to college authority for the betterment of the NU college graduates that will make them more employable/compatible in the work force.	
H2.01	
H2.02	
H2.03	

Section I: Interview End Time

Interview End Time	
Signature of the Employer	
Date	

Thank you very much once again for your kind participation in the Follow-up Tracer Study on Graduates of Tertiary-Level Colleges-2023.