

SUCCINCT REPORT ON TRAINING OF CENSUS-2023



7th Population and Housing Census–2023 (Digital Census)

**Pakistan Bureau of Statistics
Ministry of Planning Development and Special Initiative.**

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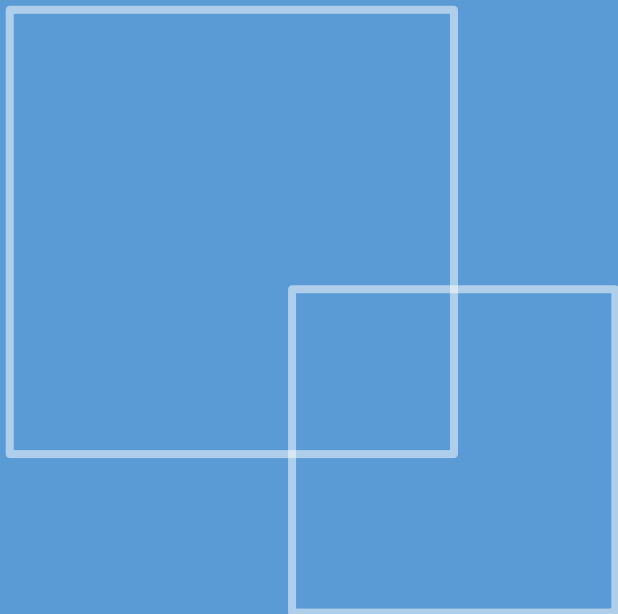
We sincerely appreciate **Dr. Naveed Iqbal**, the team lead of the Training Management Working Group, and all the Working Group members for their tireless efforts and hard work. Their dedication was crucial to the success of this extensive training initiative.



The training process was not without challenges, including a lack of IT literacy among trainers, delays in training materials, limitations of the training firm in producing high-quality materials, and infrastructure issues in some training venues. However, lessons were learned, such as the need for IT-savvy staff, proper implementation of the Training Management System (TMS), robust technical support during training, recruiting experienced trainers, selecting suitable venues, and potentially reducing the number of training tiers.



In conclusion, the training of enumerator staff played a vital role in the success of Pakistan's first Digital Census. Despite challenges, the comprehensive training approach, standardized materials, and adaptability in addressing issues ensured that field staff were well-prepared to collect accurate and reliable census data, contributing to the overall success of the 7th Population and Housing Census.



Introduction



Chapter 1: Introduction

Training of enumerator staff is critical for conducting the Population and Housing Census successfully. In the context of the first-ever Digital Census, the role of training becomes more vital. This time, the census exercise was more elaborate in terms of the information being collected in the census. Not only was the digital mode of data collection employed, but this time, data on economic establishments was also being recorded through which the frame for the Economic Census would be prepared. The Pakistan Bureau of Statistics (PBS) paid meticulous attention to all aspects of training for field staff to achieve the goals of collecting accurate census data via tablets in the 7th Population and Housing Census (The Digital Census). A comprehensive training program was designed to train the census staff at multiple tiers to enable them to play their effective role at the desired level. The ultimate focus of this training was to convey a uniform message to the census staff for each and every concept of the census, enabling them to record correct information against all questions in the relevant section of the questionnaire. For this purpose, a comprehensive training material was prepared, comprising interactive training manuals with explanatory case studies and the use of pictographic elaborations, concise and to-the-point brief videos, and other supporting materials. Specifically, the primary objectives of this training were as follows: -

- All field workers participating in the census must actively participate in the training session to ensure that they gain a thorough understanding of the fundamentals, as well as a strong grasp of the concepts and terminology used throughout the process.
- The field personnel involved in the census process had a thorough understanding of the Population and Housing Census (Digital Census) procedures and the recording correct information electronically via Tablets.
- At each level/tier, each member of the census field staff had a thorough understanding of their specific role and responsibility.

Field staff, particularly Enumerators, must fully understand how to collect true and accurate Population and Housing Census Tablet-based information from respondents in accordance with the instructions given in the training manuals. The usefulness of censuses depends on the quality of data collection, which, in turn, relies upon the preparedness of the field personnel. Therefore, the training places significant emphasis on enhancing the capacity of field staff. It strengthens the capacity of field staff regarding concepts, methodology, and the proficient

utilization of technology, especially when it comes to accurately recording data on the tablet. Therefore, the comprehensive training of field staff on filling out questionnaires and the use of other helpful modules before the start of field activities had been designed for a smooth conduct of the 7th Population and Housing Census. These training sessions for 'The First-Ever Digital Census' were planned in three tiers to train the following three hierarchical levels of trainees. The trainers included ethical, subject, and IT experts from PBS and NADRA.

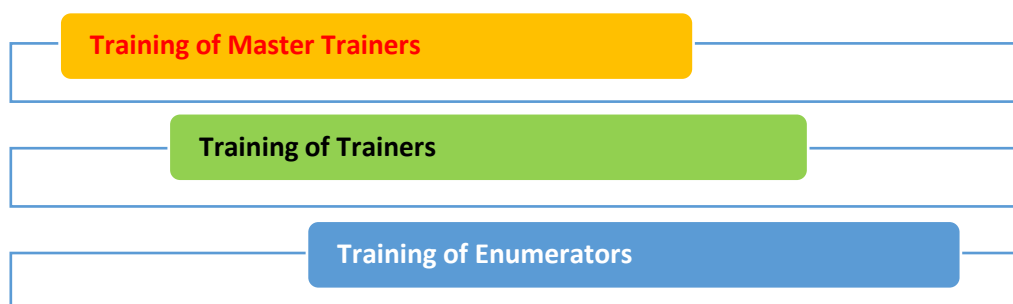


Figure 1. 1 Schematic Representation of three Tiers Training process

1.1. Training Mechanism

The Pakistan Bureau of Statistics implemented a structured training mechanism for the training of 7th Population and Housing Census. This process was designed to ensure that enumerators received comprehensive and effective training. The same Training Mechanism was used in all the three tiers of training. The mechanism followed for TOE training was similar to the one used for Master Trainer's training and Training of Trainers (TOTs).

1.1.1. Hiring of Training Firm

To ensure the success of Pakistan's 7th Population and Housing Census, a robust training strategy was paramount. Learning from international practices, the Census Advisory Committee recommended modernizing training with the help of training specialists and technology. Notably, three advertisements were published to solicit proposals from training firms, ensuring a fair competition and the selection of the most qualified firm (see **Annexure 1A**). Following this rigorous and transparent tendering process, 'SEBCON Pvt Ltd' was ultimately chosen to fulfill this pivotal role, marking the first instance of engaging a consultancy firm for training purposes in the history of the Census program. SEBCON was entrusted with the critical responsibility of providing comprehensive training materials, including manuals, conceptual videos, and allied training materials, organizing the training of Master trainers at NIBAF (see **Annexure 1B** for their main qualification requirement and work

and deliverables and **Annexure 1C** for RFP). This strategic decision to engage SEBCON aimed at ensuring the highest level of sensitization and effectiveness throughout the training program, reflecting the commitment to conducting a successful census

1.1.2. Standardized Training Approach and Accessibility of Training Materials

PBS adopted a standardized training mechanism to ensure a consistent and accessible approach to training materials across all levels. Trainers were provided with all training materials, including training presentations, manuals, and other resources, in digital format via USB drives. This approach was instrumental in guaranteeing that trainers had convenient access to essential resources for their training, ensuring that the same training and concepts were consistently imparted to all enumerators. This digital delivery method not only facilitated accessibility but also streamlined the training process, allowing for easier updates and distribution of materials as needed.

Furthermore, PBS demonstrated its unwavering commitment to transparency and widespread access to training materials by uploading them to the PBS website. This decision allowed trainers as well as trainees to access training materials online, promoting convenience and flexibility in reviewing and referring to the materials as needed. The combination of USB distribution and online accessibility further solidified PBS's dedication to ensuring a flexible and efficient training process that accommodated the diverse needs of trainees, while also promoting uniformity in training standards across the entire census operation.

1.1.3. Training Material

The success of the census enumeration process hinges on an effective and standardized training mechanism along with materials that provide a common understanding and serve as guiding resources for census enumerators, supervisors, and coordinators. The Pakistan Bureau of Statistics (PBS) recognized the paramount importance of these elements and meticulously designed a robust and consistent training framework.

1.1.4. Manual of Instructions

The firm hired by PBS for Training of Master Trainers (TOMTs) and preparation of training materials was also responsible, in collaboration with PBS, for creating the Manual of Instructions. This manual includes conceptual, ethical, and IT software guidelines, as well as

the Field Operation Plan. The manual of instructions was prepared in Urdu, English, Sindhi and other regional languages, then printed for training purposes. The audio/video clips of each question related to questionnaire was also prepared in all regional languages. The manual of instructions contained detailed instructions about concepts/definitions of each topic of census questionnaires and their response categories e.g. persons where to be enumerated, special instructions for capturing mobile population, coverage of households located in non-residential buildings, residential units that not covered under the definition of building, probing techniques, handling of refusal cases and re-visiting to locked housing units etc. The following types of manual of instructions was prepared for the Digital Census:

i. Conceptual Manual

The Conceptual Manual outlined the fundamental concepts, principles, and objectives of the census. It provided a comprehensive overview of the census process, including its purpose, scope, and methodology. This manual helped census staff and stakeholders to understand the theoretical framework behind the census, ensuring a consistent understanding of the goals and strategies involved.

ii. Field Operational Plan

The Field Operational Plan was a practical document that detailed the logistical and operational aspects of conducting the census in the field. It outlined the step-by-step procedures for data collection, including the deployment of enumerators, data collection methods, enumeration areas, and schedules. The plan also addressed resource allocation, training requirements, and quality control measures to ensure the successful execution of the census.

iii. Ethical Manual

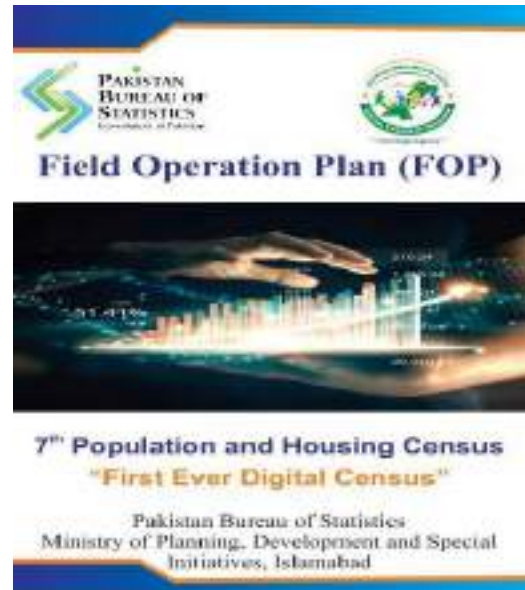
First time ethical manual was prepared to establishes the ethical guidelines and principles that census enumerators and staff must adhere to during data collection. It outlined rules and protocols related to confidentiality, privacy, informed consent, and the treatment of sensitive information. This manual was crucial to maintain the trust of the population and to ensure that ethical standards were upheld throughout the census process.

iv. Digital Application Manual

The Digital Application Manual provided instructions on the use of digital tools and technologies, including software applications and hardware devices, to gather and process census data. It covered topics such as data security, data entry procedures, and troubleshooting guidelines for the digital systems used in the census.



Conceptual Manual



Field Operational Manual



Digital Application Manual



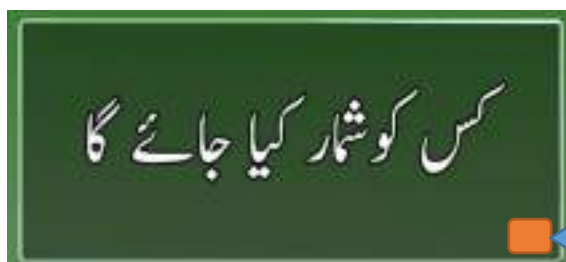
Ethical Manual

Figure 1. 2: Some screenshots taken from manuals of instruction

1.1.5 Training Presentations

PBS prepared well-structured and interactive presentations for training purpose. These presentations were categorized into three types i.e., Subject related Presentations, Presentations on Ethical related aspects and IT-related presentations.

i. Subject Related Presentations



These presentations started with the introduction of the Census. This includes History of a census in Pakistan and the 7th Population and Housing Census the first-ever Digital Census. After this, the main objectives of census were explained. All the census related technical concepts were also explained. Moreover, census methodology was explained with emphasis. The cartography i.e., use of geographical maps played a central role during the field operation, therefore maps were particularly explained during the census training sessions. It was worth mentioning that these presentations were accompanied with specifically prepared videos for explaining the matter in detail and in interesting manner. The census questionnaire comprises multiple sections. A detailed explanation was provided on each section with the help of these presentations and video clips. In addition, there were two presentations: listing and enumeration. Both presentations describe succinctly the listing and enumeration aspects with real life examples and case studies. Several screenshots were taken from each presentation and portrayed in Fig. (1.3).

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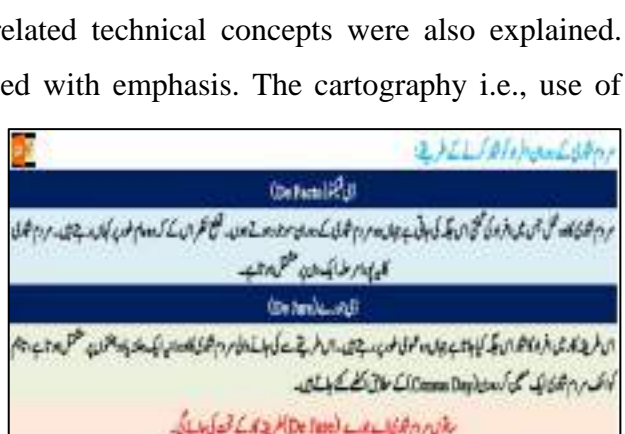




Figure 1.3: Some screenshots of training presentation

ii. IT Presentations.

Similarly, IT presentations were also specifically prepared explaining complete tablet handling such as aspects related to login procedure, connectivity, data recording and syncing of the data. Moreover, all the flow of the questionnaire was explained with the presentation in such a way that how to enter data for each question. For example, the picture above is showing that how the tablet will show details of a particular procedure during the field enumeration.



working and purpose of these applications.

1.1.6 Use of Audio Visual Tutorials

The use of audio visual tutorials during training sessions, besides written or verbal instructions, is becoming more imperative and helpful because it provides an easy and understandable way of explanation of difficult terms. It is a welcome change in communication

techniques and keeps uniformity in the instructions; therefore, use of the audio video tutorials in training program was made through use of multimedia, USB or computers. The trainers received their training by utilizing electronic media such as tablets, USB drives, and computers/laptops to access training presentations. Audio video tutorials had also been prepared, covering the whole process of census including filling up of forms on Tablet besides interviewing techniques for the guidance of Trainees. Many videos were prepared that explain the concepts of census. Some of the screenshots of videos/presentations are given as

Pictures taken from Listing videos where every definition is elaborated with real-life example





Pictures taken from Enumeration videos where every definition is elaborated with real-life example





Figure 1. 4: Pictures from training videos

Table 1. 1: Training Material in USB

Manuals	Subject Manuals	<ul style="list-style-type: none"> ➤ Conceptual Manual ➤ Summary Conceptual ➤ Ethical Manual
	IT Manuals	<ul style="list-style-type: none"> ➤ User Manual Training Management ➤ IT User Guide-IT Manual ➤ User Manual Area Frame ➤ User Manual- HR and Task Management
Other Material		<ul style="list-style-type: none"> ➤ Questionnaire ➤ Song ➤ Jingle ➤ Message ➤ Training Schedule ➤ SOPs for Trainer

1.1.7. Continuous Improvement

As part of the third level of training, PBS ensured that any issues or challenges encountered in previous stages were proactively resolved. Training materials were continually updated to incorporate valuable lessons learned, and queries raised in earlier sections were thoughtfully integrated into the FAQ section of the manuals (**Annexure 1D**). This unwavering

commitment to continuous improvement ensured that each subsequent training stage benefited from the refinement of materials and the thoughtful addressing of trainees' questions and concerns, ultimately leading to a more effective census enumeration process.

1.1.8 Training Management Working Group

A working group, consisting of senior officers from the PBS headquarters (list of officers in **Annexure 1E**), was established. This dedicated team formulated an extensive training plan, addressing the determination of the number of training tiers to be employed, the structuring of batches within each tier, and the allocation of trainers for each batch. Additionally, the working group developed various forms/ proformas for the purpose of monitoring and evaluating training at each tier.

Moreover, the group laid out requirement of Master trainers, Trainers of trainers (TOT), Trainers of enumerators (TOE) and digital equipped training venues was estimated using Census Frame Information. Keeping in view requirements, appointments Forms for appointment of trainers was prepared and circulated to Provincial Statistical Bureaus, Provincial Crop Reporting department (Survey experienced), and other Provincial Organizations for appointment of Master Trainers. Same form is circulated to Census District Officer for appointment of IT literate TOT and TOE.

The selection of appropriate training venues was of utmost importance for the successful conduct of training sessions across the country. In other words, these venues needed to have had the best facilities and easy access compared to all the available training venues within a census district at that time. In this regard, letters, along with proforma documents, were sent to the Census District Officers (See **Annexure 1F**) seeking quick and prompt feedback on the selection of training venues. This feedback was crucial to ensure that the chosen venues met the necessary criteria for conducting successful training sessions during census operations.

An application for data entry of these application was prepared by DP Center and efficient utilization of trainers and venues. In this application Nexus between requirement of trainers and venues and appointment/ availability against these was a silent and prominent feature of this application. Later on all the information from this application shifted into NADRA's software "Training Management System" For Preparation of batches, assignment

of trainers and Well equipped venues. Which Further add on attendance record, Pretest record and Posttest Record.

Training Management Working Group in all these activities Monitor and facilitate Field Staff, CDOs, CDC and Provincial Departments for

- Arrangement of missing facilities in Venue.
- Arrangement of Fully Equipped venue.
- Arrangement regarding paid facilities/ venues.
- Arrangement of trainers if no trainer available in the region/ Census District.
- Management of Batches in Big Halls.
- Prepared plans for reserve/ additional batches due absentees/replacement of field Staff.
- Planned monitoring Visits for observers, Monitoring Officers and Senior Management.
- Prepared daily attendance record of all batches, and present to senior management in Census Review Committee.
- Conduct Training Evaluation Surveys Through Call Center, to monitor/evaluate quality of training, Facilities available in training and satisfaction of trainees regarding trainers and facilities in the venue.

Table 1. 2: Estimation of training need Assessment Regarding Trainers and Venues

PROVINCE	Batch of 35 trainees		batch of 50 trainees		Available well Equipped Venues
	Venues	Trainers	Venues_	Trainers	
AJK	44	54	22	32	27
BALUCHISTAN	135	175	64	99	87
GB	17	27	10	20	14
ISLAMABAD	16	18	7	8	7
KPK	322	446	166	278	178
PUNJAB	959	1147	469	631	464
SINDH	483	629	245	389	215
Grand Total	1976	2496	983	1457	992

Table 1.2 presents the results of the training needs assessment regarding Trainers and venues, and it's important to note that multiple proposals were considered. Two of these proposals are shared here. The first proposal aimed at accommodating 35 trainees in each batch, resulting in a requirement for 1976 venues to support the training of 2496 trainers. Conversely, the second proposal suggested larger batches of 50 trainees each, which necessitated 983 venues to meet the training needs. It's noteworthy that we had 1457 well-equipped venues at our disposal.

It's worth mentioning that, in order to mitigate any potential mishaps, an additional 10% more trainers were anticipated and trained. The division-wise training needs assessment is provided in the attached **Annexure 1G**.

There were some census districts where available venues were greater than required venues, keeping in view resource limitation batch capacity in those areas were increased up to maximum of 100 trainees per batch. Moreover, for these batches one extra subject matter trainer was deputed for proper and effective training.

1.1.9 Training Management System (TMS)

To facilitate the effective implementation of the training mechanism, a specialized software solution known as TMS was developed through a collaborative effort between IT experts from the Pakistan Bureau of Statistics (PBS) and the National Database and Registration Authority (NADRA). This software served multiple crucial functions, including batch creation, attendance management, and test administration, among others. Notably, it was installed on the tablets provided to both the Master trainers and the Census Support Centers (CSCs) personnel. TMS played a pivotal role in ensuring the seamless and efficient execution of the entire training process. Regrettably, despite its potential, there had been challenges with the proper utilization of this software by end users.

1.1.10. Selection of Super Trainers

The most important aspect of training was the finalization of super trainers and training content so that each trainer had the same concepts to deliver and to avoid misconceptions. Two Brainstorming Sessions were conducted: one between internal subject matter experts, experienced and well-reputed officers, and the second Brainstorming Session was held between internal experts, National Lead Demographers, and experts from the training firm. Based on



these sessions, subject/topic-related main super trainers and their backup super trainers were selected to impart training to Master Trainers.

Primarily, the team includes subject, ethical and IT experts. They had an in-depth knowledge regarding the topics to be covered in the first phase. some glimpses of the super trainers are placed in the Figures (1.5- 1.7). The details of super trainers are provided (see **Annexure 1H**)



Figure 1. 5: Pictures of Super Trainers



Figure 1. 6: Pictures of Super Trainers



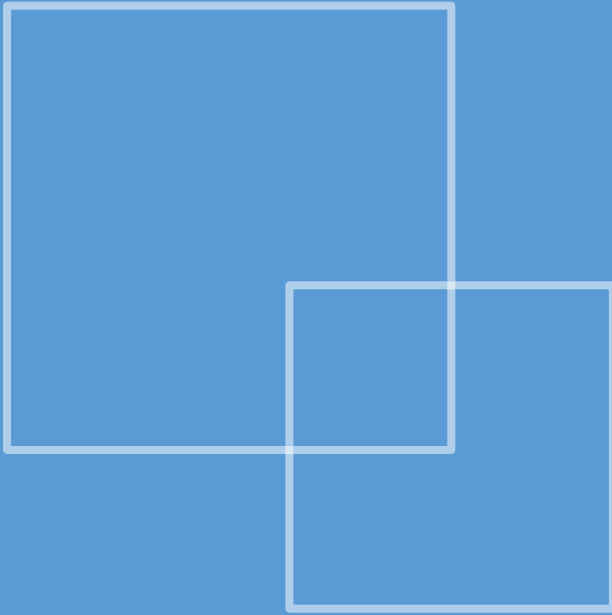
Figure 1. 7: Pictures of Super Trainers



Figure 1. 8: Pictures of Super Trainers



Figure 1. 9: Pictures of Super Trainers



Training of Master Trainers

Chapter 2: Training of Master Trainers

PBS took the provincial government on board for the selection of master trainers. For this purpose, letters along with specified proforma were sent to them (**Annexure 2A**) for provision of availability of experienced and IT literate trainers. Using available information most experienced and IT literate individuals were selected 33% more than the actual requirement.

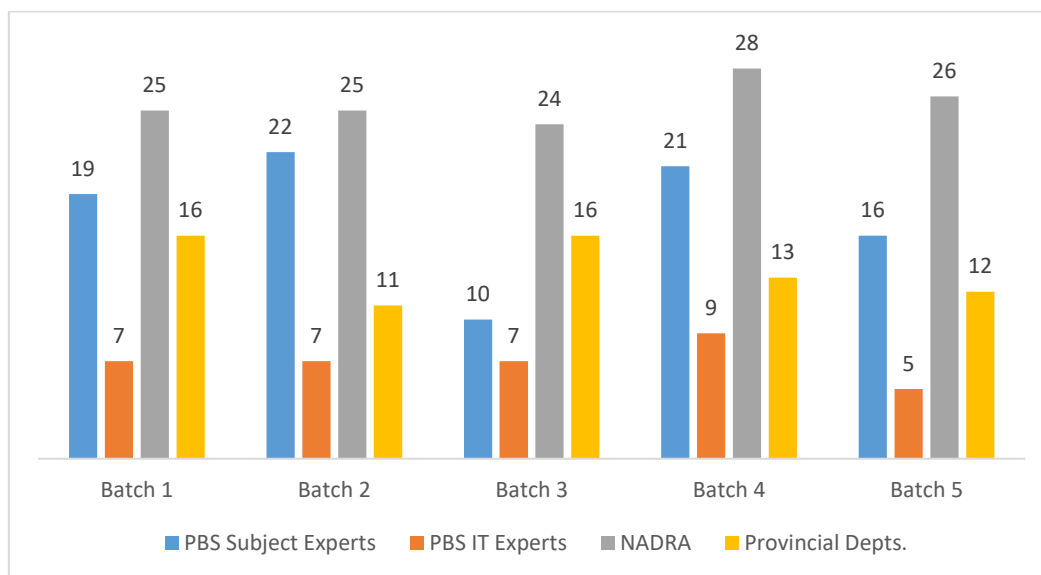


Figure 2. 1: Graphical display of the trainees from different department in each batch

Training of Master trainers (ToMTs) was held at National Institute of Banking & Finance (NIBAF), State Bank of Pakistan, Pitras Bukhari Road, Sector H-8/1, Islamabad. The training commenced on 5th December 2022 and continued till 15th December, 2022. It was conducted in five separate batches. The batch wise schedule of training is mentioned below.

Table 2. 1: Batch Wise Training Schedule

Batch No	Start Date	End Date
1	5-Dec-2022	9-Dec-2022
2	6-Dec-2022	10-Dec-2022
3	8-Dec-2022	12-Dec-2022
4	10-Dec-2022	14-Dec-2022
5	11-Dec-2022	15-Dec-2022

Before commencing the ToMTs, a schedule was designed for the entire session. This schedule basically contained information about each day's activities of the entire batch. The

schedule was followed throughout the training process and was also recommended for the next dual tiers of training, which were subsequently followed. The schedule is attached in Annexure 2B.

The first phase of the three-tier training process involved the training of Master Trainers (ToMTs), who were initially trained by Super trainers (A list of super trainers is placed at **Annexure 1F**). Master Trainers were equipped with a comprehensive understanding of concepts, definitions, interviewing techniques, and proper filling of census Tablet-based questionnaires. Around 328 Master Trainers (Subject + IT) were trained in Islamabad for further impart training to about 2875 Trainers (Subject + IT) at Division Level at the designated places selected by the Provincial/Regional Offices of PBS. Each batch of ToMTs was conducted in 5 days. The overall ToMTs were completed in 11 days as per the plan and started in the first week of December 2022. The inauguration ceremony of ToMTs for the conduct of 7th Population and Housing Census was held on 6th December 2022, at the National Institute of Banking and Finance (NIBAF), Islamabad, where Prof. Ahsan Iqbal, Minister of Planning, Development, and Special Initiatives was the Chief Guest. The Ceremony was also attended by Dr. Naeem uz Zafar, Chief Statistician/ Chief Census Commissioner, Mr. Muhammad Sarwar Gondal, Member (SS/RM), Mr. Ayazuddin Member (C&S), and other senior officers of PBS.



Figure 2. 2: Pictures from Inauguration Ceremony of Master Trainers





2.1. Creation of WhatsApp Group

Moreover, specialized WhatsApp groups were established with the explicit goal of fostering discussions among super trainers to ensure a consistent understanding of the concept. Within these groups, super trainers were encouraged to freely raise questions and engage in productive discussions. These exchanges were instrumental in refining their own comprehension of the subject matter and addressing any ambiguities.

The collaborative environment within these WhatsApp groups allowed Super trainers to engage in in-depth conversations about the concept. They would collectively explore different facets of the subject, share their experiences, and work together to arrive at a unified and well-informed perspective.

Once Super trainers reached a consensus or thoroughly discussed a particular question, the final, carefully considered answer was then communicated to the trainees. This approach guaranteed that trainees received not only the insights of their knowledgeable super trainers but also the collective wisdom and understanding that had been refined through rigorous discussion and collaboration among the super trainers.

2.2. Training Sessions and Master Trainers Evaluation

For the very first time, evaluations were conducted for both the trainers and participants. Five evaluation teams were formed, each led by a senior officer from PBS headquarters. The functions of these teams were to create WhatsApp Group, Coordination of Training Flow, record Minutes (important questions/discussion), arrangement of lunch and tea, Coordination with trainers, Training day to day planning, Responsibilities of host/facilitators. The evaluation teams for each batch submitted a summary report that included queries raised by trainers during the training sessions, important observations, and evaluations of every trainee in terms of their pre- and post-test scores, punctuality, and interest in the training, etc were noted by using the evaluation proforma (**Annexure 2C**). The table 2.2 shows the five evaluation teams along with their respective summary reports, that are given in the Annexures.

Table 2. 2: Batch wise Coordination teams

Batch No	Coordinator Teams	Summary Report
1	Mr. Imran Saleem (Director) Ms. Ayesha Sajid (Chief Statistical Officer) Mr. Faridoon Khan (Statistical Officer) Ms. Raheela Shareef (Statistical Assistant) Ms. Nubeed (Statistical Assistant) Member From SEBCON Syed Shifa	Annexure 2D
2	Mr. Rafiq Hussain Talpur (Director) Mr. Muhammad Sarfaraz (Chief Statistical Officer) Ms. Ehsana (Statistical Officer) Ms. Rabail Azeem (Statistical Assistant) Ms. Ruqia (Statistical Assistant) Member From SEBCON Mr.Khalid	Annexure 2E
3	Mr. Imran Saleem (Director) Ms. Kanwal Murtaza (Chief Statistical Officer) Mr Shaid (Statistical Assistant) Mr. Babar (Statistical Assistant) Mr. Yasir Habib (Statistical Assistant) Member From SEBCON Mr.Mubshir	Annexure 2F
4	Mr. Rafiq Hussain Talpur (Director) Dr. Arshad (Chief Statistical Officer) Mr. Muhammad Ali (Statistical Assistant) Mr. Arsalan (Statistical Assistant) Ms. Sadaf Touqeer (Statistical Assistant) Member From SEBCON Mr. Khalid	Annexure 2G
5	Mr. Imran Saleem (Director) Ms. Ayesha Sajid (Chief Statistical Officer) Mr. Faridoon Khan (Statistical Officer) Ms. Irum (Statistical Assistant) Mr. Muhammad Ali (Statistical Assistant) Member from SEBCON Syed Shifa	Annexure 2H



Figure 2. 3: Picture from Training of Master Trainer of Batch 1



Figure 2. 4: Pictures from Training of Master Trainer of Batch 2



Figure 2. 5: Pictures from Training of Master Trainer of Batch 3



Figure 2. 6: Pictures from Training of Master Trainer of Batch 4



Figure 2. 7: Pictures from Training of Master Trainer of Batch 5



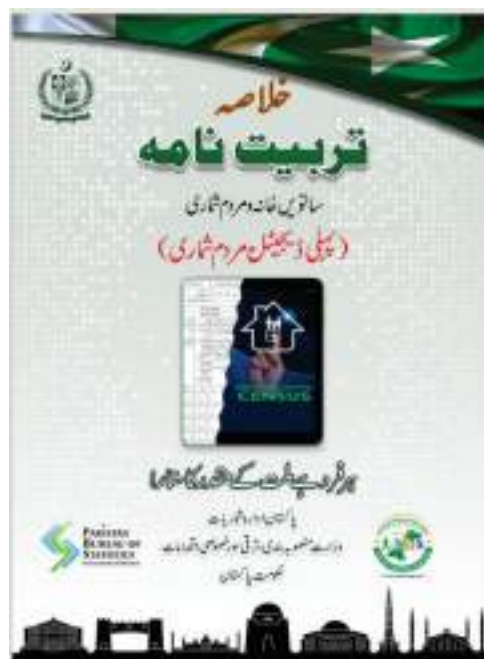
Figure 2. 8: Pictures from Mock exercise

2.3. Important Queries Raised

The main focus of the training was on standardizing the concepts of Master trainers in order to ensure that these Master trainers would convey the same concept during the subsequent levels of training. The important queries/questions raised, improvements, amendments, and observations made by the Master trainers during training sessions were also recorded. Important questions were then included in the summary manual, as Frequently Asked Questions (FAQs). The Frequently Asked Questions (FAQs), which are included in the summary manual, are attached (see **Annexure 1C**).

2.4. Summary Manual

PBS created a manual of instructions before initiating the three-tiered training program. The manual proved to be highly effective during the initial training phase. However, it was noted that the manual's size was not suitable. As a result, a decision was made to replace this manual with a summarized version (compact in size) that could easily fit into a tablet bag. The summarized manual was subsequently provided and utilized in the next stages of training, which included training for trainers and enumerators. This summarized manual would be available to enumerators, allowing them to refer to it for conceptual clarity during the enumeration process.



2.5. Mock Exercise

On the fifth day of training for each batch, all Master Trainers embarked on a field exercise in various areas of Islamabad (such as Allama Iqbal Open University and I-8) for a mock exercise. The exercise involved listing a few structures or multi-structure buildings the subsequent enumeration of households within them. Trainers were divided into groups of 6 to 8 Master Trainers (acting as enumerators) and they were tasked with enumerating at least two structures using the listing application.

The map of the area selected for mock exercise of each batch was already downloaded on all the devices, therefore, the Master Trainers were able to complete their mock exercise successfully in the particular area. After the exercise, feedback was collected from all Master Trainers using a specified format to address any issues or problems encountered during the session and mock exercise. On the basis of this feedback proforma (**Annexure 3C-10, 3C-11**), the following summary tables were formed.

According to Table 2.3, 26% of participants were confronting the Map/Boundary uploading issue. Similarly, 28% of participants faced the issue of Location/GPS, 29% of participants faced the issue of edit/logical validation checks in House Listing Application.

Table 2. 3: Frequency table of issues reported in different module/feature of listing application

Module /Feature	Frequency (out of 240)	Percentage Relative Frequency
Login	14	6%
Import	46	19%
Map/Boundary	62	26%
Location/GPS	66	28%
Listing Data Entry	26	11%
Edit/Logical Validation Checks	69	29%
Sync/ Upload	43	18%

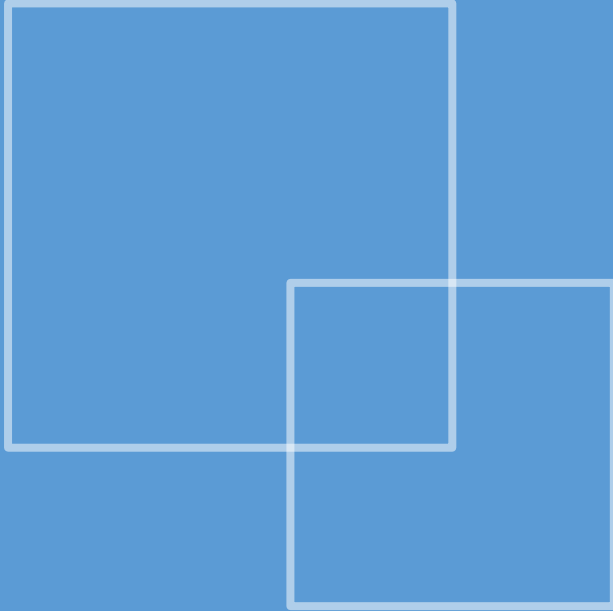
According to Table 2.4, 31% of participants were confronting the edit/logical validation check issues. Similarly, 30% of participants faced the map/boundary issue, 20% of participants faced the import issue in House Listing Application.

Table 2. 4: Frequency table of the issue reported in different module/feature of listing application

Module /Feature	Frequency (out of 240)	Percentage Relative Frequency
Login	19	8%
Import	48	20%
Map/Boundary	71	30%
Population section	45	19%
Housing section	35	15%
Start and Finish Household	40	17%



The Training of Master Trainers held in Islamabad from December 5 to December 15, 2022, was a resounding success, with 328 Master Trainers receiving comprehensive instruction. During this phase, highly experienced Super Trainers diligently evaluated each trainee based on their pre- and post-test scores, punctuality, and overall engagement. Rigorous selection criteria focused on the depth of knowledge and expertise, resulting in the appointment of only 76 individuals as Master Trainers, ensuring the highest quality of preparedness for the census activities. In response to feedback, a summarized training manual was introduced, streamlining the training process for trainers and enumerators in subsequent stages.



Training of Trainers

Chapter 3: Training of Trainers

The trainers were chosen based on their expertise in IT-related skills and prior experience in conducting census and surveys. To facilitate this selection process, letters, along with specific proforma, were dispatched to the Census District Officer (see **Annexure 3A**). These communications were aimed at requesting the appointment of individuals who were proficient in IT and capable of serving as trainer. The formal proforma provided the necessary structure for capturing essential information and qualifications required for this role

PBS conducted a crucial divisional-level training program known as the "Training of Trainers" (TOTs), which played a pivotal role in preparing individuals for the upcoming census activities. This training process started on December 19th and ended on December 23rd. This nationwide endeavor featured a total of 38 divisions, utilizing 76 different training venues across the country.

The TOTs initiative was instrumental in training 2875 dedicated trainers who received guidance and expertise from experienced Master Trainers. These highly skilled individuals were entrusted with the vital responsibility of cascading their knowledge to the next tier of individuals, comprising nearly 121,000 enumerators and their supervisors, who would be actively involved in the census activities at the Census District level. The detailed information about the trainers and the venues for each province is presented in Table 3.1.

Table 3. 1: Summary Table of TOT Training Venues

Province	TOT Venues	Subject Trainers	IT trainers	Total trainers
AJ&K	3	42	24	66
Balochistan	8	132	77	209
Gilgit Baltistan	2	25	15	40
Islamabad	1	13	8	21
Khyber Pakhtunkhwa	12	365	176	541
Punjab	32	840	442	1282
Sindh	18	495	221	716
Total	76	1912	963	2875

*The complete list of training venues for each province is placed at (**Annexure-3B**)

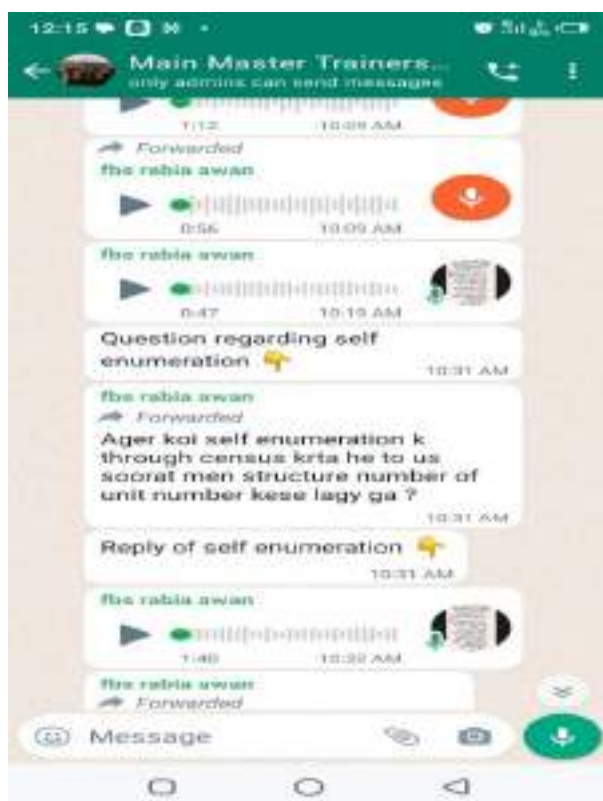
3.1. Conduct of Training

The TOTs were arranged at Divisional headquarters throughout the country including Azad Jammu & Kashmir and Gilgit Baltistan. The training was imparted on Subject matter (definitions, listing and enumeration), Ethical (behavioral and manner related aspects) and IT-

related aspects (tablet handling, recording and synching of data) of a census. Significant focus was given to disseminating standardized concepts and messages from top to bottom to ensure quality and reliability of data collection. To achieve this target, apart from conventional training and conceptual videos, real-life examples case studies, mock exercises and FAQs have also been included.

Recognizing the paramount significance of social media in today's world, special attention was dedicated to harnessing its potential. In Pakistan, WhatsApp stands out as a widely used platform, and as a result, a WhatsApp group was established to facilitate seamless and proactive communication among the trainers and address any issues related to the subject matter and IT.

Within these WhatsApp groups, Master trainers played an active role in encouraging trainees to openly pose questions and seek clarifications. These queries were not only welcomed but actively promoted, as they were deemed indispensable for the learning process. The group served as a hub for sharing day-wise training materials, aiming to ease the trainers' access to essential resources.



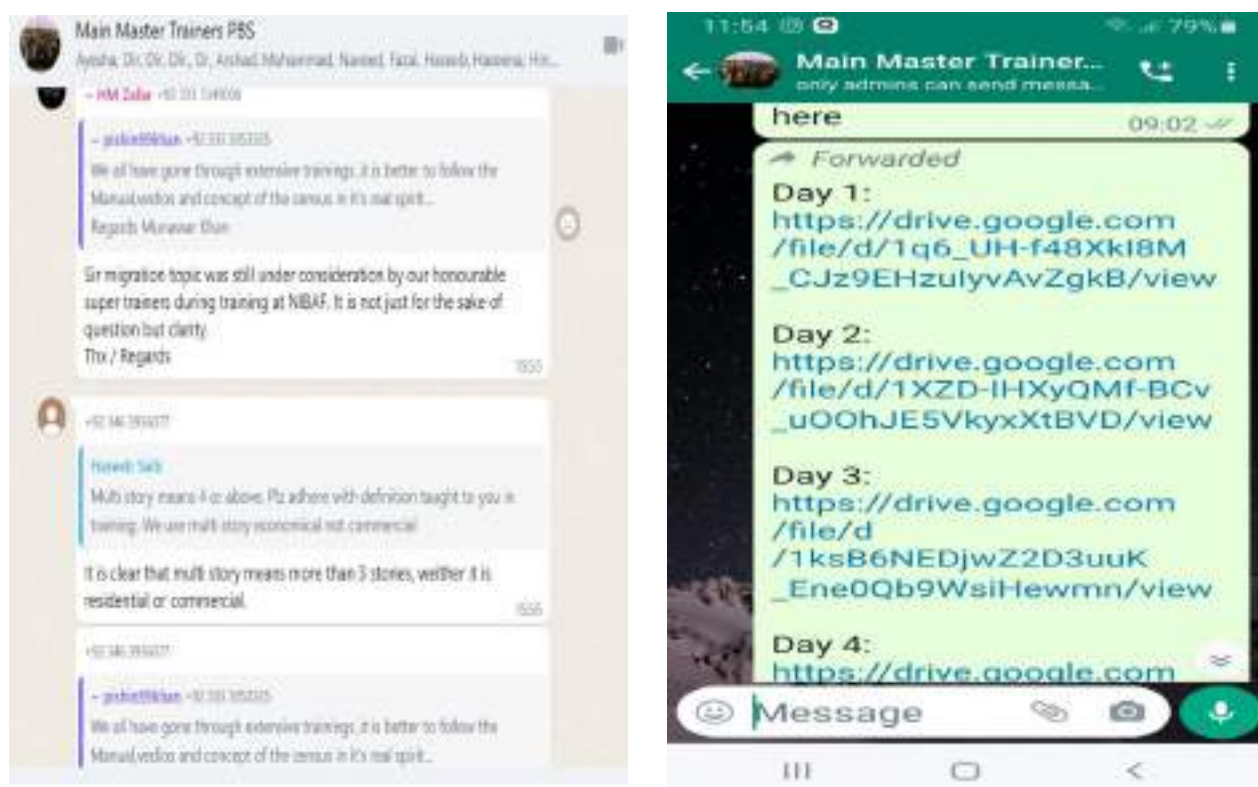


Figure 3. 1: Some screenshots captured from WhatsApp group

3.2. Monitoring Mechanism of Census Training

Training on such a large scale is a massive task, and PBS had put significant efforts into providing comprehensive training across the country. Thanks to the fact that PBS had devised a vigilant monitoring mechanism, some issues were also observed in different batches of training. PBS has implemented various monitoring schemes in order to communicate the issues encountered during training.

- Virtual Monitoring
- In-Person Monitoring

To make the training sessions interactive, the trainers' and trainees' involvement and questioning have been encouraged. During Census Training Sessions, Pre and Post-tests of the participants were also administered.

Another measure adopted to ensure effective training was monitoring of the training venues which was done virtually as well as physically. Virtual monitoring was done from National Census Coordination Centre (N3C), Pakistan Bureau of Statistics (PBS), Head Office. Whereas, Physical monitoring was done by officers from PBS Head Office as well as by



Divisional Coordinators and regional in charges during 5 days of training. A centralized monitoring and evaluation system had been designed to maintain the quality of training and selecting appropriate trainers to impart training to the enumerators. All these measure were adopted to ensure the accurate data collection for a successful Census ultimately.

For evaluation of various aspects of training, different Control Forms were designed. The evaluation of training for 7th Population and Housing Census was, therefore, performed using the feedback received through control forms, the evaluation of the trainings of each tier was done using evaluation forms. The forms were distributed to all training venues to be filled in by the Trainers, coordinators and trainees/enumerators. These performance evaluation forms were analyzed after retrieval at PBS headquarter. These control forms are placed in the **Annexure 3C**.



Figure 3. 1: Pictures from Training of Trainers in Balochistan



Figure 3. 2: Pictures from Training of Trainers in AJK and GB.



Figure 3. 3: Pictures from Training of Trainers in KPK



Figure 3. 4: Pictures from Training of Trainers in Punjab



Figure 3. 5: Pictures from Training of Trainers in Punjab



Figure 3. 6: Pictures from Training of Trainers in Sindh

3.3. Issues Identified during the TOTs

Training of trainers (TOTs) was completed in 76 places nationwide. After the culmination, feedback for issues/problems that occurred during the session and mock exercise on the specified format was sought from all master trainers that is attached in **Annexure 3C-4**. On the basis of this feedback, a consolidated report has been prepared as below:

According to Table 3.2, 31% of participants were confronting the issue pertaining to login, similarly, 21% of participants faced the issue of SIM/Signal Issue or Internet Connectivity during the training. The trainees also faced issues related to Map/HR, Assignment Issues, Old Version, and Battery Drainage issues.

Table 3. 2: Summary of the problems reported by Master Trainers

Issues	Punjab	Sindh	KP	Balochistan	Islamabad	GB	AJ&K	Total
Login Issue	11	7	6	3	1	1	2	31%
Sim/Signal Issue/Internet Connectivity	7	8	1	1	1	2	1	21%
Map/ HR Assignment Issue	10	2	3	0	0	2	1	18%
Old Version	5	5	3	1	0	0	0	18%
Battery Drainage	2	2	0	0	0	0	0	5%

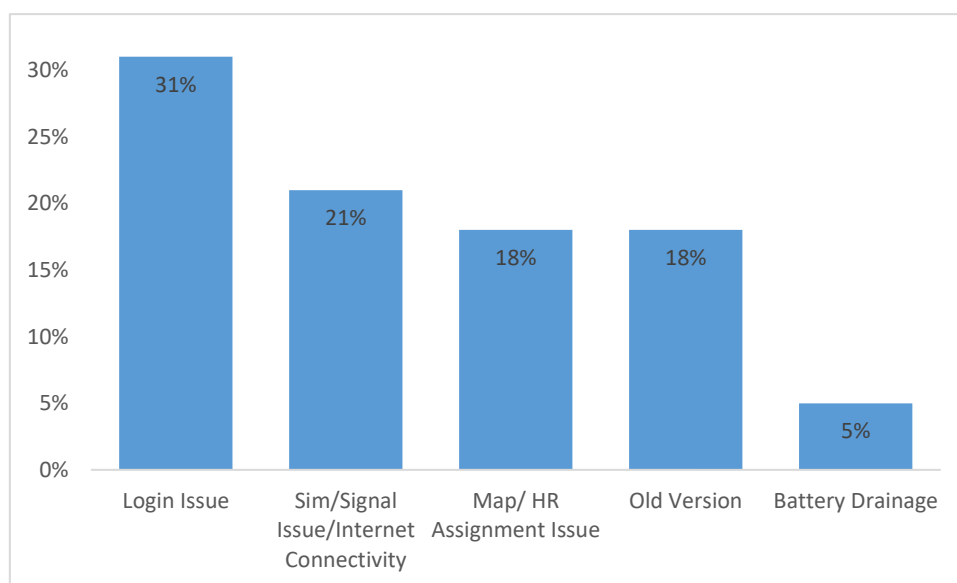


Figure 3. 7: Percentage of Issues in TOTs

At the National Census Coordination Centre (N3C), which is located in the Head Office of the Pakistan Bureau of Statistics (PBS), virtually all of the training venues were being monitored. During the five days of training, divisional coordinators and regional supervisors also physically monitored the training venues under their jurisdiction and reported numerous issues that are given in Table 3.3.

It can be inferred from Table 3.3, that login issue was mostly noted during the virtual monitoring as well. The Signal Strength and Connectivity issue only occurred in Punjab and KP.

Table 3. 3: Summary of the problems reported during Virtual Monitoring

Issues	Punjab	Sindh	KP	Baluchistan	GB	AJ&K	Total
Signal Strength and Connectivity	5		4	Nil	Nil	Nil	9
Login Issue	7		7	3	1	2	20
Do all the facilities working	Nil		2	Nil	Nil	Nil	2
Do participants seem interactive	Nil		Nil	2	Nil	Nil	2
Is training seem interactive	Nil		Nil	3	Nil	Nil	3
Is master training audible	Nil		Nil	2	Nil	Nil	2
Any officer/official available for Trainees Evaluation	Nil		Nil	3	Nil	Nil	3
Which topic explained recently	Nil		Nil	1	Nil	Nil	1
Training going on as per schedule	Nil		Nil	1	Nil	Nil	1
Social Interruptions	Nil		1	Nil	Nil	Nil	1
Irresponsibility by the Authorities	1		2	Nil	Nil	Nil	3
Map Location	Nil		2	Nil	Nil	Nil	2
Load Shedding	1		3	Nil	Nil	Nil	4

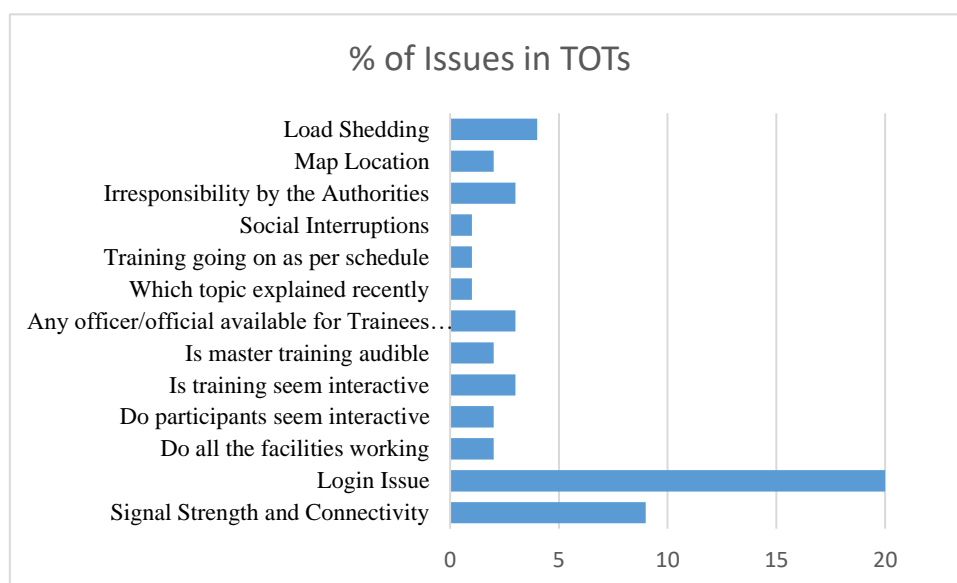
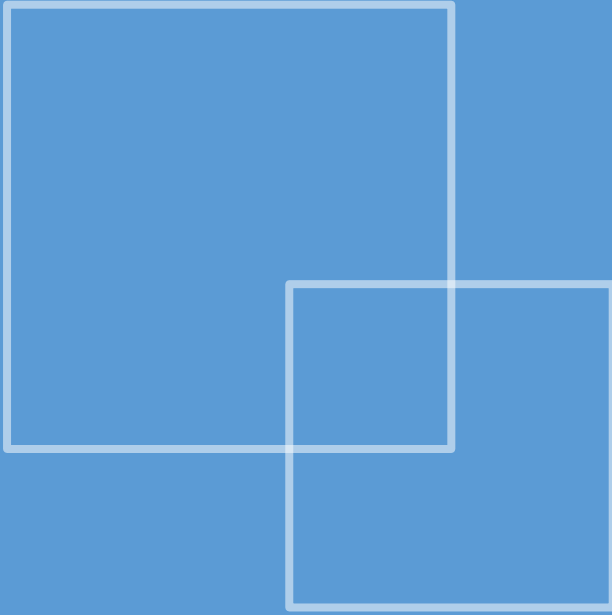


Figure 3. 8: % of Issues in TOTs

3.4. Conclusion

The TOT training was held in 76 divisions across the country, spanning from 19-December to 23-December. In this phase, 2875 trainers were trained. Despite the challenges, the training was largely successful in equipping the trainers with the necessary skills and knowledge. Master Trainers diligently evaluated each trainee based on their pre- and post-test scores, punctuality, and overall engagement. Rigorous selection criteria focused on the depth of knowledge and expertise, resulting in the appointment of Trainers, ensuring the highest quality of preparedness for the census activities. These trainers had to train the enumerators in the next tier of training, that is training of enumerators.





Training of Enumerators

Chapter 4: Training of Enumerators

To ensure the smooth execution of field activities for the 7th Population and Housing Census, it was imperative to appoint qualified census field staff. Therefore, it was decided to raise awareness among the provinces regarding the necessity of hiring census field staff, including charge superintendents, circle supervisors, and enumerators, by no later than March 31, 2022. It was strongly recommended that the field staff be recruited from the education revenue, local government, and population welfare departments.

It was requested to all Deputy Commissioners/Assistant Census Commissioners who previously served as Census District Officers within their specific areas of jurisdiction to take the necessary steps to begin the recruitment process for the aforementioned census field staff, including the allocation of 5% of positions for reserved staff. Detailed eligibility criteria is placed in **Annexure 4A**. This proactive approach to staffing is vital to ensuring the success and accuracy of the 7th Population and Housing Census.

Training of Enumerators (TOEs) was successfully completed which was held at the census district level. **120929** Enumerators and Supervisors were jointly trained for fieldwork. The breakdown of staff trained by province is shown in Table 4.1. This was the final phase of training, provided in three batches between January 7th and January 21st, 2023. The first batch's five days of training were successfully completed on January 11th, 2023. The second batch of training was incepted on January 12th, 2023, and ended on January 16th, 2023, followed by the third batch, which commenced on January 17th, and ended on January 21st, 2023.

Table 4. 1: Province wise summary table of TOE

Province	Venues	Subject Trainers	IT Trainers	Enumerators Trained
Khyber Pakhtunkhwa	178	365	176	18481
Punjab	464	840	442	61002
Sindh	215	495	221	28908
Balochistan	87	132	77	7789
Gilgit-Baltistan	14	25	15	916
Azad Jammu & Kashmir	27	42	24	2764
Islamabad	7	13	8	1069
Total	992	1912	963	120929

Table 4.1 provides a condensed summary of training of enumerator conducted across Pakistan. 992 training venues were utilized, where each training venue had multiple batches, complete list of training venues is placed at (**Annexure 4B**) Within these venues, 1912 subject and 963 IT trainers imparted training to 120929 enumerators across all provinces in Pakistan.

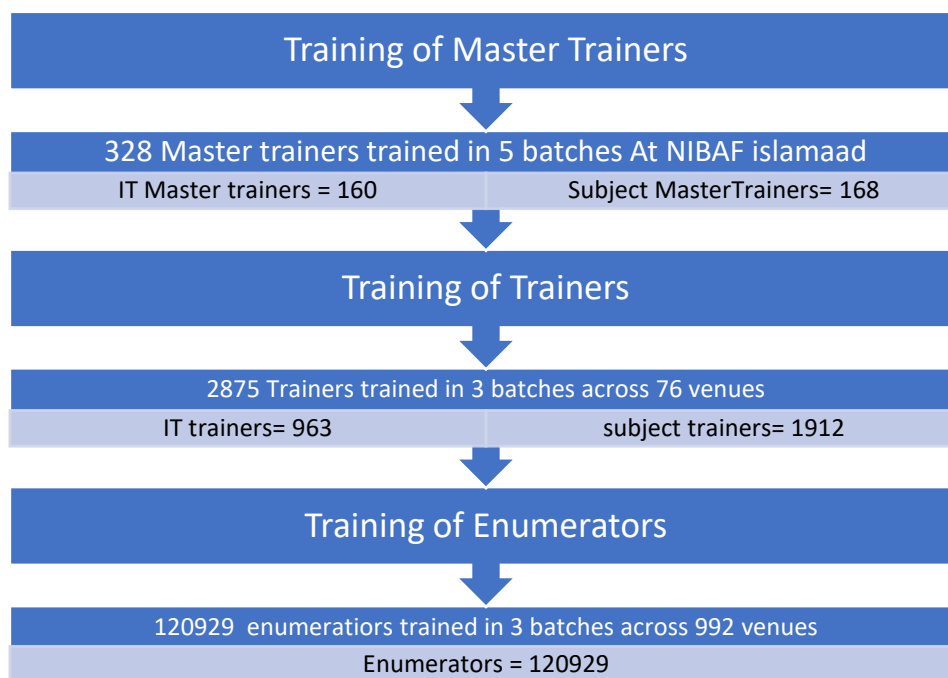


Figure 4. 1: Flow Chart of three tier training

4.1 Training Monitoring Mechanism

To make the training sessions interactive, the trainees' involvement and questioning were encouraged. During Training Sessions, Pre and Post-tests of the participants were administered.

For the evaluation of various aspects of training, different Control Forms are designed. The evaluation of training for the 7th Population and Housing Census was, therefore, performed using the feedback received through control forms, and the evaluation of the training of TOE was done using evaluation forms. The forms were distributed to all training venues to be filled in by the Trainers and trainees/enumerators. These performance evaluation forms were analyzed after retrieval at PBS headquarter. These control forms are placed in **Annexure 4C**.

Training on a large scale is a monumental job, and it is a major accomplishment for PBS to have imparted comprehensive training so effectively across the country. During this huge

exercise, some issues were also observed in the training conducted in different batches. PBS conducted different monitoring activities in order to intimate the issues/problems observed during the training of enumerators.

- *WhatsApp groups/ calls*
- *In-Person/physical Monitoring*

4.1.1 WhatsApp groups/Calls

To monitor the activities of enumerators' training, one of the monitoring teams implemented a proactive approach by creating WhatsApp groups. In these groups, Divisional Coordinators and Census Commissioners were invited to participate, allowing them to stay informed about training activities and promptly address any issues encountered during the training sessions. This strategic initiative empowered the Pakistan Bureau of Statistics (PBS) to swiftly respond to the problems faced by trainers and notify them about upcoming training batches.

Additionally, dedicated WhatsApp groups were established to facilitate seamless communication between trainers and the PBS headquarters. In these specialized groups, trainers were encouraged to ask questions and seek clarification on various training-related matters. A dedicated team at the PBS headquarters was assigned to monitor and promptly respond to these inquiries, ensuring that trainers received timely support and guidance throughout the training program. This real-time communication channel played a crucial role in ensuring that trainers had access to immediate assistance and guidance whenever needed during the training program





4.1.2 In Person/Physical Monitoring

A team of officers was sent to different stations/divisions to monitor the training of enumerators in the first batch (the list of monitoring officers is placed in **Annexure 4D**) and the third batch (list of monitoring officers is placed at **Annexure 4E**). Their primary objective was to oversee the training venues at the assigned stations, evaluating the provision of necessary facilities, content quality, and the effectiveness of training delivery for enumerators. These diligent officers submitted daily reports detailing their observations, and a comprehensive summary of reported issues was compiled. To conduct the first-ever digital census, special attention was given to IT-related issues. This prompted a dedicated team to visit various venues during the training of the third batch in order to address these specific concerns. This proactive approach aimed to identify and rectify IT-related issues before the full rollout, ensuring a smoother training process.

Glimpses of TOE at various Locations



ABBOTTABAD



BANNU



HARIPUR



PESHAWAR



MARDAN



WAZIRISTAN

Figure 4. 2: Pictures from Training of Enumerators in KPK



SUKKUR



MITHI



KARACHI



KARACHI



HYDERABAD



HYDERABAD

Figure 4. 3: Pictures from Training of Enumerators in Sindh



Figure 4. 4: Pictures from Training of Enumerators in Punjab



OKARA



RAWALPINDI



SAHIWAL



VEHARI



SHEKHUPURA



WAZIRABAD

Figure 4. 5: Pictures from Training of Enumerators in Punjab



SHAKARGARH



SHUJABAD



SAFDARABAD



ZAFARWAL



VEHARI



WAZIRABAD

Figure 4. 6: Pictures from Training of Enumerators in Punjab



Figure 4. 7: Pictures from Training of Enumerators in Balochistan



A W A R A N



B A R K H A N



L O R A L A I



S U R A B



M U S A K H E L



C H A G H I

Figure 4. 8: Pictures from Training of Enumerators in Balochistan



Figure 4. 9: Pictures from Training of Enumerators in AJK



D I A M E R



S K A R D U



S H I G A R



S K A R D U



G H A N C H E



S K A R D U

Figure 4. 10: Pictures from Training of Enumerators in Gilgit Baltistan



4.2 Issues Identified during the TOEs

PBS organized comprehensive enumerator training, but it's also important to address the issues observed during this process to continually improve it. To effectively categorize and address these issues, PBS employed various monitoring activities, including WhatsApp groups and in-person/physical monitoring. This proactive approach allows PBS to identify and address challenges, ensuring that enumerator training becomes even more effective and efficient over time. This commitment to improvement demonstrates PBS's dedication to achieving accurate and high-quality results in its enumeration efforts.

4.2.1 Training material delivery

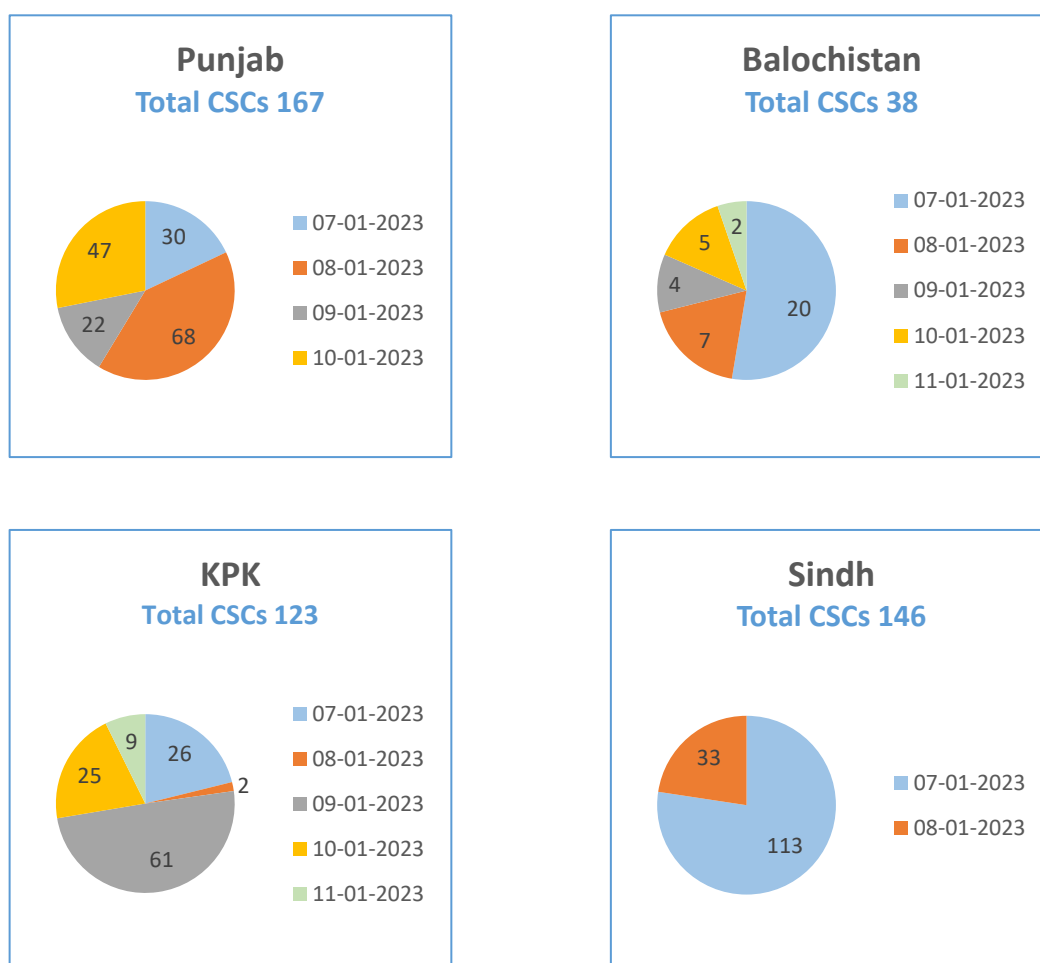
The success of the census enumeration process relied heavily on an effective and standardized training mechanism, coupled with materials that provided a common understanding and served as guiding resources for census enumerators. The Pakistan Bureau of Statistics (PBS) recognized the paramount importance of these elements and meticulously designed a robust and consistent training framework. However, one of the critical challenges faced during enumerator training was the delayed delivery of these materials to various locations. The provision of census materials to 495 census districts was initiated through Pakistan Post, leveraging its extensive network that covered even the remote areas of Balochistan, Sindh, and KPK. Unfortunately, the experience of using Pakistan Post services for the delivery of training items did not meet expectations. The foggy weather conditions also created hindrance on timely provision of training material. The performance of the postal services resulted in significant delays in material reaching most census districts. To mitigate these challenges, PBS had proactively provided soft copies of these materials to their Census Support Centers, ensuring that the training process could proceed smoothly despite the logistical setbacks.

4.2.2 Tablet delivery

Being a Digital census, the tablet is a core device and its delivery to enumerators was of utmost importance. Tablet enables field staff to collect real-time data with less effort. Further usage of tablets for data collection increases the reliability, transparency, unbiasedness and authenticity of census operations.

Tablet procurement and its delivery to all 495 Census Support Centers (CSCs) was a primary responsibility of NADRA. For this purpose, around 126,000 tablets were purchased. The operation for distributing tablets was started in the first week of January 2023. This operation was a gigantic task. PBS started 1st Batch of TOEs on 7th January 2023. Distribution of tablets to CSCs and subsequently to enumerators required three days to complete this operation. Figure 3 shows details of the operation.

The Fig. 4.10 illustrates that most tablets were delivered to CSCs on the first day in Sindh, particularly in Karachi. In the subsequent days, CSCs of GB and AJK received most of the tablets. The operation was successfully completed on 11th January 2023. Due to late tablet delivery, tablet training and practice could not be conducted. To mitigate these issues refresher courses were arranged.



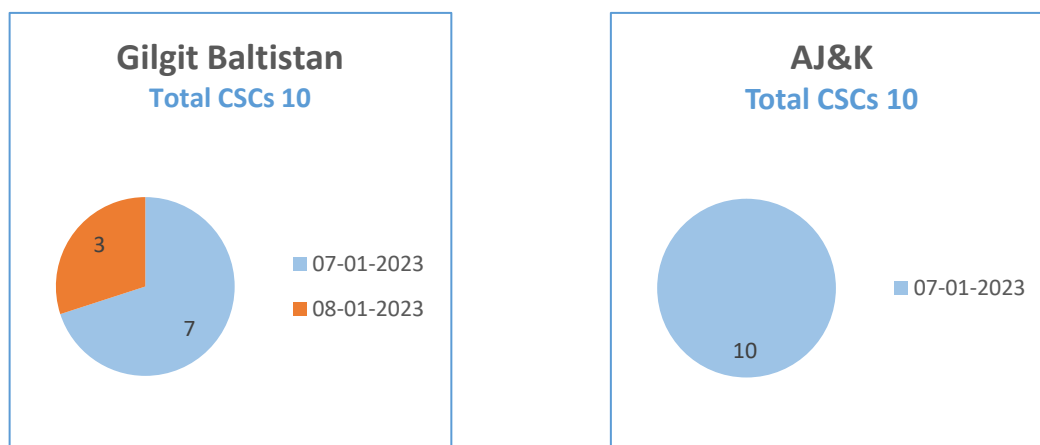


Figure 4. 11: Delivery of Tablets at Census Support Centers (CSCs), January 2023

4.2.3 Attendance of the trainees

Table (4.2,4.3,4.4) portrays the attendance of each batch along with venues. As indicated in Table 4.2, almost 92% of the initial batch of participants attended the training, which was held across all administrative units from January 7 to 11. Similarly, 88% of participants in the second batch (January 12-16) attended the training, as given in Table 4.3. During the last training batch, which took place from January 17 to 21, an impressive 94 percent of participants attended the sessions, which was significantly higher than the proportion of attendance in the previous batches. This eloquently reflects the dedication and unwavering devotion of PBS.

In Sindh, during Batch II, a significant 43% of participants were absent due to their engagement in local body elections, causing notable attendance issues. This electoral commitment continued to affect attendance in the third batch as well, emphasizing the challenges of coordinating census activities with concurrent major events like elections. In Islamabad, 21% and 25% of participants in batches (I and III) did not attend the training. The attendance of GB and Balochistan was also negatively affected due to weather and other related factors.

Table 4. 2: Attendance of Batch-I

Admn. Unit	Total Centers	To be Trained	Trained	Present %	Absent %
Punjab	464	22936	21251	92.65	7.35
KPK	178	8505	7394	86.94	13.06
Balochistan	87	4142	3558	85.90	14.10
Sindh	215	12704	10983	86.45	13.55
GB	14	559	472	84.44	15.56
AJ&K	27	1067	1035	97.00	3.00
ICT	7	349	261	74.79	25.21
Total	992	49082	44954	91.59	8.41

Table 4. 3: Attendance of Batch-II

Admn. Unit	Total Centers	Total Trainees	Present	Present %	Absent %
Punjab	460	23233	21968	94.56	5.44
KP	143	6905	6726	97.41	2.59
Balochistan	59	2813	2638	93.78	6.22
Sindh	116	8093	4618	57.06	42.94
GB	11	346	286	82.66	17.34
AJ&K	23	1063	1006	94.64	5.36
ICT	7	350	341	97.43	2.57
Total	819	42803	37583	87.80	12.20

Table 4. 4: Attendance of Batch-III

Admn. Unit	Total Centers	Total Trainees	Present	Present %	Absent %
Punjab	322	16488	16407	99.51	1.27
KP	85	3814	3944	103.41	3.41
Balochistan	21	1096	875	79.84	20.16
Sindh	83	8390	6938	82.69	18.77
GB	2	109	112	102.75	2.75
AJ&K	11	581	579	99.66	0.34
ICT	7	469	370	78.89	21.11
Total	531	30947	29225	94.44	6.38

To address the issue of absenteeism and ensure that all trainees received the necessary IT training, special measures were implemented. Special batches were organized specifically for those who had missed their initial training sessions. This approach allowed the census



organizers to accommodate the schedules and availability of trainees who may have had conflicting commitments during the regular training sessions.

Additionally, recognizing the importance of IT training in the context of tablet-based data collection, special refresher sessions were arranged for trainees in cases where the tablets could not be physically transported to the training venues. These special IT training sessions were strategically conducted to ensure that every enumerator had a comprehensive understanding of the tablet applications, even if logistical challenges prevented tablets from being physically present at their initial training location. These efforts underscored the commitment to providing all trainees with the necessary skills and knowledge to successfully carry out their census duties, regardless of logistical constraints

4.2.4. Batch I Monitoring and Reported Issues

During the first batch of TOEs, the team comprises of 16 PBS's officers visited 57 venues (see **Annexure 4D**) across different Census Support Centers (CSCs) and identified mainly three kinds of issues: The Monitoring officers recorded their observations on prescribed performa (see **Annexure 4C-5**) The prescribed performa used by monitoring officers played a pivotal role in the evaluation of the census operation's effectiveness. This performa provided a structured and standardized means to record and assess a wide array of critical aspects, including administrative, subject-related, and IT/tablet-based issues. It served as a comprehensive tool for systematically identifying and prioritizing challenges, enabling data-driven decision-making, promoting accountability, and supporting a process of continuous improvement. Furthermore, the documented data served as valuable documentation for post-census evaluation and future planning, ensuring the census operation aligned with its objectives and functions efficiently.

Based on the findings presented in **Table 4.5**, the team of officers from the Pakistan Bureau of Statistics (PBS) conveyed their overall satisfaction with the administration of the training, with ratings ranging from good to excellent across various aspects. However, it's noteworthy that their satisfaction did not extend to the domain of training materials and equipment, where there might have been room for improvement.

Furthermore, Table 4.5 highlighted significant concerns related to tablet usage during the census. Specifically, it was observed that a strikingly high percentage, approximately 70%, of

participants encountered issues related to the login process. This percentage indicates a substantial challenge in this particular area. Additionally, another noteworthy concern was the updation of application issue, which was reported by 53% of participants. Both of these two issues incurred due to network issues

Table 4. 5: Monitoring of Batch-I

Set of Indicators	Description	Poor	<Avg	Avg	Good	Exc.
1. Competence of administrative staff	Administrative staff experience in organizing/coordinating Census trainings			5%	79%	16%
2. Competence of trainers	Trainers' knowledge and preparation on the topic of the training contents			5%	95%	
	Trainers' training skills and techniques			19%	80%	
3. Training material and Equipment	Availability of training material	9%		14%	25%	53%
	Venue equipped with multimedia sound system etc.			23%	61%	16%
	Availability of consumables (Flip-chart, markers etc.)	28%	9%	25%	39%	
4. Participants' preparation/learning	Level of knowledge/learning		9%	30%	61%	
5. Participants' motivation	Interest in participation (context of the training)		9%	25%	25%	42%
6. Participants Attendance	Attendance of participants		25%	9%	33%	33%
7. Time management	Training course as per schedule (day to day)			23%	60%	17%
	Compliance with foreseen deadlines			25%	67%	9%
Set of Indicators	Description	Yes				
8. Tablet Issues	Login:	70%				
	Battery:	17%				
	Listing App:	26%				
	Enumeration APP:	9%				
	Data Editing:	9%				
	Geo Tagging:	9%				
	MDM/App Updation:	53%				
	Others:	33%				

Noted: The x% represents the percentage calculated out of 57 venues of the indicator within each group.

4.2.5 IT Expert Monitoring of Batch III

TOE was continuously monitored by PBS subject as well as IT experts. After the first phase of monitoring PBS experts took another round for the purpose at various locations (**Annexure 4E**). Accordingly, they recorded their observations on prescribed format (**Annexure 4C-5**). These observations are depicted in the following paragraph.

4.2.5.1 Training Facilities and Equipment

i) Availability of training material

The results reveal that the availability of training material was generally rated positively by monitors. The majority of monitors (63%) regarded the availability of training material as good, indicating a satisfactory level of accessibility. Additionally, a notable percentage (25%) rated it as excellent, reflecting a high level of satisfaction. A smaller proportion of monitors had a neutral view, considering the availability as average (8%). Only some of monitors expressed dissatisfaction, rating the availability below average (4%). Overall, the findings indicate that a significant portion of monitors were satisfied with the accessibility of training material, while a small percentage had neutral or negative perceptions.

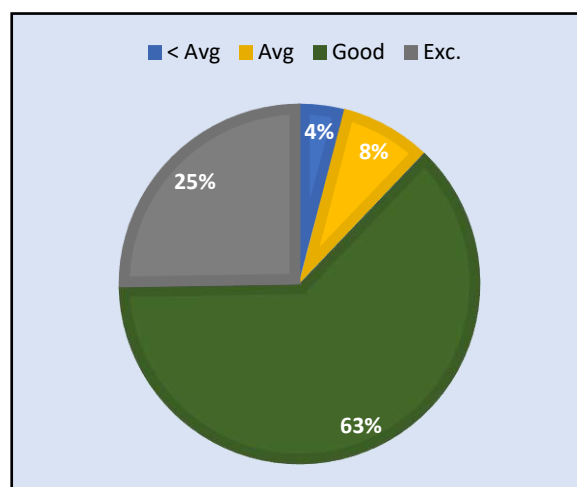


Figure 4. 12: Availability of training material

i) Venue equipped with multimedia sound system etc.

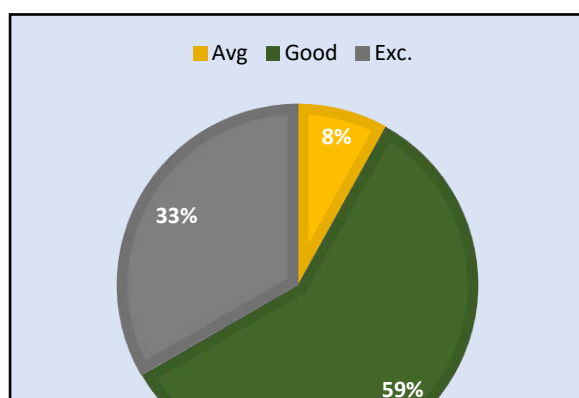


Figure 4. 13: Venue equipped with multimedia sound system etc.

The results indicate that majority of monitors were satisfied with the training material, equipment, and the venue equipped with a multimedia sound system. Specifically, 59% of the them rated the quality as good, highlighting a positive perception of the provided resources. Furthermore, 33% of the monitors rated the quality as excellent, indicating an even higher

level of satisfaction. Only a small proportion of monitors, 8%, considered the quality to be average. Overall, the findings suggest that the majority of monitors had a positive view of the training material, equipment, and the venue's multimedia sound system, highlighting their effectiveness and suitability for the training sessions

ii) Availability of Consumables

The survey results indicate that the availability of consumables, such as flip-charts and markers, for the training sessions received positive ratings from the majority of monitors. A significant percentage (67%) rated the availability as good, suggesting that they perceived an ample supply of these consumables. Conversely, only a small proportion (4%) rated the availability as poor, indicating a minimal dissatisfaction. A smaller percentage of monitors had a neutral view, considering the availability as below average

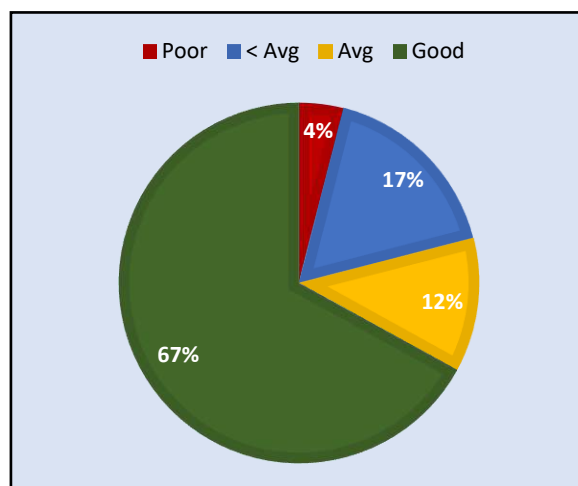


Figure 4. 14: Availability of Consumables

(17%) or average (12%). Overall, the findings suggest that most monitors were satisfied with the availability of consumables, highlighting a favorable perception of the preparedness and provision of necessary materials for the training sessions.

iii) Competence of Administrative Staff

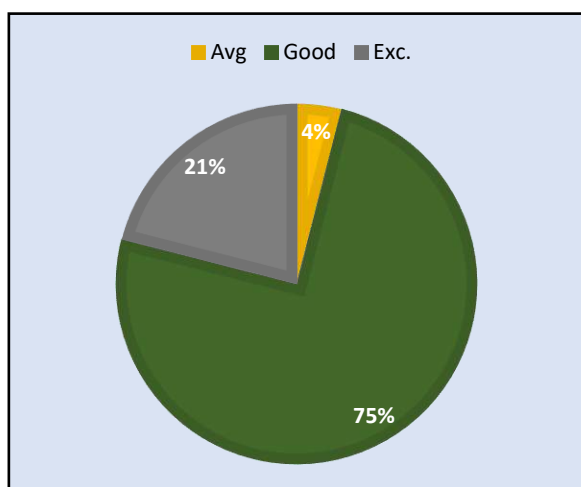


Figure 4. 15: Competence of administrative staff

Majority of monitors had a positive perception of the administrative staff's competence in organizing and coordinating Census trainings. Specifically, 75% of the monitors rated their competence as good, while 21% considered it to be excellent. This suggests that the administrative staff was viewed as skilled and knowledgeable in their role. Only 4% of the monitors rated their competence as average, indicating a smaller percentage of neutral views. Overall, the results highlight a positive

perception of the administrative staff's experience and abilities in organizing and coordinating Census trainings

4.2.5.2 Feedback about Trainer

i) Level of knowledge/learning

The results indicate that the trainer's preparation and level of knowledge or learning were highly rated by the monitors. A significant majority (92%) considered the trainer's level of knowledge and learning as good, suggesting that they perceived the trainers to be adequately prepared and knowledgeable. Additionally, a small percentage (8%) rated it as excellent, indicating a subset of participants who stood out with exceptional levels of preparation and knowledge. These findings highlight the positive perception of the trainers' readiness and understanding of the training content.

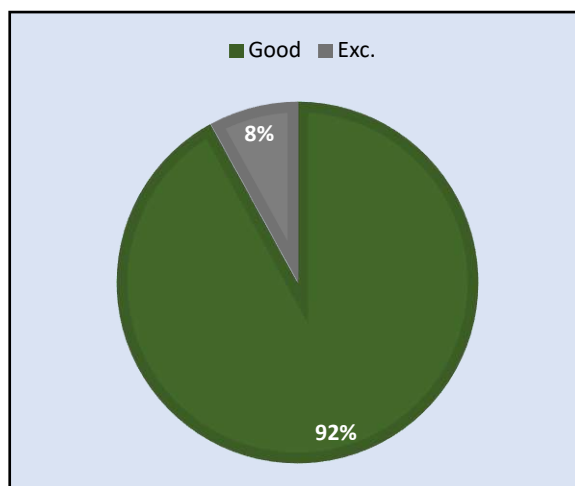


Figure 4. 16: Level of knowledge/learning

i) Trainer's Training Skills

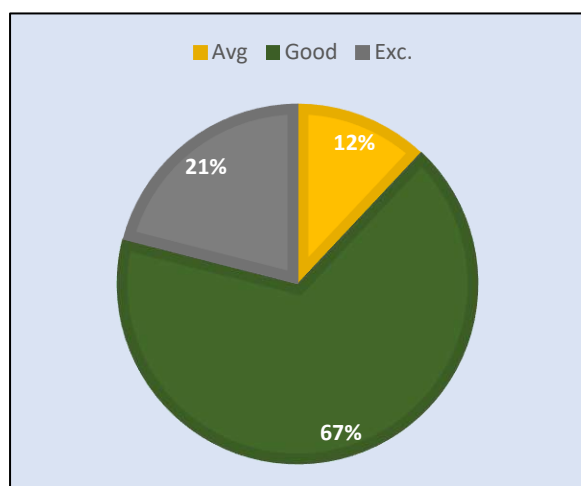


Figure 4. 17: Trainers' Training Skills

Majority of the monitors held a positive perception of the trainers' competency in terms of their training skills and techniques. This was indicated by 67% of the monitors rating their competency as good. Additionally, 21% of the monitors considered the trainers' competency to be excellent. Conversely, 12% of the monitors rated the trainers' competency as average. Overall, monitors viewed the trainers as effective and skilled in their training abilities.

ii) Time Management

The results indicate that the time management of the training course, specifically adhering to the schedule on a day-to-day basis, was highly regarded by the monitors. The majority (79%) rated it as good, suggesting that they perceived the training course to be well-organized and followed the planned schedule effectively. Additionally, a small percentage (17%) rated it as excellent, indicating that there was a notable subset of monitors who believed the training course adhered to the schedule exceptionally well. However, a very small proportion (4%) rated the time management as average, implying a minor dissatisfaction with the adherence to the schedule. Overall, these findings highlight a positive perception of the time management and scheduling of the training course.

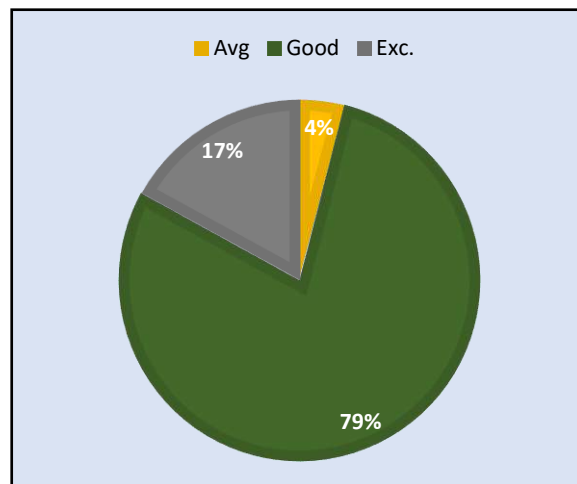


Figure 4. 18: Time Management

iii) Compliance with foreseen deadlines

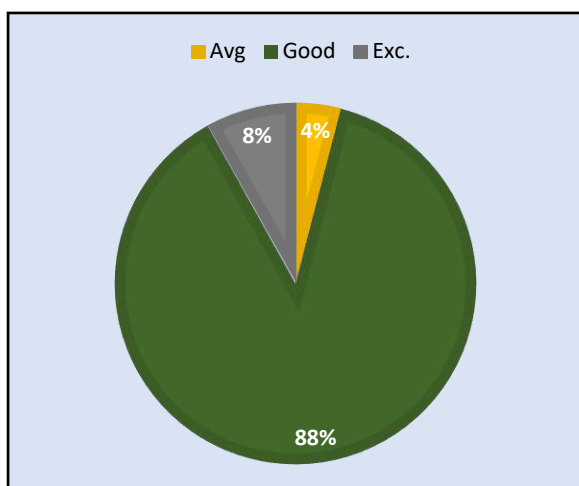


Figure 4. 19: Compliance with foreseen deadlines

The results indicate that the compliance with foreseen deadlines in the training program was positively rated by the monitors. A significant majority (88%) rated the compliance as good, suggesting that they perceived the training program to be effective in meeting the predetermined deadlines. Additionally, a small percentage (8%) rated the compliance as excellent, indicating that there was a subset of monitors who believed the training program consistently met or exceeded the foreseen deadlines. However, a very small proportion (4%) rated the compliance as average, implying a minor dissatisfaction with the adherence to deadlines. Overall, these findings emphasize a

positive perception of the training program's time management and its ability to meet the anticipated deadlines.

4.2.5.3 Feedback about Trainees

i) Interest in Participation

The results reveal that the trainees' motivation and interest in participating in the training were positively regarded by the majority of monitors. A significant percentage (62%) rated the trainees' interest in participation as good, indicating a favorable level of motivation. Additionally, 17% rated it as excellent, suggesting that some participants displayed exceptional enthusiasm and engagement. However, a portion of monitors (21%) rated the interest in participation as average, suggesting a neutral view among this subset. Overall, these findings emphasize the overall positive perception of the trainees' motivation and interest in the context of the training.

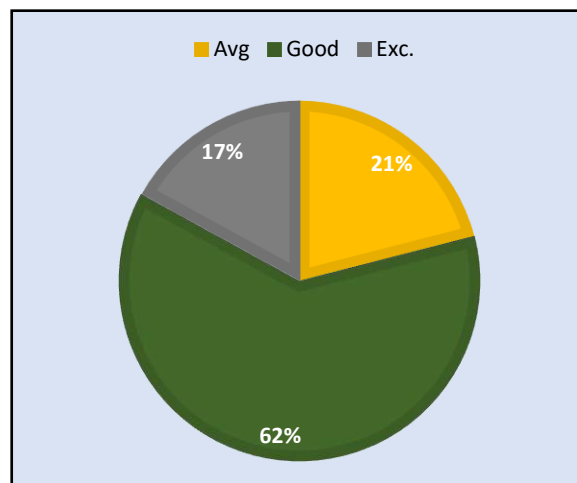


Figure 4. 20: Interest in Participation

i) Attendance of Participants

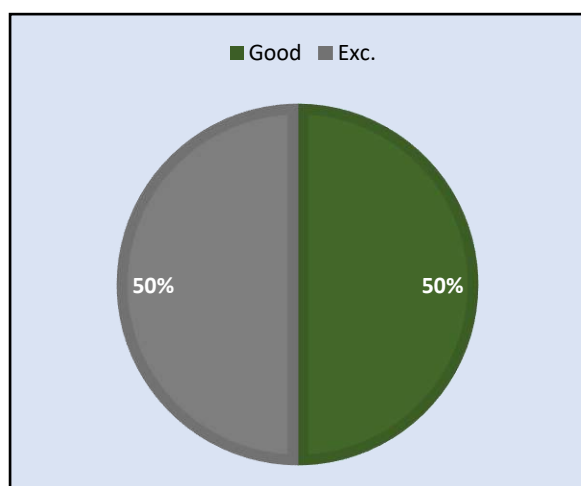


Figure 4. 21: Attendance of Participants

The results show that the trainees' attendance received positive ratings from the monitors. Equal proportions of monitors (50% each) rated the trainees' attendance as good and excellent, indicating an equal division between those who considered it satisfactory and those who viewed it as exceptional. These findings suggest that the trainees demonstrated a high level of commitment and reliability by attending the training sessions consistently. The equal distribution of ratings highlights a general

positive perception of the trainees' attendance and their dedication to actively engage in the training program.

4.2.5.4 Subject Related issues

For subject-related issues, the pie chart categorizes monitors' views about trainees' conceptual issues into two distinct groups: "Yes" and "No." The "Yes" category represents monitors who believe that trainees have reported encountering issues related to census concepts, while the "No" category encompasses monitors who do not believe that trainees face any such Issues with Dejure/Defacto Concept

The results indicate that the majority of monitors were satisfied with the explanation provided related to this concept, implying that the topic was generally well understood and comprehensible by the majority of the trainees. However, a small percentage (12%) of monitors reported encountering subject issues specifically related to de-jure and de-facto concepts. This suggests that a little proportion of monitors expressed some concerns regarding the practical aspects of data collection according to this concept.

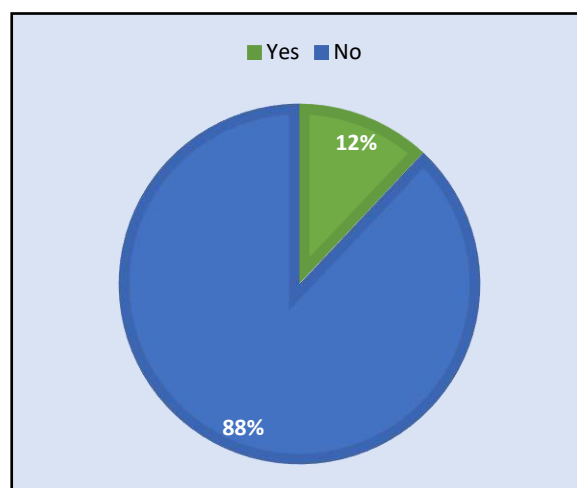


Figure 4. 22: Issues with Dejure/Defacto

i) Issues with Listing Concept

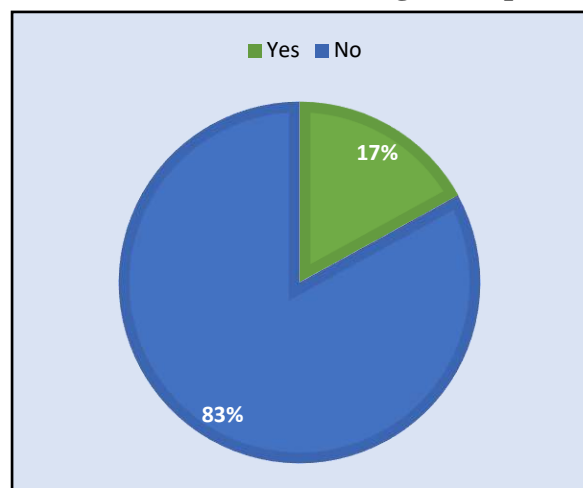


Figure 4. 23: Issues with Listing Concept

The results reveal that the majority of monitors did not report any issues with the trainees' understanding of the listed concepts, suggesting that they had a good grasp of the listing process or did not encounter significant challenges in this aspect. However, a small portion of monitors (17%) reported encountering challenges with trainees' understanding of the

listed concepts. This indicates that some monitors observed difficulties among the trainees concerning the listing concepts

ii) Issues with Enumeration Concept

Most of the monitors expressed satisfaction with the concepts related to enumeration, suggesting a widespread understanding and confidence in this facet of data collection. However, the results also indicate that a noteworthy percentage of monitors (21%) encountered challenges specifically tied to enumeration concepts among the trainees. The primary goal of monitoring was to gauge the trainees' comprehension levels. In instances of any confusion or lack of understanding, the concepts were further elaborated upon during training sessions to ensure the trainees' better grasp of the material

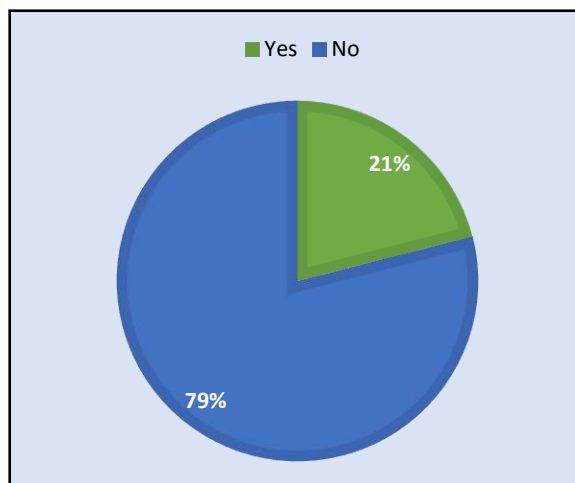


Figure 4. 24: Issues with Enumeration Concept

iii) Issues with Housing Concept

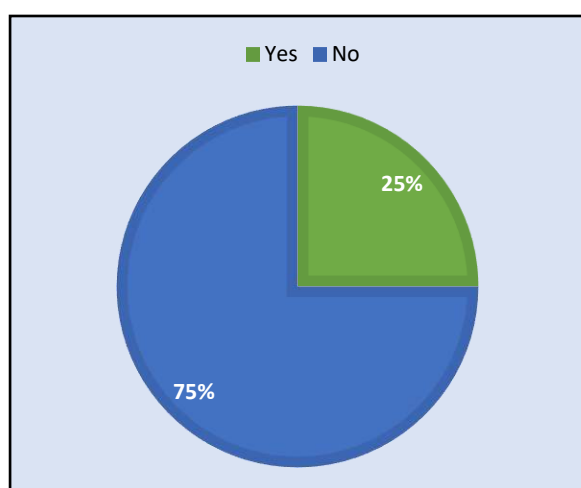


Figure 4. 25: Issues with Housing Concept

The results reveal that the majority of monitors did not report any issues with trainees' understanding of housing concepts, indicating that they had a good grasp of the subject or did not encounter significant challenges in this area. However, on the other hand, 25% of the trainees faced difficulties in comprehending housing concepts. Nevertheless, extensive efforts were made to clarify the concepts during

later training sessions and while addressing any queries.

iv) Issues with Self-Enumeration Concept

The results indicate that a segment of monitors (21%) observed challenges among the trainees related to self-enumeration concept. This suggests that some monitors noted difficulties or had concerns regarding the trainees' grasp of the self-enumeration process, which involves individuals or households independently completing data collection forms. However, most monitors did not report any trainee-related issues with self-enumeration, indicating that they had a solid understanding or did not come across significant obstacles in this aspect.

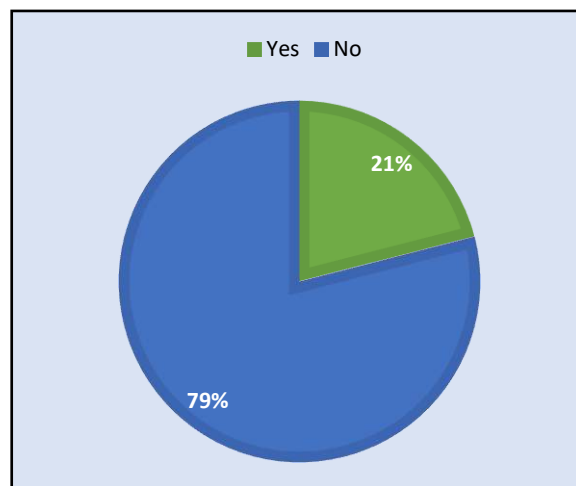


Figure 4. 26: Issues with Self-Enumeration Concept

v) Others

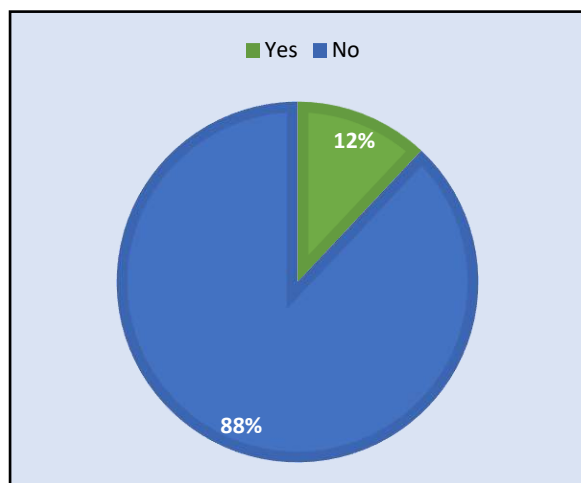


Figure 4. 27: Others

The results show that a small percentage of monitors (12%) observed issues among the trainees categorized as "other." This suggests that some monitors noted challenges or concerns among the trainees that pertained to topics not explicitly covered in the survey options. However, the majority of monitors did not report any other issues among the trainees, indicating that most did not encounter significant difficulties or concerns beyond the predefined categories.

Overall, this suggests that the overall understanding and handling of these subject issues in the context of data collection were relatively satisfactory for most of the monitors. A smaller proportion of monitors reported some issues at places. Generally, Census trainers explained the concepts wherever the participants faced any difficulty in understanding the concepts

4.2.5.5 Tablet/Application related Issues

For tablet-related issues, the pie chart categorizes monitors' views about trainees into two distinct groups: "Yes" and "No." The "Yes" category represents monitors who believe that trainees have reported encountering issues related to the tablet or application, while the "No" category encompasses monitors who do not believe that trainees face any such challenges.

i) Battery issue

The results reveal that a small percentage of monitors (8%) noted issues among the trainees specifically related to the battery of the tablets. This suggests that a few monitors observed challenges or concerns regarding the battery life or performance of the tablet devices used by the trainees for data collection. However, the majority of monitors did not report any battery-related issues among the trainees, indicating that they did not come across significant problems with the tablet batteries.

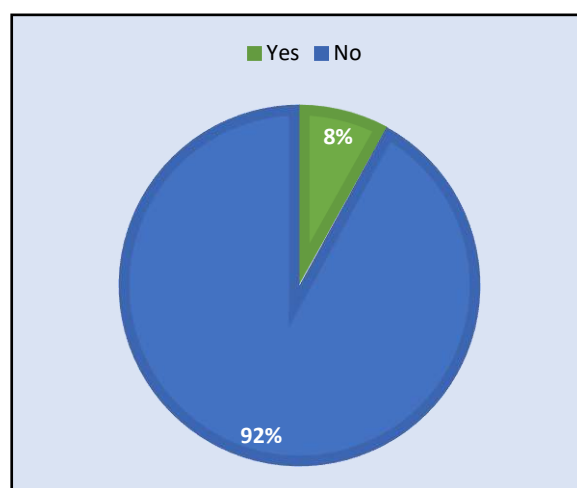


Figure 4. 28: Battery issue

ii) Login Issue

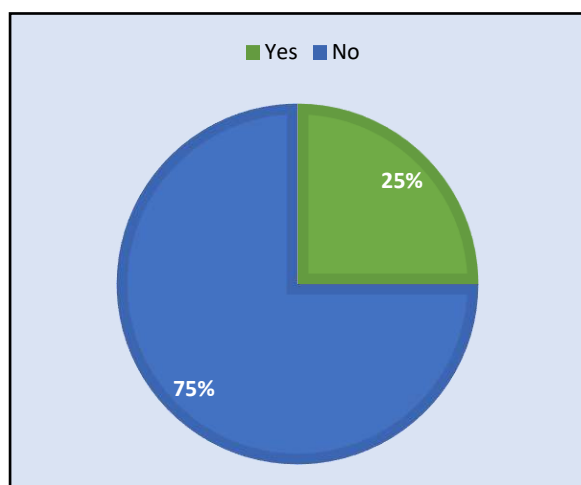


Figure 4. 29: Login Issues

The results indicate that a quarter of the monitors (25%) observed issues among the trainees specifically related to logging in on tablets. This suggests that a substantial portion of the monitors noted difficulties or challenges trainees faced when trying to log in to the tablet devices used for data collection. On the other hand, the majority of monitors did not report any login-related issues among the trainees, indicating that most trainees were able to log in

successfully without significant obstacles or concerns

iii) Listing APP Issues

The results indicate that 12% of the monitors observed issues among the trainees specifically related to the listing app on tablets. This suggests that some monitors noticed challenges or uncertainties among the trainees related to the functionality or usability of the app used for listing entities during data collection. However, the majority of monitors did not report any issues with the listing app among the trainees, implying that most trainees had a smooth experience without significant difficulties or concerns

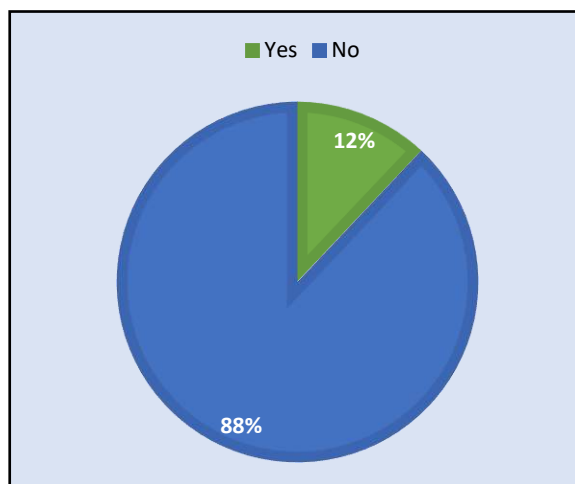


Figure 4. 30: Listing App Issues

iv) Data Editing Issues

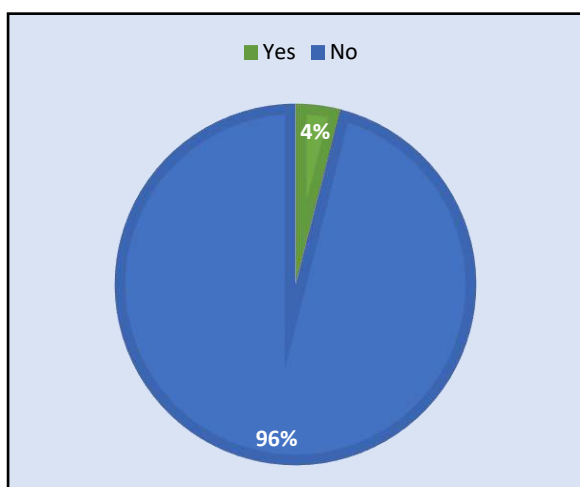


Figure 4. 31: Data Editing Issues

The results show that a very small percentage of monitors (4%) noted issues among the trainees specifically related to data editing on tablets. This suggests that a few monitors observed challenges or concerns among the trainees while attempting to edit or modify data on the tablet devices used for data collection. However, the majority of monitors did not report any data editing issues among the trainees, indicating that most trainees were able to edit data smoothly without significant

obstacles or concerns.

V) Geo Tagging Issues

The results reveal that a notable percentage of monitors (21%) observed issues among the trainees specifically related to geo tagging on tablets. This suggests that a subset of monitors noticed challenges or concerns among the trainees regarding the process of accurately tagging locations or geographic information using the tablet devices during data collection. However, the majority of monitors did not report any geo tagging issues among the trainees, implying that most trainees were able to perform this task without significant difficulties or concerns.

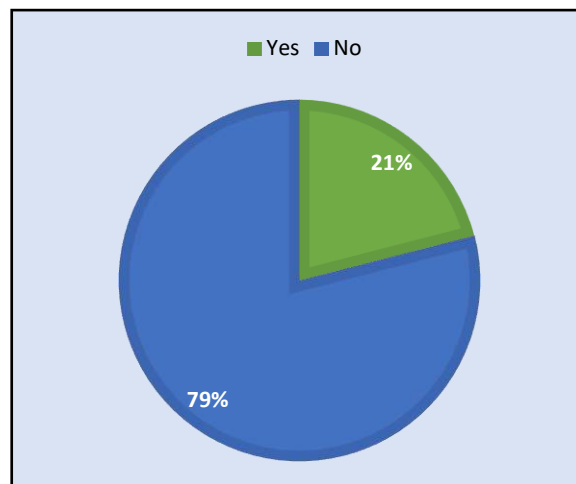


Figure 4. 32: Geo Tagging Issues

vi) MDM/APP Updation Issues

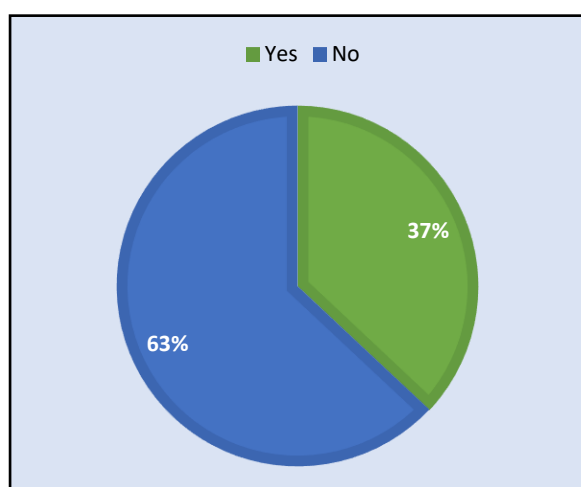


Figure 4. 33: MDM/App Updation Issues

The results indicate that a significant percentage of monitors (37%) observed issues among the trainees specifically related to Mobile Device Management (MDM) or application updates on the tablets. This suggests that a notable portion of monitors noticed challenges or difficulties among the trainees regarding the management or updating of the tablet devices and associated applications used for data collection. However, it is worth noting that the majority of monitors did not

report any MDM or app updation issues among the trainees, indicating that most trainees did not encounter significant obstacles or concerns in this area

vii) Others

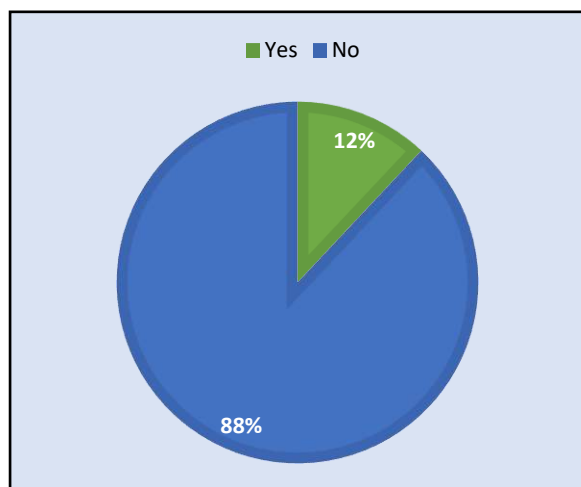


Figure 4. 34: Others

The results show that a small percentage of monitors (12%) noted issues among the trainees categorized as "other" in relation to tablet usage. This implies that some monitors observed challenges or concerns among the trainees that were not covered by the predefined survey options. However, the majority of monitors did not report any other tablet issues among the trainees, suggesting that the predefined categories of tablet issues

encompassed the majority of challenges or concerns experienced by the trainees.

Overall, these findings highlight that although a significant portion of monitors observed certain tablet issues among the trainees, most trainees did not experience major challenges or concerns. This suggests that, for the most part, the tablet devices used for data collection were functioning well and did not pose significant obstacles to the trainees.

4.2.6 Application related issues

The introduction of tablet-based data collection through listing and enumeration applications during this census marked a pivotal moment. The successful implementation of the census relied heavily on rigorous testing of these applications. Therefore, a structured feedback mechanism was established to gather input from enumerators on these applications. This feedback was specifically collected from enumerators at the venues where monitors visited, following a prescribed performas (**Annexure 4C-3 & 4C-4**). This approach significantly contributed to the overall efficiency of the census operation

Based on the data presented in Tables (4.6 & 4.7), sync/uploading data issues were highly reported in enumeration and listing applications (18% and 21%) in contrast to other issues. In addition to this, more than 10% of issues were noticed in the Login, Map/Boundary, Population Section, and Edit/Validation check in the application of enumeration. In the same way, more than 10% of issues were reported regarding login, Import Block, Map/Boundary,

Location/GPS, Listing Entry, Population Section and Edit/Validation check in the application of listing.

Table 4. 6: IT Issues faced in Enumeration Application

Number of Centers	Login	Import Block	Map/ Location	Population Section	Housing Section	Start/ Household	Logical Validation	Sync/ Upload
Bannu	5/22	4/22	8/22	6/22	8/22	3/22	2/22	1/22
Muzaffarabad	3/16	1/16	3/16	1/16	0/16	1/16	6/16	6/16
Swat	3/6	3/6	3/6	1/6	1/6	2/6	3/6	4/6
Lahore	17/128	17/128	17/128	19/128	18/128	11/128	19/128	25/128
Faisalabad	16/169	12/169	13/169	13/169	17/169	16/169	19/169	35/169
Multan	4/26	6/26	7/26	7/26	0/26	4/26	5/26	7/26
Peshawar	3/68	5/68	11/68	9/68	6/68	4/68	7/68	10/68
Sargodha	4/71	4/71	10/71	3/71	3/71	4/71	6/71	5/71
Total	55/506	52/506	72/506	59/506	53/506	45/506	67/506	93/506
In (%)	11	10	14	12	10	9	13	18

Noted: In each centre the denominator shows the total number of enumerators and the x% shows the proportion of participants/trainees having issue (like login, sync etc) at different stations.

Based on the feedback received from 506 enumerators across 8 different venues in various provinces as shown in table 7, a bar chart in figure illustrates the frequency of reported issues in the enumeration application. The chart reveals that "Sync/upload" issues were the most prevalent, with 93 occurrences, followed by "Map/Boundary" issues (72 occurrences). while "Login," "Import block," "Logical validation," and "start household" issues were reported 55, 52, 67, and 45 times, respectively. This visualization highlights the areas where the application may require improvement and indicates that addressing synchronization and mapping issues should be a priority in enhancing the enumeration process.

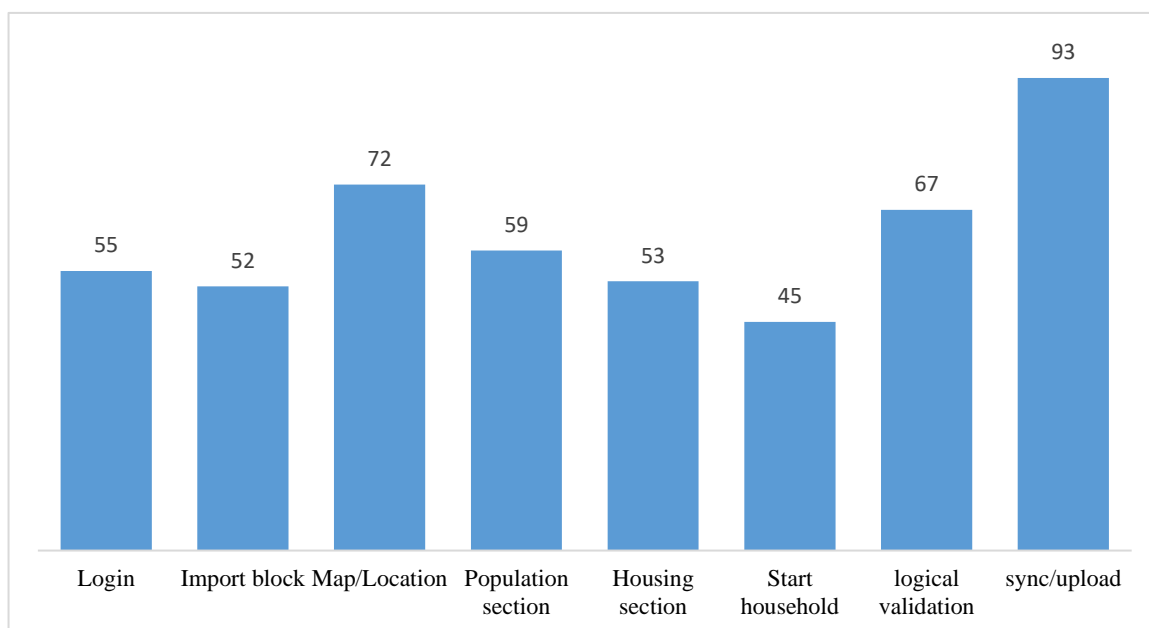


Figure 4. 35: Issues in Enumeration Application

Table 4. 7: IT issues faced in Listing Application

Name of Centers	Login	Import Block	Map /Boundary	Location/ GPS	Listing Entry	Logical Validation	Sync/ Upload
Bannu	5/22	5/22	8/22	4/22	7/22	4/22	4/22
Muzaffarabad	2/20	2/20	2/20	2/20	1/20	6/20	3/20
Swat	3/6	2/6	3/6	3/6	2/6	2/6	3/6
Lahore	30/127	27/127	31/127	31/127	19/127	23/127	29/127
Faisalabad	16/173	12/173	20/173	14/173	15/173	18/173	40/173
Multan	5/27	8/27	7/27	4/27	3/27	4/27	8/27
Peshawar	3/76	6/76	17/76	12/76	7/76	6/76	13/76
Sargodha	10/73	10/73	15/73	10/73	4/73	8/73	6/73
Total	74/524	72/524	103/524	80/524	58/524	71/524	106/524
In (%)	14	13	20	15	11	13	21

Noted: In each centre the denominator shows the total number of enumerators, and the x% shows the proportion of participants/trainees having issue (like login, sync etc) at different stations.

Based on the feedback received from 524 enumerators in the listing application, a bar chart illustrates the frequency of reported issues. The chart indicates that "Sync/upload" issues were the most common, reported by 106 enumerators. Following closely were "Map/Boundary" issues with 103 occurrences. "Location/GPS" problems were also significant, with 80 instances. "Import block" and "Logical validation" issues were reported 72 and 71 times, respectively. "Login" and "Listing entry" issues were less frequent, with 74 and 58

occurrences, respectively. This visualization highlights areas that may need improvement in the listing application, emphasizing the importance of addressing synchronization, mapping, and location-related issues for a more effective enumeration process

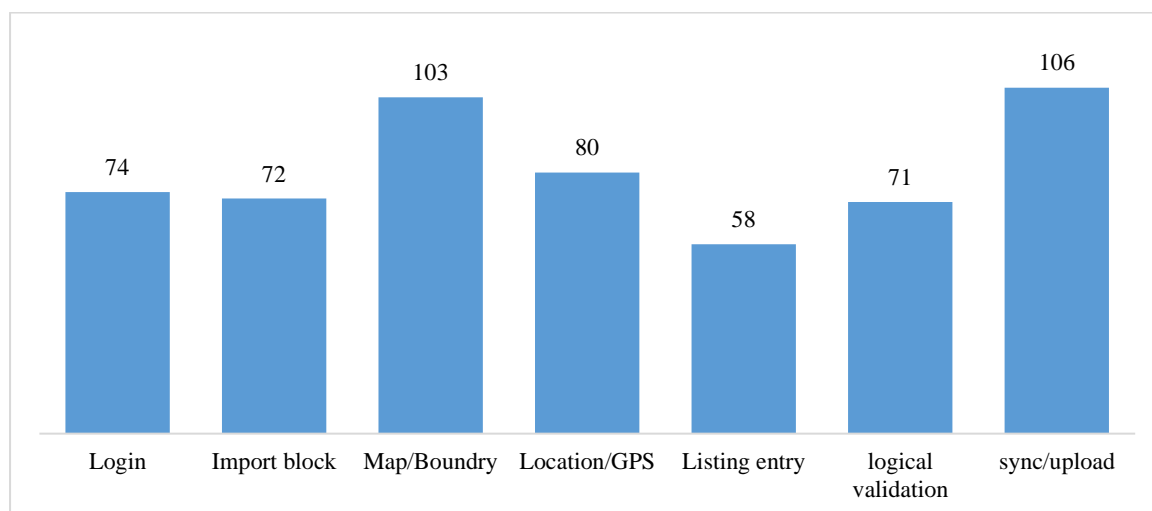


Figure 4. 36: Issues in Listing Application

There was a main issue of training and tablet delivery in the training of enumerators, which was faced mostly in the first and second batches, due to which training was adversely affected. As a result of the non-availability of tablets, at some places practice on tablets could not be done. For the purpose of training, extra batches were conducted in various districts where tablet-based exercises were not performed. The summary of extra batches is given in Table 9.

Table 4. 8: Refresher Course

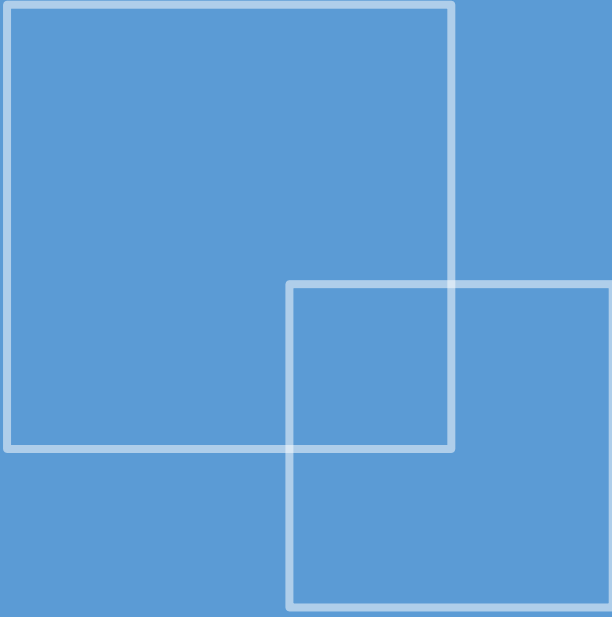
Province	No. of Venues Batch-4	Enumerators Batch -4	No. of Venues Batch-5	Enumerators Batch -5
Punjab	12	973	-	-
Sindh	33	3042	10	765
AJK	-	-	-	-
Balochistan	12	423	-	-
GB	-	-	-	-
ICT	2	146	-	-
KPK	1	71	1	68
Grand Total	59	4584	10	765



4.4. Conclusion

Training of Enumerators (TOEs) was conducted at 992 venues across Pakistan and concluded successfully. The primary objective of TOEs was to equip enumerators with advanced methods and technology, ensuring the reliability and transparency of data collection. During this phase, a total of 120,929 enumerators were effectively trained for field operations





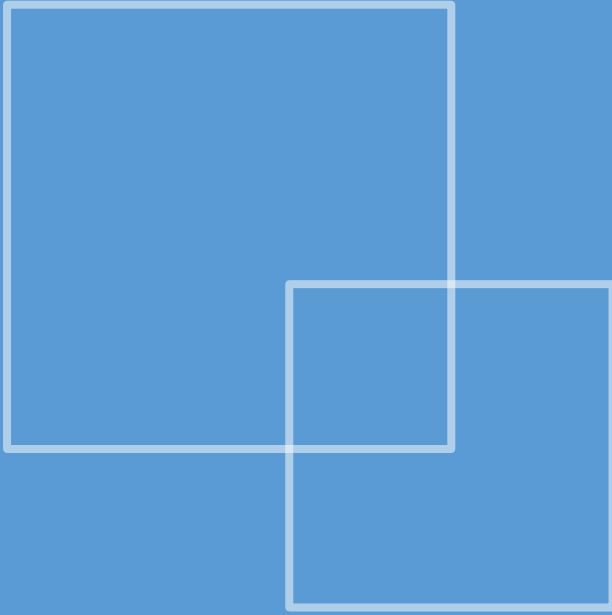
Third Party Training Evaluation



Chapter 5: Third Party Training Evaluation

PBS intends the Census 2023 to be accurate, complete, and free from controversies. The fieldwork must be as flawless as possible and census data must be gathered while upholding global standards in headcount research ethics. PBS worked extensively on the improvement of the training processes and hired a professional training firm for the preparation of standardized and interactive training material. Monitoring and Evaluation (M&E) is considered imperative for the quality assurance (QA) of such a huge project. Training evaluation is the systematic process of analyzing training programs to ensure effective, efficient and uniform message delivery across the country. Training evaluation identifies training gaps and even discovers opportunities for improving training programs to make the learning process effective in terms of training design and process being able to achieve its intended outcome. Measuring training effectiveness thus helps the management to better understand and identify skill and process gaps to analyze the desired outcomes of training programs. PBS requested United Nations Fund for Population (UNFPA) for technical assistance on M&E and QA. UNFPA hired an Independent Consultant, with proven expertise, and made his services available to PBS. The Consultant reported to the Chief Statistician and worked closely with the concerned staff deputed to manage the massive Digital Census training exercise, the largest of its kind in Pakistan. The Consultant provided 5 reports consisting of inception report, a Monitoring and Evaluation Action Plan, Tools with guidelines for Quality Assurance and a Summative Review of the whole Monitoring and Quality assurance process. (see **Annexure 5A**).





Conclusion and Lesson Learnt



Chapter 6: Conclusion and Lesson learnt

The 7th Population and Housing Census of Pakistan in 2023 marked a significant milestone as it was the country's first-ever digital census. In order to ensure the success of this ambitious project, extensive three-tier training programs were conducted for master trainers, trainers, and enumerators, who were tasked with collecting accurate and reliable data to provide the government with comprehensive demographic information. Given the critical role of training in the success of the census, the Pakistan Bureau of Statistics (PBS) placed significant emphasis on developing a robust training program for the personnel involved in conducting the census.

The training program aimed to equip the participants with the necessary knowledge and skills to effectively conduct the digital census. The training was conducted in three phases, beginning with the selection and training of super trainers, who then trained subsequent batches of trainers responsible for training the enumerators at the census district level. This three-tier approach ensured that all enumerators received comprehensive and consistent training. The training program covered various aspects, including census methodology, questionnaire administration, ethical principles of census operation, data collection methods, confidentiality information, and the use of digital tools and technologies.

Considering the significance of training for clarification of standard concepts regarding questionnaire cannot be denied. The PBS advertised three times for hiring any popular firm for the purpose of imparting quality training to the trainers. But finally, they succeeded in the selection of firm namely SEBCON (PVT) LTD, Islamabad. The firm was responsible to perform the following tasks:

- preparation of audio / video for clarification on questionnaire in regional languages,
- preparation of interactive manuals
- conductance of mock exercise / data collection training
- logistics arrangements for Master trainers / trainers.

6.1. Issues Encountered During Training Process

The following issues were confronted in the entire gigantic process of training.

- a) **Lack of IT Literacy:** The trainers were supposed to be tech-savvy, but unfortunately this was not the case, and numerous participants especially those aged one were

unaware of using tablets, which created issues during training. Despite the fact that PBS shared cleared criteria for selection of enumerators and supervisors to district government. Keeping in view the requirement of digital literacy and willing worker may be selected with consent. In response, it requires more efforts to improve their skills and knowledge regarding the concepts and tablets use. Furthermore, selection of aged persons for training is inappropriate.

- b) **Delay in Training Materials:** Training materials in some far flung areas were delayed by dint of Pakistan post office, which affected the training.
- c) **Limitation of SEBCON (PVT) Limited:** The Sebcon (pvt) limited was hired for the purpose of preparation of standard and effective training materials to participants. However, the firm could not accomplish the chore, that PBS was expecting from them. By dint of lack of innovation skills and young experts, they did not able to complete the ideas PBS made regarding the census training. The voice quality of audio / video tutorials was below standards and made it difficult for trainer listeners to comprehend the topic. Further, no female background voices were found in these audio / video tutorials. In addition to this, no efforts had been made for innovation and creativity of the new ideas.
- d) **Lack of facilities in various venues:** Some training venues particularly in Sindh confronted infrastructure issues. These include unreliable internet connectivity, lack of unavailability of multimedia and frequent power outages, which adversely affected the implementation of the digital training modules. These challenges required on-site troubleshooting and alternative solutions to ensure uninterrupted training sessions. Further, no refreshment was given to the participants.
- e) **Shortage of IT trainers:** In the second phase (ToT), the NADRA team of IT was responsible for imparting training regarding tablets for data collection. However, in fact, the available pool of instructors and their provided staff lack knowledge and skills regarding the training.
- f) **Tier Problem:** The training process is organized into three distinct tiers, with each tier acting as a crucial intermediary for knowledge transfer to the subsequent stage. Nevertheless, it is vital to recognize that during this progression, there is a potential for notable distortions to arise in the information being conveyed.



6.2. Lesson Learnt

- a) **Selection of relevant staff:** Young and IT-familiar staff should be selected for a digital census. This is possible if the PBS representative at CSC has strong coordination with the provincial relevant authorities.
- b) **Proper Implementation of TMS:** The proper implementation of TMS is very essential indicator for successful training. When properly implemented, TMS will guarantee a transparent and fair selection of trainers for the next phase.
- c) **Robust Technical Support Lesson:** To mitigate the impact of infrastructure challenges, a dedicated technical support team should be in place during training sessions. This team can provide immediate assistance in resolving connectivity issues and ensuring the smooth operation of digital tools. Additionally, backup power sources should be available to minimize disruptions caused by power outages.
- d) **Recruiting experienced trainers Lesson:** It is important to have sufficient human resources in terms of experienced trainers. Based on the challenging nature of the operation, PBS should plan and allocate enough resources to fill gaps adequately. This may have been achieved by hiring more IT trainers or by building the capacity of existing trainers in these critical areas. It is also crucial to have a contingency plan in place to handle the shortage of trainers. Such pre-determined plans may help PBS to quickly adapt to unexpected resource shortages that may arise during training programs. For example, having an agreement with other departments or training institutes for their support in a situation like this may help address the shortage of trainers.
- e) **Hiring Experienced Firm Lesson:** Before hiring a training firm, it should be taken into account that it has relevant experience in handling tasks of huge field exercises.
- f) **Selection of Suitable venue & delivery service:** In mostly territories, the venues selection was good. However, in the future, alternate venues may be selected where issues are recorded. Further, dispatching the training materials at least two weeks before the start of training. In addition, refreshments are ensured for participants in all venues.
- g) **Reduction in training tiers:** It is recommended to mitigate the tiers process from 3 phases to 2 phases, which will augment the efficiency of the entire process. In other words, master trainers should directly impart the knowledge to the enumerators as well as supervisors.