KENYA NATIONAL BUREAU OF STATISTICS

PILOT SURVEY REPORT

2024/25 KENYA INTEGRATED HOUSEHOLD BUDGET SURVEY

DECEMBER 2024

PREFACE

The Kenya National Bureau of Statistics (KNBS) is established under the Statistics Act, Chapter 112 of laws of Kenya for the collection, compilation, analysis, publication and dissemination of statistical information, and coordination of the national statistical system. In exercising its mandate, the KNBS planned conducting the 2024/25 Kenya Integrated Household Budget Survey (KIHBS) to update socio-economic database for national and county-level planning, as well as for the Sustainable Development Goals (SDGs) and other developmental targets.

In implementing the 2024/25 KIHBS, a pilot survey was conducted aimed to rigorously test survey instruments, logistics, procedures, and field operations. It also evaluated the efficacy of data collection technologies such as the Computer-Assisted Personal Interviewing (CAPI) system. The findings from the pilot survey have informed the refinement of methodologies and tools to enhance the quality and efficiency of the main survey.

The report outlines the objectives, methodologies, and challenges of the pilot survey while providing actionable recommendations to address observed gaps. Notable innovations include improvements in survey logistics, streamlined questionnaire design, and enhanced field coordination mechanisms.

The success of the pilot survey is attributed to the collaborative efforts of KNBS staff, technical partners, and stakeholders at both national and county levels. We extend our sincere gratitude to all contributors whose expertise and dedication have shaped this exercise into a foundation for a robust national survey.

As we prepare for the main survey in 2025, we are confident that the lessons and insights derived from this pilot will significantly contribute to achieving our goal of providing high-quality data for Kenya's socio-economic transformation.



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LIST OF ACRONYMS

TWC	Technical Working Committee
CAPI	Computer-Assisted Personal Interview
SMS	Sampling Methods and Standards
TOT	Training of Trainers
PAPI	Paper-Assisted Personal Interview
KIHBS	Kenya Integrated Household Budget Survey
KNBS	Kenya National Bureau of Statistics
HBS	Household Budget Survey
SDGs	Sustainable Development Goals
NGAO's	National Government Administrative Officers
LSMS	Living Standards and Measurement Study
CMO	Cluster Mobilization Officer
NSU	Non-Standard Units
GPS	Global Positioning System

CHAPTER 1: INTRODUCTION

Kenya has been conducting integrated household budget surveys to capture a wide range of socio-economic characteristics of individuals and households. These surveys encompass demographics, education, health, labour and housing characteristics; ICT access and use; household consumption and expenditure patterns; sources of household income; and other household characteristics. The data collected is utilized to update socio-economic databases for national and county-level planning, as well as to track progress towards the Sustainable Development Goals (SDGs) and other developmental targets.

Over the years, Kenya has carried out various integrated household budget surveys, including the 1981/82 Rural Household Budget Survey (RHBS), 1983/84 and 1993/94 Urban Household Budget Surveys (UHBS), the 1992, 1994, and 1997 Welfare Monitoring Surveys (WMSs), the 2005/06 and 2015/16 Kenya Integrated Household Budget Surveys (KIHBSs), and the Kenya Continuous Household Survey (KCHS) series from 2019 to 2022. These surveys play a crucial role in providing valuable data for gaining insights into the socio-economic landscape of the country, guiding policy and tracking development initiatives.

The 2024/25 Kenya Integrated Household Budget Survey (KIHBS) is being implemented from to update socio-economic databases. To this end a pilot survey has been carried out aimed to rigorously test survey instruments, logistics, procedures, and field operations. It also evaluated the efficacy of data collection technologies such as the Computer-Assisted Personal Interviewing (CAPI) system. The findings from the pilot survey have informed the refinement of methodologies and tools to enhance the quality and efficiency of the main survey. The activities involved in the pilot survey included the recruitment of personnel, publicity and advocacy, training of trainers, training of research assistants and supervisors, data collection, report writing, finalization of tools and instruments, as well as data analysis and report writing. The Pilot began on 16th July 2024 over 14 days.

1.1 Pilot Survey Objectives

The main objective of the 2024/25 KIHBS pilot survey was to test the survey instruments, logistics and survey procedures and protocols.

The specific objectives of the 2024/25 KIHBS pilot were to:

i. Test KIHBS survey Instruments and tools – questionnaires, CAPI System, equipment, anthropometric equipment, and their administration;
ii. Test data collection and capture, review and transmission procedures from the field to headquarters servers;

iii. Test survey logistics: - transport, cluster mobility, terrain, the transition from one cluster to the next, callbacks, facilitation (payments), procurement procedures, e.g., diary and recall method and survey administration procedure.
iv. Test publicity and advocacy effectiveness and methods used
v. Identify any flaws in all the questionnaires namely household level questionnaire, household consumption questionnaire, market questionnaire, purchase diary questionnaire and community questionnaire.
vi. Test the time and length required to cover a cluster with respect to the questionnaire (each questionnaire, module)
vii. Assess the expected response rates that inform the main survey.
viii. Test the viability of the CAPI system, Tablets, GPS capture.
ix. Test use of NSU reference photos and the corresponding conversion factors.
x. Data quality – data checks to improve quality to be implemented during the main survey.
xi. Test survey administration procedures and protocols – hence assist training for main survey;
xii. Assess the quality of trainers and delivery methodologies
xiii. Assess and determine the quality and number of personnel required for main survey
xiv. Assess the interlinkages with the local administration (Political and administrative, eg NGAOs)
xv. Assess the budgetary requirements to implement the main survey.

1.2 Pilot Survey Methodology, Scope, Sample Design, Selection and Implementation

The pilot survey for the 2024/25 KIHBS was undertaken in 26 clusters selected from 12 counties, as indicated in **Table 1**

Table 1: Selection Criteria for Counties

Region	County Selected	Criteria of Selection	Description
Central	Murang'a	Agricultural County	Rural Settlement
Coast	Mombasa	Coastal/Urban County	Middle-Income Cluster
Coast	Kwale	Coastal/Low-Income County	Rural Settlement
Eastern	Marsabit	Social protection (Receives Cash Transfers)	Rural Cluster
Eastern	Makueni	Diversity in consumption patterns	Urban middle-income cluster
Nairobi	Nairobi	Urban/Income distributions Patterns	High, Middle, Low-Income Clusters & Peri-urban
North Eastern	Garissa	Refugees Host Communities	Refugee Camp
North Eastern	Turkana	Price Trends varying from other regions, refugee hosting community	Urban Cluster, a refugee camp
Nyanza	Migori	Border Point	Urban
Rift Valley	Nakuru	Diversity in consumption patterns	Urban Cluster
Rift Valley	Uasin Gishu	Diversity in Consumption Patterns/Agricultural County	Rural Cluster
Western	Kakamega	Working age population (15+)	urban cluster

To select the clusters and households for the KIHBS pilot, the Kenya Household Master Sample Frame (K-HMSF) was used. A total of 26 clusters and 260 households were selected for the pilot survey, equating to 10 households per cluster as shown in **Table 2**.

Table 2: Distribution of Clusters and Households

S/No	County	Teams	Clusters			Households		
			Rural	Urban	Total	Rural	Urban	Total
1	Garissa	1	2	0	2	20	0	20
2	Kakamega	1	0	2	2	0	20	20
3	Murang'a	1	2	0	2	20	0	20
4	Kwale	1	2	0	2	20	0	20
5	Makueni	1	0	2	2	0	20	20
6	Marsabit	1	2	0	2	20	0	20
7	Migori	1	0	2	2	0	20	20
8	Mombasa	1	0	2	2	0	20	20
9	Nairobi	2	0	4	4	0	40	40
10	Nakuru	1	0	2	2	0	20	20
11	Uasin Gishu	1	2	0	2	20	0	20
12	Turkana	1	0	2	2	0	20	20
	Total	13	10	16	26	100	160	260

Figure 1: Map Depicting the Distribution of Selected Clusters for the 2024/25 Kenya Integrated Household Budget Surveys (KIHBS) Pilot Survey



CHAPTER 2: SURVEY INSTRUMENTS

As part of the preparatory activities for the 2024/25 KIHBS, a set of six questionnaires were developed. Stakeholders were engaged in the development of the questionnaire that included technical expertise from the World Bank Living Standards and Measurements Survey team. These questionnaires were administered during the pilot survey data collection. Each questionnaire comprised several modules aligned with its specific objectives. The questionnaires included:

1. **Household member information / individual questionnaire** This questionnaire had a number of modules which collected information on individual household members such as household roster; migration; emigration; education; labour; health; fertility; disability; household deaths; child health and anthropometry; ICT services; domestic tourism and credit and loans.
2. **Household-level questionnaire-** The questionnaire had a number of modules which collected information at the household level i.e.: housing; water, sanitation and energy; land use ownership and tenure; Agriculture biodiversity; agriculture output and input; livestock; household enterprises; transfer received and sent; social protection; other income; recent shocks; climate change; household ICT; household justice; and food security.
3. **Household consumption expenditure questionnaire-** This had several modules which collected information on purchase and consumption of food and non-food items. Food items purchased and consumed were covered under different recall periods. Some of the modules included: food items purchased/consumed in the past 7 days; food taken away from home in the past 7 days; Non-food items purchased/consumed - in the past 7 days, last 1 month, last 3 months, last 6 months and semi durables and durables items for the last 1 year.
4. **Community questionnaire-** This questionnaire collected information at cluster level about the community identification, roster of informants, basic characteristics of the community, changes in community welfare, access to basic services, economic activities, agriculture and security and safety. This questionnaire was administered by the cluster mobilizers.
5. **Purchase diary questionnaire**– Administered to all sampled households by the interviewer.
6. **Market questionnaire** – Collected information on prices, weights and units of measure for market goods. It was administered by the Supervisor.

The household member information and household consumption expenditure questionnaire were programmed into one CAPI Application, while the rest were programmed separately. The summary of each module by number of questions is presented in **Table 3.**

Table 3: Summary of the Questionnaires by Module

Questionnaire	Module Name	No. of questions	No. of roster items
Individual	Section A-1: Household Identification	22	
Individual	Section B: Household Member Roster and Demographics	16	
Individual	Section B1: Migration	18	
Individual	Section B1: Emigration	10	
Individual	Section C: Education	27	
Individual	Section D: Labour	95	
Individual	Section E: Health	23	
Individual	Section E2: Fertility	16	
Individual	Section E3: Disability	12	
Individual	Section E4: Deaths In The Household	10	
Individual	Section F: Child Health And Anthropometry	4	
Individual	Section G: ICT Service	18	
Individual	Section H: Domestic Tourism	8	
Individual	Section I1: Credit	5	
Individual	Section I2: Loans	12	
Individual	Section I3: Financial Inclusion	7	
Household	Section J: Housing	39	
Household	Section K: Water, Sanitation and Energy Use	85	19
Household	Section L: Land Ownership and Tenure	20	
Household	Section M: Agriculture Biodiversity	32	
Household	Section N: Agriculture Output and Inputs	43	20
Household	Section O: Livestock	64	21
Household	Section P: Household Enterprises	30	
Household	Section Q1: Transfers Received	21	7
Household	Section Q2: Transfers Sent	11	2
Household	Section Q3: Social Security	6	
Household	Section R: Other Income	3	15
Household	Section S: Recent Shocks To Household Welfare	9	29
Household	Section T: Climate Change	18	10
Household	Section U: Food Security - Last 12 Months	19	
Household	Section V: Household Justice Module	16	7
Household	Section W: Household ICT	12	
Household	Section YA: Within-Household Food Consumption & Expenditure	14	237
Household	Section YB: Meals Taken Outside The Household	22	
Household	Section YC: Within-Household Beverage Consumption & Expenditure	4	23
Household	Section YD: Non-Food Expenditures - 7 Days Recall Period	9	11
Household	Section YE: Non-Food Expenditures - 1 Month Recall Period	11	93
Household	Section YF: Non-Food (Health) Expenditures - 1 Month Recall Period	11	69
Household	Section YG: Non-Food Expenditures - 6 Month Recall Period	9	192
Household	Section YH: Transport- Long Distance - 6 Month Recall Period	14	6
Household	Section YI: Semi Durables Expenditures	9	160
Household	Section YJ: Household Expenditure on Education In The Last 12 Months	12	40
Household	Section YK: Durables Expenditures	7	89
Community	Section A-1: Community Identification	12	
Community	Section CB: Roster Of Informants	6	
Community	Section CC: Basic Characteristics Of The Community	6	
Community	Section CD: Access To Basic Services	47	
Community	Section CE: Economic Activities	15	
Community	Section CF: Agriculture	25	
Community	Section CG: Changes In Community Welfare	44	
Community	Section CH: Security & Safety	18	

CHAPTER 3: RECRUITMENT OF THE PILOT SURVEY PERSONNEL

Due to the limited personnel required for the pilot survey, interviewers were chosen from the KNBS field staff. The selected team was assigned various roles such as field interviewers, cluster mobilizers, mobilization supervisors, and data collection supervisors for the pilot survey. Selection criteria were based on the staff's expertise and experience in field data collection activities. Each team was carefully chosen to work in one of the 12 counties selected for the pilot study. Additionally, three interviewers were designated as reserves in case of illness or if one of the interviewers was unable to continue with the survey. The composition of the field teams is presented in the Table 4

Table 4: Composition of Teams for the KIHBS Pilot Survey

S/no	County	Clusters	Teams	Data Collection		mobilization and publicity	
				Interviewers	Supervisors	Mobilization officer	Mobilzation Supervisors
1	Murang'a	2	1	2	1	1	1
2	Mombasa	2	1	2	1	1	1
3	Kwale	2	1	2	1	1	1
4	Marsabit	2	1	2	1	1	1
5	Makueni	2	1	2	1	1	1
6	Nairobi	4	2	4	2	1	1
7	Garissa	2	1	2	1	1	1
8	Turkana	2	1	2	1	1	1
9	Migori	2	1	2	1	1	1
10	Nakuru	2	1	2	1	1	1
11	Uasin Gishu	2	1	2	1	1	1
12	Kakamega	2	1	2	1	1	1
	Total	26	13	26	13	12	12

CHAPTER 4: TRAINING OF PILOT SURVEY PERSONNEL

4.1 Introduction

The pilot training survey was conducted for two groups - one group was trained on the questionnaire to carry out the data collection, and the other group was trained on cluster mobilization and publicity. The training utilized various methods, including presentations, hands-on CAPI practice, group practices, and field practice. The time allocated for each module in the questionnaire training was monitored. The training covered all the necessary aspects, including field practice. The data collection team had the opportunity to test the questionnaire and their skills during the field practice. The programme also included a CAPI exam and dedicated time for debriefing and addressing logistical and administrative concerns.

4.2 Training of Trainers

For proper implementation and accuracy of data collected, it was imperative to have a team of trainers who are subject specialist in the various modules in the KIBHS questionnaires. In addition, some trainers were assigned roles of training the cluster mobilization teams. The training of trainers of trainers were coordinated by the 2024/25 KIHBS secretariat.

During the training of trainers, the participants revised survey tools (PAPI/CAPI), manuals, developed presentations and training programme. A total of 30 trainers were trained during the four days.

4.3 Training of interviewers and mobilizers

4.3.1 Training Duration

The training for the data collection team lasted 22 days, while the mobilization and publicity team underwent a 5-day training, both of which ran concurrently. However, the 22-day training period was insufficient to effectively cover all the necessary modules comprehensively. Additionally, only one day was allocated for field practice, during which enumerators were instructed to complete just a section of the questionnaire, as one day was not enough to cover the entire questionnaire. This resulted in not meeting the field practice objectives sufficiently that included testing the questionnaire flow and interviewers grasp of concepts and techniques for the survey.

The mobilization and publicity team were trained on how to conduct survey publicity, advocacy and administering of the community questionnaire. Filed practice on the community questionnaire was not conducted.

4.3.2 Questionnaire modules

The time allocated to each module in the training program varied depending on its content and the overall length of the training. For instance, the sections on demography and labour required were

allocated. The actual time spent on each module was noted, and adjustments will be made to the program for the main training accordingly.

Certain modules were reported as challenging to teach, particularly those involving complex concepts or extensive data collection procedures. Feedback from the training highlighted difficulties in engaging participants during these modules, indicating a need for more interactive teaching methods and subject matter specialists to teach the modules.

4.3.3 CAPI Training

The training was designed such that PAPI training preceded CAPI training for each module. However, in some modules, the trainers delivered the content first and conducted the CAPI training later after other modules have been done, which often confused trainees due to the large amount of material covered in between. It is recommended to conduct the PAPI training followed by immediate CAPI practice for each module. This issue arose mainly because the same trainer handled both the PAPI and the CAPI sessions. To address this, increasing the number of CAPI trainers would help prevent trainer fatigue and ensure more effective learning.

4.3.4 Participant Feedback

Participants expressed a desire for more hands-on practice and real-life scenarios to better understand the survey tools and methodologies. Suggestions included incorporating more group activities and discussions to enhance learning outcomes and the number of field practice days to at least two or three days. Feedback from participants indicated that the training duration was too short

4.3.5 Observations during training

Some key challenges faced during the training and suggestions for improvement:

i. Participant Feedback:

   a. Some participants felt that the training pace was too fast, and they would have benefited from having more time for practice and to ask questions.
   b. Participants suggested that the training materials could be made more interactive and engaging to improve knowledge retention, the manuals and the questionnaires were not printed.

ii. Innovative Suggestions:

   a. The mobilization and publicity team could have been included in the field practice to better prepare the households for the upcoming data collection.

b. Incorporating more hands-on activities and role-playing exercises could help participants better understand their roles and responsibilities.

iii. The subject matter experts were involved in other activities hence the trainings for some modules were conducted by the available staff.

iv. Increasing the number of CAPI trainers would help prevent trainer fatigue and ensure more effective learning

CHAPTER 5: PILOT CAPI AND SERVER

5.1 CAPI System

The time taken to program a questionnaire depends on the complexity of the survey tool, the software platform used, and the programmers' experiences. The first draft of CAPI was developed in 3 weeks and was tested during a capacity building workshop in January 2024.

The system was further updated using the outputs from the workshop which was held in May 2024 on the finalization of tools. In June 2024 a capacity building was held for Trainers in a workshop where major updates were made to the PAPI questionnaire which demanded further updating of the CAPI system. The frequent changes in the questionnaire posed several challenges to programmers due to changes in questions' flow, skip logic or validations. To mitigate this problem, the CAPI programmers are required to go through each question for validation after every review of the questionnaires.

The testing of the CAPI questionnaires was done to ensure the logic or structure of all question paths and validations are in line with PAPI. The designer has an automatic compiler that verifies question logic without manual input which helps to identify any anomalies in the system.

The Non-standard units (NSU) survey was done in April 2024, whose outputs were the building blocks of the consumption module since it provided the non-standard units of every food item in the module, the sizes and photos of different sizes, and weights of every size to form the conversion factors and their prices. Another task was to get the calories of every item since in the system we had to calculate the calories consumed per person per day as a variable to monitor outliers during data collection. The photobook generated was used by interviewers as a reference book to show the respondents the different sizes of the items they purchased or/and consumed and choose their right size. All those generated files were uploaded to the system.

The bugs in the system identified during the training of the data collection team were corrected but only partially due to time constraints and fatigue of the programmers, who had less than a week to deal with them.

5.2 Server Management

The server was configured during the Training of Trainers (ToT) workshop by the ICT Division. The headquarters users were given their logins and created supervisors and interviewers and further created assignments based on the ToT updated questionnaire. The field practice was conducted in Nakuru county where 260 assignments for the pilot were created in readiness of data collection for the pilot study.

Data monitoring in the server and in Stata using the Sursol package was conducted throughout the data collection period with daily reports being sent to the supervisors and enumerators to correct the errors

identified. We could not send the errors on the first week, the time taken to complete the questionnaire, so the data had not hit the server. A mechanism has been formulated on how the data can reach the server daily without disrupting the data collection exercise, whereby monitoring can be done per module to ensure teams get the errors while still in their current cluster.

To ensure that errors identified by field monitors are addressed promptly and efficiently, a structured communication flow mechanism will be implemented. Monitors will document issues in real-time using predefined templates, specifying the household affected and type of error (e.g., incorrect skip logic, missing responses, or data entry mistakes) and the specific question or module affected. These reports will be relayed immediately through a centralized communication platform, such as WhatsApp groups, ensuring that both field supervisors and enumerators receive clear and actionable instructions. This direct and streamlined reporting will minimize delays in resolving issues and help avoid further inconsistencies during data collection.

Additionally, the mechanism will establish escalation procedures for complex or recurring issues. If an enumerator encountered difficulties in resolving a respondent error, it was escalated to the supervisor, coordinator, programming team, or survey designers for immediate troubleshooting. Scheduled check-in meetings between monitors and field teams will provide opportunities to review common errors, share feedback, and reinforce best practices. This continuous feedback loop ensures that errors are not only corrected promptly but also that enumerators gain the necessary understanding to prevent similar issues from recurring, ultimately improving the quality and consistency of the data collected.

CHAPTER 6: LOGISTICS

Logistics presented here constitute vehicles and supplies in terms of material that were to facilitate the activity for both the data collection team and mobilization team. The supplies were *Samsung* tablets and power banks, photo reference books, measuring boards, weighing scales, reflectors, flyers and brochures.

6.1 Distribution of Materials from HQ to the Field

The measuring cylinders were obtained from KNBS County offices, where those with surplus cylinders were asked to redistribute them to counties experiencing shortages. A similar approach was taken for the measuring boards. However, new weighing scales were procured for redistribution during training, which did not occur as planned. This led to delays in issuance from HQ to the field, disrupting data collection activities.

Most staff members had their KNBS staff IDs readily available. Reflector jackets were distributed on time to teams for both mobilization and data collection efforts. Photo reference books were provided digitally and uploaded onto the devices of data collection enumerators rather than being distributed as physical copies. Tablets and power banks were issued during training, and any defective devices were replaced during the actual data collection.

6.2 Fuel Management

Fuel funds were allocated at a flat rate to all twelve regions and managed by KNBS. Two options were available for fuel utilization; first, there was an option to use fuel cards preloaded according to the budget while secondly, use of cash issued to supervisors as imprest. The second option was utilized due to delays in preparing vehicles for fieldwork. This mode of fuelling was communicated in a timely manner.

6.3 Transport Arrangements

Transport for fieldwork was adequately planned during the training of the data collection team. However, during actual fieldwork, teams had to use borrowed vehicles, as KNBS vehicles were engaged in other ongoing activities.

CHAPTER 7: DATA COLLECTION

7.1 Distribution of Pilot Counties and Cycle Options Used

The Pilot data collection started on July 16th and continued for 14 days until July 30th, 2024. Twelve (12) counties were sampled for pilot survey and each of the 12 counties was selected based on certain considerations. Each county had one data collection team except Nairobi county which had 2 teams to make a total of 13 teams. A field team consisted of a Driver, 2 research assistants and a supervisor. Each team was allocated two clusters and covered a total of 20 households during the pilot days. A team stayed in the cluster for 7 days and then proceeded to the next cluster for another 7 days.

Various aspects of administering the questionnaire were tested, especially the purchase diary, counties/clusters were split into two groups for purposes of administering the purchase diary. To test the 1st options, 6 counties namely, Kwale, Marsabit, Nairobi, Turkana, Nakuru and Uasin Gishu were grouped together. Two research assistants covered one cluster for 7 days. Each research assistant covered 5 households. During the 1st day in the cluster, the research assistant covered demographics and food consumption together with the purchase diary. The interviewer would then proceed with the rest of the questionnaire. The second set of the diary was running for two days, while the third set was to run for 3 days.

The second group of 7 counties namely; Muran'ga, Mombasa, Makueni, Nairobi, Garissa, Migori and Kakamega applied the second option. Each research assistant covered his/her own cluster for the 14 days and administered the diary. The diary was dropped on the second day and started filling in the third day. The second set of diaries was dropped on the 4th day and filling started on the fifth day as the 1st diary set was collected. The 3rd set of diaries was dropped on the sixth day and collected the 2nd diary on the seventh day. The 3rd diary filling will start on the 7th day. The last day for filling out the 3rd diary was on the ninth day and picked the diaries on the tenth day. As they were giving respondents time to fill the diaries, the rest of the modules were also administered. Table 5 outlines the distribution of these options.

Table 5: Distribution of Pilot Counties by Cycle Options Used

S/no	County	Clusters	Teams	Interviewers	Supervisors	Option 1	Option 2
						7 days diary	14 days Diary
1	Muran'ga	2	1	2	1		1
2	Mombasa	2	1	2	1		1
3	Kwale	2	1	2	1	1	
4	Marsabit	2	1	2	1	1	
5	Makueni	2	1	2	1		1
6	Nairobi	4	2	4	2	1	1
7	Garissa	2	1	2	1		1
8	Wajir	2	1	2	1	1	
9	Migori	2	1	2	1		1
10	Nakuru	2	1	2	1	1	
11	Uasin Gishu	2	1	2	1	1	
12	Kakamega	2	1	2	1		1
	Total	**26**	**13**	**26**	**13**	**6**	**7**

7.2 Cluster Mobilization

Cluster mobilization team consisted of two members. There were 12 mobilization team in 12 pilot counties; Murang'a, Mombasa, Kwale, Marsabit, Makueni, Nairobi, Turkana, Garissa, Migori, Nakuru, Uasin Gishu and Kakamega. The fieldwork began on of July 8th while the data collection followed eight days later. The plan was, the Publicity and mobilization to happen a day before data collection but since there was a delay, data collection began 8 days after publicity had started. Mobilizers were to visit the clusters/EAs one day earlier before data collection team to mobilize people in the cluster and then do sensitization for pilot data collection. Due to the delay in starting the fieldwork, sensitization was done eight days before the actual data collection and the administration of community questionnaire was a done before actual data collection started.

7.3 Fieldwork Supervision

The supervisors were in charge of a team. During cluster boundary identification, the supervisor was accompanying the teams to ensure the boundaries were identified correctly. The supervisor ensured all households were visited in the cluster and intervened whenever the interviewer faced some resistance from the respondents. Assignments were shared with the supervisor for clusters and it was the work of the supervisor to assign work to research assistants. Once data is collected, it was the work of the supervisor to check the data quality before submitting the data to the server. Other roles included administrative issues and logistics in their counties

7.4 Fieldwork Coordination

The coordinator's role was to ensure the smooth progress of data collection by overseeing workflow, fostering team cohesion, and managing logistical arrangements. Coordinators were assigned different teams for monitoring purposes and had limited field visits, while also being part of the data quality teams. They maintained constant communication with field teams to track data collection progress and were responsible for addressing any issues reported by supervisors during fieldwork, ensuring the overall quality of the exercise in their areas of monitoring.

CHAPTER 8: ROLES OF PERSONNEL DURING KIHBS PILOT FIELDWORK

8.1 Research Assistants (Interviewers)

The Research Assistants were the key personnel in the KIHBS pilot data collection exercise. They reported to field supervisors and their roles and responsibilities included;

a) Locating of sampled households with assistance of the supervisor
b) Conducting the interviews to the targeted respondents and completing the questionnaire(s)
c) Checking the completed questionnaires to ensure that all questions were asked and responses neatly and legibly recorded
d) Arranging for interviews and call-backs
e) Maintaining confidentiality of the interviews and the data collected
f) Responsible for allocated survey materials and equipment
g) Preparing debriefing notes for the supervisor
h) Forwarding to the supervisor all completed questionnaires and relevant notes.
i) Interview and capture household information using computer aided personal interview (CAPI) approach.
j) Assist the supervisor in conducting the community questionnaire

8.2 Cluster Mobilisers

1. To prepare cluster mobilization work plans based on the data collection schedules;
2. To plan and schedule for courtesy calls for the County Commissioners, Chief Officers of Health and County Directors of Health so as to brief them about the Survey as well as plans of publicity and advocacy for the survey;
3. To make arrangements through the County Commissioners on when to schedule the sensitization meetings/sessions at the sub-county level for NGAOs
4. To ensure that the official list of NGAOs is provided through the County Commissioner's office;
5. To sensitize the NGAOs on their roles pertaining to the survey.
6. To make arrangements through the County Commissioners on when and where sensitization for the residents/public will be conducted for the selected clusters;
   NB: The venue for the Public Barazas should be strategically located within the selected cluster

7. To sensitize the residents/public within the selected clusters about the survey at the cluster level.
8. To ensure that the distribution of the survey sensitization materials (brochures, posters etc) is adequately done

9. To facilitate payment of allowances to the cluster mobilization personnel based on the approved rates and the breakdown of the budget that shall be provided;
10. To ensure the respective Payment Schedules and Attendance Sheets are signed and stamped
11. To ensure that the imprest issued to them for the exercise is surrendered within 7 days after completion of the exercise
12. To prepare a CMO's Report at the end of the end of the activity

8.3 Field Supervisor

The supervisor was responsible for the field team. The supervisors were identified and appointed from among KNBS staff. The roles and responsibilities included:

a) Ensuring that sampled households are correctly identified and enumerated in an appropriate manner
b) Providing leadership and inculcating team spirit
c) Monitoring the quality of the data collected
d) Managing the vehicle(s) assigned to the team
e) Responsible for all accessories and other survey equipment
f) Ensuring data entry is well captured
g) Ensuring the packaging and delivery of completed questionnaires to the headquarter is as per set guidelines
h) Ensuring that control records of the work are properly filled
i) Preparing weekly briefs and monthly reports to the coordinator.
j) Assisting in the editing of completed questionnaires
k) Transferring captured data to the headquarters
l) Administering the market and community questionnaire

8.4 County Statistical Officers (CSOs)

The County Statistical Officers (CSOs) also played a key role in the KIHBS pilot survey within their counties. Their roles and responsibilities included;

i. Assisting teams to correctly identify the clusters and the sampled households;
ii. Assisting in administrative and logistical issues;
iii. Act as liaison person between the survey team and the County Administration;
iv. Assisting in quality control of the data collected by conducting random checks on RA visits to the household;
v. Providing monthly briefs to the coordinators

8.5 National Government Administrative Officers (NGAOs)

The NGAOs played a key role during data collection. These included the County Commissioners, Deputy County Commissioners, Assistant County Commissioners, chiefs, assistant chiefs, police officers and village elders. Their roles and responsibilities included:

i. Assist in undertaking publicity/advocacy in the selected cluster to ensure public awareness and cooperation;
ii. Provide general security to the data collection teams;
iii. Assist in identifying the selected clusters and their boundaries;

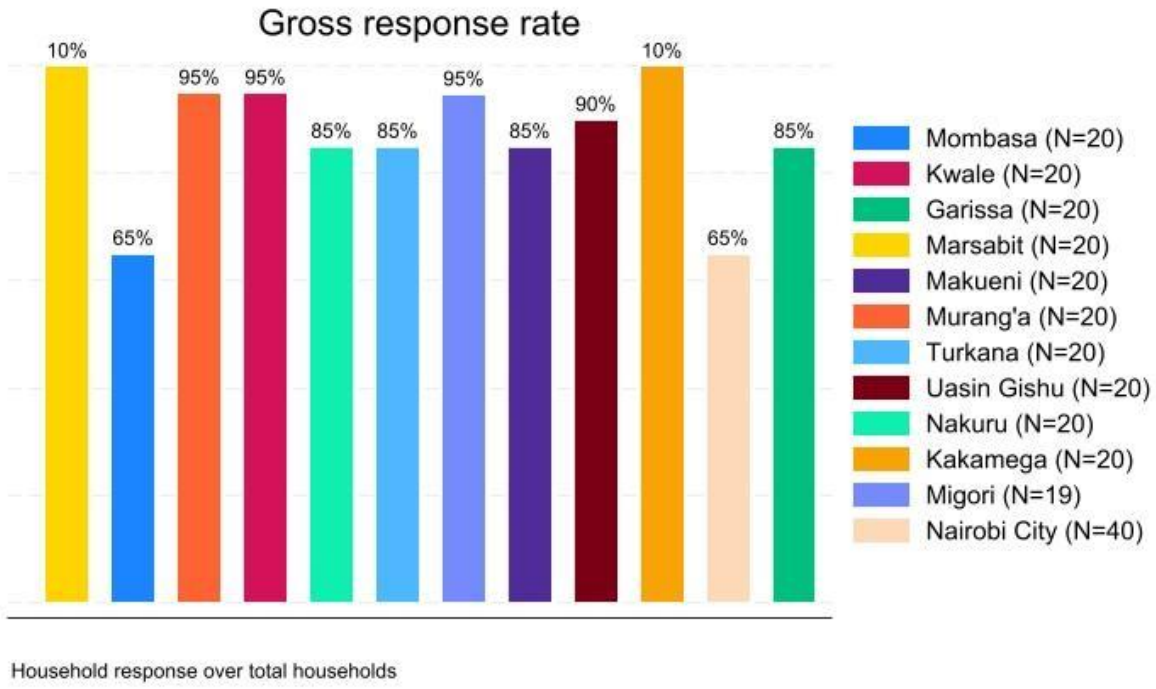
CHAPTER 9: RESULTS FROM THE FIELD: DATA ANALYSIS

9.1 Overview, Survey Timing and Enumerators' Performance

9.1.1 Net and Gross Response Rate

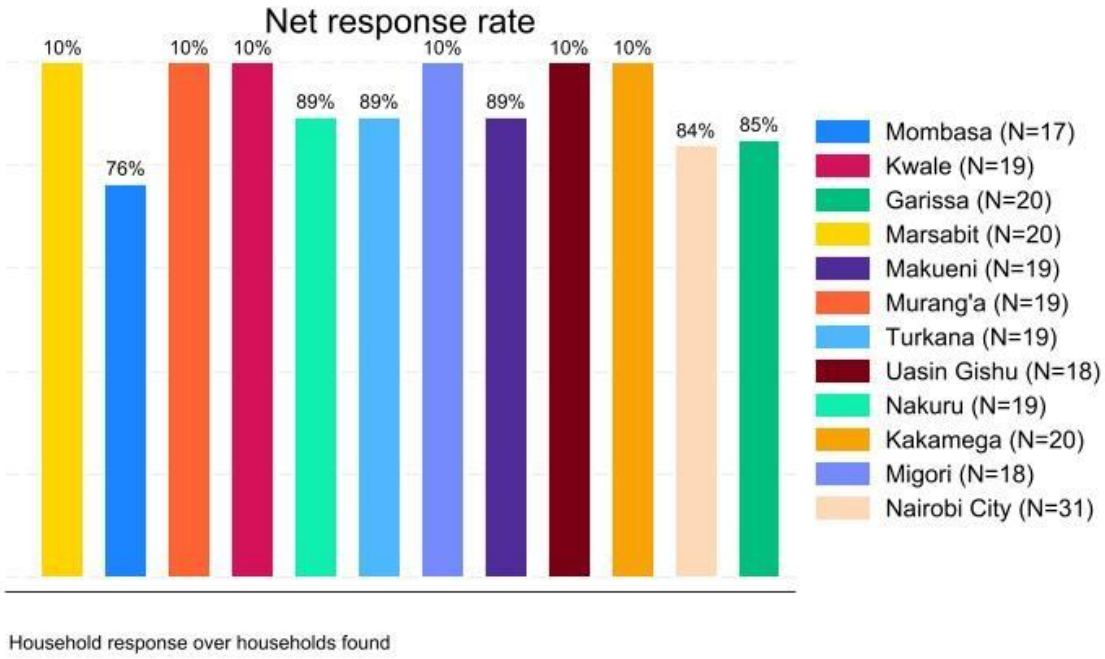
The gross response rate is obtained by dividing the household that responded by the total sample. There is a wide variation in response rates across counties, indicating differences in household participation and possibly regional engagement efforts. Counties like Marsabit, Kakamega, Kwale, Murang'a and Migori had very successful household responses (90% and above); these counties likely achieved very good data collection and household participation. In turn, Mombasa and Nairobi had significantly low participation, indicating challenges in reaching households or low engagement. The differences in response rates could reflect various factors such as geographical challenges, socio-economic factors, or the effectiveness of mobilization and data collection efforts in different counties.

Figure 9.1: Gross Response Rate



The net response rate is obtained by dividing the households that responded by eligible households (i.e. either household found with a competent respondent, no household member at home or no competent respondent at home at time of visit, or Entire household absent for an extended period). Furthermore, the net response rate remains systematically lower for Nairobi and Mombasa counties, where clusters are outdated and it is difficult to find respondents due to relocation.

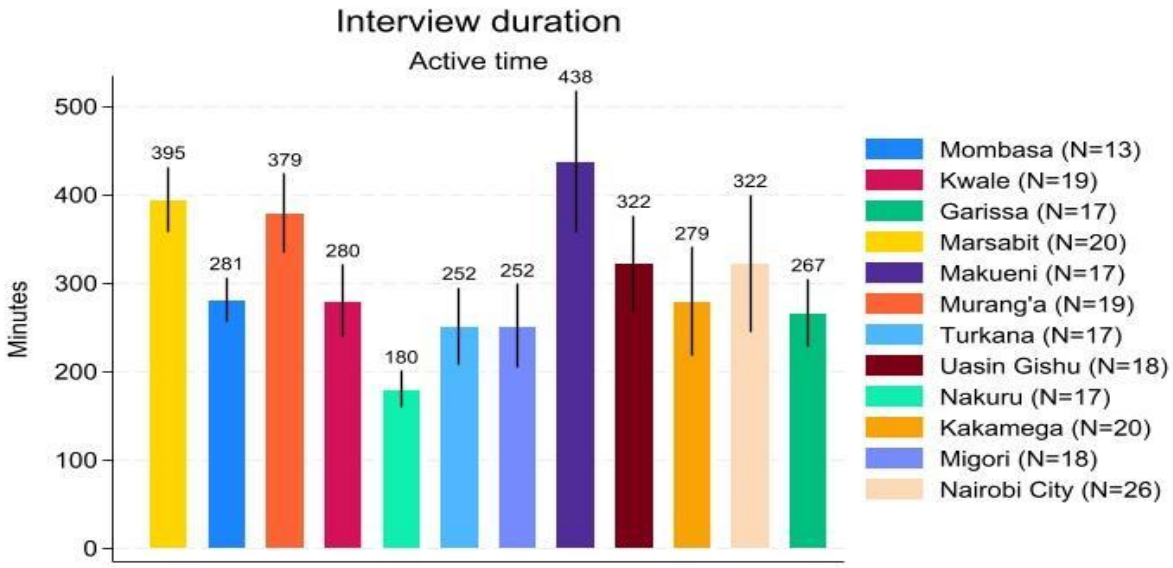
Figure 9.2: Net Response Rate



9.1.2 Overall Duration (by County and Nationally)

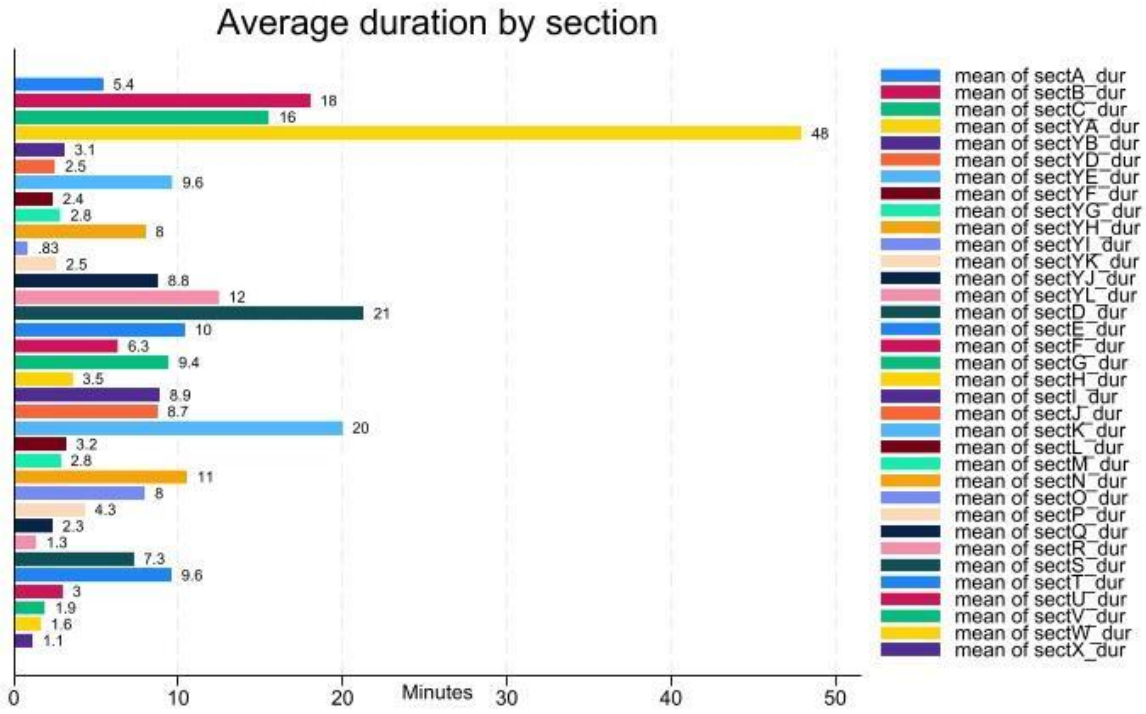
At a national level, the total time to complete one interview is 306 minutes (equivalent to 5.1 hours). At the county level, Makueni, Marsabit, and Muranga display the highest interview duration values.

Figure 9.3: Interview Duration



1) Sections Duration

Figure 9.4: The most time-demanding section is the one dedicated to capturing at-home food consumption (48 minutes on average). Other poverty



2) Food at Home Duration

Nationally, 41 minutes are required on average to complete the food consumption section. At the county level, Nairobi and Makueini show the longest duration, while Kwale and Garissa have the lowest values. Both Nairobi and Kwale durations may have been influenced by enumerator performances and field dynamics.

Figure 9.5 Food at Home Section Duration

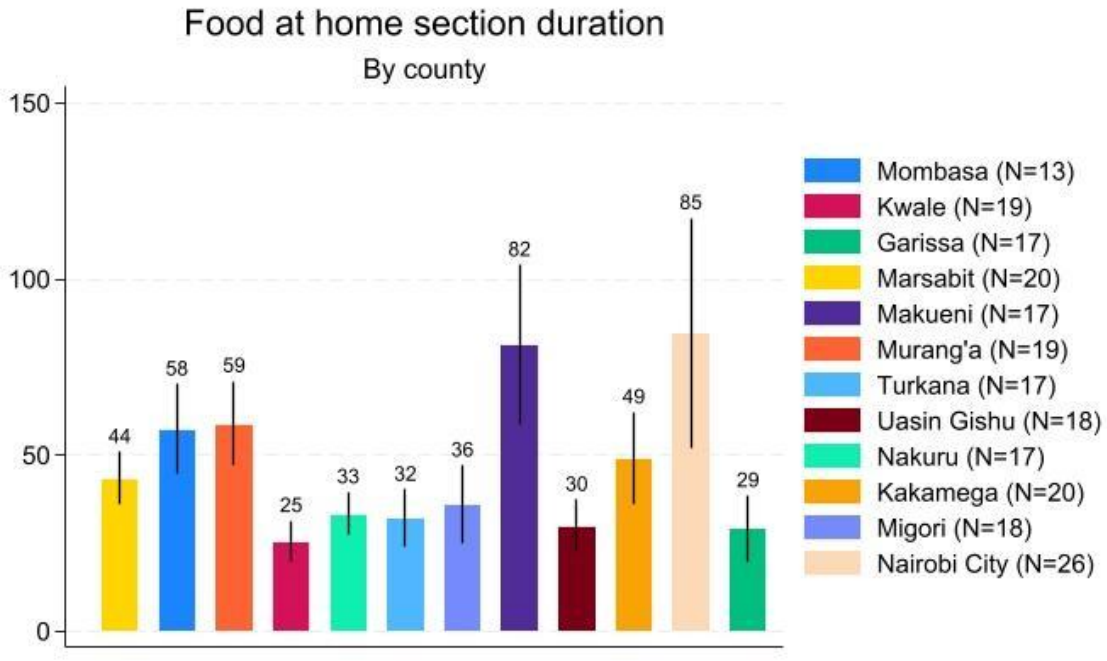


Table 9.1: Duration to Complete the Module

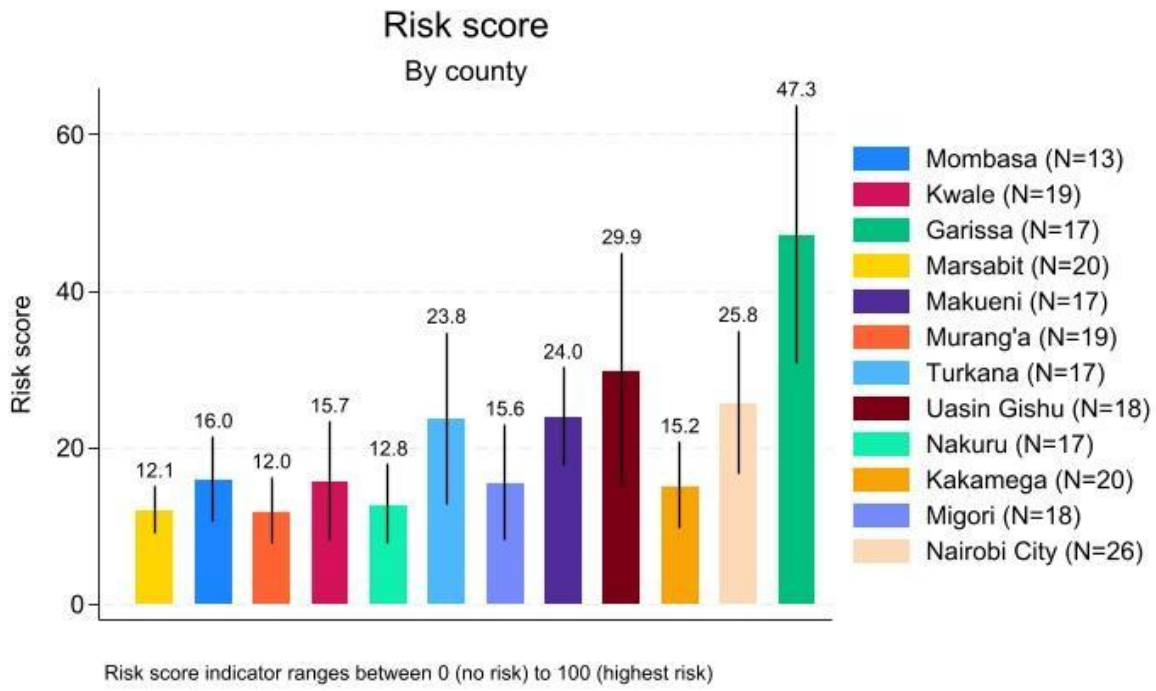
Modules	Mean	Median	Min	Max
Section A: Household Identification	5	4	1	26
Section B: Household Roster	18	14	2	120
Section C: Education	16	11	0	60
Section D: Labour	21	17	0	81
Section E: Health, Fertility, Health Insurance and Disability	10	9	0	42
Section F: Anthropometry	6	4	0	33
Section G: ICT Service by Household Individual Members	9	8	0	37
Section H: Domestic Tourism	4	3	0	21
Section I: Credit And Financial Inclusion	9	7	0	47
Section J: Housing	9	7	0	44
Section K: Water, Sanitation and Energy	20	16	0	75
Section L: Land Ownership and Tenure	3	3	0	24
Section M: Agriculture Holding	3	2	0	21
Section N: Agriculture Input and Output	11	5	0	81
Section O: Livestock	8	1	0	58
Section P: Household Enterprises	4	1	0	49
Section Q: Transfers	2	1	0	22
Section R: Other Incomes	1	1	0	10
Section S: Recent Shocks to Household Welfare	7	6	0	33
Section T: Climate Extremes: Current Experience, Past Experience & Future Expect	10	7	0	47
Section U: Food Security - Last 12 Months	3	2	0	16
Section V: Household Justice Module	2	1	0	17
Section W: Household ICT and e-Waste	2	1	0	12
Section X: Social Protection	1	1	0	16
Section YA: Within-Household Food Consumption & Expenditure Over the Past 7 Days	48	37	2	298
Section YB: Meals Taken Outside the Household During the Last 7 Days	3	2	0	24
Section YD: Frequently Purchased/Consumed Non-Food Expenditures - 7-Day Recall P	2	2	0	12
Section YE: Non-Food Expenditures 1 Month Recall Periods (P1)	10	8	0	39
Section YF: Non-Food Expenditures 1 Month Recall Periods (P2)	2	2	0	14
Section YG: Non-Food Expenditures 6-Month Recall Periods	3	2	0	27
Section YH: Non-Food Expenditures 6-Month Recall Periods	8	6	0	40
Section YI: Non-Food Expenditures 6-Month Recall Periods	1	1	0	5
Section YK: Semi-Durables Expenditure 12 Months (P1)	3	2	0	13
Section YJ: Semi-Durables Expenditure 12 Months (P2)	9	7	0	33
Section YL: Durables Expenditures	12	10	0	42
Overall Interview Duration	**306**	**288**	**68**	**873**

9.1.3 Risk (by County)

The Risk score indicates the likelihood of unwanted interviewer behaviour in individual interviews; the indicator ranges from value 0 to 100 ranges from 0 to 100. A higher score suggests that the interview exhibits more anomalies and is therefore at a greater risk of containing problematic interviewer behaviour. The anomalies are captured across an array of dimensions, including 1) Interview timing (hour of the day); 2) Geographical location such as GPS; 3) Duration of the interview and individual questions; 4) Sequence of questions asked; 5) Modifications to question answers; 6) Pauses during the interview; 7) data entropy and variation patterns.

Garissa, Uasin Gishu and Turkana counties show the highest values of the Risk score indicator; while, Muranga, Nakuru and Marsabit display the lowest average Risk score level.

Figure 9.6: Risk Score



9.2.4 Testing Food Consumption Approaches

As part of the KIHBS pilot, some alternative approaches to collecting at-home food consumption as well as expenditures on food away from home were tested. The motivation behind testing these approaches was to assess their suitability for implementation in the main KIHBS exercise.

Two different approaches were implemented for collecting at-home food consumption via recall which differ only in how respondents are asked which food items they consumed, purchased or acquired. Under the first approach referred to as the "single layer" approach, respondents were asked item-by-item whether they consumed, purchased or acquired that item in the past 7 days, proceeding down the full list of items with this question before proceeding to ask more details for items that were consumed, purchased, or acquired. This is also the approach followed in the KCHS. The alternative approach that was tested is referred to as the "2-layer" approach where respondents were first asked whether they consumed, purchased, or acquired any items within food groups (i.e., whether they consumed any cereals, meat, dairy, etc.) and then proceeding to ask whether they consumed, purchased, or acquired food items within those food groups that they reported consuming from. The potential advantage and

primary motivation for the 2-layer approach is that it will save interview time since the interviewer doesn't need to run through the full list of food items but only those items within aggregated groups that the respondent reported consuming, purchasing, or acquiring in the past 7 days. The potential disadvantage is that respondents may forget some food items when asking whether consumed food groups which, in turn, might lead to underestimated consumption expenditures. The pilot data allows us to examine both of these aspects.

The two approaches were randomly assigned to half of the sample with each household only receiving either the single-layer or 2-layer approach (but not both). The figure below presents the time interviewers used to complete the at-home food consumption module across the two approaches. As expected, the 2-layer approach takes less time to complete, saving on average 7 minutes of interviewing time across the whole sample and similar savings in both rural and urban areas. Therefore, there is a substantial benefit in terms of interview time to the 2-layer approach.

CHAPTER 10: CHALLENGES AND RECOMMENDATIONS

During the pilot survey, specific challenges emerged that require attention before the main. Key considerations include the duration of interviews, Lengthy questionnaires, procurement of materials, publicity methods, quality assurance among others.

Addressing these challenges is crucial to ensure efficiency and success of the main KIHBS survey. Below is a summary of challenges and recommendations:

Issues	Recommendation
• Lengthy questionnaire administration led to fatigue among the respondents	• Reduce the questionnaire size/ number of questions to align with key objectives of the survey
• The market questionnaire contained discrepancies in the units of measure for various items	• Review the market questionnaire to align with the food consumption modules in the main questionnaire
• Discrepancies in the CAPI questionnaires in terms of skip patterns	• CAPI programming to be done after the finalization of the PAPI questionnaire • Conduct CAPI testing in selected counties to validate the skip patterns and ensure the questionnaire flow functions as intended
• Data collection through CAPI (Survey Solution) requires the completion of the whole interview of which takes long to complete hence the supervisor has no data to review	• The survey solution system should enable partial data saving on the server to allow supervisors to review interviewers' completed work in real-time
• Downtime server due to frequent power blackouts	• A cloud server to be procured
• Lack of publicity materials such as reflector jackets, brochures and posters	• Procure the publicity materials in advance
• Inadequate anthropometry equipment (Shorr board, Weighing scale, standardization equipment and batteries)	• Procure additional anthropometry equipment
• Extended use of field vehicles over the 12 months survey period may lead to wear and tear including tire damages	• Procure a backup tires to support continuous field operations throughout the year-long survey
• Limited availability of fueling stations in some counties i.e. ASAL counties which may hinder the efficiency of field teams conducting the survey.	• Procure fuel jerry cans to carry additional fuel reserves

Issues	Recommendation
• Plan to hire 7 vehicles for the ASAL counties	• With 39 vehicles available and 8 out of service, an additional 15 vehicles are required. A cost comparison indicates that purchasing these vehicles is more economical than hiring them for the entire year.
• The varying terrains and security conditions across counties pose challenges in allocating suitable vehicles for the field team	• Allocate appropriate vehicles based on the terrain and security of the counties
• Some clusters are not accessible using vehicles	• Alternative means of transport like boats and motorbikes
• Inadequate allocation for NGAOs to cover all the cadres	• Ensure all cadres are catered for as per the existing rate • The A/chiefs to be paid during mobilization and data collection • Village elders to be paid all the days the team will be in the cluster
• During cluster mobilization some of the urban clusters lacked open spaces to conduct barazas and FGDs.The weather conditions in rural areas also posed a challenge	• Consider funds for venue (hall hires, chairs and tents) • Allocate enough funds for refreshments for participants during FGD
• Likelihood of wear and tear during the extended field survey operations was identified as an issue during the pilot survey	• Vehicles to be maintained prior to the main survey. Minor and major repairs to be undertaken regularly
• The number of days allocated for cluster mobilization and community questionnaire was inadequate	• Allocate 3 days for Cluster mobilization; First day –Courtesy call and sensitization of barazas; Second day-Focus group discussion; Third day-conduct price questionnaire
• Some of the mobilizers took longer to identify the clusters posing a challenge	• Sampling team to provide the cluster centroids to guide the mobilization team to locate the clusters(Provision of maps)
• The CAPI questionnaire was exhibiting some errors such as skip patterns, fixing the price for some items at a minimum of 100 among others	• The CAPI system to be tested in 3 counties prior to TOT to test its implementation.

These recommendations will require budget review due to the considerable changes in the entire KIHBS survey process.

ANNEXES

Questionnaire 1A- Household member information / individual

Questionnaire 1B- Household-level Information-

Questionnaire 1C- Household consumption expenditure Information-.