REPORT ON
USER SATISFACTION SURVEY (USS) 2024

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Report on
User Satisfaction Survey (USS) 2024

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Abbreviations and Acronyms

BBS   Bangladesh Bureau of Statistics

BIDS   Bangladesh Institute of Development Studies

BIGD   BRAC Institute of Governance and Development

BRAC   Building Resources Across Communities

CAPI   Computer Adapted Personal Interview

CD-ROM   Compact Disc Read Only Memory

GDP   Gross Domestic Product

HTML   Hypertext Markup Language

ICT   Information and Communication Technology

KII   Key Informant Interview

MPhil   Master of Philosophy

NQAF   National Quality Assurance Framework

NSDS   National Strategy for the Development of Statistics

NSDS-ISP   NSDS Implementation Support Project

NSO   National Statistical Office

NSS   National Statistical System

PARIS21   Partnership in Statistics for Development in the 21st Century

PDF   Portable Document Format.

PhD   Doctor of Philosophy

SDG   Sustainable Development Goal

UNSD   United Nations Statistics Division

USS   User Satisfaction Survey

Executive Summary

The Bangladesh Bureau of Statistics (BBS) plays a vital role in the National Statistical System (NSS) as the National Statistical Office (NSO) for generating, compiling, and disseminating statistical data on national social, economic, demographic, and other aspects. These data are essential for developing evidence-based policies and managing resources effectively. Researchers, academics, policymakers, planners, and other professionals frequently utilize the BBS data to make informed policy decisions. Given the extensive reliance on BBS data for policymaking across various sectors, it is essential to evaluate whether the quality, types, frequency, and accessibility of data meet the users' needs and identify areas for improvement. In 2022, the first User Satisfaction Survey (USS 2022) was conducted to gauge the satisfaction levels of data users with the official statistics and services provided by the BBS. This follow-up survey aims to measure the current satisfaction levels with BBS's official statistics, assess the progress made since the previous survey, and identify areas requiring further enhancement.

Research Methods and Data Collection

A mixed-method sampling strategy was used to choose the respondents. First, types of organizations were chosen following the USS 2022. Second, the respondents are randomly chosen from within the selected organizations to ensure representativeness.

Data collection methods were tailored to user preferences, including in-person interviews, telephone interviews, and online surveys. All methods relied on a structured questionnaire for consistency.

Characterizing the Users of Official Statistics

The total sample size is 1333, with 22.28 percent female respondents. The highest proportion of the respondents (54.99%) are collected from academic institutions, followed by government organizations (8.93%), research institutions (8.55%), financial institutions (8.03%), and development partners (7.80%). Approximately 40.51% of the users have a PhD degree, the last highest academic program. Most of the respondents' ages are between 28 and 55, and the average age is 45. While the most senior respondents are 88, the youngest is 21 years. In contrast, the average working experience of the respondents is 17 years.

Approximately 68.57 percent of the respondents use population, demographic, and vital statistics more frequently, followed by income and poverty statistics (60.77%) and national accounts statistics (54.91%). In contrast, information and communication technology (ICT) use (17.18%) statistics, and crime and judicial statistics (7.88%) are the least utilized. Interestingly, users with a PhD degree or from academic backgrounds exhibit similar usage patterns. Findings also reveal that the percentage of users has increased compared to the USS 2022, except for the population, demographic, and vital statistics. Approximately 40.98 percent of the respondents use the BBS data with no periodicity, while it was 46.57 percent in 2022.

Among the various statistical domains, education statistics emerge as the most utilized, with 73.21 percent of users engaging with this data, followed closely by population, demographic, and vital statistics (72.10%), and income and poverty statistics (68.52%). Decision-making is the second most dominant purpose of using BBS data (24.49%). Planning (21.95%) and modeling/forecasting (19.73%) remain essential among the data users. Interestingly, the breakdown of decision-making by domain indicates that foreign trade held the top spot (30.34%), followed by industrial statistics (27.87%) and price statistics (26.77%).

A large proportion of the respondents obtained data from the BBS website or data portals (88.37%) while 48.16 percent obtained it from published reports and 41.26 percent obtained it free of cost from BBS. The most widely used modes are data in BBS publications (59.02%) and PDF formats in websites and CD-ROMs (55.55%).

Perceptions and Satisfactions of Products and Services

The most useful domains include health and nutrition (28.36%), national accounts (26.78%), crime/judicial statistics (26.67%), income and poverty (26.17%), and ICT use statistics (25.76%). Compared to the USS 2022, findings of the USS 2024 reveal higher levels of data usefulness across most domains, except for foreign trade, population, demographics and vital statistics, and crime and judicial statistics.

Approximately 11.78 percent of the users rate the data collection methodology as very good, while 66 percent rate it as good. Around 75.55 percent of users find BBS products, including data and publication reports, moderate or very easy to extract the required information. About 69.42 percent report that access to BBS data is easy or very easy, while 28.51 percent find it somewhat difficult, and 2.02 percent find it difficult. The highest percentage of users reported very easy or easy accessibility for education statistics (75.44%), followed by population, demographic, and vital statistics (74.73%) and gender statistics (73.11%), respectively. Conversely, the most challenging domains to access are crime and judicial, labor, and foreign trade statistics.

About 80.09 percent of the users reported that the specific data they require is available but not sufficient; the fully available criterion is met only for 16.39 percent. Approximately 6.64 percent of the users consider BBS data to be very reliable, and 40.87 percent view it as reliable. Approximately 18.95 percent perceive the data as comparable to that of similar countries.

A significant majority, approximately 97.15 of respondents, report using the BBS website. This proportion increased by about 10 percentage points from 88.97 percent in USS 2022. About two-thirds of the users find accessing official statistics on the BBS website somewhat easy (31.98%), easy (26.93%), and very easy (5.93%). Over 33.53 percent of the users find it somewhat difficult or very difficult, indicating a need for improvement in the BBS website.

About 32.10 percent of users did not contact the BBS for statistics, while 18.87 percent contacted once, 32.10 percent contacted 2-5 times, and 16.93 percent contacted more than five times. Users contacted the BBS for various purposes, including requesting specific data (71.92%), discussing data requirements (39.26%), methodological queries (21.20%), following up on publications (20.63%), seeking clarification on data (17.48%), authenticating data (16.05%), etc. Some users

also contact the BBS for sampling advice or procedures (15.76%) and website guidance (6.88%). A few users contact BBS for other purposes, including microdata and analytical surveys. About 47.85 percent of the users reported that their most recent contact with the BBS fully met their needs, while 42.12 percent indicated their needs were only partially met. Compared to the USS 2022, the results of the USS 2024 indicate similar percentages of overall satisfaction with BBS correspondence.

Level of Satisfaction of BBS Products and Services

About 64.34 percent of users express satisfaction with the accuracy of official statistics, and 25.58 percent express dissatisfaction. Approximately 54.36 percent of users express satisfaction with the timeliness of official statistics, and 38.56 percent express dissatisfaction. On average, 77.06 percent of users express satisfaction with the relevance of official statistics, and 16.81 percent express dissatisfaction. On average, about 47.88% of respondents are satisfied with the statistics frequency, and 42.88% are not satisfied. Compared to the USS 2022, findings of the USS 2024 reveal that a higher proportion of users are satisfied with data accuracy, timeliness, and relevance, with a few exceptions. Overall, about the quality of BBS official statistics, about 29.39 percent of the users are satisfied, 55.59 percent are somewhat satisfied, 11.64 percent are somewhat unsatisfied, and 3.39 percent are totally unsatisfied.

Users' Preferences

A vast majority of the users, about 89.95%, expressed somewhat or the most preferred option for obtaining the BBS data free of cost. Approximately 93.62% of the users prefer (somewhat or most) obtaining data through the BBS website or data portals. This preference stems from the convenience of online access, which allows users to retrieve data whenever needed.

Respondents commonly prefer to acquire the BBS data in Word/Excel format in the CD-ROMs and website (66.89%), PDF format in the CD-ROMs and website (41.89%), BBS publications (35.22%), HTML and web format (17.78%), and infographics (9.91%).

Approximately 48.39% of the users prefer union or ward-level data, followed by 20.71% for upazila-level data, and 18.23% for district-level data. Only a small proportion of the users expresses interest in regional-level data (2.55%).

About two-thirds of the respondents prefer to have publications in both Bengali and English. However, the current style of presenting both the English and Bengali analysis in the same publication should be discontinued. Instead, the BBS can publish separate English and Bangla reports for wider usage, as it sometimes does.

Users' Feedback to Strengthen the BBS ecosystem

Based on the above findings, below are the key recommendations to enhance user satisfaction:

1. Improve the BBS website and interface to enhance the efficiency of navigation, search, filtration, and data analysis. Users also recommend improving the website to allow information collection via mobile devices, such as Android and iOS applications.

2. Introduce 24/7 online chat options on the website to promptly help users.

3. Ensure the availability of the most up-to-date statistics, including microdata, and reduce publication delays of data and statistical reports.

4. Create a data repository that provides both updated and archived data.

5. Increase data frequency across all statistical domains.

6. Launch a data portal system where users can have filtering options followed by different attributes, including gender, ethnicity, and geographic area.

7. Introduce an online automated analysis and reporting system to enable users to assess trends quickly.

8. Create video tutorials and frequently asked questions (FAQ) sections to guide users.

9. Offer datasets with the smallest administrative units, like union and ward, and cover more areas.

10. Address the issue of missing values to ensure data completeness and accuracy.

11. Provide updated statistical data in various formats compatible with standard statistical software, such as MS Excel, R, SPSS, and Stata.

12. Provide open access to statistical products, particularly for educational and research institutions and public libraries. This approach fosters greater transparency and accountability while empowering users to utilize statistical information more effectively.

13. Advocate for including national statistics in academic curricula and regularly seek feedback from educational institutions.

14. The BBS should recruit highly qualified personnel for data management as skilled and informed staff are the key components for ensuring the effectiveness and reliability of statistical solutions.

15. Design and implement training programs to improve the skills and competencies of BBS personnel. These programs should be tailored to the specific needs of different BBS departments and incorporate theoretical knowledge and practical applications.

16. Enhance the service quality of BBS staff through comprehensive training programs, including mandatory yearly online modules focusing on technical skills and customer service.

17. Collaborate with other research organizations to access additional data and expand coverage frequency.

18. Establish a feedback mechanism with educational and research institutions on the usability and relevance of its statistical products. This feedback loop facilitates continuous improvement and effectively meets the users' needs.

19. Encourage internship programs with academic institutions to train emerging statisticians and researchers.

20. Identify key user groups for each publication and directly share updates with them. Tailoring communication to specific user segments can improve relevance and engagement.

By implementing these promotional strategies, the BBS can enhance awareness, accessibility, and utilization of its statistical information, ultimately strengthening its impact on policymaking and decision-making processes. Equally important is to conduct user satisfaction surveys regularly to read the pulse of the policymakers, researchers, and other data users for updating the existing statistics or introducing statistics and take necessary measures to keep the statistical ship of the BBS on an even keel in terms of transparency and credibility. Finally, future user satisfaction surveys should not be limited to the BBS only, rather these should encompass all data-generating agencies of the NSS. This is particularly important as BBS, as the NSO, needs to improve not only the data it generates but also needs to ensure the quality of data generated by other agencies.

CHAPTER 1

Chapter 1: Introduction

1.1 Background

Data and reports from the National Statistical System (NSS) are crucial for formulating evidence-based policy and effective resource management. The Bangladesh Bureau of Statistics (BBS) is the National Statistical Office (NSO) of the country, and hence, the lead agency of the NSS. Even though a few other agencies, such as the Bangladesh Bank, and the National Board of Revenue, generate specific data and information, BBS single-handedly and systematically collects and disseminates most of the socio-economic and socio-demographic data used in policymaking. The BBS plays a crucial role in providing accurate and reliable data for policy-making and decision-making processes in Bangladesh. It is instrumental in generating essential statistics for various sectors, including income, employment, demography, poverty, and inequality, to inform evidence-based policies and strategies. By collaborating with other organizations and utilizing innovative data collection methods, the BBS contributes significantly to improving program effectiveness and addressing diverse challenges, including budget constraints, weak coordination, and data quality issues. Through its efforts, the BBS strives to enhance the availability of high-quality data, supporting informed decision-making processes and fostering sustainable development in Bangladesh. Thus, BBS promotes and strengthens the statistical services for its users for informed decision-making despite that progress in statistics is a marking issue at the least. For instance, GDP is designed to be a measure of economic activity but displays several acknowledged weaknesses in meeting that aim. Further, it is clearly not a measure of a wider meaning of progress, other than in economic terms, despite also sometimes being taken as a measure of progress (Allin & Hand, 2021). Besides, official statistics are only part of the evidence base that might be used to inform policy-making. Evidence has to be pushed toward policymakers and politicians, as well as pulled by them (Allin & Hand, 2021a; Islam, 2010). With these caveats in mind, this study aims to provide insights into the users of BBS data and reports.

In general, user satisfaction surveys aim to assess how the users perceive the official statistics made available by the NSS. These surveys help understand users' perspectives and needs, guiding the design and assessment of services. The surveys also focus on identifying potential users and their information needs and evaluating the services provided to meet their expectations. By measuring satisfaction levels, these surveys provide critical information for developing services that align with user expectations, ensuring a positive user experience. Additionally, the surveys aim to gauge user satisfaction with the quality, accuracy, clarity, comprehensiveness, objectivity, timeliness, and usefulness of the statistical and policy products offered, ultimately aiming to improve service delivery and user experience.

User satisfaction surveys aim to assess the satisfaction levels of users with the services provided, identify their needs and preferences, and improve service quality based on feedback. These surveys help in understanding user demographics, evaluating service components, and measuring satisfaction levels to enhance user experience and meet their expectations effectively. The surveys

also focus on gauging satisfaction with specific aspects, such as accuracy, clarity, timeliness, and accessibility of information. By analyzing user feedback and satisfaction levels, official statistics agencies can tailor their services to better serve the diverse needs of their users and ensure continuous improvement in service delivery.

The BBS has been subjected to frequent criticism from different quarters. While some of these criticisms are valid, many are based on speculations. Amidst these issues, the government shifted its focus to the agency so that it could meet the needs of the policymakers and other stakeholders. Accordingly, the Parliament passed the Statistical Act 2013 to give further impetus to the activities of the organization. Article 2(g) of the Statistical Act 2013 mandated the BBS to develop and update the National Strategy for Development of Statistics, or NSDS for short (Ministry of Law and Parliamentary Affairs, 2013, p. 1397). Accordingly, with technical assistance from the World Bank, the BBS developed the first NSDS, which was approved by the Cabinet in 2013 (BBS, 2015). The main focus of the NSDS is to promote and strengthen the statistical services for its users with improved accuracy, reliability, and timely production of national statistics.

As part of the mandates (BBS, 2015, p. 58) of the NSDS, the BBS conducted its first User Satisfaction Survey (USS 2022) in 2022 that assessed user satisfaction with official statistics and implementation of the NSDS (BBS, 2023) and completed the national quality assurance framework (NQAF) for statistics in 2023 (BBS, 2023). The USS 2022 aimed to measure the extent to which users of official statistics in Bangladesh are satisfied with the available statistics and how their statistical needs are met. During the intervening period, the BBS implemented sizeable proportions of the first phase of NSDS. Besides the NSDS initiatives, the BBS professionals continuously strive to improve the quality of official statistics and related services. Further, BBS needs to formulate a second phase of the NSDS to complete the partially implemented activities as well as undertake new activities to meet the demands of the data users. It is within this context that this User Satisfaction Survey 2024, USS 2024 for short, is conducted independently by the Bangladesh Institute of Development Institute (BIDS) to identify areas for improvement and assess improvements made so far based on the findings of the previous survey in USS, 2022. Conducting a follow-up user satisfaction survey of official statistics is important for several reasons. The major points for rationales of such initiative include but are not limited to improvement of data quality, user feedback, accuracy and reliability, relevance and usability, meeting user needs, enhancing trust and transparency, resource allocation, policy-, and decision-making supports, technological advancements, legal and ethical compliance, and promoting usage. Overall, conducting user satisfaction surveys of official statistics is a critical initiative for ensuring that the data provided meets the highest standards of quality, relevance, and usability, ultimately supporting informed decision-making across various sectors. Thus, the User Satisfaction Survey 2024, USS 2024 for short, is vital for modernizing the national statistical ecosystem, enhancing the quality of official statistics, and increasing overall credibility among key stakeholders.

1.2 Objectives of the Study

The primary aim of this study is to conduct a follow-up USS to track and measure the extent to which data users in Bangladesh are satisfied with available official statistics. This survey assesses the satisfaction levels of data users regarding the existing official statistics across various domains and introduces new avenues of evaluation. Additionally, the study expanded its scope by including more data-generating agencies like the Bangladesh Bank, National Board of Revenue, Export Promotion Bureau, and Bangladesh Bureau of Educational and Information Statistics. Specifically, the study aims to

    a. Assess user satisfaction levels with services like data and reports provided by BBS and other data-generating agencies;

    b. Identify areas of improvement based on user feedback to modernize the NSO and other data-generating agencies and enhance data accessibility, accuracy, and reliability;

    c. Evaluate the effectiveness of the changes made since the previous survey and measure the impact on user satisfaction; and

    d. Analyze user suggestions and recommendations to strengthen the statistical ecosystem and meet evolving data needs.

1.3 Organization of the Report

The report is divided into eight chapters; each chapter addresses the different aspects of the users' satisfaction with the official statistics. Chapter 1 begins with the introduction of the report, which sheds light on the background, objectives, and organization of the report. Chapter 2 presents the methodological framework to assess the specific and general objectives. Chapter 3 characterizes the users across several socio-demographic attributes, including age, gender, experience in the related field, academic achievement, with or without a PhD degree, and organizational affiliation, which is expected to help in conducting multivariate analysis of the empirical findings. Chapter 4 analyzes the users' perception of the aggregate or domain-specific experience of the official statistics and compares the results with the ones found in USS 2022, wherever possible, given the data constraint about satisfaction. Chapter 5 discusses users' satisfaction concerning the accuracy, timeliness, relevance, and frequency of official statistics. These piecemeal satisfaction levels are supplemented with the overall satisfaction of the BBS data. Chapter 6 presents an inferential analysis of how users' attributes affect their perception and satisfaction levels for BBS products. Chapter 7 sheds light on the preferred channels and formats for obtaining official statistics and products, followed by major recommendations to improve BBS statistics, products, and services. Chapter 8 draws a few broad conclusions and suggests pertinent recommendations.

CHAPTER 2

Chapter 2: Analytical Approach and Methodology

2.1 Desk Review

Following the USS 2022, a desk review has been conducted to find relevant information, understand the methodological approach, and identify necessary changes. Consultative meetings were held between the BIDS and BBS research teams to establish a common understanding, including sampling procedure, data collection tools, and strategies to improve response rates and facilitate the survey.

2.2 Sample Size

This study emphasizes the sampling process to ensure that the selected entities and users of official statistics accurately represent the entire population. Consequently, estimates derived from data collected in the initial USS 2022 round are utilized to gauge population characteristics with a reasonable degree of precision. Given that the majority of indicators in the prior USS were categorical variables, this study also conducts hypothesis testing to compare the proportions of alternative states within a dichotomous indicator. Notably, the overall dissatisfaction level, as determined by the USS 2022, was estimated at 65%.

Against this backdrop, the hypotheses of interest are $H_0: p = p_0$ vs. $H_1: p \neq p_0$ where p is the proportion under H_0 and p_0 is the proportion under H_1, which p_0 is the known proportion (e.g., the proportion of dissatisfaction among users). The formula for determining the sample size to ensure that the test has a specified power is given below:

$$n = \left(\frac{Z_{1-\alpha}\sqrt{p(1-p)} + Z_{1-\beta}\sqrt{p_0(1-p_0)}}{\delta} \right)^2 \qquad (1)$$

where α is the selected level of significance, $Z_{1-\alpha}$ is the value from the standard normal distribution, $1 - \beta$ is the selected power, $Z_{1-\beta}$ is the value from the standard normal distribution, and δ is the effect size, defined as follows:

$$\delta = |p - p_0| \qquad (2)$$

The numerator of the effect size, the absolute value of the difference in proportions, $|p - p_0|$, represents what is considered a meaningful or practically significant difference in proportions. The above sample size, n, for proportion, a discrete random variable, is estimated under the assumption of normal distribution. Therefore, the unadjusted sample size, n, found above needs to be adjusted with the following factor to get the continuity corrected sample size, n_c, as follows:

$$n_c = \frac{n}{4}\left(1 + \sqrt{1 + \frac{2}{n|p_0 - p|}} \right)^2 \qquad (3)$$

Setting the z statistic at 95%, which is conventional, the z value is 1.96, p is the proportion of users fully satisfied with products of BBS, which is 0.35 in this case, and the 80% power of the test, which is 0.84, and the consequent effect size of 0.04 results in estimated sample size at 1170. Considering a 2.5% non-response rate, the sample size becomes 1200 (1170/.975). The study surveyed 1333 users grouped into different meaningful categories.

2.3 Sampling Techniques

The USS 2024 aims to explore the utilization of official statistics in guiding decisions and policymaking while assessing user satisfaction. The study uses a mixed-method sampling strategy to choose the respondents. This involves a two-stage sampling method: first, institutions are chosen based on the nature of their works which requires the use of statistics for evidence-based planning, research, and interventions and in certain cases actions. This technique completely overlaps with the purposive framework established in the USS 2022 in choosing the institutions. Second, respondents are randomly selected within these chosen institutions.

Specifically, the survey targets data users from various sectors, including public and private educational institutions, national and international research organizations, United Nations (UN) agencies, bilateral development partners, national and international non-governmental organizations, and civil society. These institutions cover various activities, like health, agriculture, education, energy, environment and natural resources, governance and decentralization, and information and communication technology (ICT).

2.4 Development of Survey Instrument

Questionnaires are developed following the PARIS21 guidelines (PARIS21, 2010). To compare the results of USS 2024 with that of USS 2022, all the questions from that round were retained. Besides, more questions were based on the review user satisfaction survey conducted in different countries across Europe, e.g., Eurostat 2020 User Satisfaction Survey (European Commission, 2020), Asia e.g., Nepal (CBS, 2018), and Africa, e.g., Rwanda (NISR, 2019) to comprehensively assess the changes. Further, the domain of ICT use was included, reflecting the increasing significance of this sector in statistical analysis. The final questionnaire is appended in Annex A.

2.5 Training of Enumerators and Data Collection

The formation of the survey team is the first step toward its implementation. Team members are hired based on their skills, experience in various aspects of the survey implementation process, and a thorough knowledge of local and country-specific contexts. The total number of professional enumerators and supervisors with five or more years of experience is about 55. Everyone has experience in collecting country-wide data. Also, five data entry operators are recruited to process survey data with a data entry specialist. Finally, the research team monitored the survey activities and data integrity.

A three-day training program familiarizes the enumerators with the questionnaire. The training sessions also allow the research team to assess the quality of the translation of the questionnaire. The training sessions cover the following activities:

i. make all enumerators thoroughly familiar with all questions in the questionnaire and their sensitivities, including purposes and range of potential answers;

ii. test the learning ability, knowledge, and interviewing skills of the enumerators;

iii. decide how to resolve confusing issues related to interviewing, when and how to prompt an answer; and

iv. allow the back-office team members to develop the necessary quality templates.

Enumerators must review the questionnaire, explaining their intent, possible responses, and how they could be asked. The enumerators are also trained through interactive presentation exercises, group assignments, mock interviews, and, at the end, given tests to demonstrate their progress.

In the case of in-person interviews, the questionnaire is provided to each respondent beforehand to ensure clarity and understanding. The enumerator followed the Computer Assisted Personal Interview (CAPI) technique to complete the interview. Alternatively, data collection is facilitated through the SurveyCTO platform utilizing the online survey technique. As a third alternative, a soft copy of the questionnaire was mailed to prospective respondents at home and abroad for their convenience. The respondent sent the filled-in copy of the questionnaire through return mail.

Data collection methods include in-person interviews and online surveys utilizing a structured questionnaire. In cases where in-person interviews are impractical, particularly for prominent researchers, respondents are provided with options for self-administered responses. It includes access to an online survey link or the provision of print versions for completion.

To supplement the quantitative data gathered, Key Informant Interviews (KIIs) were conducted with several experienced users of BBS data identified through platforms like Google Scholar citations. These respondents are purposively chosen based on their specific expertise and understanding. The KIIs provide valuable insights and serve to validate some of the findings obtained from the general user population. The KIIs are also used to supplement the findings from the quantitative survey. The conclusion from the KIIs validates the inference drawn from the quantitative survey data.

2.6 Analytical Method

To assess user satisfaction of official statistics, various analytical methods can be employed based on the research findings. Studies have highlighted the use of quantitative research approaches supported by statistical analysis as dominant in the usual research, while artificial neural networks have been utilized to approximate the links between user satisfaction and its determinants, showcasing asymmetry and nonlinearity in relationships (Ferrari & Manzi, 2014). Additionally, a two-step procedure involving nonlinear principal component analysis and multilevel models has

been proposed for analyzing satisfaction data, creating a synthetic continuous measure of satisfaction, and detecting individual and environmental determinants of satisfaction levels (Ferrari, Pagani, & Fiorio, 2007). Furthermore, a simplified process has been outlined for measuring the fulfillment of user requirements, emphasizing practical interpretation and ease of use through minimum criteria and formula-based analysis.

For ease of understanding, a rather simple approach is applied to analyze the data in the absence of a strong benchmark: estimating proportions of users along a particular attribute of official statistics both at the aggregate level as well as across several major statistical domains. Insofar as satisfaction is a latent variable, it is defined as users' perception or feeling about BBS statistical products, including data, publications, CD-ROMs, and service delivery systems like websites, product distribution, and other services for analytical convenience. Following convention, we also assume satisfaction as whether users access their desired data quickly and cheaply.

A descriptive analysis is used to outline the characteristics of the users, highlight trends in their preferences for statistics-related resources, and illustrate data use cases. The analysis then analyzes perceptions of statistical products and identifies areas for further improvement. As satisfaction is an individual perception, this analysis then categorizes the respondents according to different attributes, such as users with a PhD degree and those that do not have such a degree, to compare two groups to identify common perceptions. However, this strand of analysis is carried out only with the USS 2024 for practical convenience. Whenever data allows, the analysis also compares the findings of the USS 2022 to examine whether the efforts of the NDS-ISP enhanced the users' satisfaction and demands. The quantitative analyses are triangulated with the consultation of the KIIs to validate the findings. Finally, limited binomial, multinomial, and count outcomes in perception, satisfaction, and feedback are regressed on a set of sociodemographic correlates to assess the relative leverage of these attributes. The estimation is done using appropriate econometric techniques. The appropriate econometric methods and techniques are succinctly discussed in Chapter 6.

CHAPTER 3

Chapter 3: Characterizing the Users of Official Statistics

Data were collected from 1333 users of the BBS statistics. It may be noted that 92.70 percent of responses were obtained through physical interviews, while 5.73 percent and 1.56 percent were gathered through online and phone surveys, respectively. Given the repeated follow-ups, the non-response rate is less than 5 percent. This chapter outlines the profiles of these users in terms of their age, gender, academic qualifications, experience in using the official statistics, and institutional affiliations. It also discusses the frequency and intensity of official statistics usage followed by the purpose of use and formats of published data used, the modes of contacting the BBS for obtaining data, and the channels of obtaining the data. This study takes an extended approach that is different from the USS 2022 methodology by categorizing respondents into two groups: those with PhD degrees and those without.[1] Even though data were collected from users with Bachelor's' degrees, Master's degrees, MPhil degrees, PhD degrees, and postdoctoral fellows, the data were split into two groups, with or without PhD degrees, for brevity of analysis. This classification is intended to differentiate between 'intensive users' and 'occasional users' of BBS data.[2]

3.1 Gender and Age (in Years) of the Users

The distributions of age and gender of the users are presented in Figure 3.1. The doughnut presented in the left part of Figure 3.1 shows the percentage distribution of users based on gender. Approximately 77.72% of users are male. As elaborated in the previous chapter, the second stage of the sampling was random. Hence, it appears that the distribution of the users along the broad disciplines from which the sample was drawn is skewed to the male professionals.

The right part of Figure 3.1 shows that age ranges between 24 years and 84 years. The mean (45.21 years) and the median (45 years) age of the users are almost equal. However, the standard deviation is high at 10.86 years. Despite the thin right tail, the skewness of the distribution is not severe with the coefficient of skewness estimated at 0.41. Besides, the coefficient of kurtosis is estimated at 3.3, which implies that the distribution is pretty close to a normal (mesokurtic) distribution.

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[1] Category with PhD degree also includes postdoctoral fellows.

[2] This classification could also be done in a number of ways such as academic versus non-academic, journalism versus remaining, government versus non-government institutions, and financial versus non-financial institutions, etc.

Figure 3.1: Distribution by Gender and Age of the Users
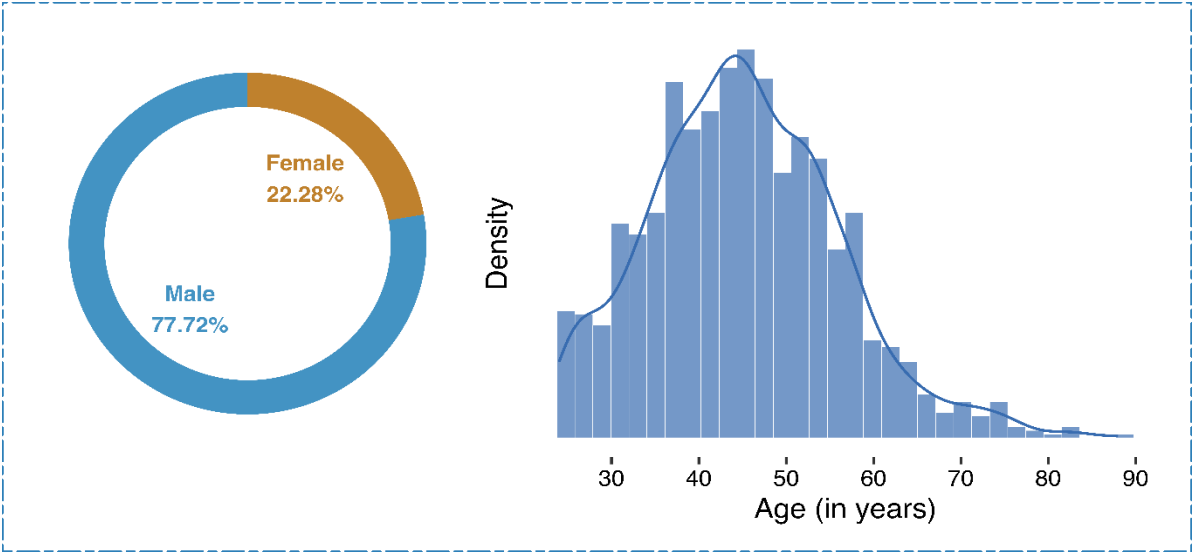
Source: USS 2024.

3.2 Academic Qualification and Experience of the Users

The distributions of the last academic degree and experience in the related field are presented in Figure 3.2. The histogram presented in the left part of Figure 3.2 shows the last academic degree earned by the users. It may be noted that the highest proportion (48.99%) of the users have a Master's degree, followed by 37.43 percent with a PhD degree, and 6.83 percent with an MPhil degree. The proportions of users with a graduate degree and post-doctoral are very small at 3.68 percent and 3.08 percent respectively. Thus, about 40.51 percent of the users have a PhD degree or above. This implies that a higher proportion of users are without a PhD degree; they work in different organizations apart from academic institutions and research organizations.

Figure 3.2: Distribution by Academic Degree and Experience of the Users
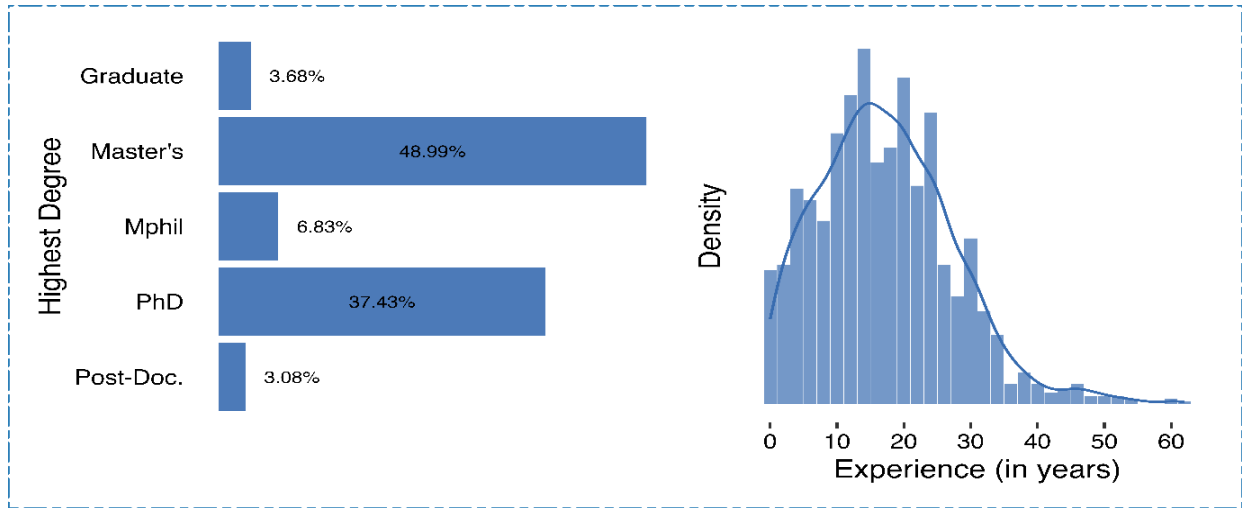
Source: USS 2024.

The working experience of the users, which ranges between zero and 62 years, is presented in the right part of Figure 3.2. Similar to their age distribution the mean (17.49 years) and the median (17 years) years of users are also almost equal. Given the thin right tail, the distribution is skewed to the right with the coefficient of skewness estimated at 0.69. However, compared to the distribution of age the coefficient of kurtosis is estimated at 3.82, which implies that the users tend to follow a leptokurtic distribution. Given the well-behaved nature of the socio-demographic distributions of the users, one can take the estimates that follow with confidence.

The distribution of users across institutions is reported in Figure 3.3, which illustrates the percentage distribution of respondents based on their institutional affiliations. Out of the total 1,333 sample, the majority (54.99%) are affiliated with academic institutions[3], followed by government organizations (8.93%), research institutions (8.55%), financial institutions (8.03%), and development partners (7.80%).

Figure 3.3: Sample Distribution by Institutional Affiliation

	Overall	PhD	Without PhD
Academic Institution	54.99%	81.67%	36.82%
Government Organisation	8.93%	5.74%	11.10%
Research Institution	8.55%	5.74%	10.47%
Financial Institution	8.03%	2.41%	11.85%
Development Partner	7.80%	2.59%	11.35%
Mass Media and Journalism	4.88%		8.20%
Graduate/Post Graduate Student	2.70%		4.54%
Business Community	2.40%		4.04%
Individual Researcher	1.73%	1.85%	1.64%
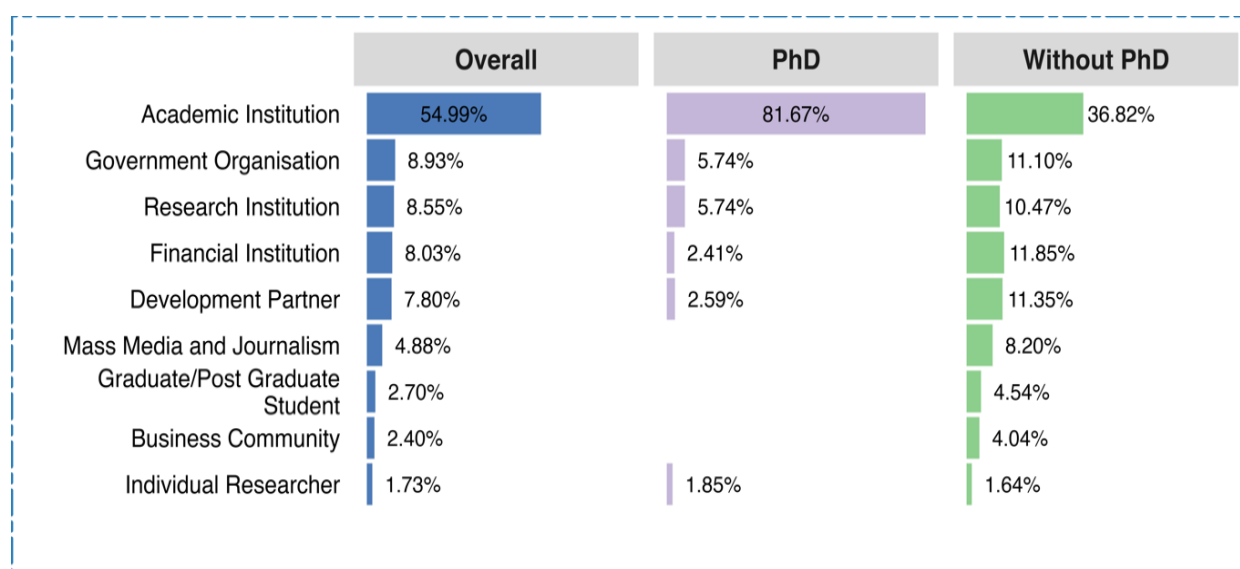
Source: USS 2024.

3.3 User Prevalence of Statistics by Domain

The user prevalence of statistics across the 15 broad domains: agriculture statistics, national accounts, price statistics, foreign trade statistics, industry statistics, labor statistics, income and poverty statistics, population, demographic and vital statistics, health and nutrition statistics, gender statistics, education statistics, environment statistics, crime and judicial statistics, ICT use statistics, and others is presented in Table 3.1. This categorization is followed so that the results are comparable with that of USS 2022 (BBS, 2023) and comply with the quality assurance framework of the NSS (BBS, 2023) and the PARIS21 guidelines (PARIS21, 2010) as well. It is important to note that an individual user may use multiple domains of official statistics.

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[3] Public and private universities and government colleges are grouped under academic institutions.

The estimation results reveal that approximately 68.57 percent of the respondents use population, demographic, and vital statistics most frequently, followed by income and poverty statistics (60.77%) and national accounts statistics (54.91%). More than half of the respondents use agriculture, education, and labor statistics, followed by industry statistics (39.83%), environment statistics (38.56%), and foreign trade (35.11%). However, information and communication technology (ICT) use (17.18%) statistics, and crime and judicial statistics (7.88%) are the least utilized. Approximately 6.38% use other miscellaneous statistics. Interestingly, users with PhD degrees or from academic backgrounds exhibit similar patterns of usage, primarily focusing on population, demographic, and vital statistics, followed by income and poverty statistics.

Findings from the USS 2024 round also reveal that the percentage of users has increased compared to the USS 2022, except for the population, demographic, and vital statistics. For instance, the proportion of users in national accounts increased from 35.17 percent in 2022 to 54.91 percent in 2024. Similarly, educational statistics usage increased to 50.41 percent from 32.76 percent, income and poverty statistics increased to 60.77 percent from 43.45 percent, and labor statistics increased to 50.11 percent from 33.10 percent. The increase in usage ranges between 2.02 percent and 19.74 percent. This comparison underscores a notable trend: users utilize the BBS products more extensively than before. Conversely, usage of population, demographic, and vital statistics decreased to 68.57% in 2024 from 70.52% in 2022.

Table 3.1: Usage of Official Statistics by Domain

(%)

Domain of Statistics	USS 2022		USS 2024	
	Count	Percent	Count	Percent
Agriculture Statistics	232	40.00	677	50.79
National Accounts Statistics	204	35.17	732	54.91
Price Statistics	150	25.86	594	44.56
Foreign Trade Statistics	117	20.17	468	35.11
Industry Statistics	146	25.17	531	39.83
Labor Statistics	192	33.10	668	50.11
Income and Poverty Statistics	252	43.45	810	60.77
Population, Demographic, and Vital Statistics	409	70.52	914	68.57
Health and Nutrition Statistics	160	27.59	617	46.29
Gender Statistics	155	26.72	569	42.69
Education Statistics	190	32.76	672	50.41
Environment Statistics	137	23.62	514	38.56
Crime/Judicial Statistics	34	5.86	105	7.88
ICT Use Statistics	-	-	229	17.18
Other Statistics	11	1.90	85	6.38
Total Sample	580		1333	

Sources: USS 2022 and USS 2024.

It may, however, be noted that the respondents are quite different in USS 2024 than those in USS 2022 despite using a similar sample frame. For instance, USS 2024 excluded those students who are pursuing a Master's degree after completion of their Bachelor's degree, while it is included in USS 2022. The rationale for excluding this group is that these continuing students still do not have comprehensive acquaintance with the full range of data published by the BBS. Hence, their responses are likely to be biased, the direction of which is unknown. This caveat should be borne in mind while comparing the results across different aspects between the two rounds.

3.4 Intensity of Using Statistics by Domain

The intensity of using official statistics by the respondents is shown in Figure 3.4. Approximately 40.98 percent of the respondents use the BBS data with no periodicity, which was 46.57 percent in 2022. Against this approximately six percentage point decline between the two rounds, the use of official statistics bi-annually increased from 1.93 percent to a staggering high of 21.05 percent. While the trend in the monthly use of official statistics remained the same, there is approximately a mirror image of changes in the use of official statistics both annually and quarterly between the two rounds.

Figure 3.4: Intensity of Using Official Statistics

	2022	2024
Daily	11.25%	1.65%
Every Alternative Day	0.35%	0.94%
Weekly	5.10%	2.61%
Fortnightly	1.23%	2.49%
Monthly	11.07%	10.20%
Quarterly	5.27%	11.92%
Annually	9.49%	6.11%
Bi-annually	1.93%	21.05%
Not Periodicity (Now and Then)	46.57%	40.98%
Once upon a time	7.73%	2.04%
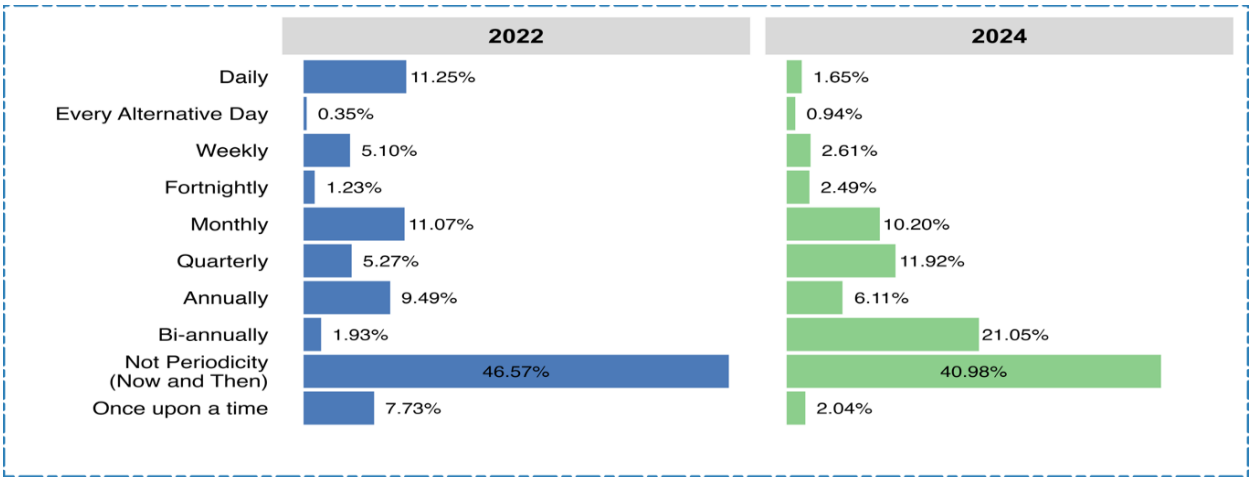
Sources: USS 2022 and USS 2024.

It is important to acknowledge that this distribution may be biased due to the nature of BBS data, primarily annual or occasional. Consequently, the observed patterns may be influenced by the supply-side characteristics of the data provided by the BBS. Be that as it may, these findings underscore the diverse intensity of users' preferences, highlighting the significance of offering data in formats and intervals that match their distinct requirements and operational workflows. By understanding and accommodating these varied preferences, the BBS can enhance the usability and relevance of its data offerings, thereby better serving the needs of its user base. This approach fosters greater engagement and utilization of official statistics and ultimately facilitates informed decision-making and policy formulation across various domains.

3.5 Purpose of Using Official Statistics

Statistical data play a pivotal role across various domains for several purposes, including decision-making, planning, modeling, forecasting, education and research, monitoring, mass media, journalism, and general information dissemination. Accurate and regularly updated statistical data and information let users gain insights into past trends and patterns and facilitate informed decision-making processes. Insights into how respondents utilize domain-specific BBS data are presented in Table 3.2. The results for USS 2024 indicate that a higher proportion of data by domain are used for education and research, ranging between 73.21 percent (education statistics) and 49.52 percent (crime and judicial statistics). Among the various statistical domains, education statistics emerge as the most utilized, with 73.21 percent of users engaging with this data, followed closely by population, demographic, and vital (72.10%), and income and poverty statistics (68.52%).

Decision-making emerges as the second most common usage category, with 24.49 percent of the respondents leveraging BBS data for this purpose, followed by planning (21.95%) and modeling and forecasting (19.73%). For decision-making, approximately 30.34% of respondents utilize foreign trade data, 27.87% utilize industrial statistics, and 26.77% use price statistics.

Compared to the findings of the USS 2022, this study observes an overall uptake in utilizing BBS data for decision-making purposes across various domains, with a few exceptions such as price, industry, labor, population, demographic and vital, and crime statistics. Conversely, there has been a decrease in the usage of BBS data for planning purposes in most domains. However, for modeling and forecasting, there is an increase in the utilization of agriculture, as well as population, demographic, and vital statistics.

Moreover, the study notes an increase in the use of BBS data for research and education across all categories. Similarly, there is increased usage within agriculture and population, demographic, and vital domains for monitoring and evaluation. These trends highlight evolving patterns in utilizing BBS data for different purposes, reflecting shifting user priorities and needs.

While average trends in data use across domains increased for decision-making, education and research, and mass media and journalism, the trends declined for planning, modeling and forecasting, and monitoring and evaluation between the two rounds.

Table 3.2: Purpose of Using Official Statistics

Domains of Statistics	Round	Decision-making	Planning	Model-ing and Forecas-ting	Educatio n and Resea-rch	Monito-ring and Evalua-tion	Mass Media and Journa-lism	General Informa-tion
Agriculture Statistics	2022	23.28	28.88	23.28	50.86	9.48	NA	NA
	2024	26.14	24.52	24.67	64.55	11.82	10.93	15.36
National Accounts Statistics	2022	23.76	24.26	28.22	53.96	11.88	NA	NA
	2024	26.23	24.32	22.27	61.34	8.88	10.66	15.71
Price Statistics	2022	29.53	24.16	36.24	48.99	18.12	NA	NA
	2024	26.77	25.76	27.10	57.07	8.75	12.96	16.84
Foreign Trade Statistics	2022	26.50	24.79	37.61	54.70	14.53	NA	NA
	2024	30.34	26.92	23.50	52.99	9.83	13.25	18.16
Industry Statistics	2022	28.08	28.77	35.62	46.58	12.33	NA	NA
	2024	27.87	25.61	22.22	57.25	10.73	14.12	17.14
Labor Statistics	2022	25.13	27.23	25.13	57.59	14.66	NA	NA
	2024	23.05	19.76	21.26	66.02	8.68	11.53	14.37
Income and Poverty Statistics	2022	21.20	34.40	24.80	50.40	14.00	NA	NA
	2024	22.47	21.23	21.23	68.52	10.37	9.01	15.56
Population, Demographic, and Vital Statistics	2022	28.33	25.62	17.98	45.81	9.36	NA	NA
	2024	20.79	20.35	16.74	72.10	9.96	8.42	13.35
Health and Nutrition Statistics	2022	20.62	27.50	23.75	58.75	12.50	NA	NA
	2024	22.04	19.77	18.31	67.26	11.02	10.70	12.97
Gender Statistics	2022	23.53	31.37	27.45	50.98	17.65	NA	NA
	2024	25.31	20.74	18.10	64.50	9.67	10.90	16.34
Education Statistics	2022	18.62	25.53	21.28	56.38	14.89	NA	NA
	2024	19.94	18.01	17.41	73.21	8.93	8.63	13.54
Environment Statistics	2022	20.90	26.12	31.34	59.70	20.15	NA	NA
	2024	23.74	21.21	20.62	66.54	8.95	8.95	14.20
Crime/Judicial Statistics	2022	31.25	46.88	18.75	37.50	25.00	NA	NA
	2024	20.00	20.00	15.24	49.52	9.52	16.19	22.86
ICT Use Statistics	2024	24.45	22.27	17.90	51.97	10.04	21.40	20.09
Other Statistics	2022	57.14	71.43	28.57	42.86	42.86	NA	NA
	2024	28.24	18.82	9.41	52.94	10.59	17.65	23.53

Sources: USS 2022 and USS 2024.
Note. NA indicates not available in the questionnaire for the USS 2022.

3.6 Formats of Published Data Currently Used

BBS primarily offers statistical data in various formats, such as publications in PDF format in CD-ROMs and websites, MS Word or MS Excel form in CD-ROMs and websites, HTML and web format, and infographics. Based on users' requirements and technological advancements, the respondents were asked to report the modes of formats of the published data they are using. The formats of BBS published data by statistical domains the respondents use are presented in Table

3.3. The most widely used modes are data in BBS publications (59.02%) and PDF form in websites and CD-ROMs (55.55%). Respondents commonly note that BBS provides reports and annual publications on the website in PDF formats, making them accessible and useful for obtaining relevant information. Around 21.68 percent of users currently utilize relevant data in MS Excel format for such purposes. Additionally, about 11.80 percent and 5.63 percent of users extract data from HTML web format and infographics, respectively. These insights highlight the importance of providing diverse formats to cater to users' varied needs and preferences, ensuring accessibility and usability of statistical data.

Table 3.3: Modes or Formats of Published Data Currently Used

(%)

Domains of Statistics	BBS Publication	PDF form in CD-ROMs & website	Word/Excel form in CD-ROMs & website	HTML and web format	Infographics	Other
Agriculture Statistics	64.40	59.38	23.49	8.57	6.35	0.30
National Accounts Statistics	57.10	55.33	21.31	14.34	5.87	0.14
Price Statistics	55.89	51.52	23.06	13.80	5.56	0.34
Foreign Trade Statistics	55.13	51.92	18.16	14.53	5.77	0.00
Industry Statistics	55.56	55.18	20.53	14.12	6.21	0.19
Labor Statistics	57.19	54.04	23.80	12.13	4.94	0.15
Income and Poverty Statistic	58.64	56.17	26.30	11.48	5.06	0.74
Population, Demographic and Vital Statistics	57.44	58.21	23.74	12.80	3.72	0.22
Health and Nutrition Statistics	58.51	55.11	25.61	10.53	5.35	0.65
Gender Statistics	60.11	57.82	21.79	7.73	5.80	0.35
Education Statistics	61.46	57.29	20.24	10.27	3.72	0.30
Environment Statistics	58.75	56.42	22.76	11.09	4.47	0.39
Crime/Judicial Statistics	58.10	47.62	15.24	13.33	8.57	0.00
ICT Use Statistics	64.63	53.71	22.71	10.48	4.80	0.00
Other Statistics	62.35	63.53	16.47	11.76	8.24	1.18

Source: USS 2024.

3.7 Channels for Learning and Obtaining BBS Data

Data users typically become aware of and access official statistics from the BBS through various channels. About 91.60 percent of users learn about the availability of official statistics through websites and search engines (Figure 3.5). Additionally, 54.91 percent and 50.34 percent of users obtain information through publications or websites of international organizations and official press releases or mass media, respectively. About one-fourth of users learn about these statistics through personal contacts with the BBS staff (26.71%), social media (26.18%), and public events or conferences (25.36%), while a smaller proportion (8.48%) learn through subscriptions to the BBS website.

Figure 3.5: Channels of Learning about the Availability of Statistics
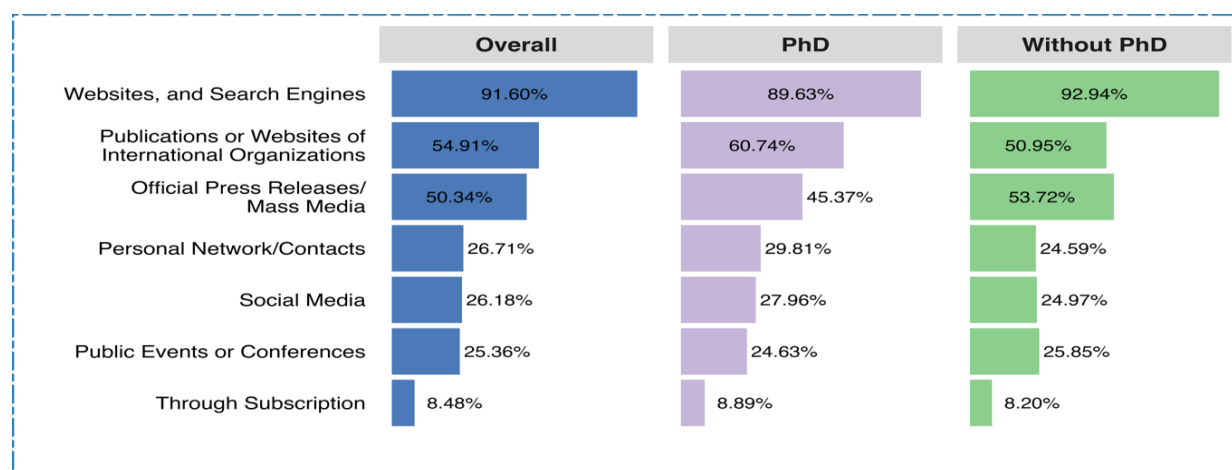
Source: USS 2024.

Though there are various channels through which respondents become aware of the availability of BBS data, they were asked to report the medium they usually obtain these. Thus, the channels through which the data users usually obtain the official statistics are listed in Figure 3.6. Many respondents obtained data from the BBS website or data portals (88.37%), while 48.16 percent obtained it from published reports, and 41.26 percent obtained it free of cost. This trend is consistent across data users with and without PhD degrees. Respondents also obtain data from various channels, including purchases from the BBS website (23.03%), libraries of public and educational institutions (19.58%), official requests from their institutions (12.68%), and telephones/facsimiles/emails to BBS (10.35%), libraries of government offices (8.25%), etc. Overall, these findings highlight the significant reliance on online platforms, particularly the BBS website, for accessing statistical data among the users. However, traditional methods such as accessing data from libraries still play a role, albeit to a lesser extent.

Figure 3.6: Channels of Obtaining Statistics
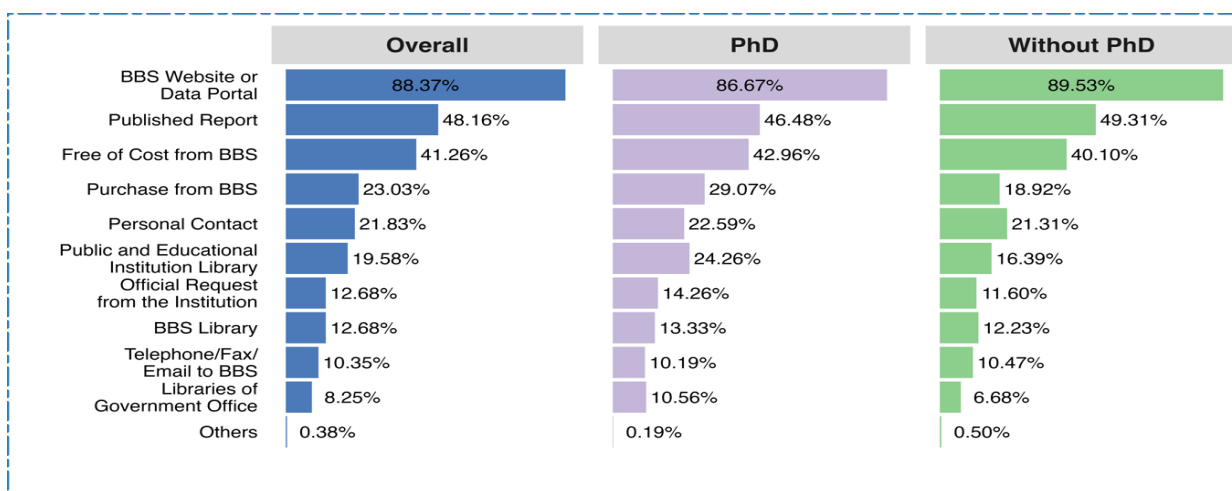
Source: USS 2024.

3.8 Modes of Communication in Contacting the BBS

The respondents were also asked to report whether they have ever tried to contact BBS for any query on data and, if contacted, which medium they have used. It may be noted that more than half of the respondents did not contact BBS (52.29%) for any query on data. While about 38.56 percent tried to contact BBS for a query on data, 9.15 percent do not even remember whether they contacted the BBS for any data query. It is shown in Figure 3.7 that the respondents who have ever contacted BBS used various modes of communication in contacting the BBS, including telephone (56.42%), personal contact with the Head Office (39.11%), and contact with an official of BBS (27.43%), website (33.46%), and email to Head Office (24.71%).

Figure 0.1: Modes of Communication in Contacting the BBS
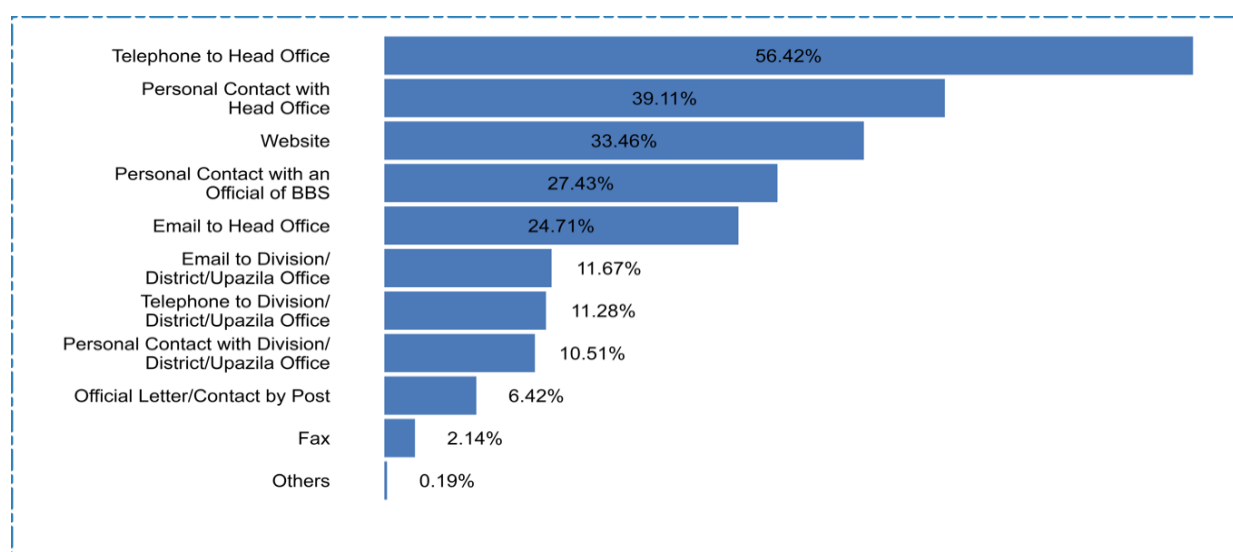
Source: USS 2024

CHAPTER 4

Chapter 4: Perceptions and Satisfactions of Products and Services

After looking at the respondents' profiles and data usage patterns, including incidence, frequency, purpose of using official statistics, formats of published data use, and channels through which they usually obtain data, this chapter explores the respondents' perceptions of the official statistics from different perspectives.

4.1 Usefulness

Users from diverse domains may have distinct perceptions regarding the usefulness of BBS publications in comprehending trends, informing decisions, and tackling challenges within their respective areas of expertise. Users' perceptions of the usefulness of data across various domains are presented in Table 4.1. For instance, Table 4.1 indicates that 27.03 percent of users find agriculture statistics very useful, followed by 57.02 percent who find it useful, 14.18 percent who find it somewhat useful, and 1.77 do not find it very useful. The most useful domains include health and nutrition (28.36%), national accounts (26.78%), crime/judicial statistics (26.67%), income and poverty (26.17%), and ICT use statistics (25.76%).

Table 4.1: Perception of the Usefulness of BBS Data

(%)

Domains of Statistics	Round	Very Useful	Useful	Somewhat Useful	Not Very Useful
Agriculture Statistics	2022	13.42	68.40	16.02	2.16
	2024	27.03	57.02	14.18	1.77
National Accounts Statistics	2022	26.37	58.71	11.94	2.99
	2024	26.78	58.06	14.07	1.09
Price Statistics	2022	22.00	55.33	18.67	4.00
	2024	24.41	56.73	17.34	1.52
Foreign Trade Statistics	2022	17.09	70.09	11.11	1.71
	2024	24.36	55.34	17.74	2.56
Industry Statistics	2022	12.50	65.28	20.14	2.08
	2024	23.54	54.80	19.21	2.45
Labor Statistics	2022	20.83	55.73	19.27	4.17
	2024	25.45	55.99	17.07	1.50
Income and Poverty Statistics	2022	21.29	58.23	18.47	2.01
	2024	26.17	56.54	15.56	1.73
Population, Demographic, and Vital Statistics	2022	24.63	59.61	13.55	2.22
	2024	24.07	60.39	14.22	1.31
Health and Nutrition Statistics	2022	19.50	54.72	21.38	4.40
	2024	28.36	54.78	15.07	1.78
Gender Statistics	2022	18.71	61.29	18.06	1.94
	2024	24.08	58.00	15.99	1.93

Domains of Statistics	Round	Very Useful	Useful	Somewhat Useful	Not Very Useful
Education Statistics	2022	18.62	64.36	15.96	1.06
	2024	23.66	61.01	13.84	1.49
Environment Statistics	2022	20.00	53.85	23.08	3.08
	2024	24.12	58.75	14.01	3.11
Crime/Judicial Statistics	2022	18.75	56.25	12.50	12.50
	2024	26.67	49.52	18.10	5.71
ICT Use Statistics	2024	25.76	51.97	17.47	4.80
Other Statistics	2022	62.50	37.50	0.00	0.00
	2024	30.59	49.41	16.47	3.53

Sources: USS 2022 and USS 2024.

Compared to the USS 2022, findings of the USS 2024 reveal higher levels of data usefulness across most domains, except for foreign trade, population, demographic and vital statistics, and crime and judicial statistics. These insights provide valuable feedback on the perceived utility of BBS products, offering opportunities for improvement in data dissemination and presentation strategies.

4.2 Easiness of Understanding BBS Products

Users' perceptions of the ease of understanding of BBS products are presented in Figure 4.1. Around 75.55 percent of users find BBS products, including data and publication reports, moderate to very easy to comprehend or extract the required information. Interestingly, users with PhD degrees report higher levels of ease in understanding compared to users without PhD degrees, suggesting that users without PhD may require further assistance in interpreting the data and reports. Additionally, approximately 1.77 percent of users without PhD have no comments on the ease of understanding BBS products, while 1.51 percent find them difficult to understand, indicating scopes for improvement in communication and presentation.

Figure 4.1: Perception of Ease of Understanding BBS Products
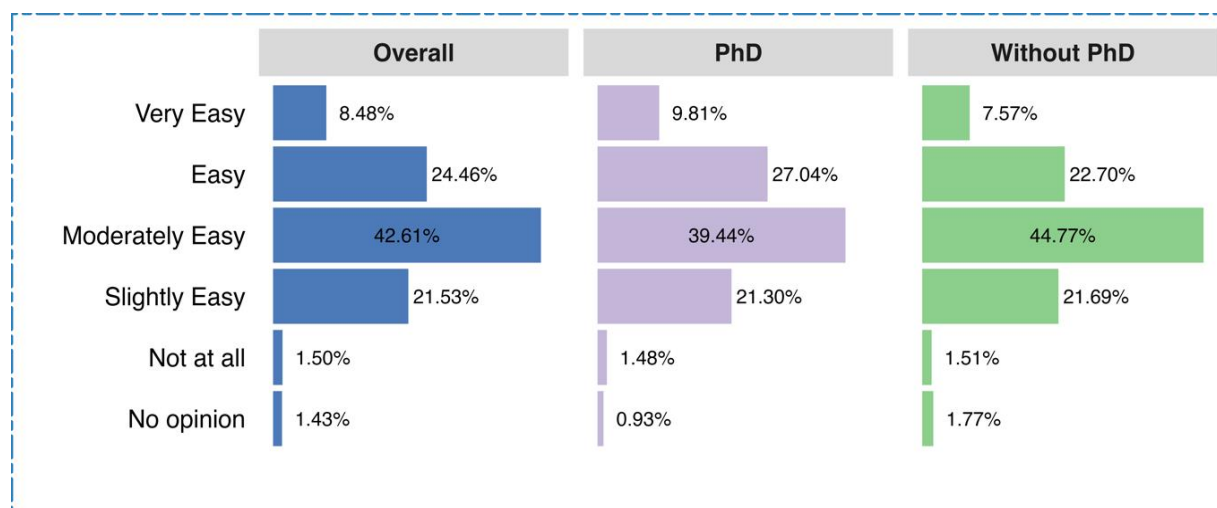
Source: USS 2024.

Further, users' perceptions of the easiness of data presentation across domains are illustrated in Table 4.2. The results reveal that 65.62 percent of the users perceive it as easy to very easy. The rest, 31.19 percent of the users, find it somewhat easy, and a very small proportion find it difficult. The proportion registers very little variation across the domains, ranging between 60 percent and 70 percent.

A comparison between the USS 2022 and USS 2024 reveals that while the proportion of users rating somewhat easy increased by 6.87 percent, those rating very easy and easy declined by 1.59 percent and 4.36 percent, respectively. It gives a mixed overall outcome when the results are compared across domains. While the perception that presentation is very easy increased marginally in 8 of the 15 domains, it declined in the other seven domains. In contrast, the perception that the presentation of data is easy declined in all domains except for the other statistics. Finally, the perception that the presentation of data is somewhat easy shows a positive change across all domains.

Table 4.2: Perception of Easiness of Presentation of Data by Domain

(%)

Domain of Statistics	Round	Very Easy	Easy	Somewhat Easy	Not Easy
Agriculture Statistics	2022	12.12	60.61	24.68	2.60
	2024	14.18	52.58	30.28	2.95
National Accounts Statistics	2022	14.36	59.41	22.77	3.47
	2024	16.67	50.41	30.60	2.32
Price Statistics	2022	15.33	51.33	29.33	4.00
	2024	13.47	47.98	34.51	4.04
Foreign Trade Statistics	2022	11.30	57.39	27.83	3.48
	2024	12.39	49.57	33.97	4.06
Industry Statistics	2022	15.17	53.10	27.59	4.14
	2024	12.24	48.40	34.84	4.52
Labor Statistics	2022	13.09	55.50	23.56	7.85
	2024	15.87	49.55	30.99	3.59
Income and Poverty Statistics	2022	13.20	57.20	24.80	4.80
	2024	16.42	51.60	28.27	3.70
Population, Demographic, and Vital Statistics	2022	16.13	59.55	21.59	2.73
	2024	16.85	52.95	27.57	2.63
Health and Nutrition Statistics	2022	15.19	53.80	25.95	5.06
	2024	16.05	52.03	28.85	3.08
Gender Statistics	2022	11.69	59.09	24.68	4.55
	2024	15.99	52.72	29.35	1.93
Education Statistics	2022	16.58	61.50	18.18	3.74
	2024	16.07	51.04	30.51	2.38
Environment Statistics	2022	14.50	55.73	25.19	4.58
	2024	13.23	52.53	31.13	3.11

Domain of Statistics	Round	Very Easy	Easy	Somewhat Easy	Not Easy
Crime/Judicial Statistics	2022	19.35	54.84	19.35	6.45
	2024	17.14	47.62	34.29	0.95
ICT Use Statistics	2024	12.23	50.66	34.50	2.62
Other Statistics	2022	50.00	25.00	25.00	0.00
	2024	22.35	43.53	28.24	5.88

Sources: USS 2022 and USS 2024.

4.3 Accessibility

Insights into users' perceptions regarding the accessibility of BBS products and data by statistical domains are presented in Table 4.3. To that end, a Likert scale of 4 as very easy, easy, somewhat difficult, and difficult is used. About 69.42 percent of all users report that access to BBS data is easy or very easy, while 28.51 percent find it somewhat difficult, and 2.02 percent find it difficult. The highest percentage of users reported very easy to easy accessibility for education statistics (75.44%), followed by population, demographic, and vital statistics (74.73%) and gender statistics (73.11%), respectively. Conversely, the most challenging domains to access are crime and judicial, labor, and foreign trade statistics. While crime and judicial statistics are at the nascent stage in Bangladesh, BBS should look into the accessibility issues of the other two statistics, as the BBS has been generating the latter statistics regularly for quite a long period.

Comparing these findings to the USS 2022 reveals that users now find it less easy to access statistics across all of the domains except health and nutrition statistics. One potential reason for this declining trend could be the difference in sample respondents. This assertion could be validated once a similar set of respondents are interviewed in future rounds.

Table 4.3: Perception of Accessibility Data by Domain

(%)

Domains of Statistics	Round	Very Easy	Easy	Somewhat Difficult	Difficult
Agriculture Statistics	2022	12.07	62.93	21.12	3.88
	2024	13.74	56.57	27.62	2.07
National Accounts Statistics	2022	18.72	62.07	13.30	5.91
	2024	12.30	60.38	25.14	2.19
Price Statistics	2022	19.59	56.08	16.22	8.11
	2024	11.45	57.41	29.29	1.85
Foreign Trade Statistics	2022	18.26	57.39	20.00	4.35
	2024	9.83	55.98	31.41	2.78
Industry Statistics	2022	12.33	57.53	23.29	6.85
	2024	9.04	57.82	30.32	2.82

Domains of Statistics	Round	Very Easy	Easy	Somewhat Difficult	Difficult
Labor Statistics	2022	16.75	55.50	21.99	5.76
	2024	11.68	53.89	31.74	2.69
Income and Poverty Statistics	2022	18.40	58.00	18.80	4.80
	2024	13.83	57.53	25.93	2.72
Population, Demographic, and Vital Statistics	2022	18.81	65.35	13.86	1.98
	2024	12.80	61.93	23.85	1.42
Health and Nutrition Statistics	2022	11.95	59.12	25.16	3.77
	2024	11.02	61.26	25.77	1.94
Gender Statistics	2022	15.03	63.40	16.99	4.58
	2024	12.83	60.28	26.01	0.88
Education Statistics	2022	16.58	64.71	16.04	2.67
	2024	13.24	62.20	23.36	1.19
Environment Statistics	2022	18.52	56.30	19.26	5.93
	2024	9.92	57.78	30.16	2.14
Crime/Judicial Statistics	2022	15.62	62.50	15.62	6.25
	2024	11.43	54.29	32.38	1.90
ICT Use Statistics	2024	14.85	53.71	30.57	0.87
Other Statistics	2022	25.00	50.00	25.00	0.00
	2024	22.35	40.00	34.12	3.53

Sources: USS 2022 and USS 2024.

Be that as it may, these insights emphasize the importance of ensuring easy access to statistical data and products, as they directly impact users' ability to utilize and benefit from the information provided by the BBS. Identifying areas of difficulty in accessibility allows for targeted improvements to enhance user experiences and maximize the utility of statistical data.

The challenges that users encounter while accessing or obtaining statistical data across domains are presented in Table 4.4. Approximately 14.10 percent of all users indicate difficulty in obtaining data. For these users, the challenge is more pronounced for not finding the data on the website (59.77%), followed by the lack of metadata (21.21%) and not knowing the location of data (12.81%). Across domains, the incidence is more pronounced in not finding the data on the website for population, demographic, and vital statistics (65.53%), ICT use statistics (65%), and health and nutrition statistics (64.85%).

Table 4.4: Reasons for Difficulty in Obtaining Data

(%)

Domain of Statistics	Round	N	Data location unknown	Data not found on the website	No Metadata	Others
Agriculture Statistics	2022	57	5.26	31.58	42.11	19.30
	2024	243	14.40	60.91	20.99	3.70
National Accounts Statistics	2022	40	5.00	22.50	52.50	25.00
	2024	236	13.56	60.17	23.73	2.54
Price Statistics	2022	36	5.56	25.00	44.44	27.78
	2024	214	11.68	59.81	24.30	4.21
Foreign Trade Statistics	2022	28	0.00	14.29	46.43	35.71
	2024	192	14.58	57.29	25.00	3.12
Industry Statistics	2022	39	7.69	35.90	43.59	25.64
	2024	205	13.66	64.39	19.51	2.44
Labor Statistics	2022	52	3.85	30.77	32.69	38.46
	2024	265	12.83	63.77	19.62	3.77
Income and Poverty Statistics	2022	57	3.51	40.35	40.35	24.56
	2024	272	13.24	61.03	22.79	2.94
Population, Demographic, and Vital Statistics	2022	64	7.81	32.81	37.50	17.19
	2024	264	9.09	65.53	21.97	3.41
Health and Nutrition Statistics	2022	43	16.28	34.88	37.21	16.28
	2024	202	13.37	64.85	18.32	3.47
Gender Statistics	2022	34	5.88	35.29	26.47	29.41
	2024	181	12.15	59.67	24.31	3.87
Education Statistics	2022	36	5.56	38.89	25.00	30.56
	2024	187	13.90	61.50	20.86	3.74
Environment Statistics	2022	36	8.33	33.33	55.56	22.22
	2024	197	16.75	58.88	21.32	3.05
Crime/Judicial Statistics	2022	8	12.50	25.00	25.00	25.00
	2024	42	11.90	59.52	23.81	4.76
ICT Use Statistics	2024	80	11.25	65.00	18.75	5.00
Other Statistics	2022	2	50.00	50.00	0.00	0.00
	2024	39	15.38	56.41	17.95	10.26

Sources: USS 2022 and USS 2024.

Most users face difficulties, including poor website navigation, unclear organization, and insufficient instructions. This challenge is particularly prevalent in population, demographic, and vital statistics (65.53%), ICT use statistics (65%), health and nutrition (64.85%), and industry statistics (64.39%). Users often cite BBS's irregular publication of outdated data and lack of detailed information as contributing factors. Additionally, approximately 25.23 percent of users report difficulty in finding metadata, with the highest percentages observed in foreign trade statistics (25%), gender statistics (24.31%), and national accounts statistics (23.73%).

These insights highlight the importance of addressing specific challenges users face in accessing statistical data, such as enhancing website navigation, ensuring regular updates and detailed information, and providing comprehensive metadata. Addressing these challenges can significantly improve the usability and accessibility of BBS data for users across different domains.

The USS 2024 reveals several notable trends compared to the USS 2022. First, a higher proportion of users across all domains now report difficulty knowing where to find their required data. Additionally, even when data are found, more users report that the available data are not sufficient to meet their requirements. However, in contrast to the USS 2024, a higher proportion (31.95%) of users in the USS 2022 reported facing challenges in finding metadata. This implies that users are still concerned about issues with the metadata, although there may have been advancements in some areas of data availability and accessibility. These comparative findings highlight the evolving nature of users' experiences and challenges in accessing statistical data. Addressing these issues is essential for enhancing the usability and effectiveness of statistical products and services provided by the BBS.

4.4 BBS Methodology of Data Collection

As the NSO, the BBS is responsible for collecting, compiling, and disseminating statistical data. This includes conducting surveys and censuses using standard approaches outlined in the literature and the UNSD. The BBS reports thoroughly describe the survey methodology, sample design, questionnaires, ethical guidelines, and data-gathering techniques. The respondents were asked to report their perception of the data collection methodology by the BBS.

Estimates presented in Table 4.5 indicate that 11.78 percent of the users rate the data collection methodology as very good, while 66 percent rate it as good. While 13.16 percent of the users perceive it as poor to very poor, 9.07 percent are unaware of the methodology. The estimates also reveal that a high perception of the methodology is rated as good to very good for income and poverty statistics (81.85%), health and nutrition statistics (81.36%), education statistics (80.80%), and population, demographic, and vital statistics (80.75%). However, perceptions regarding the methodology for price statistics (75.76%), ICT statistics (75.11%), and crime and judicial statistics (66.67%) fall below the average of 77.78 percent.

Table 4.5: Perception of BBS Methodology of Data Collection

(%)

Domain of Statistics	Round	Very Good	Good	Poor	Very Poor	Don't Know
Agriculture Statistics	2022	7.39	52.61	20.00	2.17	17.83
	2024	10.78	68.54	9.16	0.89	10.64
National Accounts Statistics	2022	9.41	47.03	21.78	5.45	16.34
	2024	10.66	68.17	8.61	1.09	11.48
Price Statistics	2022	8.72	45.64	26.85	8.05	10.74
	2024	9.60	66.16	12.12	1.85	10.27
Foreign Trade Statistics	2022	7.83	53.91	16.52	2.61	19.13
	2024	12.18	64.96	10.04	1.92	10.90
Industry Statistics	2022	6.90	48.97	21.38	5.52	17.24
	2024	10.17	64.78	11.30	2.26	11.49
Labor Statistics	2022	10.00	40.53	26.32	6.32	16.84
	2024	11.68	67.07	10.78	2.40	8.08
Income and Poverty Statistics	2022	9.24	40.56	25.30	6.83	18.07
	2024	13.33	68.52	8.02	1.98	8.15
Population, Demographic, and Vital Statistics	2022	8.62	49.26	18.47	1.72	21.92
	2024	11.38	69.37	9.19	1.31	8.75
Health and Nutrition Statistics	2022	8.28	44.59	26.75	3.18	17.20
	2024	11.67	69.69	10.53	1.94	6.16
Gender Statistics	2022	8.44	52.60	19.48	2.60	16.88
	2024	13.18	65.91	11.60	1.76	7.56
Education Statistics	2022	8.02	56.68	14.44	2.67	18.18
	2024	11.31	69.49	10.57	0.74	7.89
Environment Statistics	2022	8.15	42.22	22.96	8.15	18.52
	2024	9.92	67.51	10.70	1.75	10.12
Crime/Judicial Statistics	2022	12.12	54.55	24.24	3.03	6.06
	2024	14.29	52.38	20.00	3.81	9.52
ICT Use Statistics	2024	10.04	65.07	12.66	3.06	9.17
Other Statistics	2022	25.00	37.50	0.00	12.50	25.00
	2024	16.47	62.35	11.76	3.53	5.88

Sources: USS 2022 and USS 2024.

A comparison between USS 2022 and USS 2024 reveals an overall increase of 20.29 percentage points in rating the BBS data collection as very good or good. An increasing trend in very good or good ratings is observed across the domains except for the crime and judicial statistics and other statistics. Not surprisingly, higher credibility is achieved in very good or good ratings in income and poverty statistics (32.05%), health and nutrition statistics (28.49%), labor statistics (28.22%), and environmental statistics (27.06%) between the two rounds.

4.5 Documentation of Metadata

Metadata plays a crucial role in various data generated or compiled by the BBS. It serves to describe content, provide context, document transactions, and situate data, and hence is becoming increasingly essential due to the rise in digital information and technology. Overall, metadata acts as intelligent data, facilitating data organization, retrieval, and interpretation, making it a critical component in data modeling, function operation, and the development of knowledge-based information systems (Liu & Liu, 2023).

The users' perception of the methodological description of metadata is presented in Figure 4.2. Metadata in statistics play a crucial role in providing information that describes statistical data comprehensively, including definitions, sources, techniques, quality, and relationships. This metadata aids users in understanding, interpreting, and effectively utilizing statistical data. For instance, the metadata of a survey may encompass details such as sample design, questionnaire structure, response rate, weighting techniques, margin of error, and more.

More than two-thirds (67.40%) of the users find the methodological description of metadata to be good to very good, while 10.29 percent perceive it as poor, and 1.71 percent find it very poor (Figure 4.2). Among users with a PhD degree, 73.59 percent rate the description as very good to good, compared to 63.24 percent without a PhD degree. Thus, a significant proportion of users across all groups find the methodological description of metadata satisfactory.

Figure 4.2: Perception of Documentation of Metadata
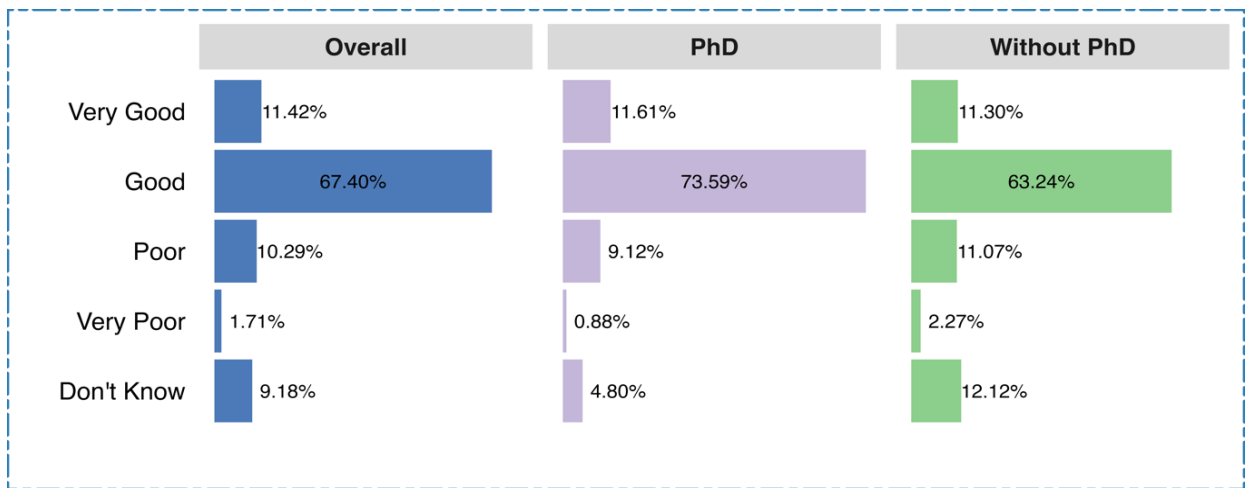
Source: USS 2024.

These findings indicate a potential gap in effectively communicating metadata-related information to users. Addressing this issue is essential to ensure that users can fully leverage metadata to understand and utilize statistical data accurately and efficiently. Enhancing the clarity and accessibility of metadata descriptions can improve users' overall experience and facilitate more informed decision-making and analysis.

4.6 Quality of Data

As the leader of the NSS, the BBS prioritizes maintaining data quality to support evidence-based policymaking. Understanding how users assess the quality of BBS products is crucial for ensuring their effectiveness and relevance. Statistical data quality is crucial for various fields of socioeconomic issues. Quality data leads to accurate predictions and informed decision-making. Transparency in statistical approaches is essential to avoid errors and promote scientific advancement, wherein quality data is a sine qua non. For instance, in estimating prevalence rates of anthropometric failures, data quality indicators play a vital role in ensuring the accuracy of results. In fine, data quality plays a fundamental role in generating meaningful insights and driving impactful decisions across various dis ciplines.

It is found that about 95.30 percent of users rate the data quality as good or above when using a self-assessment scale ranging from very good to very poor (Table 4.6). The rest 4.70 percent consider it poor or very poor.

Table 4.6: Perception of Quality of BBS Statistics

Domain of Statistics	Round	Very Good	Good	Poor	Very Poor
Agriculture Statistics	2022	10.87	77.83	11.30	0.00
	2024	11.67	84.49	2.81	1.03
National Accounts Statistics	2022	12.87	72.77	12.87	1.49
	2024	9.29	86.75	2.87	1.09
Price Statistics	2022	8.11	68.24	21.62	2.03
	2024	10.44	83.67	3.87	2.02
Foreign Trade Statistics	2022	12.28	78.07	9.65	0.00
	2024	8.76	86.54	3.42	1.28
Industry Statistics	2022	12.50	70.14	15.97	1.39
	2024	7.53	87.57	3.01	1.88
Labor Statistics	2022	11.52	69.11	17.28	2.09
	2024	10.18	85.18	3.14	1.50
Income and Poverty Statistics	2022	10.48	70.97	17.74	0.81
	2024	10.62	83.58	4.20	1.60
Population, Demographic, and Vital Statistics	2022	9.93	82.38	6.45	1.24
	2024	10.28	85.78	3.28	0.66
Health and Nutrition Statistics	2022	11.32	67.30	19.50	1.89
	2024	10.70	85.89	3.08	0.32
Gender Statistics	2022	10.97	77.42	10.32	1.29
	2024	10.02	86.65	2.81	0.53

Domain of Statistics	Round	Very Good	Good	Poor	Very Poor
Education Statistics	2022	10.33	77.17	12.50	0.00
	2024	10.12	86.75	2.53	0.60
Environment Statistics	2022	10.37	71.85	16.30	1.48
	2024	10.12	85.99	3.11	0.78
Crime/Judicial Statistics	2022	12.50	71.88	6.25	9.38
	2024	8.57	86.66	3.81	0.95
ICT Use Statistics	2024	8.30	85.58	5.24	0.87
Other Statistics	2022	33.33	66.67	0.00	0.00
	2024	9.41	82.35	5.88	2.35

Sources: USS 2022 and USS 2024.

Statistical domain-wise perceptions indicate that 6.12 percent of users in ICT use statistics, 5.89 percent in price statistics, and 5.80 percent in income and poverty statistics rated them as poor or very poor in USS 2024. These results may be compared with that from the USS 2022, where 23.65 percent of users in price statistics, 21.39 percent in health and nutrition statistics, 19.37 percent in labor statistics, 18.55 percent in income and poverty statistics, and 17.78 percent in environmental statistics rated the quality as poor or very poor.

Thus, perceptions regarding data quality across other domains are relatively consistent. These findings highlight the users' overall positive perception of data quality, with some variations observed across different domains. Addressing the identified concerns and maintaining high data standards are essential for enhancing the credibility and utility of data to policymakers and stakeholders.

It may be recalled that the NSDS-ISP started its implementation in 2018, which made diverse supportive interventions across the wings of the BBS. These interventions are likely to enhance the quality of statistics. Accordingly, users were asked to report whether they had used these data before 2018 domain-specific statistics of BBS in the USS 2024. Those who used data both before 2018 and in 2024 were asked to compare the quality of data across domains to compare their perception of the changes in data quality.

Results presented in Table 4.7 indicate that approximately 41 percent of the users utilized BBS data previously, and they are still doing so. Of them, 67.01 percent report that data quality has improved, while 31.58 percent indicate that the quality has remained the same, and only 1.41 percent report that the quality has deteriorated. The statistical domain-wise perceptions of users also align with these findings, with a high proportion of users noting improvements in the quality of environmental statistics (71.77%), labor statistics (70.44%), population, demographic, and vital statistics (69.41%), education statistics (68.95%), income and poverty statistics (67.15%), etc.

Table 4.7: Changes in the Quality of BBS Data in 2024 and 2018 or before

(%)

Domain of Statistics	Used BBS data before 2018	Quality of Data between 2018 and 2024		
		Improved	Remained Same	Deteriorated
Agriculture Statistics	50.79	64.97	33.67	1.36
National Accounts Statistics	54.91	67.96	31.23	0.81
Price Statistics	44.71	66.74	31.20	2.07
Foreign Trade Statistics	35.26	63.71	35.51	0.78
Industry Statistics	39.91	65.10	33.78	1.12
Labor Statistics	50.26	70.44	28.65	0.91
Income and Poverty	60.92	67.15	30.97	1.88
Population and Demographic, and Vital Statistics	68.57	69.41	29.31	1.29
Health and Nutrition Statistics	46.36	65.81	33.00	1.19
Gender Statistics	42.69	66.96	32.17	0.88
Education Statistics	50.56	68.95	29.78	1.26
Environment Statistics	38.56	71.77	27.03	1.20
Crime/Judicial Statistics	7.88	64.71	35.29	0.00
ICT Use Statistics	17.25	67.07	30.54	2.40
Other Statistics	6.38	64.47	31.58	3.95

Source: USS 2024

These results suggest a positive trend in users' perceptions of data quality over time, indicating potential enhancements in BBS data collection and dissemination practices after implementing the NSDS-ISP. However, the extent of the positive change that can be attributed to the NSDS-ISP needs to be rigorously assessed. Be that as it may, continued efforts to maintain and further improve data quality will be crucial for sustaining user confidence and ensuring the effectiveness of BBS products in informing policymaking and decision-making processes.

4.7 Availability of Required Data

As the leader of the NSS, the BBS collects and disseminates statistical data. Respondents were asked whether they were able to obtain the data they needed. It may be noted from Figure 4.3 that 13.05 percent of users always find the data they require, while 55.51 percent often do. Around 25.21 percent of the users report sometimes receiving the data they need, while approximately 6.23 percent state that they never obtain the required data. Comparison between USS 2022 and USS 2024 reveals that while 'often' availability of data increased by more than 13 percentage points, 'always' and 'sometimes' availability declined by about 11 percentage points and more than five percentage points, respectively.

These findings suggest that while most users often obtain the data they require, a notable portion still experiences needing help accessing the necessary information. Addressing these challenges can enhance the effectiveness and utility of the BBS's data dissemination efforts. A web-based data filtering method might be useful for users who want to obtain specific data for their needs. The BBS has been using this method on its census data; however, it is not present in the case of sample data. The BBS website should act as a platform for accessing necessary data along with the reports that are allowed under the Statistics Act 2013.

Figure 4.3: Perception of Availability of Required Data from BBS

2022	2024
Always 23.95%	Always 13.05%
Often 42.13%	Often 55.51%
Sometimes 30.59%	Sometimes 25.21%
Almost Never 3.32%	Almost Never 6.23%
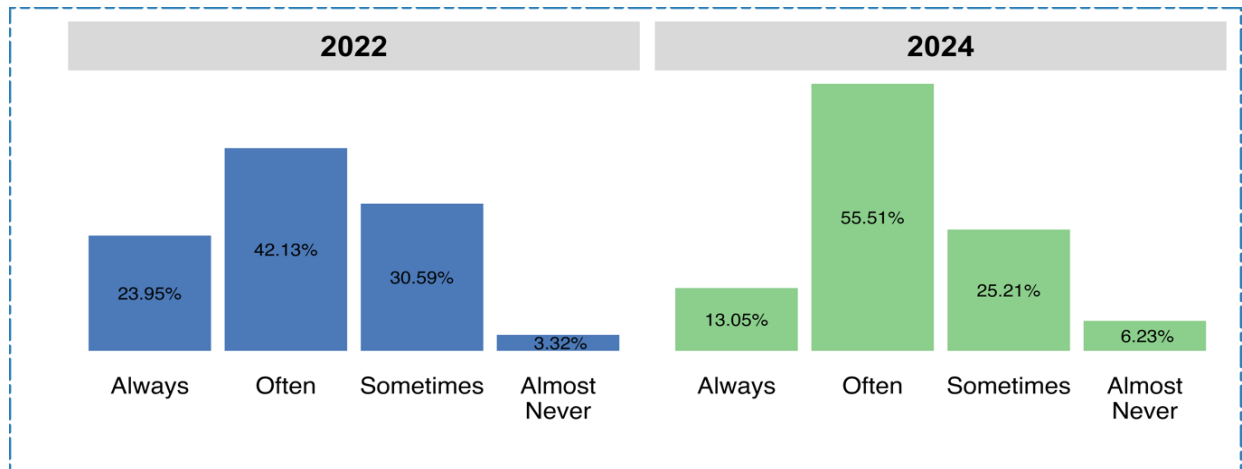
Sources: USS 2022 and USS 2024.

The users were asked to report to what extent the available official statistics meet their priority needs. Results presented in Figure 4.4 show that around 28.51 percent of the users perceive that the available official statistics meet their priority needs very well or well, while 69.02 percent perceive it moderately well or slightly well. While comparing the results among users with and without PhD, results indicate that users with PhD feel that available official statistics meet their priority needs very well or well by 29.63 percent compared to users without PhD at 27.74 percent.

Figure 4.4: Available Official Statistics and Users' Priority Needs

	Overall	PhD	Without PhD
Very Well	4.95%	7.04%	3.53%
Well	23.56%	22.59%	24.21%
Moderately Well	45.84%	45.19%	46.28%
Slightly Well	23.18%	23.33%	23.08%
Not at All	1.13%	1.30%	1.01%
No Opinion	1.35%	0.56%	1.89%
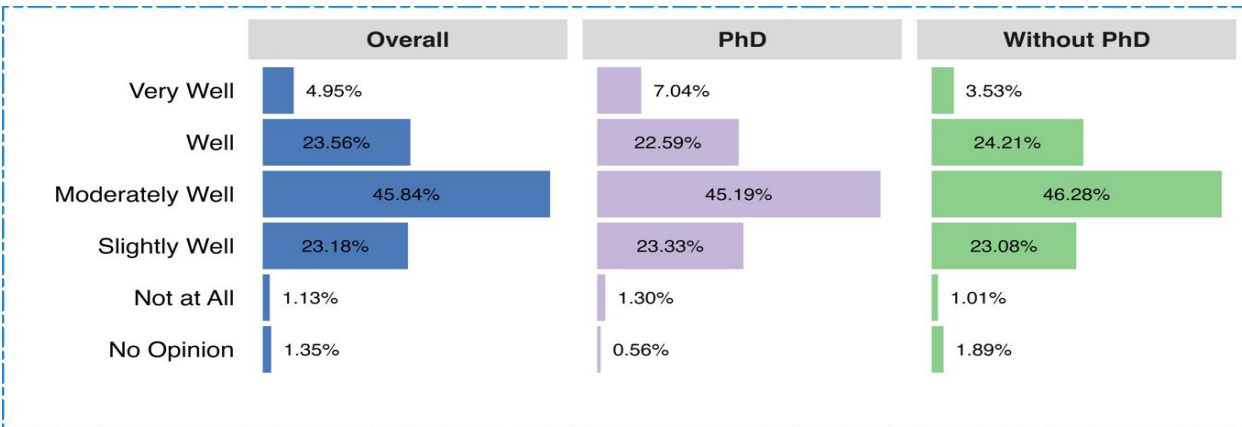
Source: USS 2024.

Figure 4.5: Availability of Specific BBS Products and Users' Requirements

Statistics Domain	Fully Available	Available But Not Sufficient	Not Available
Agriculture Statistics	18.46%	78.73%	2.81%
National Accounts Statistics	18.31%	78.55%	3.14%
Price Statistics	16.67%	80.13%	3.20%
Foreign Trade Statistics	17.31%	79.49%	3.21%
Industry Statistics	14.69%	82.30%	3.01%
Labour Statistics	15.27%	81.89%	2.84%
Income and Poverty Statistics	17.53%	79.01%	3.46%
Population, Demographic, and Vital Statistics	19.04%	79.21%	1.75%
Health and Nutrition Statistics	20.26%	77.15%	2.59%
Gender Statistics	16.52%	80.32%	3.16%
Education Statistics	15.77%	80.95%	3.27%
Environment Statistics	15.18%	81.52%	3.31%
Crime/Judicial Statistics	11.43%	85.71%	2.86%
ICT Use Statistics	15.28%	79.91%	4.80%
Other Statistics	14.12%	76.47%	9.41%

Source: USS 2024.

As the leader of the NSS, the BBS provides various statistical products, including agriculture, industrial production, foreign trade, national income, etc. Accordingly, users' perception of the availability of required data is explored by statistical domains. Users' perception of BBS data to meet their requirements is presented in Figure 4.5. It is noted that 80.09 percent of the users reported that the specific data they require are available but not sufficient; the fully available criterion is met only for 16.39 percent of the users. Finally, 3.52 percent of the users reported that the specific data they looked for were not available at all. There is very little variation across the domains. The upshot of this analysis is that data are, by and large, available, but the level of disaggregation, e.g., by socioeconomic attributes or at the spatial levels, is not sufficient to serve the users' purposes. This unavailability would limit the usefulness of the statistical information.

4.8 Dissemination of Final Results of BBS

Users' perceptions regarding the dissemination of the final results of different surveys, censuses, and compiled data by the BBS are presented in Figure 4.6. On average, 56.41 percent of the users find these disseminations good to excellent. However, a sizeable portion, approximately 32.18 percent, indicate that they neither consider them excellent nor poor. Interestingly, users with a PhD degree express similar perceptions compared to those without a PhD degree. These results suggest a potential opportunity for enhancing the dissemination to better align with users' needs and preferences. Identifying and addressing any underlying issues in sharing these estimates could improve their utility and enable users to leverage them more effectively in their work.

Figure 4.6: Perception of Dissemination of Final Results by BBS
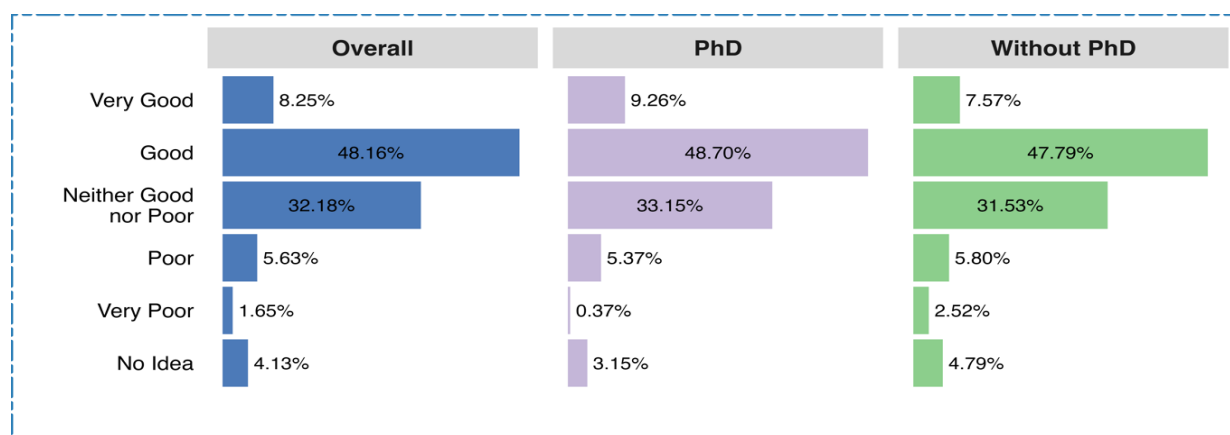
Source: USS 2024.

4.9 Availability of Information on Revised/Updated Data

This study explores the availability of information on revised or updated data by the statistical domains. The estimates presented in Figure 4.7 indicate that more than half of the users feel that enough information on the revised/updated versions is available. Around 58 percent of the users of national accounts statistics, population, demographic and vital statistics, and ICT use statistics data report that enough information on revised or updated are available. However, a large proportion of the users still feel that not enough information is available regarding this, which should be taken into account.

Figure 4.7: Perception of Availability of Information on Revised/Updated Data
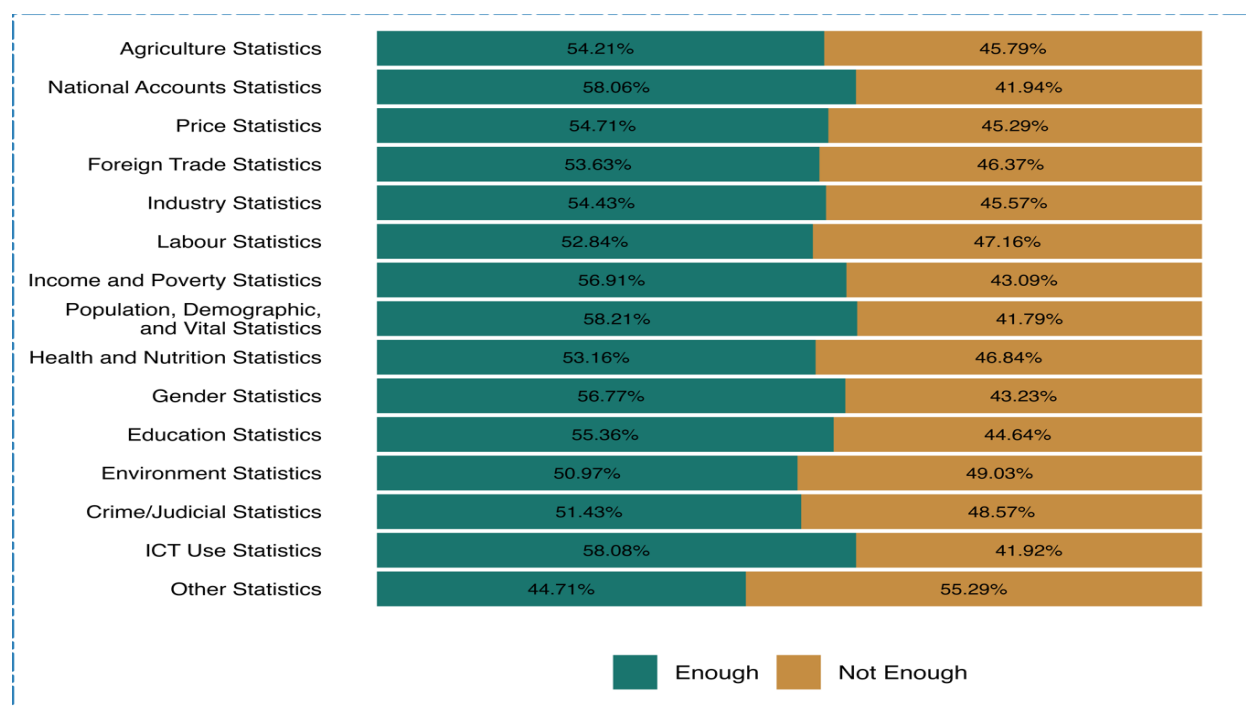
Source: USS 2024.

4.10 Reliability of BBS Statistics Relative to Similar Countries

The reliability of statistics in Bangladesh is a topic of concern compared to similar countries. For instance, studies have shown that Bangladesh's GDP per capita estimation has improved over time, with discrepancies attributed to factors like the informal economy (Tahsin, 2022). Additionally, when comparing tax revenue contribution to GDP, Bangladesh lags behind not only similar South Asian countries but also the world average, highlighting potential gaps in data accuracy and financial reporting (Sarkar, 2023). These findings underscore the importance of enhancing statistical reliability and data quality in Bangladesh to align with global standards and improve policy planning and decision-making processes.

To that end, users' perceptions of the reliability of BBS data compared to similar countries are presented in Figure 4.8. It is found that 6.64 percent of the users consider BBS data to be very reliable, and 40.87 percent view it as reliable. Approximately 18.95 percent perceive the data as comparable to that of similar countries. However, around 33.55 percent of the users perceive BBS data as less reliable, including some users who are uncertain about the differences.

Figure 4.8: Reliability of Data Relative to Similar Countries
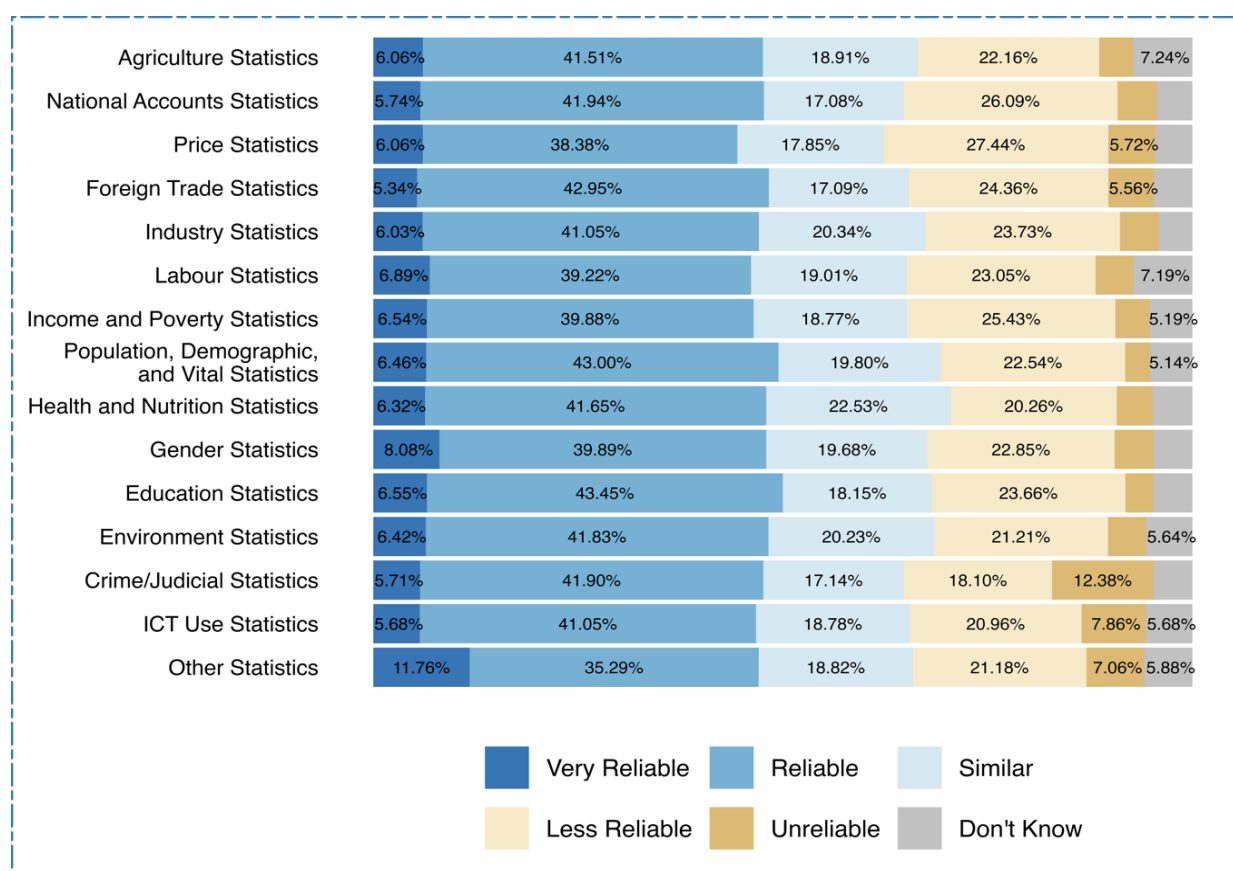
Source: USS 2024

4.11 Perception of BBS Microdata

Microdata is unit-level data obtained from surveys, censuses, and administrative systems. This data usually provides information about individual entities, including households, businesses, farms, and geographical areas. They help analyze a specific issue and design policies in a particular area. The percentage distribution of awareness and uses of BBS microdata is presented in Figure 4.9. Only 37.74 percent are aware of BBS microdata; the proportion is a bit higher among the data users with PhD (44.26%) than users without PhD (33.3%). In other words, a large proportion of users, about 62.27 percent, need to be more familiar with microdata. Among all the respondents, only 18.15 percent and 9.21 percent of respondents with and without PhD degrees use the microdata. It needs to be reviewed if such as low proportion of users is due to low demand from the users or strict supply constraints of the BBS in sharing the microdata. The conditions and costs of accessing microdata should be liberalized, at least for Bangladesh researchers.

Figure 4.9: Awareness and Use of Microdata
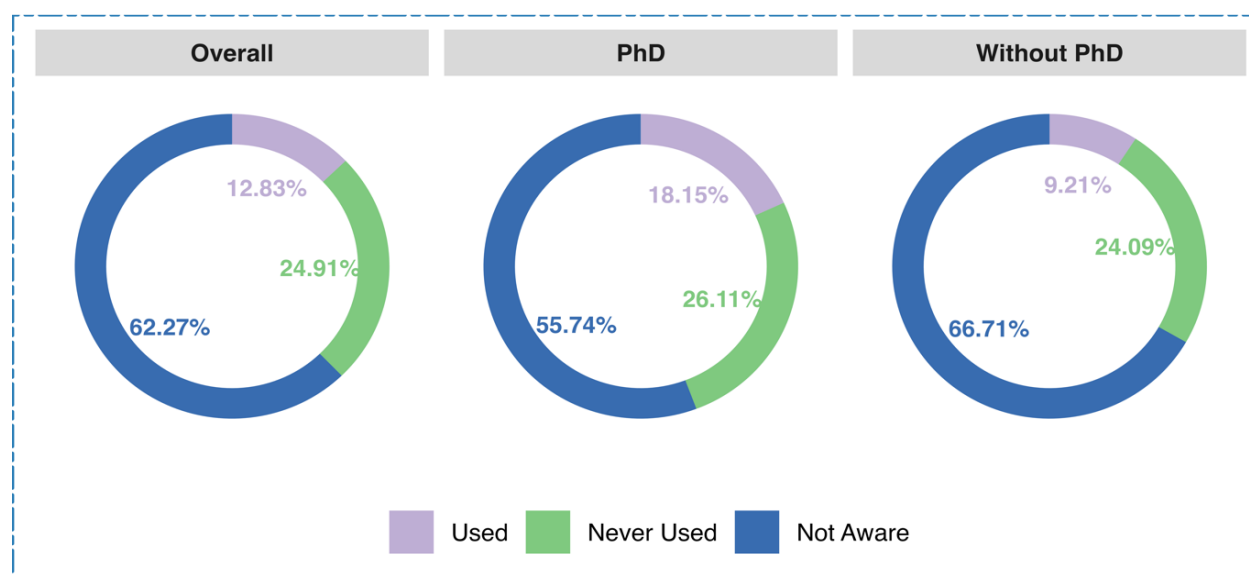
Source: USS 2024.

Access to the BBS microdata is typically restricted to authorized personnel or researchers to safeguard privacy and confidentiality. Interested parties must apply through formal channels, adhering to guidelines, specifying the usage purpose, and agreeing to confidentiality agreements. Once approved, authorized users or researchers gain access to the microdata. However, it is essential to note that administrative processes and data availability may vary over time.

Users' perceptions regarding BBS microdata from several perspectives, such as the process of acquiring, adequacy, preferred channel of accessing, and price, are presented in Figure 4.10. About 46.20 percent of users view the process of accessing microdata as complicated; it is relatively lower for users with a PhD degree (40.82%) than those with a PhD degree (53.42%). On average, 80.12 percent of users argue that the available microdata is available but not sufficient to meet

their requirements. This incidence is higher in users with PhD (82.65%) than those without PhD (76.71%). The most preferred channel for accessing microdata is directly downloading from the website (87.13%), with little variation between users with or without PhD. Finally, about 51.46 percent of the users view BBS microdata as expensive, while about one-third view it as reasonable. This view is more or less similar among users with or without a PhD degree.

These perceptions highlight challenges associated with accessing and utilizing BBS microdata, including cost barriers, complex administrative procedures, and insufficient data availability. Addressing these challenges is crucial to facilitate more widespread and effective use of microdata for research and policymaking. This may involve streamlining administrative processes, increasing data accessibility, and exploring avenues to reduce costs associated with accessing microdata.

Figure 4.10: Perception of Using BBS Microdata
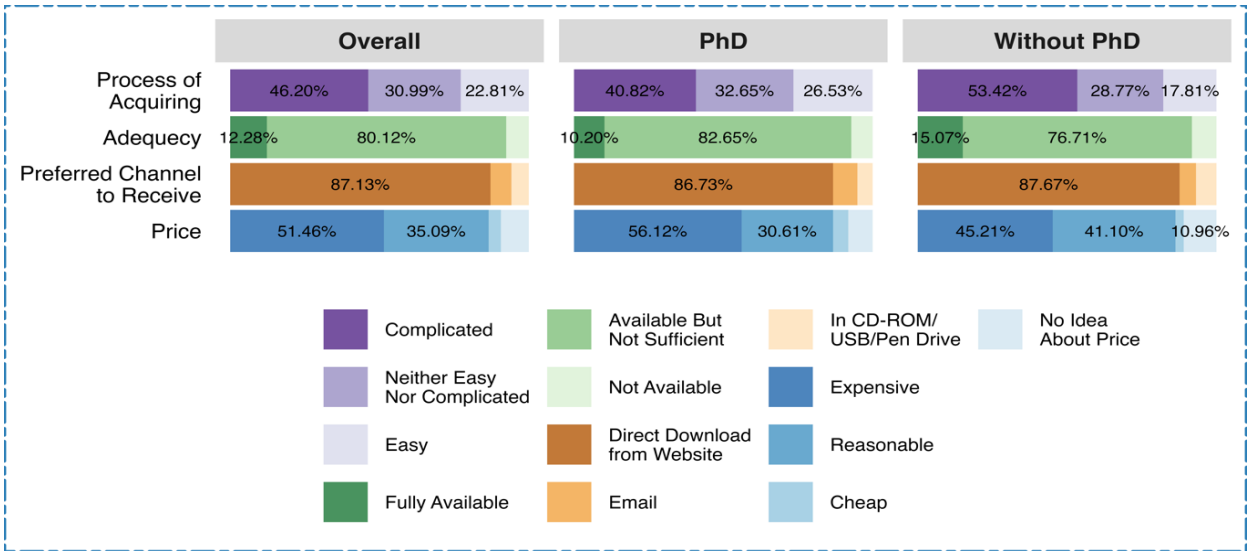
Source: USS 2024.

The BBS provides microdata to users in various formats, including Microsoft Excel spreadsheets and CSV files. These can be obtained through direct downloads from websites, emails, and CD-ROMs. However, the duration of receiving data varies depending on administrative procedures for the specific dataset. Most users prefer receiving datasets using websites. The BBS database could be more informative and user-friendly so that they could easily download their required information. Users' perceptions of the duration of receiving a response from BBS regarding any query or request for microdata are shown in Figure 4.11. About 57.90 percent received the BBS replies within 15 days, 22.22 percent received them between 16 days and one month, and 14.04 percent received them after more than a month. Results also show that approximately 3.51 percent even do not receive a response.

Figure 4.11: Duration of Receiving Responses from BBS on Microdata

Legend:
- Within 7 Days
- 8 to 15 Days
- 16 Days to 1 Month
- More Than 1 Month
- Did Not Receive Response
- Others

Chart values:
- 2.34%
- 3.51%
- 14.04%
- 21.64%
- 22.22%
- 36.26%
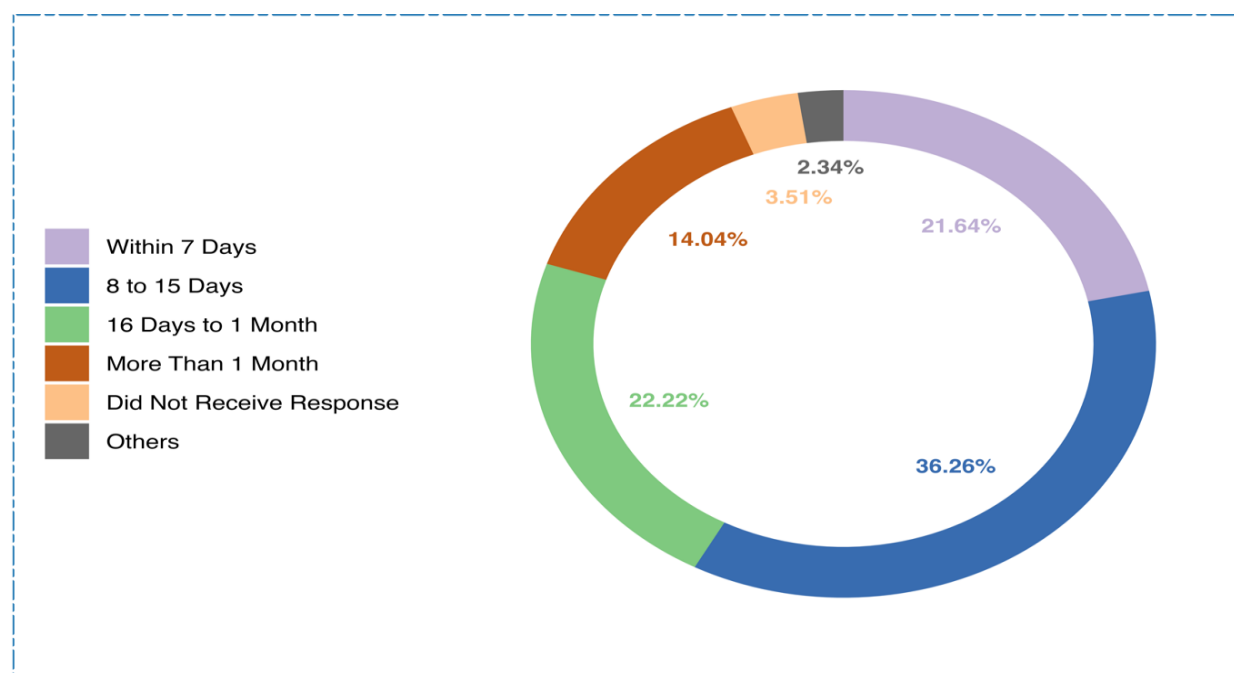
Source: USS 2024.

4.12 Perception of the BBS Website

This section captures both the intensity of visiting the BBS website across various statistical domains and the perception of the overall performance of the BBS website. The BBS website, www.bbs.gov.bd, is a vital platform for the online sharing of data and information across various sectors, including the economy, health, and environment. Like other online platforms, this website offers user-friendly navigation, well-organized content, and accessibility features to facilitate seamless access to relevant information. Notably, the BBS has introduced the Sustainable Development Goals Tracker (SDG tracker) on its website, aiming to establish an online data repository for monitoring initiatives aligned with the SDGs. This freely available tracking system plays a crucial role in keeping stakeholders informed about government plans and monitoring the impact of policies in line with the SDGs. A significant majority, approximately 97.15 percent, report using the BBS website. This proportion increased by about 10 percentage points from 88.97 percent in USS 2022.

Given the preponderance of use of the BBS website, users' perception of the accessibility to official statistics while browsing the BBS website is explored (Figure 4.12). About two-thirds of the users find accessing official statistics on the BBS website somewhat easy (31.96%), easy (26.93%), and very easy (5.93%). There is hardly any variation among users with or without PhD degree. Users with a PhD degree find accessing official statistics on the BBS website somewhat easy at 31.30 percent, easy at 26.67 percent, and very easy at 7.22 percent compared to their counterparts without PhD degree at 32.41 percent, 27.11 percent, and 5.04 percent, respectively. These results indicate

that users can easily access and download the latest published statistics from the website. These findings highlight the importance and effectiveness of the BBS website as a primary source of statistical data and information for users across various sectors and domains. However, over 33.53 percent of the users find it somewhat difficult to very difficult. This discrepancy suggests that there is a need for improvement in the accessibility of the BBS website, particularly for non-PhD users. Enhancements facilitate easier browsing and retrieval of required statistical products.

Figure 4.12: Perception of Accessibility of Data through Browsing the BBS Website
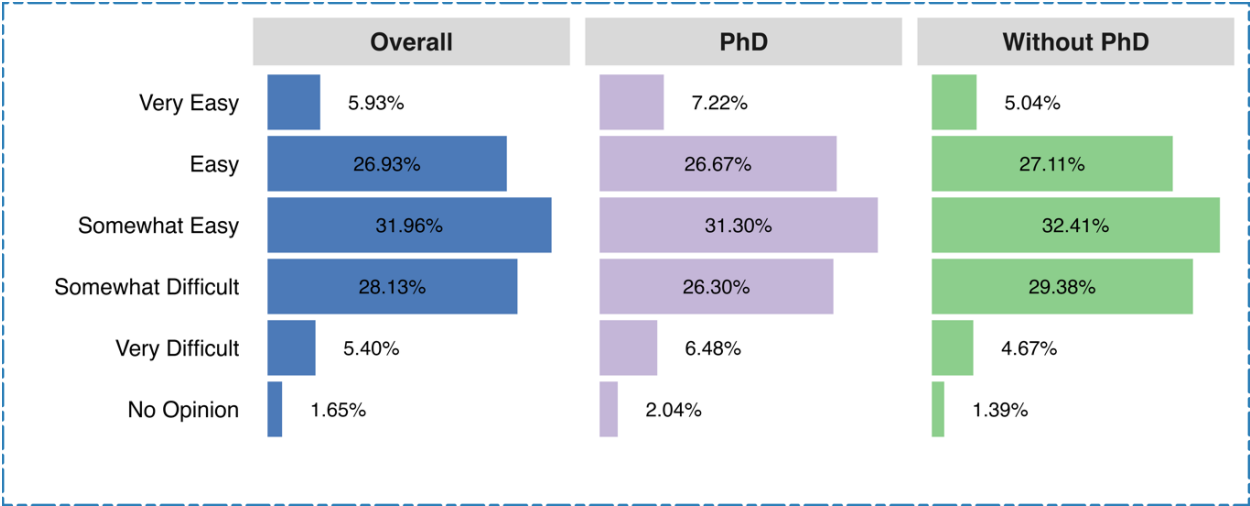
Source: USS 2024.

After looking at the usage and the perception of the BBS website by the users, an evaluation is conducted on the BBS website's performance on a few indicators (Table 4.8). Approximately 85.80 percent of users rate the accessibility of the BBS website as good to very good, while the rest (14.21%) hold a less favorable opinion. Although the BBS updates the website regularly, approximately 46.33 percent of the respondents feel there is room for further improvement, with only 5.25 percent expressing the highest satisfaction with the current update frequency. Regarding website interface, 9.27 percent of the users rate it as excellent, 62.86 percent as good, and 27.88 percent as not good. Similarly, 74.44 percent of the users find the information organization satisfactory, while 25.56 percent encounter difficulties in locating desired publications or information on the website. One particular issue highlighted in the survey was the frequent crash of the website and the eventual loss of information.

On overall evaluation, while 5.95 percent of the users rate the BBS website's quality as excellent, 71.74 percent believe it as good, while 22.32 percent still perceive it as not good, indicating a need for enhancements, particularly in providing more user-friendly statistics on national accounts, price, foreign trade, and labor statistics. By offering easy access to comprehensive and up-to-date information, the BBS website plays a crucial role in supporting evidence-based decision-making processes and facilitating the monitoring of initiatives aimed at achieving sustainable development goals. Continued efforts to enhance the functionality and accessibility of the website will further strengthen its utility and effectiveness as a valuable resource for stakeholders.

Table 4.8: Evaluation of the BBS Website

(%)

Indicators	Round	Very Good	Good	Not Good
Accessibility	2022	27.00	65.00	8.00
	2024	23.17	62.63	14.21
Coverage of information/content	2022	16.00	73.00	10.00
	2024	14.67	71.27	14.05
Update information/statistics	2022	7.00	46.00	46.00
	2024	5.25	48.42	46.33
Design/user interfacing	2022	7.00	71.00	21.00
	2024	9.27	62.86	27.88
Organization of information/ statistics	2024	10.50	63.94	25.56
User friendly	2024	9.65	63.63	26.72
Overall evaluation	2024	5.95	71.74	22.32

Sources: USS 2022 and USS 2024.

Compared to the USS 2022, there has been improvement in the website's provision of updated statistical information. However, perceptions regarding website accessibility and coverage have deteriorated. Despite the BBS's efforts, this perception could stem from the users' diverse backgrounds and heterogeneous requirements. Meeting the varied needs of a diverse user base poses challenges in ensuring optimal accessibility and coverage for all users.

4.13 Perception of BBS Staff, Products, and Services

To capture users' perceptions of BBS productions and services, a series of questions were asked covering several areas: the procedure for obtaining publications, staff availability, the availability of BBS publications and data in the BBS library, the organization of publications and statistical products in the library, and the procedure for using the library. Additionally, users' perceptions of the technical skills, behavior, and responsiveness of BBS staff when contacted for data were explored. These findings are discussed in this section.

4.13.1 Technical Skills and Behavior of the BBS Staff and Overall Services

This section documents the respondents' perceptions of the technical skills and behavior of BBS staff and the overall quality of BBS services. The estimates in Figure 4.13 imply that the respondents expressed a high level of satisfaction, which ranges from very good to satisfactory, with the technical skills (93.71%), behavior (96.78%) of the BBS staff, and the overall quality of BBS services (94.60%). Despite these positive ratings, the results suggest there is still room for improvement in the overall quality.

Figure 4.13: Perceptions of Technical Skills and Behavior of Staff and Service Quality
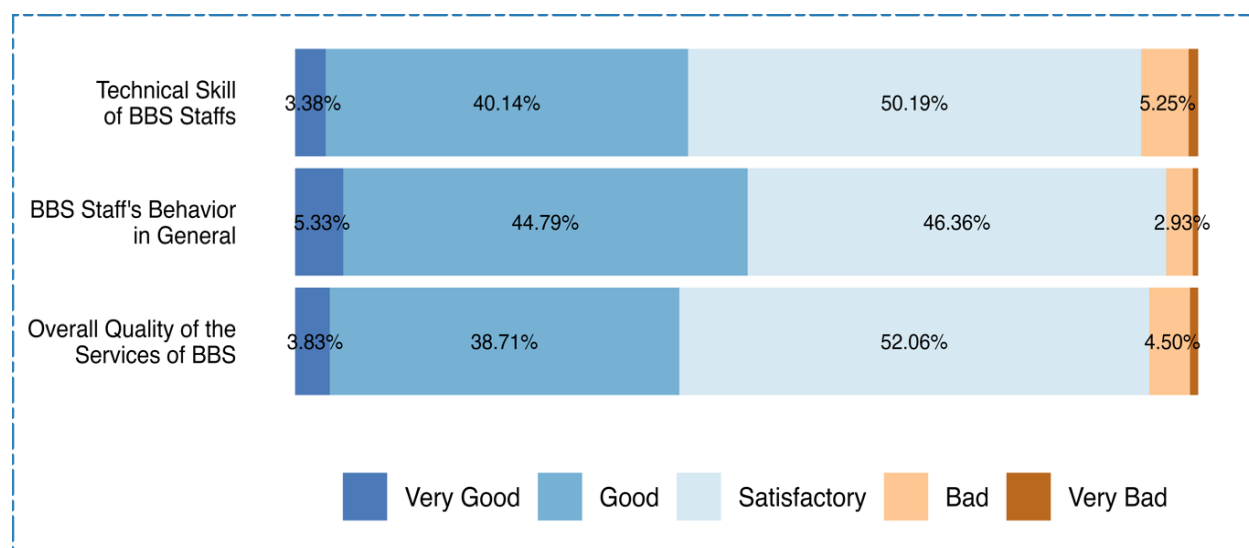
Source: USS 2024.

4.13.2 Procedure for Obtaining BBS Publications and Using the Library

It may be noted that the number of respondents who received services for obtaining publications and library use is 433 and 187 out of 1333 respondents (Figure 4.14). More than half of the users who received publication services rated the procedure for obtaining BBS publications as good to very good at 52.89 percent, followed by 36.72 percent who rated it as satisfactory, and the rest found the services unsatisfactory. Similarly, perceptions of staff availability for these services were positive (good to very good) at 51.27 percent, satisfactory at 40.42 percent, and the rest unsatisfactory. For library services, the majority of the users rated the availability (94.65%) and organization (97.33%) of BBS publications and data, as well as the procedure for using the library (89.84%) as very good to satisfactory.

Figure 4.14: Perception of Obtaining BBS Products and Services

Services for Obtaining Publications (N = 433)

	Very Good	Good	Satisfactory	Bad
Procedure for Obtaining Publication	19.17%	33.72%	36.72%	10.16%
Staff Availability for the Services	9.24%	42.03%	40.42%	

Services for Library Use (N = 187)

	Very Good	Good	Satisfactory	Bad
Availability of BBS Publications and Datain BBS Library	11.76%	55.08%	27.81%	
Organization of Publications and Statistical Productsin the Library	11.23%	54.01%	32.09%	
Procedure for Using Library	23.53%	35.83%	30.48%	8.56%

Legend: Very Good | Good | Satisfactory | Bad | Very Bad

Source: USS 2024.

4.13.3 Contacts and Responsiveness of BBS Staff for Data and Services

To assess the responsiveness of BBS staff when contacted, respondents were asked to report the number of times they had contacted BBS in the past 24 months, the purpose of their contact, the promptness with which services were received, and their satisfaction with how their requests were handled. The frequency of contact with the BBS over the last two years for statistics is summarized in Figure 4.15. About 32.10 percent of users did not contact the BBS for statistics, while 18.87 percent contacted once, 32.10 percent contacted 2-5 times, and 16.93 percent contacted more than five times. When these results are compared with that of the USS 2022, it is revealed that the case of never contacted increased by about 13 percentage points, contacted only once increased by about three percentage points, contacted 2-5 times declined by about six percentage points, and contacted more than five times declined by about 12 percentage points respectively. The upshot of the results is that users made fewer contacts to the BBS for their data needs between USS 2022 and USS 2024 at all the intervals considered. One of the reasons for such changes could be the increased informativeness of the BBS website.

Figure 4.15: Frequency of Contacting BBS in the Last 24 Months
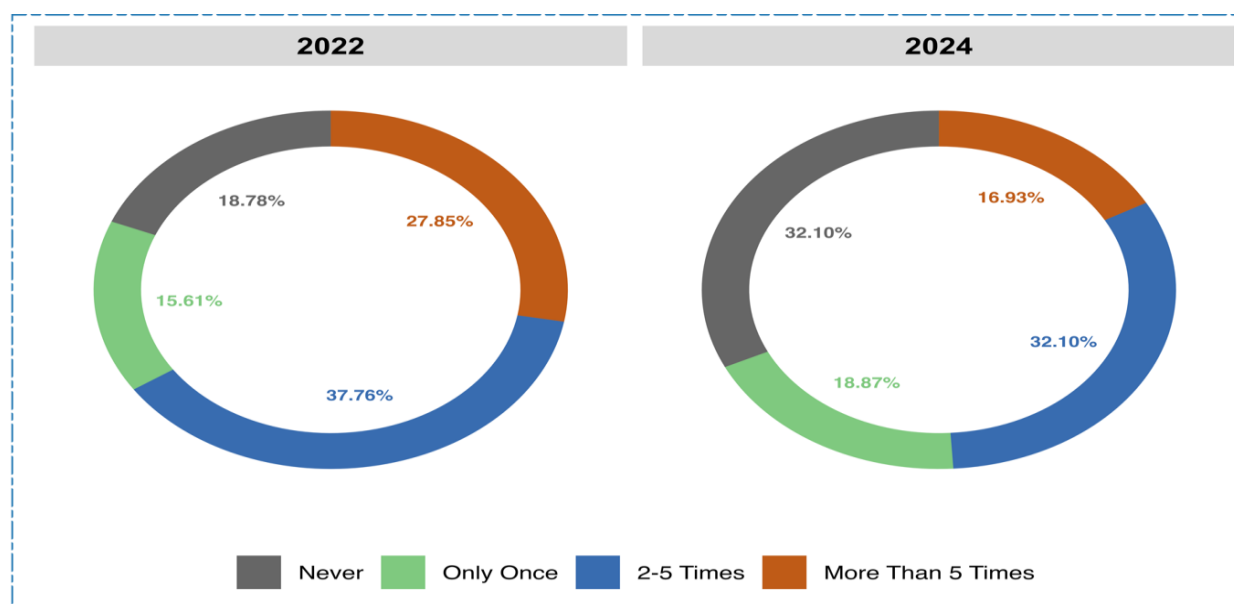
Sources: USS 2022 and USS 2024.

Along with the frequency of contracting the BBS for statistics, data were also collected on the purpose of such contracting. The purposes of users' contacting BBS in the last 24 months are presented in Table 4.9. Results indicate that users contacted the BBS for various purposes, including requesting specific data (71.92%), discussing data requirements (39.26%), methodological queries (21.20%), following up on publications (20.63%), seeking clarification on data (17.48%), authenticating data (16.05%), etc. Some users also contact the BBS for sampling advice or procedures (15.76%) and guidance on using the website (6.88%). Fewer users are contacted for other purposes, including microdata and analytical surveys.

Table 4.9: Purposes of Contacting BBS in the Last 24 Months

(%)

Purposes	2022	2024
Request Specific Statistics/Figures	71.03	71.92
Discuss Data Requirements	22.56	39.26
Seek Clarification on Data	27.69	17.48
Query/Advice/Service on Methodology	14.62	21.20
Follow up on Press Release/Publication	12.56	20.63
Data Authentication	15.90	16.05
Advice/Service on Sampling	7.69	15.76
Requested Guidance on the Website	4.62	6.88
NOC for Conducting Survey	1.03	8.02
Cartographic/GIS Service	3.85	2.87
Others	1.54	0.57

Sources: USS 2022 and USS 2024.

Quick responses to data users' requests play a crucial role in various fields, policy-making, research, and economic analysis. Overall, quick response mechanisms are essential for optimizing processes, improving data quality, and enhancing decision-making across various domains. Users' experiences of receiving services from the BBS are presented in Figure 4.16. About 45.27 percent of the users reported receiving their desired services within one week of correspondence, while 19.77 percent received them within two weeks, 17.48 percent within one month, and 17.48 percent after over a month. When these results are compared with that found in the USS 2022, it is revealed that receiving the response from the BBS within a week decreased by more than 27 percentage points, receiving the response within two weeks, one month, and more than one month decreased by 6, 10, and 11 percentage points respectively. Thus, users reported longer response times to queries on statistical information from the BBS in 2024 compared to that in 2022.

Figure 4.16: Response Duration of Users' Request for Services
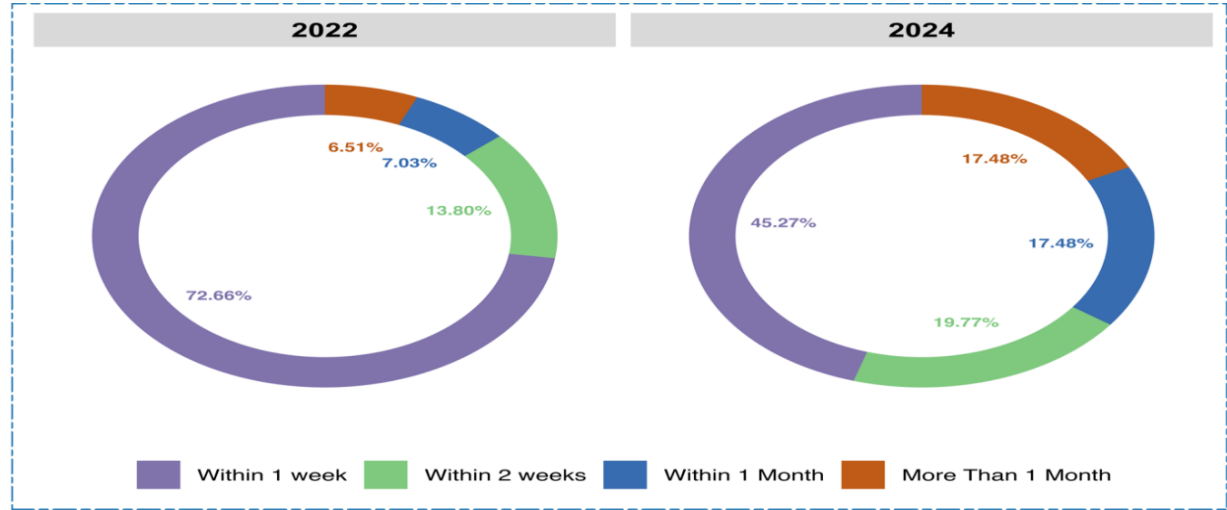
Sources: USS 2022 and USS 2024.

Figure 4.17: Proportion of Request Met for Statistical Needs in the Recent Contact
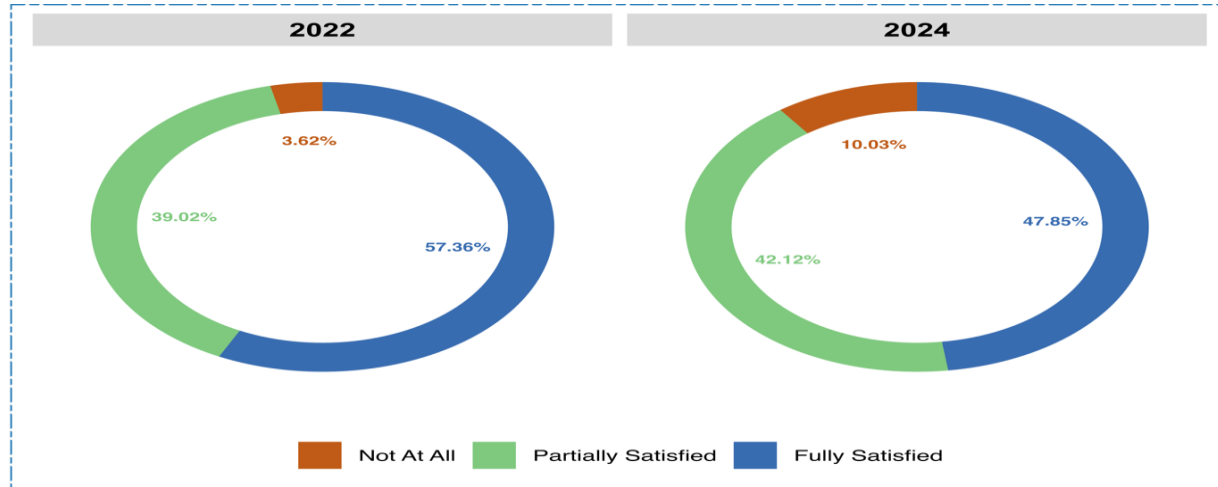
Sources: USS 2022 and USS 2024.

How well users' recent requests to the BBS were met are presented in Figure 4.17. About 47.85 percent of the users reported that their most recent contact with the BBS fully met their needs, while 42.12 percent indicated their needs were only partially met. However, 10.03 percent of the users stated that their correspondence with the BBS did not meet their requirements.

Compared to the USS 2022, the results of the USS 2024 indicate similar percentages of overall satisfaction with BBS correspondence. However, in 2024, fewer users reported receiving full information, while more users reported receiving partial information and did not meet their requirements. One potential reason for this discrepancy is the increased number of users with more heterogeneous statistical information.

Respondents whose requests were partially met or not met were asked to specify the reasons. Some of the major reasons presented in Table 4.10 include the lack of exact data (43.96%), gaps in the availability of quality data (43.41%), not enough details in data (41.21%), outdated data (35.71%), huge time lag (34.62%). In comparison to the USS 2022, a higher proportion of users cited reasons related to time lags in data provision, claims of inadequate detailed information, and gaps in data availability in USS 2024, while a smaller proportion of users mentioned issues like the absence of exact data and dissatisfaction with outdated data. These issues require attention; otherwise, they will hinder data users' ability to conduct meaningful research and develop effective policies.

Table 4.10: Reasons for Meeting Needs Partially or Not Meeting at All

(%)

Reasons	2022	2024
No Exact Data	47.24	43.96
Not Enough Details	34.97	41.21
Gap in the Quality of Data	31.90	43.41
Outdated Data	38.04	35.71
Huge Time Lag	12.27	34.62
Others	4.29	2.20

Sources: USS 2022 and USS 2024.

CHAPTER 5

Chapter 5: Level of Satisfaction of BBS Products and Services

User satisfaction with official statistics is crucial as it reflects the service quality provided and can impact decision-making processes. Studies emphasize the significance of user satisfaction in various sectors, such as public finance, national accounts, income and poverty, population and demographics, and gender. Understanding and evaluating users' satisfaction levels through appropriate statistical methods not only help in improving services but also enhance user experience and engagement. Further, the complexity of user expectations and the need for continuous evaluation to identify areas for improvement underscores the importance of prioritizing user satisfaction in delivering official statistics effectively (Blakemore & McKveer, 2001). This section captures user satisfaction with the quality and frequency of statistics, as well as the overall quality of BBS products and services. Insofar as users are from different academic and organizational backgrounds, domain-specific perception offers particular assessments of BBS statistics. Therefore, users were asked whether they were satisfied with the domain-specific BBS statistics and data from the perspectives of accuracy, relevance, timeliness, and frequency, along with overall satisfaction.

5.1 Accuracy of Official Statistics

The precision of official statistics is essential for various purposes, influencing government policies, social services, and public confidence. Accurate official statistics play a vital role in informed decision-making for the government, aiding in policy decisions related to economic development and planning. Accurate statistics are also crucial for effective resource allocation in public services like healthcare, education, and welfare programs to ensure appropriate support reaches needy areas. The government utilizes accurate data for budget planning and fair fund distribution across various sectors and regions, fostering economic stability, market confidence, policy effectiveness, social trust, and international cooperation. User perception of the accuracy of official statistics is presented in Table 5.1. It is found that 64.34 percent of users express satisfaction with the accuracy of official statistics, 25.58 percent express dissatisfaction, and 10.08 percent are uncertain about the accuracy of statistical data in USS 2024. Across the domains, satisfaction with the accuracy of official statistics is the highest in education statistics (68.90%), followed by gender statistics (67.84%) and population, demographic, and vital statistics (67.83%). Conversely, the proportions of satisfied users are lower in ICT use statistics (58.95%) and crime and judicial statistics (58.10%).

Table 5.1: Perception of Accuracy of Official Statistics

(%)

Domain of Statistics	Round	Satisfied	Unsatisfied	Don't Know
Agriculture Statistics	2022	66.52	22.47	11.01
	2024	65.29	24.08	10.64
National Accounts Statistics	2022	64.50	27.50	8.00
	2024	65.16	24.32	10.52
Price Statistics	2022	58.90	32.88	8.22
	2024	61.62	28.79	9.60
Foreign Trade Statistics	2022	72.97	18.02	9.01
	2024	64.10	27.14	8.76
Industry Statistics	2022	54.93	35.21	9.86
	2024	64.41	25.05	10.55
Labor Statistics	2022	58.82	32.09	9.09
	2024	62.13	27.99	9.88
Income and Poverty Statistics	2022	59.84	29.92	10.25
	2024	65.19	25.56	9.26
Population, Demographic, and Vital Statistics	2022	74.06	17.38	8.56
	2024	67.83	23.09	9.08
Health and Nutrition Statistics	2022	59.87	28.03	12.10
	2024	67.10	21.88	11.02
Gender Statistics	2022	70.67	19.33	10.00
	2024	67.84	24.08	8.08
Education Statistics	2022	73.63	18.68	7.69
	2024	68.90	22.77	8.33
Environment Statistics	2022	58.91	26.36	14.73
	2024	67.32	21.79	10.89
Crime/Judicial Statistics	2022	65.62	18.75	15.62
	2024	58.10	28.57	13.33
ICT Use Statistics	2024	58.95	32.75	8.30
Other Statistics	2022	85.71	0.00	14.29
	2024	61.18	25.88	12.94

Sources: USS 2022 and USS 2024.

Compared to the USS 2022, findings of the USS 2024 reveal that a higher proportion of users are satisfied with data accuracy across various domains, with a few exceptions such as agriculture statistics, foreign trade statistics, population, demographic and vital statistics, gender statistics, education statistics, and crime and judicial statistics. Consequently, satisfaction across all domains register a fall of around two percentage points between the two rounds.

5.2 Timeliness of Official Statistics

Timely official statistics are vital for decision-making, policy formulation, and societal benefits. Timely data is also crucial for monitoring economic trends, crisis management, and ensuring economic stability. It also promotes transparency, public trust, efficient resource allocation, and helps with social planning. Additionally, timely statistics support research, analysis, and global comparisons and foster effective governance and global cooperation. User perception of the timeliness of official statistics is presented in Table 5.2.

Table 5.2: Perception of Timeliness of Official Statistics

(%)

Domain of Statistics	Round	Satisfied	Unsatisfied	Don't Know
Agriculture Statistics	2022	50.88	42.04	7.08
	2024	55.98	36.34	7.68
National Accounts Statistics	2022	72.08	24.37	3.55
	2024	57.79	36.34	5.87
Price Statistics	2022	64.58	31.25	4.17
	2024	56.57	37.04	6.40
Foreign Trade Statistics	2022	59.82	31.25	8.93
	2024	53.63	41.03	5.34
Industry Statistics	2022	45.83	47.22	6.94
	2024	55.56	38.23	6.21
Labor Statistics	2022	50.27	43.24	6.49
	2024	54.49	38.47	7.04
Income and Poverty Statistics	2022	49.58	42.08	8.33
	2024	56.54	38.27	5.19
Population, Demographic, and Vital Statistics	2022	55.00	35.25	9.75
	2024	58.97	35.67	5.36
Health and Nutrition Statistics	2022	51.90	36.08	12.03
	2024	57.86	35.17	6.97
Gender Statistics	2022	58.50	32.65	8.84
	2024	55.18	37.43	7.38
Education Statistics	2022	58.66	39.11	2.23
	2024	58.63	35.12	6.25
Environment Statistics	2022	49.61	39.53	10.85
	2024	54.86	36.96	8.17

Domain of Statistics	Round	Satisfied	Unsatisfied	Don't Know
Crime/Judicial Statistics	2022	63.33	26.67	10.00
	2024	47.62	41.90	10.48
ICT Use Statistics	2024	45.85	44.54	9.61
Other Statistics	2022	57.14	42.86	0.00
	2024	45.88	45.88	8.24

Sources: USS 2022 and USS 2024.

It is found that 54.36 percent of users express satisfaction with the timeliness of official statistics, 38.56 percent express dissatisfaction, and 7.08 percent are uncertain about the timeliness of statistical data in USS 2024. Across the domains, satisfaction with the timeliness of official statistics is the highest in population, demographic, and vital statistics (58.97%), followed by education statistics (58.63%), health and nutrition statistics (57.86%), and national accounts statistics (57.79%). Conversely, proportions of satisfied users are lower in crime and judicial statistics (47.62%) and ICT use statistics (45.85%).

Compared to the USS 2022, findings of the USS 2024 reveal that higher proportions of users are satisfied with the timeliness of data across half of the domains, the leaders being industry statistics increased by 9.73 percentage points. In contrast, proportions of users not satisfied with the timeliness of statistics include crime and judicial statistics, which declined by 15.71 percentage points, and national accounts statistics, which declined by 14.29 percentage points. Consequently, satisfaction across all domains register a fall of around two percentage points between the two rounds.

5.3 Relevance of Official Statistics

Official statistics are pivotal in governance, business, and society, offering significant benefits in several areas. It facilitates decision-making processes by providing important data for policymaking, business strategies, and resource allocation in public services. Moreover, they play a vital role in economic planning and monitoring, contributing to budgeting, forecasting, and assessing economic health indicators. Additionally, official statistics promote transparency and accountability by holding governments responsible and building public trust through reliable data. They also support social research and development by informing social policies and facilitating academic and policy research. Furthermore, they enable international comparisons and cooperation, assist in crisis management, bolster democratic engagement, and contribute to sustainable development goals by tracking progress and monitoring environmental indicators. In essence, official statistics are essential for informed decision-making and the effective functioning of society across various domains. User perception of the relevance of official statistics is presented in Table 5.3.

Table 5.3: Perception of Relevance of Official Statistics

(%)

Domain of Statistics	Round	Satisfied	Unsatisfied	Don't Know
Agriculture Statistics	2022	79.28	13.51	7.21
	2024	79.91	14.03	6.06
National Accounts Statistics	2022	84.46	11.92	3.63
	2024	79.92	15.16	4.92
Price Statistics	2022	77.70	11.51	10.79
	2024	75.42	19.02	5.56
Foreign Trade Statistics	2022	73.15	12.96	13.89
	2024	77.99	17.52	4.49
Industry Statistics	2022	64.03	24.46	11.51
	2024	77.78	17.14	5.08
Labor Statistics	2022	73.08	21.98	4.95
	2024	78.14	16.17	5.69
Income and Poverty Statistics	2022	70.17	18.91	10.92
	2024	79.75	15.93	4.32
Population, Demographic, and Vital Statistics	2022	80.86	11.34	7.81
	2024	81.62	13.46	4.92
Health and Nutrition Statistics	2022	64.97	22.93	12.10
	2024	80.23	13.61	6.16
Gender Statistics	2022	72.41	16.55	11.03
	2024	79.61	15.11	5.27
Education Statistics	2022	78.89	16.11	5.00
	2024	80.51	13.84	5.65
Environment Statistics	2022	67.72	21.26	11.02
	2024	77.24	15.18	7.59
Crime/Judicial Statistics	2022	76.67	20.00	3.33
	2024	63.81	24.76	11.43
ICT Use Statistics	2024	73.36	20.09	6.55
Other Statistics	2022	66.67	16.67	16.67
	2024	70.59	21.18	8.24

Sources: USS 2022 and USS 2024.

The domain-specific estimates imply that, on average, 77.06 percent of users express satisfaction with the relevance of official statistics, 16.81 percent express dissatisfaction and only 6.13 percent are uncertain about the relevance of statistical data in USS 2024. Across the domains, satisfaction with the relevance of official statistics is the highest in population, demographic, and vital statistics (81.62%), followed by education statistics (80.51%), health and nutrition statistics (80.23%), and agriculture statistics (79.91%). In contrast, the proportion of satisfied users is the lowest in crime and judicial statistics (63.81%).

Compared to the USS 2022, the estimates of the USS 2024 reveal that higher proportions of users are satisfied with the relevance of data across most of the domains. The average satisfaction is about 3.5 percentage points higher compared to the USS 2022. However, the overall positive changes mask the proportions of more users not satisfied with the relevance of statistics of national accounts statistics, price statistics, foreign trade statistics, and crime and judicial statistics, which declined by 3.24, 7.51, 4.56, and 4.76 percentage points respectively.

5.4 Frequency of Official Statistics

Timely and regular official statistics play a vital role for policymakers, businesses, and the general public by facilitating informed decision-making. Continuous updates are essential for monitoring policy impacts and making necessary adjustments, particularly in managing health crises. Economic statistics are relied upon by businesses and investors for strategic planning and risk management. Transparency and accountability are enhanced through regular dissemination of official statistics, empowering citizens to hold institutions accountable. Public resource allocation relies heavily on statistical data, ensuring equitable distribution of services like education and healthcare. High-frequency statistics enable swift responses to rapid changes, facilitating effective crisis management in a fast-paced world.

Satisfaction levels regarding the frequency of statistics across statistical domains are presented in Figure 5.1. Users express high levels of satisfaction with education statistics (53.87%) and foreign trade statistics (52.35%). However, satisfaction levels are lower for crime and judicial statistics (43.81%). Notably, dissatisfaction is higher for income and poverty statistics (46.91%). On average, about 47.88% of respondents are satisfied with the frequency of statistics, 42.88% are not satisfied, and 9.24% are uncertain about it.

Understanding the varying perspectives across accuracy, timeliness, relevance, and frequency is crucial for tailoring statistical products and services to meet the needs of heterogeneous user groups. By recognizing users' unique requirements and priorities across different domains, the BBS can enhance the data accuracy, timeliness, relevance, and frequency, ultimately fostering greater confidence and credibility in their outputs. However, the analyses of user satisfaction by individual attributes should be validated with the users' perception of the overall quality of official statistics.

Figure 5.1: Satisfaction with the Frequency of Official Statistics

Statistics	Satisfied	Unsatisfied	Don't Know
Agriculture Statistics	46.53%	45.35%	8.12%
National Accounts Statistics	47.54%	44.54%	7.92%
Price Statistics	49.33%	42.76%	7.91%
Foreign Trade Statistics	52.35%	39.53%	8.12%
Industry Statistics	49.15%	40.11%	10.73%
Labour Statistics	48.50%	43.56%	7.93%
Income and Poverty Statistics	45.80%	46.91%	7.28%
Population, Demographic, and Vital Statistics	48.25%	44.42%	7.33%
Health and Nutrition Statistics	50.24%	40.52%	9.24%
Gender Statistics	50.26%	40.60%	9.14%
Education Statistics	53.87%	38.99%	7.14%
Environment Statistics	49.03%	42.02%	8.95%
Crime/Judicial Statistics	43.81%	38.10%	18.10%
ICT Use Statistics	45.85%	44.10%	10.04%
Other Statistics	37.65%	51.76%	10.59%

Source: USS 2024.

5.5 Quality of Official Statistics

Quality official statistics play a crucial role in economic, social, and political contexts for various reasons. They are essential for policymakers to make informed decisions, economic planning, and analysis, as well as for transparency and building public confidence. Moreover, official statistics enable international comparisons, help in business and investment decisions, and support research and academia. Additionally, accurate statistics help in resource allocation, crisis management, monitoring, evaluation, and promoting social equity. In essence, quality official statistics are fundamental for fostering good governance, ensuring economic stability, promoting social justice, and driving overall national development through empirical evidence. To that end, users were asked about their perceptions of the overall quality of BBS statistics on a 4-point Likert scale.

The domain-wise satisfaction levels of data users regarding the quality of statistics measured on a is presented in Table 5.4. On average, 29.39 percent are satisfied, 55.59 percent are somewhat satisfied, 11.64 percent are somewhat unsatisfied, and 3.39 percent are entirely unsatisfied. Across domains, users express high levels of satisfaction with health and nutrition (30.96%), population, demographic, and vital (30.85%), environmental (30.16%), and national accounts (30.05%) statistics. In contrast, the satisfaction level is lower for price statistics (24.75%). Notably, dissatisfaction is higher for crime and judicial statistics (17.14%). However, more than half of the users reported being somewhat satisfied across the domains with very little variations.

Even though users now express higher satisfaction with overall data quality compared to the findings of the USS 2022, they are not fully satisfied but are somewhat satisfied in 2024. These findings underscore the importance of maintaining robust standards in data collection, analysis, and reporting across statistical domains.

Table 5.4: Satisfaction with the Quality of Official Statistics

(%)

Domain of Statistics	Round	Satisfied	Somewhat Satisfied	Somewhat Unsatisfied	Unsatisfied
Agriculture Statistics	2022	34.05	49.14	15.52	1.29
	2024	28.36	57.16	11.08	3.40
National Accounts Statistics	2022	40.69	42.16	13.73	3.43
	2024	30.05	56.83	10.52	2.60
Price Statistics	2022	28.67	54.67	12.67	4.00
	2024	24.75	60.10	10.77	4.38
Foreign Trade Statistics	2022	36.52	53.04	6.96	3.48
	2024	28.21	57.05	9.83	4.91
Industry Statistics	2022	28.97	55.86	12.41	2.76
	2024	28.06	56.31	11.68	3.95
Labor Statistics	2022	32.98	49.74	10.47	6.81
	2024	27.69	57.19	11.08	4.04
Income and Poverty Statistics	2022	40.96	42.17	13.25	3.61
	2024	29.51	56.30	10.49	3.70
Population, Demographic, and Vital Statistics	2022	45.54	43.07	9.65	1.73
	2024	30.85	55.69	11.71	1.75
Health and Nutrition Statistics	2022	35.22	46.54	15.09	3.14
	2024	30.96	55.92	11.02	2.11
Gender Statistics	2022	39.35	51.61	7.74	1.29
	2024	29.35	57.47	10.37	2.81
Education Statistics	2022	39.15	50.26	8.99	1.59
	2024	28.57	59.08	9.38	2.98
Environment Statistics	2022	29.63	54.07	14.81	1.48
	2024	30.16	55.06	11.87	2.92
Crime/Judicial Statistics	2022	31.25	46.88	12.50	9.38
	2024	26.67	54.29	17.14	1.90
ICT Use Statistics	2024	28.82	54.15	13.54	3.49
Other Statistics	2022	62.50	37.50	0.00	0.00
	2024	38.82	41.18	14.12	5.88

Sources: USS 2022 and USS 2024.

5.6 Quality of BBS Products and Services

The BBS regularly publishes statistical reports across various domains. The quality of these products and services is influenced by factors such as the process of accessing data, the cost of the product, the promptness of service delivery, the availability and quality of relevant information, ease of understanding, and the usefulness of the data. An overview of user satisfaction with the quality of BBS products and services, rated on a scale from highly satisfied to very unsatisfied, is presented in Table 5.5..

Table 5.5: Satisfaction with the Quality of BBS Products and Services

(%)

Types of Products and Services	Round	Very Satisfied	Satisfied	Unsatisfied	Very Unsatisfied
Processes for accessing official statistics	2022	8.78	70.97	18.10	2.15
	2024	7.80	59.94	24.61	7.65
Cost of the product	2022	7.57	67.03	24.32	1.08
	2024	9.00	44.49	34.28	12.23
Duration between time requested and made data available	2022	8.72	63.76	24.16	3.36
	2024	6.98	38.86	36.01	18.15
Level of detail of information needed	2022	6.84	60.26	29.91	2.99
	2024	15.83	47.64	32.33	4.20
Product easy to read and understand	2022	9.89	75.05	13.76	1.29
	2024	24.53	59.04	14.03	2.40
Quality of analysis	2022	5.82	74.78	18.10	1.29
	2024	17.10	60.47	19.05	3.38
Usefulness of product	2022	10.62	74.83	13.63	0.92
	2024	15.00	62.27	20.03	2.70
First-time experience	2022	20.04	63.11	14.50	2.35
	2024	11.93	59.86	19.50	8.70
Services after data acquisition	2022	17.00	64.59	16.43	1.98
	2024	8.93	58.96	25.51	6.60
Others	2022	18.75	56.25	18.75	6.25
	2024	14.56	34.95	25.24	25.24

Sources: USS 2022 and USS 2024.

Only 7.80% of users report that they are very satisfied with accessing official statistics, while 59.94% are satisfied, 24.61% are unsatisfied, and 7.65% are very unsatisfied. Regarding the cost of the product, 9% of the users are very satisfied, 44.49% are satisfied, and the rest are unsatisfied or very unsatisfied. For the promptness of data delivery, 6.98% are very satisfied, and 38.86% are satisfied. In terms of the detailed data and other information received, 15.83% of users are highly satisfied, and 47.64% are satisfied, while 36.53% are unsatisfied or very unsatisfied. More than 83.57% of users are satisfied or very satisfied with the ease of reading and understanding BBS publications, and 77.57% are satisfied or very satisfied with the quality of analysis. Regarding first-time experiences with BBS products and services, 71.79% of the users report being satisfied or very satisfied. On average, 65.81% of users are satisfied to very satisfied with the overall quality of BBS products and services, while 25.06% are unsatisfied, and 9.12% are very unsatisfied.

CHAPTER 6

Chapter 6: Inferential Analysis of Selected BBS Issues

Factors like age, gender, educational status, experience, and working institutions can also influence users' satisfaction with statistical data. For example, different age groups may have varying expectations and preferences, and experienced users might have different satisfaction levels compared to new researchers. The previous chapters primarily described users' perceptions and satisfaction levels collectively, with occasional focus on distinctions between users with and without a PhD degree in their last academic credentials. This chapter briefly reports how users' attributes influence their perception and satisfaction with BBS products and services.

6.1 Estimation of Users' Satisfaction with respect to Attributes of Researchers

On the Website and its Access, and Awareness on BBS Microdata

The users' satisfaction survey tracked the satisfaction level of the BBS and its services by individual users across services of different wings. Some of them are more general and hence, not tied up with any particular products or services, while other issues are specific to less all or some of the 15 statistical domains. The satisfaction levels are re-constructed as binary or yes-no variables while some of them are multinomial (ordered), or simply count variables. Hence, at least four estimation techniques have been used based on the nature of the outcome variables. These techniques are succinctly described below without much of the mathematical elaboration.

It may be noted that both the accessibility of the BBS website and awareness about microdata are binary outcomes. To examine the effect of users' characteristics on the satisfaction level for the accessibility of the BBS website and awareness about microdata, the following model is used:

$$\Pr(y_i = 1 \,|x) = \phi(\beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \beta_3 x_{3i} + \beta_4 x_{4i} + \beta_5 x_{5i} + \beta_6 x_{6i} + \beta_7 x_{7i} + \varepsilon_i) = \phi(x) \qquad (6.1)$$

Where y_i is the binary indicator of whether user i is satisfied with the issue under consideration. The covariates are as follows: x_{1i} is gender (male=1 and female=0) for the user i. The x_{2i} is age, measuring by years; x_{3i} is years of schooling; x_{4i} is the years of experience in the related field. The x_{5i} is a binary variable on PhD level education of users (with PhD=1 and without PhD=0). Similarly, x_{6i} is the binary variable for users affiliated with academic institutions (academic user=1 and non-academic user=0). Finally, x_{7i} is the years of experience of using BBS data.

If the estimated coefficients of these variables are statistically significant then it can be argued that the corresponding variable is an important attribute that would influence the level of satisfaction. A positive and significant coefficient means it positively affects the satisfaction level while a negative and significant coefficient means the opposite. The model is estimated using a probit regression model along with the marginal effects for all 15 statistical domains.

On Statistical Domains

Furthermore, the number of domains used by a user varies between 1 and 15 as there are 15 distinct statistical domains considered in this study. As this is a count variable, the estimation technique is limited to either Poisson regression or Negative binomial regression model based on whether the outcome variable is over-dispersed or not. The model can be estimated using a Poisson regression model if the mean and variance of the dependent variable are the same otherwise it can be estimated using a negative binomial model.

Considering that the total number of domains used by a user i is S_i, where S_i lies between 1 and 15 is the outcome variable for our model. Therefore, to examine the effect of attributes on the expanse of usage, the following model is employed:

$$\log(\lambda_i) = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \beta_3 x_{3i} + \beta_4 x_{4i} + \beta_5 x_{5i} + \beta_6 x_{6i} + \beta_7 x_{7i} + \varepsilon_i \qquad (6.2)$$

   Where x's are the same as in the equation 6.1[4].

On disaggregated Data

Finally, many of the statistical data are also disaggregated at national, regional (divisional), district, upazila, and union levels. Users were asked to choose the level of disaggregation of data they would like to have from the dataset like national, divisional, district, upazila, and union levels. The choice outcomes Y_i are described as categorical data and it is also influenced by user attributes. This implies that:

$$Pr[Y_i = j | x_{1i}, \dots, x_{ki}] = p_{ij} \qquad\qquad \forall\ i=1,\dots,n \qquad (6.3)$$

for each of the m (=5) possible values of j.

or similarly,

$$P_{ij} = p(Y_i = j) = \Phi(x'_{ij}\beta) \qquad (6.4)$$

This is estimated using the multinomial probit regression model. It may be noted that the magnitudes of individual coefficients do not directly convey any message but the marginal effects and their significance measure the impact of the explanatory variables on users' choice of disaggregated level of data.

6.2 Factors Affecting the Level of Satisfaction on Domain Independent issues

On Access and Awareness of the BBS Website Table 6.1 shows the marginal effects of attributes on the easiness of browsing the BBS website for data and awareness of microdata. The marginal

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[4] One derivation of the negative binomial mean-dispersion model is that individual units follow a Poisson regression model, but there is an omitted variable, v_j, such that e^{v_j} follows a gamma distribution with mean 1 and variance α, i.e., $e^{v_j} \sim \Gamma(1/\alpha,\ \alpha)$. Thus, the model estimates the Poisson parameters outlined in Equation (6.2) along with the estimate of $\ln(\alpha)$ and α. It may be noted that the magnitude and significance of α justifies which of the two models between Poisson and negative binomial is the correct model to be specified. If α is significantly different from 0, the negative binomial is justified, and if the converse result is found then the Poisson model should be used.

effects are reported after estimating the probit model given in Equation 6.1. Column 1 shows the effects of attributes on easiness of browsing. None of the estimated coefficients are statistically significant, indicating that users' attributes do not affect the ease of access of browsing the BBS website for data. Column 2 shows the marginal effects on awareness of BBS microdata. The estimated effect of males is negative and statistically significant. This effect indicates that male users are less likely to be aware of microdata than their female counterparts by about 7.12 percent. Similarly, the estimated effect of years of schooling is negative and statistically significant. In this case, higher years of education reduce the probability of awareness by 1.74 percent. One of the potential implications for these findings is that BBS needs to circulate about the availability of its microdata, especially during academic programs. It is also noted that users with a PhD degree are more likely to be aware of microdata by 9.89 percent than their counterparts without a PhD degree. Similarly, users affiliated with academic institutions are more likely to be aware of BBS microdata by 13.70 percent than those affiliated with non-academic institutions. Column 2 shows the estimated marginal effect of BBS data use years. The effect is positive and statistically significant. Those who have been using the BBS data for a long time are more likely to be aware of the microdata; the probability increases by 0.7 percent points for each extra year.

Table 6.1: Effects on Easy Browsing of Website and Awareness of Microdata

Estimation Method	(1)	(2)
	Probit (Marginal Effects)	
Dependent Variable/Covariates	**Easy Browsing of BBS Website**	**Awareness of BBS Microdata**
Gender (Male = 1)	0.0119	-0.0712**
	(0.0320)	(0.0314)
Age (in Years)	-0.0021	-0.0025
	(0.0027)	(0.0028)
Years of Schooling	0.0050	-0.0174***
	(0.0056)	(0.0058)
Years of Experience	0.0045	0.0002
	(0.0031)	(0.0032)
Has a PhD Degree (= 1)	-0.0295	0.0989***
	(0.0381)	(0.0380)
Affiliated with Academic Institution (= 1)	0.0004	0.1370***
	(0.0301)	(0.0296)
Years of BBS Data Use	-0.0007	0.0070***
	(0.0023)	(0.0023)

Note: Figures in the parentheses are standard errors. Figures with ***, **, and * represent 1%, 5%, and 10% significance levels, respectively.

On Different Statistical Domains

As 15 domains are considered, respondents who used all domains are measured by 15 usages, while those who used ten domains are as 10, and so on. In this way, the counts of domain variables have been measured as the dependent variables. Similarly, for user satisfaction, nine indicators were considered: processing in accessing data, cost, duration between data request and obtain, level of available detailed information, easy readability and understanding, quality analysis, usefulness, first-time experience, and post-data collection services. For satisfaction response in each item, the score is one; otherwise, zero. So, users satisfied in all levels score nine, while those satisfying six levels are counted as six, and so on. Those who are not satisfied with any level will score zero in total. In this way, the use intensity and satisfaction have become count variables. It is found that the number of domains used is over-dispersed (the conditional variance exceeds the mean), while satisfaction for BBS products and services is not (the conditional variance equals the mean). Thus, following Equation (6.2) and the associated discussion in the text therein, both the negative binomial and Poisson regression models have been applied to estimate the effect of attributes on the number of domains used and satisfaction with BBS products and services, respectively. Table 6.2 shows the estimated effects of attributes on use the number of domains used and satisfaction for all BBS products independent of domains.

Column 1 shows the estimated effects on the number of statistical domains used. All the estimates are statistically significant except for gender. A significant effect of years of schooling at -0.0134 indicates that users with an additional schooling year are less likely to be satisfied with the usefulness of the BBS products. In this case, the expected log count of use decreases by 0.0134. Again, statistically significant effects of years of experience and data-use years imply that the expected log count of use increases by 0.0072 and 0.0245, respectively.

Table 6.2: Effects on the Number of Domains and Satisfaction with BBS Products

	(1)	(2)
Estimation Method	**Negative Binomial**	**Poisson**
Dependent Variable/Covariates	**Number of Domains Used**	**Satisfaction with BBS Products and Services**
Gender (Male = 1)	-0.0058	-0.0810***
	(0.0385)	(0.0268)
Age (in Years)	-0.0162***	0.0043*
	(0.0033)	(0.0023)
Years of Schooling	-0.0134**	-0.0066
	(0.0065)	(0.0047)
Years of Experience	0.0072*	-0.0019
	(0.0038)	(0.0026)
Has a PhD Degree (= 1)	-0.0130	0.0182
	(0.0450)	(0.0320)
Affiliated with Academic Institution (= 1)	-0.1289***	0.0414
	(0.0357)	(0.0258)
Years of BBS Data Use	0.0245***	-0.0012
	(0.0028)	(0.0019)
Constant	2.3821***	1.8214***
	(0.1503)	(0.1062)

Note: Figures in the parentheses are standard errors. Figures with ***, **, and * represent 1%, 5%, and 10% significance levels, respectively.

Column 2 reports the estimated effects of attributes on satisfaction. Most estimates are insignificant, except for gender and age indicators. The estimated effect of gender is -0.0810, which is negative and statistically significant. This implies that the expected log count of the number of items satisfied decreases by 0.0810 compared to their female counterparts. Similarly, the significant effect of age is 0.0043, implying that users who are one year older are more likely to be satisfied with BBS products by 0.0043. In contrast, years of schooling and experience, having a PhD degree, affiliation with academic institutions, and years of BBS data do not significantly influence users' satisfaction levels about the BBS products and services.

On Disaggregated level of Data

Table 6.3 shows the marginal effect after estimating the multinomial probit model for preferring the geographically disaggregated data. Column 1 shows the effect on the likelihood of getting national data. In this case, most estimates are insignificant, except for gender and academic institution. The estimated effect of gender is negative and statistically significant, indicating that male users are 3.17 percent less likely to extract national-level data. Similarly, users affiliated with academic institutions are 4.40 percent less likely to receive national-level data. Column 2 shows the marginal effects for regional-level data, where the estimated effects of PhD, academic institution, and BBS data use years are statistically significant. This implies that users with a PhD degree are 2.28 percent more likely to have regional data than their counterparts without a PhD degree, while users affiliated with academic institutions and experienced BBS-data users are less likely to receive regional-level data. Column 3 represents the estimated marginal effect for district-level data, where only years of schooling are statistically significant and negative. This implies that users with one more schooling year are 0.97 percent less likely to receive district-level data. Column 4 shows the estimated marginal effect of the PhD indicator for upazila, which is positive and statistically significant, indicating that users with a PhD degree are 9.06 percent more likely to receive upazila-level data than their counterparts without a PhD degree. Finally, Column 5 shows the marginal effects of schooling years and affiliation with academic institutions, which are positive and statistically significant. For example, the estimated effect of affiliation with an academic institution is 0.0863, indicating that users' affiliation with universities would like to have union-level data more than their counterparts by 8.63 percent. Overall, the marginal effects for disaggregated data reported in Table 6.3 show that users are more likely to have upazila- and union-level data.

Table 6.3: Marginal Effects of Preference for Geographically Disaggregated Data

	(1)	(2)	(3)	(4)	(5)
Estimation Method	**Multinomial Probit (Marginal Effects)**				
Dependent Variable/ Covariates	**National**	**Regional**	**District**	**Upazila**	**Union**
Gender (Male = 1)	-0.0317**	0.0127	0.0068	-0.0135	0.0256
	(0.0147)	(0.0118)	(0.0261)	(0.0289)	(0.0333)
Age (in Years)	0.0013	0.0010	0.0018	-0.0052**	0.0010
	(0.0012)	(0.0008)	(0.0021)	(0.0026)	(0.0028)
Years of Schooling	0.0017	-0.0007	-0.0097**	-0.0132**	0.0219***
	(0.0024)	(0.0020)	(0.0047)	(0.0053)	(0.0057)
Years of Experience	-0.0001	-0.0007	-0.0002	0.0047*	-0.0037
	(0.0014)	(0.0009)	(0.0024)	(0.0029)	(0.0032)
Has a PhD Degree (= 1)	-0.0193	0.0228*	-0.0209	0.0906***	-0.0732
	(0.0183)	(0.0137)	(0.0311)	(0.0351)	(0.0392)
Affiliated with Academic Institution (= 1)	-0.0440***	-0.0350***	-0.0061	-0.0012	0.0863***
	(0.0143)	(0.0108)	(0.0237)	(0.0274)	(0.0309)
Years of BBS Data Use	-0.0014	-0.0020**	0.0015	0.0019	0.0000
	(0.0011)	(0.0008)	(0.0017)	(0.0019)	(0.0022)

Note: Figures in the parentheses are standard errors. Figures with ***, **, and * represent 1%, 5%, and 10% significance levels, respectively.

6.3 Empirical Results on Issues Dependent on the Domains

As different users could use multiple statistical domains of the BBS data, it is rational to consider that each of the users can use each of the domains. This domain consideration would allow capturing individual-use-specific effects and isolating the actual effects of attributes. Table 6.4 reports the marginal effects of attributes on user satisfaction for BBS data across domains for a subset of indicators. Similar to Table 6.1, the estimates were found after estimating the probit model.

Column 1 shows the effects of the perception on the accuracy of data. The estimated effect of gender is negative and statistically significant. This implies that male users are 7.37 percent less likely to be happy about the BBS data's accuracy than their female counterparts. Similarly, the estimated effect for years of schooling is negative and statistically significant, indicating that one additional year of schooling decreases the accuracy satisfaction by 0.79 percent. The estimated effect of data use experience is similar to years of experience. In this case, one year of BBS data use decreases the accuracy perception by 0.20 percent. These findings imply that users with more education (having a PhD degree) or data use experience are less likely to become happy about the data accuracy.

Table 6.4: Effects on the Satisfaction of the Characteristics of BBS Data: Part I

	(1)	(2)	(3)	(4)	(5)
Estimation Method	Probit (Marginal Effects)				
Dependent Variable/ Covariates	**Accuracy of Data**	**Timeliness of Data**	**Relevance of Data**	**Frequency of Data**	**Overall Quality of Data**
Gender (Male = 1)	-0.0737***	-0.0494***	-0.0345***	0.0005	-0.0331***
	(0.0095)	(0.0092)	(0.0055)	(0.0107)	(0.0053)
Age (in Years)	0.0105***	0.0099***	0.0056***	0.0075***	0.0023***
	(0.0012)	(0.0009)	(0.0011)	(0.0013)	(0.0004)
Years of Schooling	0.0079***	0.0087***	0.0047***	0.0093***	0.0054***
	(0.0014)	(0.0013)	(0.0010)	(0.0015)	(0.0012)
Years of Experience	-0.0099***	-0.0069***	-0.0080***	-0.0041***	-0.0002
	(0.0014)	(0.0011)	(0.0011)	(0.0013)	(0.0004)
Has a PhD Degree (=1)	-0.0315**	-0.0655***	-0.0114*	-0.0139	-0.0247***
	(0.0154)	(0.0152)	(0.0069)	(0.0118)	(0.0056)
Affiliated with Academic Institution	0.1064***	0.0836***	0.0945***	0.0298*	0.0275***
	(0.0166)	(0.0074)	(0.0100)	(0.0159)	(0.0026)
Years of BBS Data Use	-0.0020***	-0.0052***	0.0005	-0.0050***	-0.0011***
	(0.0005)	(0.0005)	(0.0011)	(0.0007)	(0.0009)

Note: Figures in the parentheses are standard errors. Figures with ***, **, and * represent 1%, 5%, and 10% significance levels, respectively.

Column 2 shows the marginal estimated effects of attributes on users' satisfaction for timeliness. The estimated effect of males is negative and statistically significant, indicating that male users are less likely to be satisfied by 4.94 percent than their female counterparts. Similarly, the estimated effect of years of experience, with a PhD degree, and years of BBS data use are negative and statistically significant. For example, the estimated effect of years of experience is -0.0069, indicating that one year more experienced users are less likely to be satisfied by 0.69 percent. The estimated effects of years of schooling and users affiliated with academic institutions are positive and statistically significant. For example, the estimated effect of affiliation with academic institutions is 0.0836, indicating these users are more likely to be satisfied with data timeliness by 8.36 percent.

Column 3 shows the marginal effects of the attributes on satisfaction with the relevance of BBS data. The estimated effect of male users is -0.0345, which is negative and statistically significant. This implies that male respondents are less likely to be happy with the relevance of the BBS data than those of their female counterparts. Similarly, the estimated effects of the years of experience and with a PhD are negative and statistically significant. For example, the estimated effect of the PhD indicator is -0.0114, implying that users with a PhD degree are 1.14 percent less satisfied with the relevance than their counterparts without a PhD degree. The estimated effects of age, years of schooling, and affiliation with academic institutions are positive and statistically significant. In this case, for example, users affiliated with academic organizations are more likely to become satisfied than their counterparts affiliated elsewhere. Column 3 also shows that data use experience does not influence users' satisfaction with the relevance of BBS data. One of the policy

implications is that BBS could identify the potential avenues why BBS data do not make these experienced users happy with the data relevance issues and address them accordingly.

Column 4 reports the marginal effects of the attributes on satisfaction for data frequency. The estimated effects of male and PhD indicators are insignificant. The estimated effects of age, years of schooling, and affiliation with academic institution indicators are positive and statistically significant. For example, the estimated effect of affiliation with academic institutions is 0.0298, indicating that these users are 2.98 percent happier on data frequency than their counterparts. The estimated effects of years of experience and data use years are negative and statistically significant. For example, the estimated effect for years of experience is -0.0041, indicating that users with one more year of experience are more likely to be dissatisfied by 0.41 percent for the data frequency of the BBS.

Column 5 reports the marginal effects on satisfaction for the overall quality of BBS data. The estimated effects of males, years of experience, PhD degree, and data-use years are negative and statistically significant. For example, the estimated effect of the PhD indicator is -0.0247, indicating that users with a PhD degree are 2.47 percent more dissatisfied with the overall quality of BBS data than their counterparts without a PhD. These findings imply that BBS should consider the feedback from experienced users or users with a PhD for improving the overall quality of data.

Table 6.5: Effects on the Satisfactions of the Characteristics of BBS Data: Part II

	(1)	(2)	(3)	(4)	(5)
Estimation Method	**Probit (Marginal Effects)**				
Dependent Variable/ Covariates	**Usefulness**	**Easy to Obtain**	**Good Method**	**Easy Access**	**Reliability**
Gender (Male = 1)	-0.0540***	-0.0297**	-0.0325***	-0.0445***	-0.1134***
	(0.0071)	(0.0128)	(0.0080)	(0.0077)	(0.0133)
Age (in Years)	0.0049***	0.0047***	0.0054***	0.0040***	0.0064***
	(0.0008)	(0.0009)	(0.0010)	(0.0009)	(0.0009)
Years of Schooling	0.0051***	0.0042***	0.0044**	-0.0037*	0.0156***
	(0.0014)	(0.0013)	(0.0018)	(0.0021)	(0.0016)
Years of Experience	-0.0044***	-0.0010	-0.0029**	0.0022*	-0.0055***
	(0.0009)	(0.0008)	(0.0012)	(0.0013)	(0.0011)
Has a PhD Degree (= 1)	-0.0266**	-0.0310***	0.0411***	0.0537***	-0.0688***
	(0.0115)	(0.0091)	(0.0083)	(0.0120)	(0.0123)
Affiliated with Academic	0.0232**	-0.0164	0.0590***	-0.0034	0.0753***
Institution	(0.0092)	(0.0134)	(0.0090)	(0.0110)	(0.0094)
Years of BBS Data Use	0.0009**	-0.0014***	0.0003	-0.0031***	0.0014
	(0.0005)	(0.0005)	(0.0011)	(0.0007)	(0.0009)

Note: Figures in the parentheses are standard errors. Figures with ***, **, and * represent 1%, 5%, and 10% significance levels, respectively.

Table 5.5 shows the marginal effects of the attributes on the satisfaction of the BBS data for the second subset of indicators. The estimated effects of male indicators for usefulness, easy obtain, good method, easy accessibility, and reliability are negative and statistically significant. For example, the estimated effect on satisfaction for usefulness is -0.0540, which is negative and statistically significant. This estimate indicates that male users are less likely to be satisfied by 5.40 percent than their female counterparts. Table 5.5 also shows that the estimated effects of age and years of education are positive, except for the easy accessibility, and statistically significant. For example, the estimated effect of years of education is 0.0156, indicating that users with one more schooling year are more likely to be satisfied by 1.56 percent. The estimated effect of PhD indicator on usefulness, ease of data obtained, and reliability are negative, except for good method and easy accessibility, and statistically significant. For example, the estimated effect of the PhD indicator on usefulness is -0.0266, indicating that users with a PhD degree are less likely to be satisfied by 2.66 percent than their counterparts without a PhD degree. In contrast, the estimated effect of the PhD indicator on an appropriate method for data collection is 0.0411, indicating that they are 4.11 percent more likely to be satisfied with the data collection methodology than their counterparts without a PhD degree. The estimated effect of affiliation with academic institutions for usefulness, suitable method, and reliability are positive and statistically significant, while it is insignificant for easy to obtain and easy to access. These findings imply that academic institutions do not have easy access to collect BBS data across domains.

CHAPTER 7

Chapter 7: Users' Preferences and Feedback

It is imperative to consider user preference and feedback to guarantee relevance, quality, credibility, and efficient utilization of official statistics. The active involvement of users and the integration of their feedback play a crucial role in augmenting the comprehensive worth and influence of statistical results. By engaging with users and incorporating their inputs, the BBS can ensure that its outputs and services meet evolving needs and expectations, thus fostering a culture of data-driven decision-making in various sectors of society. This chapter discusses preferences and feedback from users for improving and strengthening the BBS statistical ecosystem.

7.1 User Preference to Improve the Products of BBS

User preferences are essential in advancing BBS products as they offer valuable and pragmatic insights. Consistently collecting and examining users' preferences aids in addressing internal inconsistencies and determining the overall product trajectory.

7.1.1 Preferred Channels to Access Official Statistics

Insights into users' preferred channels for obtaining BBS data and publications are assessed using the Likert scale: most, somewhat, less, and least preferred. The results are presented in Table 7.1. Only 8.10% of the users highly preferred purchasing datasets directly from the BBS, while 19.73% expressed somewhat preferences. In contrast, buying BBS products is a less or least preferred channel for the majority of users (72.17%). A vast majority of the users, about 89.95%, expressed somewhat the most preferred option for obtaining the BBS data free of cost. Approximately 93.62% of the users prefer (somewhat to most) obtaining data through the BBS website or data portals. This preference stems from the convenience of online access, which allows users to retrieve data whenever needed. In contrast, 51.46% of users selected an official request or application from their institution as less or the least preferred channel for obtaining data. However, some users advocate for this option, particularly for datasets that may be confidential for national security reasons or possess unique attributes for specific research studies. Moreover, only anonymized datasets could be used for academic or research purposes, emphasizing the importance of proper channels for accessing sensitive data. About 65.12% of the users also prefer (somewhat to most) accessing data from public libraries and libraries of educational institutions. Notably, a higher percentage of users prefer obtaining data through personal contacts (most preferred 20.33% and somewhat preferred 39.83%), indicating the value of networking and collaboration in accessing statistical information. About 79.44% of the users also prefer (somewhat or most) accessing data from published reports and analyses of the BBS.

These findings underscore the importance of providing diverse and accessible channels for users to obtain the BBS data and publications, catering to their diverse and heterogeneous needs and preferences while ensuring transparency and accountability in data dissemination processes.

Table 7.1: Preferred Channels to Access BBS Products

<div align="right">(%)</div>

Preferred Channel	Most Preferred	Somewhat preferred	Less Preferred	Least Preferred
Purchase from BBS	8.10	19.73	24.53	47.64
Free of cost from BBS	69.39	20.56	6.15	3.90
BBS Library	21.08	41.49	21.38	16.05
BBS Website/Data Portals	78.24	15.38	3.83	2.55
Official (written) request from the Institution	14.10	34.43	29.48	21.98
Through telephone/fax/email to BBS	21.76	33.23	26.11	18.90
From libraries of other government offices	16.35	35.48	25.73	22.43
From public libraries & libraries of educational institutions	30.91	34.21	18.75	16.13
Personal contacts	20.33	39.83	22.73	17.10
Published reports and analyses	38.63	40.81	14.25	6.30
Others	16.81	30.09	15.04	38.05

Source: USS 2024.

7.1.2 Preferred Formats to Acquire Published Data by Statistical Domain

The respondents were asked to report their preferred modes of obtaining BBS data and publications across statistical domains. Though researchers acquire data in various formats from the BBS, the respondents commonly prefer to acquire the BBS data in Word/Excel format

Table 7.2: Preferred Modes or Formats of the Published Data

<div align="right">(%)</div>

Domain of Statistics	Data in BBS Publication	PDF form in CD-ROMs & website	Word/Excel form in CD-ROMs & website	HTML and web format	Info-graphics	Others
Agriculture Statistics	33.68	42.98	69.28	15.66	9.45	1.18
National Accounts Statistics	33.61	39.21	69.81	18.44	7.92	1.37
Price Statistics	32.32	37.04	68.52	17.17	10.27	1.52
Foreign Trade Statistics	29.06	39.32	66.67	18.59	9.40	0.85
Industry Statistics	32.02	40.11	67.42	17.51	10.17	1.32
Labor Statistics	34.58	41.32	68.41	16.77	8.53	1.05

Domain of Statistics	Data in BBS Publication	PDF form in CD-ROMs & website	Word/Excel form in CD-ROMs & website	HTML and web format	Info-graphics	Others
Income and Poverty Statistics	32.72	38.40	71.60	19.51	8.64	1.73
Population, Demographic, and Vital Statistics	34.90	40.48	72.65	19.69	7.66	1.31
Health and Nutrition Statistics	34.20	41.49	70.02	17.50	9.56	1.62
Gender Statistics	36.91	42.18	64.67	15.29	10.72	1.58
Education Statistics	34.97	42.86	68.90	17.41	8.93	1.19
Environment Statistics	35.21	40.66	71.60	17.51	9.92	1.36
Crime/Judicial Statistics	39.05	46.67	51.43	18.10	13.33	0.95
ICT Use Statistics	41.48	49.78	61.14	18.78	10.04	0.44
Other Statistics	43.53	45.88	61.18	18.82	14.12	3.53

Source: USS 2024.

in the CD-ROMs and website (66.89%), PDF format in the CD-ROMs and website (41.89%), BBS publications (35.22%), HTML and web format (17.78%), and infographics (9.91%). Table 7.2 shows domain-wise data users' preferences to acquire the published data. About 72.65% of the users prefer to receive population, demographic, and vital statistics in Word/Excel format on the CD-ROMs and website, followed by 72.65 percent for income and poverty statistics, 71.60 percent for environment statistics, 70.02% for health and nutrition statistics, etc.

7.1.3 Preferences for Geographically Disaggregated Data

Policymakers, academics, and researchers often require disaggregated data tailored to their specific needs. This disaggregation may encompass various geographical levels, including national, regional, district, upazila (sub-district), or even lower administrative levels, depending on the nature of the survey or census conducted. Such disaggregated data facilitates detailed analysis and helps elucidate variations across different spatial scales. Accordingly, users' preferences regarding geographically disaggregated data are explored (Figure 7.1). Approximately 48.39% of the users prefer union or ward-level data, followed by 20.71% for upazila-level data and 18.23% for district-level data. Only a small proportion of the users express interest in regional-level data (2.55%). Interestingly, these preferences remain consistent across different user categories, including users with and without a PhD degree.

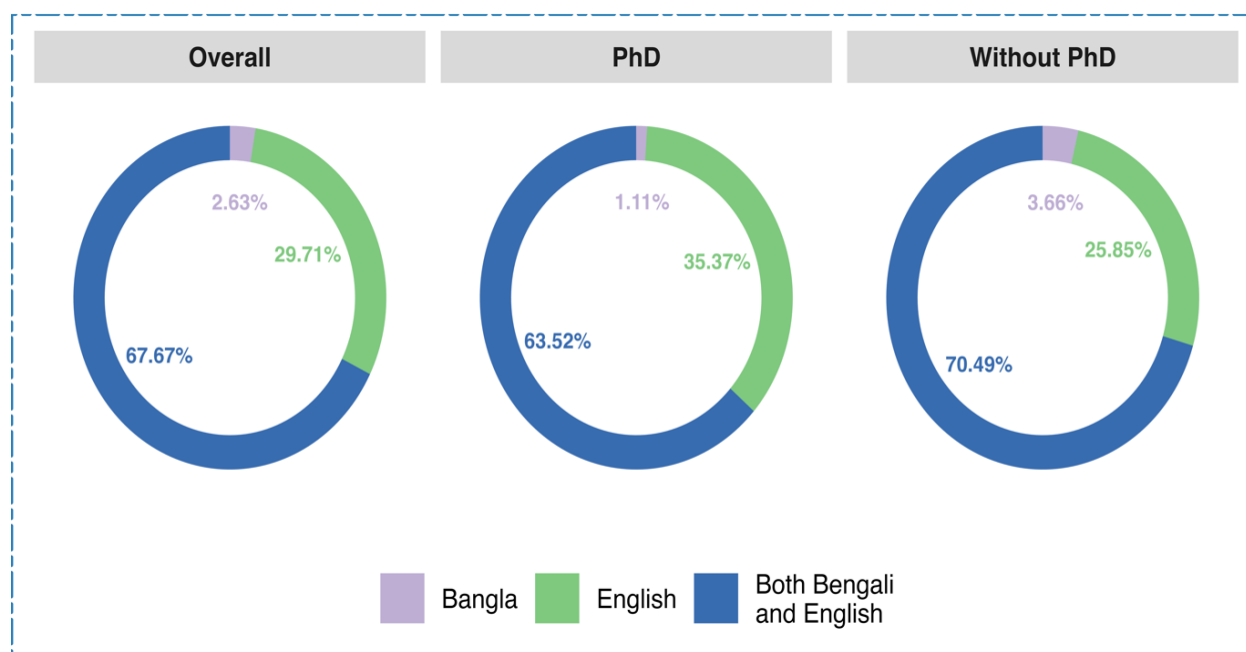**Figure 7.1: Preferred Geographical Disaggregation of Data**
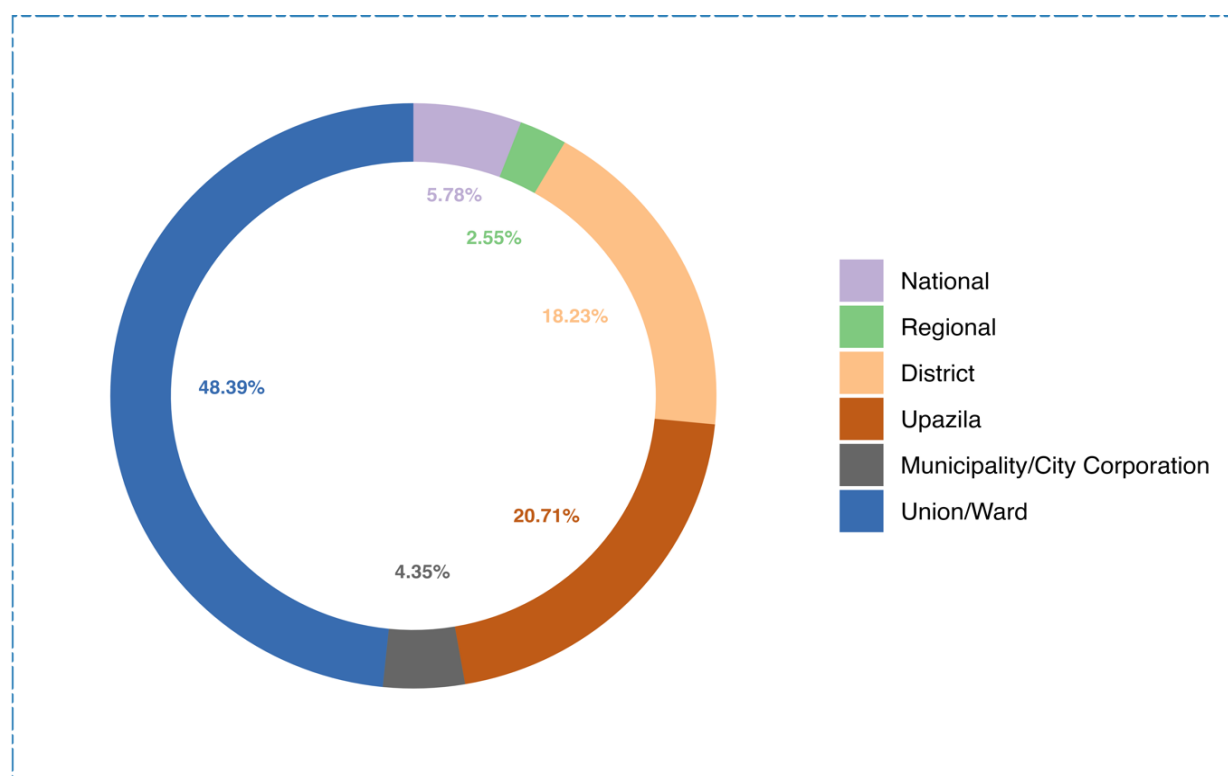
Source: USS 2024.

These findings underscore the importance of providing geographically disaggregated data to meet the diverse needs of policymakers, researchers, and analysts. By offering data at various administrative levels, BBS can facilitate more nuanced analysis and enable users to gain deeper insights into regional variations and trends, thereby enhancing the utility and relevance of statistical information for research and policymaking purposes.

7.1.4 Linguistic Preference for the BBS Publications

Insofar as it requires very little English competency and Bangla is the vernacular language, published data either in English or Bengali can be used. However, one needs to be fully conversant in English to understand the BBS reports written in English. Thus, users' preferred language for receiving publications is explored (Figure 7.2). The results indicate that about two-thirds of the respondents prefer to have publications in both Bengali and English, while 29.71 percent prefer them in English, and only 2.63 percent prefer them in Bengali. Among respondents with a PhD degree, 35.37 percent prefer them in English, compared to 25.85 percent of the users without a PhD degree. Conversely, 70.49 percent of the users without a PhD degree prefer to have publications in both English and Bengali, compared to 63.52 percent of the users with a PhD degree. However, the current style of presenting both the English and Bengali analysis in the same publication should be discontinued. Instead, the BBS can publish separate English and Bangla reports for wider consumption, as it sometimes does.

Figure 7.2: Preferred Language to have the BBS Publications

Overall	PhD	Without PhD
2.63%	1.11%	3.66%
29.71%	35.37%	25.85%
67.67%	63.52%	70.49%

Legend: Bangla | English | Both Bengali and English

Source: USS 2024.

7.2 User Feedback to Strengthen the Statistical System of BBS

User feedback plays a crucial role in enhancing the NSS in general and the BBS in particular by providing valuable insights for improvement. Incorporating user feedback can lead to significant enhancements in statistical systems and correct errors, and it can also influence user's trust and understanding. Additionally, these feedbacks can be utilized to validate data conflicts. The BBS users highlighted the following issues to strengthen the statistical system and meet evolving data requirements.

7.2.1 Improve and Make Effective Dissemination of BBS Products

Users' opinions on how to improve and make effective dissemination of the survey and census findings of the BBS are shown in Figure 4.3. On average, about 88.75 percent of the users prefer sharing statistical products through websites as the most effective method. This preference is largely similar between users with a PhD degree (90.74%) and those without a PhD degree (87.39%). Additionally, approximately 60.99 percent believe seminars, workshops, and stakeholders' meetings could serve as effective dissemination methods, while 57.39 percent argue for press releases and media coverage. Interestingly, users without a PhD degree are more inclined to prefer these modes (61.66%) than those with a PhD degree (60%). In contrast, most users do not favor traditional approaches like exhibitions and pamphlets for disseminating surveys and census reports. These statistics suggest a clear preference for digital platforms and more dynamic methods of information dissemination.

These findings underscore the importance of embracing digital tools and innovative approaches to ensure widespread and effective dissemination of statistical information, catering to the users' diverse needs and preferences while maximizing accessibility and impact.

**Figure 7.3: Preferred Dissemination Modes of the BBS Data and Publications**
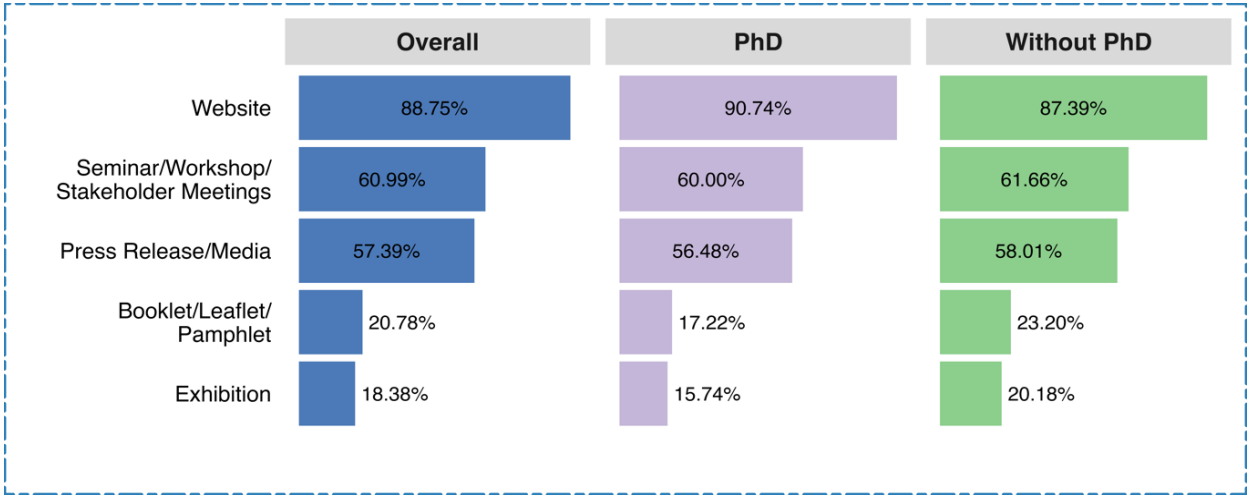
Source: USS 2024.

7.2.2 Modes of Presentation Formats of Statistics

Users' feedback on the most effective presentation formats for BBS products is critical to reach out to more users. It is found that approximately 90.10 percent of the users prefer statistics to be presented as analytical reports that include tables, charts, and graphs (Figure 7.4). Conversely, only 9.90 percent prefer the presentation consisting solely of tables, charts, and graphs.

**Figure 7.4: Preferred Formats for BBS Publications and Reports**
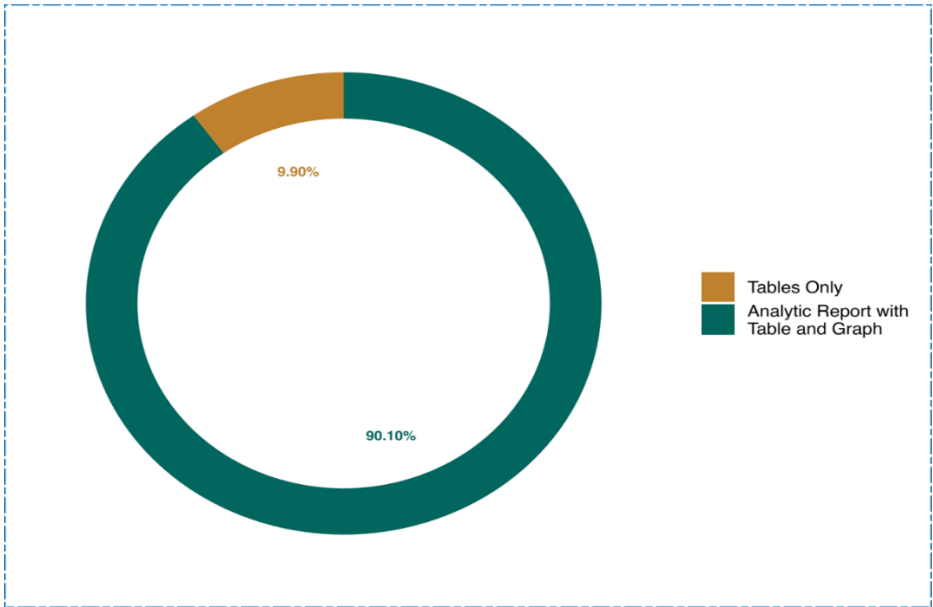
Source: USS 2024.

7.2.3 Make Surveys and Censuses More Informative

The users' feedback on enhancing the effectiveness of surveys and censuses is presented in Figure 7.5. Approximately 78.32 percent of the users recommend engaging with relevant stakeholders, while 76.74 percent suggest identifying users' needs. Additionally, 60.32 percent of the users advocate for coordination with other data producers, and 42.39 percent emphasize the importance of providing more disaggregated data for the lowest administrative units.

**Figure 7.5: Ways to Make the Surveys and Censuses More Effective**
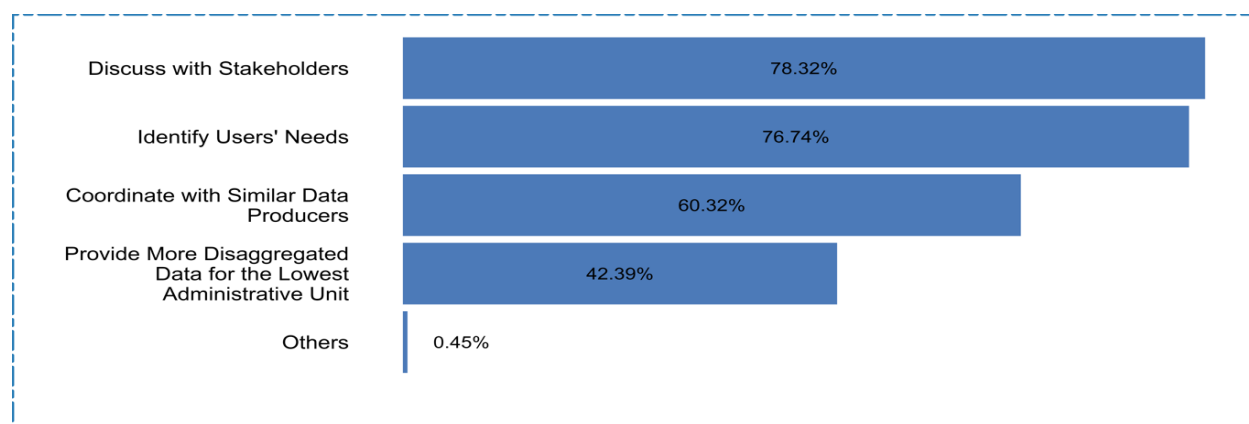
Source: USS 2024.

7.2.4 Promote More Usage of BBS Data and Publications

Users' suggestions to increase the access and use of BBS data and publications are depicted in Figure 7.6. The findings indicate that many users (88.35%) suggest providing data in electronic versions that should be directly downloadable. Around 82.60 percent of the users strongly prefer being promptly informed about the newly released statistical products. This suggests the importance of timely communication, including using listserv/broadcast to make users aware of the latest data and reports. Users also suggest including BBS statistics as mandatory content in academic curricula (18.83%) and making the BBS products available at public libraries (50.56%) and local private booksellers (15.90%) to promote more usage.

Figure 7.6: Suggestions to Promote the Use of BBS Products
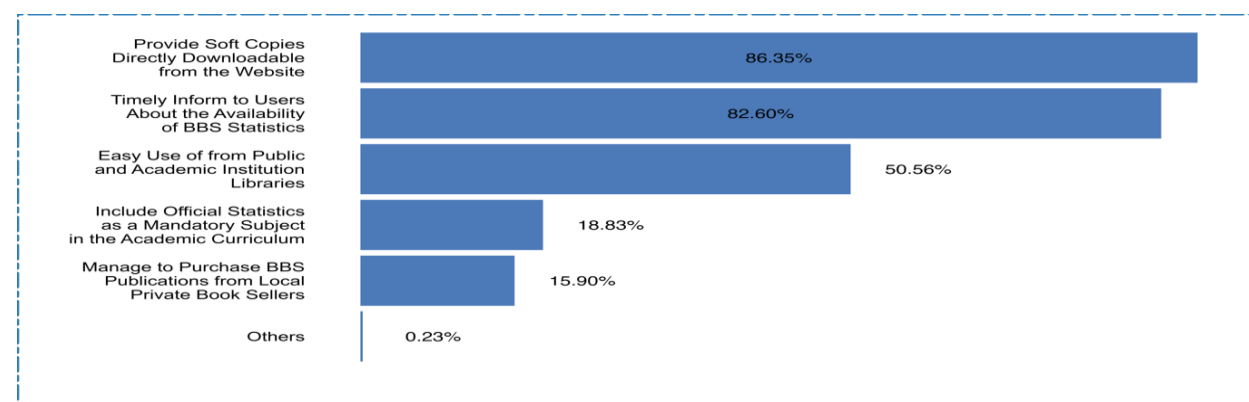
Source: USS 2024.

7.2.5 Improve the BBS Website

Most users expressed concern about the BBS website and suggested making it more accessible so that they can browse without experiencing buffering. They suggest improving the website and interface to enhance the efficiency of navigation, search, and data analysis. Users emphasize the need for a user-friendly interface with interactive visualization tools, filters, and search functionalities.

The BBS website can also launch a data portal system, where users can filter options by different attributes: gender, ethnicity, geographic area, etc. Some users suggest covering the GPS tracking at the micro-level, similar to the SDG tracking, at least at the district level. This tracking system could also offer an option for comparing the trends among these attributes.

Users also recommend timely updating of data to enable them to monitor the changing patterns and make informed decisions. Users also emphasize providing complete and updated information to avoid biased policies. Additionally, users recommend improving the website to allow data collection via mobile devices, such as Android and iOS applications. This enhancement would further facilitate access to statistical information, catering to users who prefer to access data on the go using their smartphones.

Further, many users recommend the availability of statistical data in various formats compatible with statistical software, such as MS Excel, R, SPSS, and Stata, thus catering to diverse user needs and preferences. Some users also recommend introducing frequently asked questions (FAQ) sections for common queries and 24/7 online chat options. The chat option will offer users quick replies and save time, ultimately helping them concentrate on their work.

7.2.6 Improve Data Frequency

Users strongly recommend improving the frequency of data across all statistical domains. They emphasize the importance of providing the most recent information to facilitate better-informed policy-making. To address this, the BBS could take several steps. First, it could prioritize the most preferred domains and engage users to identify key indicators and determine feasible frequency updates. For instance, domains like education and health may require annual updates, while macroeconomic indicators may need to be updated quarterly, and price data may need to be updated monthly. Second, establishing standard data formats and structures would enhance users' consistency and ease of access. For example, sometimes annual reports publish the trends, such as enrollment rates and school numbers. Users recommend the data should be available in other convenient formats, like MS Excel and Stata. Third, users prefer real-time data, enabling them to promptly understand and respond to emerging events. Implementing mechanisms for real-time data collection and dissemination could address this need. Lastly, creating a data repository that provides both updated and archived data would be beneficial. Collaborating with other public and private research organizations could also expand data coverage and frequency.

7.2.7 Suggestions for Additional Statistics

Although the BBS provides the most important statistical data and information, it often falls short of users' expectations. Approximately 35% of the respondents need to check data from other sources to accomplish their work. For example, some users would like to have underground water and forest coverage data, while some other users prefer to have the land use and land cover data at the upazila level.

Users also feel the need for yearly agricultural production costs and returns of field crops and post-harvest data. They also suggest separate data for commercial and household production of livestock data. Given that the floodplains are drying up, users suggest detailed data for marine fisheries, with a particular focus on artisanal fishers for informed policymaking. Some of the users also would like to have data on human trafficking. Further, users emphasize the regularly published data on informal sectors as it is a crucial component of the national economy.

Some of the users also prefer to obtain air pollution and consequential health effects data at regular intervals. Some users also think that statistical information for breeds, foreign drugs, medicine, and vaccines should be included. They also prefer data on undernutrition, stunting, and underweight for health nutrition. As many people use telemedicine, users prefer to see telemedicine data and its impacts on human health and the national economy.

BBS could conduct surveys regularly so that panel data could be prepared. The notable section-wise suggestions are agricultural machinery survey, agricultural service provider's survey, rural market survey, consumer behavior survey, mental health survey, cybercrime statistics, sound pollution, citizen perception survey, human rights survey, transgender survey, and income tax survey. They also suggest HIES and WASH surveys every three years. Some also recommend providing an institutional quality index, purchasing manager index, and good governance index.

7.2.8 Improve the Quality of Statistical Products

While collecting data, respondents emphasize the highest professional practices, including ethics, capacity building, transparency, and accessibility. Adequate information for the data collection methodology and variables should also be provided. The users want data accessible to heterogeneous users to meet their diverse demands. For example, some of the users recommend reliable data on environment and climate change, population, nutrition, agriculture, forestry, fisheries, and livestock. Some researchers also suggest that agricultural data should be collected following the recent land tenure and contractual agreements. Some users want datasets with the smallest administrative units, like union and ward, to cover more areas. This smallest unit with more areas helps researchers to get the broader units. This smallest unit should be coordinated with other data from national and international research organizations. The BBS should also plan to collect panel datasets on some socioeconomic indicators.

Some users claim to have manipulations of statistical information. For example, they suspect that political influences are reflected in the published data of the BBS. The BBS should check these claims and dispel such misgivings by elaborating the data collection methodology following the appropriate UN protocols and international standards and also sharing the corresponding metadata.

Some also emphasize ensuring data accuracy. For example, they have strong claims on food prices and want monthly data for necessary food items at geographically disaggregated levels. The time gap in releasing the data should also be addressed.

The BBS could design an option to collaborate with other national and international research organizations on fundamental socioeconomic indicators. The users will appreciate the BBS products when they make cross-country comparisons and find consistency. This approach would also help build and enhance users' confidence in the BBS statistics.

7.2.9 Make the Microdata Acquisition Process Easier

Most users recommend making the **microdata acquisition process easier**. They also advocate for sharing all microdata with detailed information on the BBS website, indicating the importance of an online platform for data dissemination. This would facilitate access to specific datasets, enabling researchers to conduct in-depth analyses. Many also desire to obtain microdata at a more granular level, such as the smallest geographical unit (e.g., union or ward level), allowing for more detailed analyses. Most users advocate for free access to microdata, especially those from educational institutions and research organizations.

7.2.10 Enhance the Human Resource Capacity and Improve BBS Service Quality

The service quality involves various aspects, including data accuracy, timeliness, efficiency, and reliability. To ensure service quality, the BBS should develop a plan considering resource allocation and future demands. The BBS should recruit highly qualified personnel for data collection. The skilled BBS staff are the key component for ensuring the effectiveness and reliability of statistical solutions. The personnel should also be equipped with adequate training following the ethical guidelines. The comprehensive training program should cover data management practices, technology uses, data formats, statistical ethics, data security, monitoring, and validation.

Users also suggest improving the professional approach and behavior of the BBS staff. Ensuring that BBS staff demonstrate a professional attitude when interacting with data or information seekers is crucial. This practice includes responsiveness, courtesy, and transparency in addressing user inquiries and requests. By investing in developing its human resources, the BBS can strengthen its capacity to provide accurate, timely, and reliable statistical information that supports evidence-based decision-making and contributes to national development efforts.

CHAPTER 8

Chapter 8: Conclusions and Recommendations

The Bangladesh Bureau of Statistics (BBS) is the primary organization responsible for collecting and disseminating statistical data through and conducting censuses, surveys, and research to support national development planning and policy formulation. To improve the quality of official statistics, this study primarily aims to conduct a follow-up User Satisfaction Survey (USS) 2024 to track and measure the extent to which data users in Bangladesh are satisfied with available official statistics. To understand the varying needs and satisfaction levels of different user groups, respondents are categorized into those with and without PhD degrees. Despite these distinctions, the overall findings align closely with the results obtained from all users.

The findings reveal that most respondents primarily utilize population and demographic statistics, followed by data related to income and poverty, and national accounts. Conversely, crime and judicial statistics are the least utilized domain. Additionally, most users access statistical information as and when required rather than regularly. Approximately three-quarters of the users express satisfaction with the relevance of the data, while two-thirds are content with its accuracy. However, only half of the respondents are satisfied with the frequency and timeliness of statistical products.

Although nearly all users utilize the BBS website, a significant majority (93%) believe that its quality could be improved, with many considering it outdated. Further, some users express moderate dissatisfaction with the adequacy of the statistical information provided. Based on the findings, several key recommendations are presented to enhance user satisfaction:

Improve BBS Website:

Improve the BBS website and interface to enhance the efficiency of navigation, search, filtration, and data analysis. Users also recommend improving the website to allow information collection via mobile devices, such as Android and iOS applications.

Introduce a 24/7 Online Chat Option:

Introduce 24/7 online chat options on the website to promptly help users.

Ensure Timely Availability of Statistics:

Ensure the availability of the most up-to-date statistics, including microdata, and reduce publication delays for data and statistical reports.

Create data archives:

Create a data repository that provides both updated and archived data.

Increase Data Frequency:

Emphasize the importance of increasing data frequency across all statistical domains.

Provide More Statistics:

Provide underground water and forest coverage, as well as land use and land cover data. Users also need yearly post-harvest loss data along with costs and returns of agricultural production.

Provide Statistics for Informal Economy:

Provide more information, including the sectors and size of the informal economy.

Conduct More Surveys:

Conduct surveys on agricultural machinery and service providers, rural market surveys, consumer behavior surveys, mental health surveys, cybercrime statistics, sound pollution-related data, senior citizen rights data, human rights surveys, transgender surveys, and income tax surveys. They also suggest HIES and WASH surveys every three years.

Provide more Statistical Indices:

Create and publish more indices, including the institutional quality index, purchasing manager index, and good governance index.

Provide Dataset with Smallest Administrative Unit Level:

Offer datasets at the smallest administrative unit levels, like union and ward, to cover more areas.

Launch a Data Portal System:

Launch a data portal system where users can have filtering options followed by different attributes, including gender, ethnicity, and geographic area.

Enhance User-Friendliness and Accessibility:

Improve the design and interface of the BBS website and organization to facilitate easier navigation, search functions, and data analysis.

Provide Updated Data Formats:

Provide updated statistical data in various formats compatible with standard statistical software such as MS Excel, R, SPSS, Stata, etc.

Implement Online Analysis Tools:

Introduce an online automated analysis and reporting system to enable users to assess the trends quickly.

Offer Free Access to BBS Products:

Provide BBS products free of charge with high-quality customer support and ensure public accessibility as a public institution.

Enhance Staff Service Quality:

Enhance the service quality of BBS staff through comprehensive training programs, including mandatory yearly online modules focusing on technical skills and customer service.

Collaborate with Research Organizations:

Collaborate with other research organizations to access additional data and expand coverage frequency.

Incorporate National Statistics in Education:

Advocate for including national statistics in academic curricula and regularly seek feedback from educational and research institutions.

Consider Peer Review Processes:

Implement a peer review for methodology selection and data collection.

Develop Informative Resources:

Create video tutorials and frequently asked questions (FAQ) sections to guide users.

Provide Easy Access to Microdata:

Make microdata easily accessible, granular, and affordable to facilitate research and policymaking efforts.

Deliver Information Promptly:

Identify key user groups for each publication and directly share updates with them. Tailoring communication to specific user segments can improve relevance and engagement.

Use Diverse Communication Channels for Effective Disseminate:

Leverage multiple communication channels including the institutional website, email, webinars, traditional media, social media platforms, and newsletters to disseminate information effectively.

Provide Open Access:

Provide open access to statistical products, particularly for educational institutions and public libraries. This approach fosters greater transparency and accountability while empowering users to utilize statistical information more effectively.

Enhance Research Capacity:

Integrate national statistics into academic curricula so that students and researchers gain exposure to real-world data and analytical techniques. This exposure would enhance their research skills and enable them to conduct cutting-edge studies for evidence-based policymaking.

Encourage Internship Programs:

Encourage internship programs with academic institutions to train emerging statisticians and researchers.

Introduce Regular Feedback Mechanism:

Establish a feedback mechanism with educational and research institutions on the usability and relevance of its statistical products. This feedback loop facilitates continuous improvement and effectively meets the users' needs.

Arrange Training Programs:

Design and implement training programs to improve the skills and competencies of BBS personnel. These programs should be tailored to the specific needs of different wings within the BBS and incorporate both theoretical knowledge and practical applications.

Address Issues of the Missing Values:

Addressing the issue of missing values is crucial for ensuring data completeness and accuracy. Implementing strategies to minimize missing data and addressing gaps can improve the overall quality of statistical information.

Monitor and Address Limitations:

Check research studies and media reports that used BBS products and identify the challenges they face. Addressing these identified challenges in these studies can improve data quality and, ultimately, user satisfaction.

Address Publication Delays:

Address issues related to publication delays to ensure timely dissemination of information.

By implementing these promotional strategies, the BBS can enhance awareness, accessibility, and utilization of its statistical information, ultimately strengthening its impact on policymaking and decision-making processes. Equally important is to conduct user satisfaction surveys regularly to read the pulse of the policymakers, researchers, and other data users for updating the existing statistics or introducing statistics and take necessary measures to keep the statistical ship of the BBS on an even keel in terms of transparency and credibility. Finally, the future user satisfaction survey should not be limited to the BBS only, it rather should encompass all data-generating agencies of the NSS. This is particularly important as BBS, as the NSO, needs to improve not only the data it generates but also needs to ensure the quality of data generated by other agencies.

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