





GHANA ANNUAL HOUSEHOLD INCOME AND EXPENDITURE SURVEY

Quarter 4 2022 Multidimensional Poverty Report



GHANA STATISTICAL SERVICE OCTOBER 2023

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QUARTER 4 2022 MULTIDIMENSIONAL POVERTY REPORT

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ADMINISTRATIVE MAP OF GHANA



GHANA ANNUAL HOUSEHOLD INCOME AND EXPENDITURE SURVEY PUBLICATIONS

1	Quarterly Household Labour Force Report
2	Quarterly Multidimensional Poverty Report
3	Quarterly Food Insecurity Report
4	Biannual Monetary Poverty Report
5	GDP by Expenditure Quarterly Newsletter
6	GDP by Expenditure Annual Bulletin
7	GDP by Expenditure Annual Newsletter
8	Regional GDP by Expenditure Annual Bulletin
9	Annual Household Labour Force Report
10	Annual Multidimensional Poverty Report
11	Annual Food Security Report
12	Annual Monetary Poverty Report
13	Household Income and Expenditure Report
14	Poverty and Vulnerability Dynamics in Ghana
15	Technical Report

FOREWORD

The Annual Household Income and Expenditure Survey (AHIES) is the first nationally representative high-frequency household panel survey in Ghana. The AHIES is conducted to obtain quarterly and annual data on household final consumption expenditure and a wide scope of demographic, economic and welfare variables including statistics on labour, food insecurity, multidimensional poverty, and health status for research, planning and policy making.

The 2022 first to third quarters Multidimensional Poverty Report is the first to make available quarterly statistics on various dimensions of poverty: Incidence (headcount) and intensity on different aspects of living conditions (electricity, housing, assets, overcrowding, cooking fuel, toilet facility and drinking water), education (attendance, attainment, and grade progression) and health (insurance coverage and nutrition). These statistics are presented by region and type of locality.

This publication targets Government Ministries, Departments, and Agencies (MDAs); Metropolitan, Municipal and District Assemblies (MMDAs); Development Partners; Civil Society Organisations (CSOs); Private Sector; Research and Academia; and the public. The report provides relevant and timely data to support implementation and monitoring of the Coordinated Programme of Economic and Social Development Policies, 2017-2024: An Agenda for Jobs: Creating Prosperity and Equal Opportunity for All which aims, among others, to institute policies and programmes to reduce poverty in all forms and dimensions and minimise inequality among socio-economic groups and between geographical areas.

Specifically, the statistics on the different dimensions of poverty can be used to identify groups as well as populations with multiple deprivations, their characteristics and locations. This will engender the development of appropriate social protection policy intervention by the Ministry of Gender, Children and Social Protection and other relevant stakeholders.

The disaggregated statistics will also support the monitoring of progress towards SDG 1 (end poverty in all its forms everywhere), SDG 3 (ensure healthy lives and promote wellbeing for all at all ages), SDG 4 (ensure inclusive and equitable quality education and promote lifelong learning opportunities for all), SDG 10 (reduce inequality within and among countries) and SDG 11 (ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums). The report will, thus, guide the development and deployment of targeted interventions which aim to promote equity and human welfare in the country

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ACKNOWLEDGEMENTS

This report presents Ghana's Multidimensional Poverty Index (MPI), which complements the monetary poverty by providing an assessment of deprivation of basic survival needs. The complementarity engenders the deployment of diverse and targeted social and monetary interventions to deprived populations, especially the poorest of the poor. The criticality of an MPI assessment of poverty is the pervasiveness of an unequal and varied level of lack of access to basic survival needs across different population groups and, more importantly, the indispensability of public services notably on issues in the domain of health and education policy needs. The computational process draws on the Annual Household Income and Expenditure Survey (AHIES) and benchmarks the analytical procedures with internationally recognized methods of accessing multidimensional poverty.

GSS wishes to acknowledge the invaluable contribution of Francis Bright Mensah, the National Project Coordinator; Anthony Krakah; Jacqueline Anum; Patrick Adzovor; Isaac Dadson (all from GSS); and Joshua Sebu of the University of Cape Coast, for engaging with the data, analysis and report writing. The technical support and dedication of National Steering Committee in the process of conceptualization, analytical validation and report writing are very much appreciated. The AHIES MPI team is particularly grateful to the Board and Management of the Ghana Statistical Service for their invaluable support and guidance. A special appreciation goes to the World Bank, Ghana, for providing both financial and technical support.

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ABBREVIATIONS AND ACRONYMS

AF Alkire-Foster

AHIES Annual Household Income and Expenditure Survey

CAPI Computer Assisted Personal Interviewing

CPI Consumer Price Index
CSOs Civil Society Organisation
DPT Doctor of Physical Therapy

DQMT Data Quality Management Team

EA Enumeration Area

GDP Gross Domestic Product

GLSS Ghana Living Standards Survey

GSS Ghana Statistical Service

HFCE Household Final Consumption Expenditure

HISWA Harmonising and Improving Statistics in West Africa

HQ Headquarters

IBES Integrated Business Establishment Survey
IDA International Development Association
MDAs Ministries, Departments, and Agencies

MMDAs Metropolitan, Municipal and District Assemblies

MPI Multidimensional Poverty Index

NDPC National Development Planning Commission
OPHI Oxford Poverty and Human Development Index

PES Post-Enumeration Survey

PHC Population and Housing Census
PIT Project Implementation Team

SA Supervisory Area

SDGs Sustainable Development Goals

UNDP United Nations Development Program

UNICEF United Nations Children's Fund

1. OVERVIEW OF 2022 ANNUAL HOUSEHOLD INCOME AND EXPENDITURE SURVEY

1.1. Introduction

The Government of Ghana has committed itself to the development of an equitable society as espoused in development policies such as the Coordinated Programme of Economic and Social Development Policies, 2017-2024: An Agenda for Jobs: Creating Prosperity and Equal Opportunity for All; Agenda 2063: The Africa We Want; and Transforming Our World: the 2030 Agenda for Sustainable Development. All these bold national and international initiatives are meant to ensure that "nobody is left behind". In response to the need for data to support the design, implementation, and monitoring of these international and national policies, the Ghana Statistical Service (GSS) is rolling out the Annual Household Income and Expenditure Survey (AHIES).

The commonality between the rationale of AHIES and the Coordinated Programme of Economic and Social Development Policies is the identification of same areas of challenges facing the nation's development. These are economic (trends in economic growth and income, structure of the economy, poverty, and inequality) and social (child and family welfare, education and training, employment and decent work, and disability and development).

AHIES further responds to 10 out of the 17 Sustainable Development Goals (SDGs 1 to 10) and will generate disaggregated data for reporting on 23 targets under these goals. Specifically, the primary rationale of AHIES, which is to improve the measurement of Gross Domestic Product (GDP) aligns with SDG 8 (Decent Work and Economic Growth). Indeed, an improvement in the measurement of GDP will enhance the tracking of 20 SDG indicators using economic performance of the denominator. Pathways of using AHIES to improve the measurement of GDP include the use of 'near-real' time data to capture Household Final Consumption Expenditure (HFCE) instead of using estimates and to generate quarterly and sub-national estimates for GDP.

Currently, data for estimating HFCE is obtained from the Ghana Living Standards Surveys (GLSS), which in the past 24 years have been conducted in an interval of every 5 to 8 years. This means that during the inter-GLSS survey periods the HFCE is estimated as a residual term in the computation of GDP by the expenditure approach (GDP_E). This implies that the reliability of the estimates is compromised relative to changes in contemporary consumption expenditure patterns given the time lapse and the irregularity in the inter-GLSS periods. Further to this, each GLSS sampling design, is based on the thematic focus which varies across different surveys and, therefore, does not allow for derivation of sub-national GDP because the sample at the regional level is not representative for capturing household expenditure for the computation of GDP.

Other focal areas of AHIES are revision of the weights for the computation of Consumer Price Index (CPI) based on HFCE and provision of high-frequency estimates for poverty,

employment, and food insecurity. In total, AHIES has 12 thematic areas and 4,087 analysable questions, including a list of items.

The 2022 AHIES is the first in a series that will regularly provide representative panel data at the national and regional levels on expenditure, income and living conditions of households and individuals. Data collection for AHIES is quarterly and over the three-year period of January 2022 to December 2024. The panel data makes it possible to understand labour mobility, and transitions in and out of poverty and food insecurity to guide the design of targeted interventions. The sub-national statistics will inform resource allocation to reduce spatial inequalities in development. The survey is collecting data on 10,800 households in 600 enumeration areas (EA).

1.2. Objectives of AHIES

The primary objective of AHIES is to establish a longitudinal system for the collection of economic, demographic and social data to improve the measurement of GDP for the monitoring of national development. The secondary objectives are to:

- 1. Provide baseline data for the estimation of household consumption expenditure on a regular basis at regional and national levels;
- 2. Provide information for updating the country's National Accounts;
- 3. Obtain data for updating the basket of consumer goods and services for rebasing consumer price index; and
- 4. Provide quarterly and annual data on a wide range of socio-economic and demographic variables (e.g., labour force, food insecurity, employment, income).

1.3. Expected Outcomes of AHIES

The expected outcomes of AHIES are to be able to:

- 1. Measure monetary and non-monetary poverty;
- 2. Compute food insecurity;
- 3. Estimate labour statistics:
- 4. Identify labour transitions, poverty and food insecurity transitions; and
- 5. Identify households and individuals burdened with multiple socio-economic challenges (triple burdened households and individuals).

1.4. Legal Framework

Ghana Statistical Service derives its legal authority from the Statistical Service Act, 2019 (Act 1003), that mandates the Service to provide quality, relevant, accurate, and timely statistical information for the purpose of national development. Further, Section 37(1) of Act 1003 mandates GSS to conduct other censuses and surveys as may be directed by

the Governing Board. It is in line with this mandate that GSS has initiated the Annual Household Income and Expenditure Survey (AHIES), with the first conducted in 2022.

1.5. AHIES Organisational Structure

The AHIES National Project Director is the Government Statistician, assisted by the Deputy Government Statistician as Deputy National Director. The National Project Director presided over a Project Technical Committee (PTC) which was headed by a Project Technical Director who served as the Coordinator. The PTC provided strategic oversight, with the Coordinator being responsible for the day-to-day operations. The Coordinator presided over a Project Implementing Team (PIT) based at the GSS head office.

The PIT provided technical assistance in all aspects of project implementation including design of instruments and training materials, recruitment, and training, monitoring of field activities, data analysis and report writing. Regional Statisticians, who assisted with the implementation of the project in their regions, reported directly to the Coordinator. For the field data collection, a supervisor oversaw a team comprising five interviewers and a driver responsible for the team's transportation.

1.6. Finance and Logistics

The main source of funding for the AHIES is the Harmonising and Improving Statistics in West Africa (HISWA) Project (P169265), an International Development Association (IDA) package provided by the World Bank. The budget for the 2022 AHIES is six million three hundred and seventeen thousand, eight hundred and thirty-eight United States Dollars (US\$6,317,838).

The G-money Electronic Payment System (G-money) was used to facilitate the transfer of payment to field officers. The System was used because it was found to be prompt and of lower cost relative to other modes of payments.

The acquisition, storage, and deployment of logistics for training and fieldwork were coordinated by the GSS Procurement Unit, the Stores and the Project Implementation Team. The Procurement Unit was also responsible for immediately replacing defective items which led to the smooth implementation of the survey.

1.7. Publicity, Education and Advocacy

To encourage selected respondents to actively participate in the survey, AHIES utilised the Integrated Marketing Communications approach which selects the communication style based on the demographics of the respondents. This involved the use of media house engagement, F&Q flyers, and use of community communication centres.

For the community-level engagements, team supervisors scheduled advance meetings with local opinion leaders to officially inform them about the objectives of AHIES and secure their acceptance of the field officers in their communities. Opinion leaders were also sensitised on the objectives of the project to obtain the cooperation of the

community members. Interviewers were also trained to be able to communicate the objectives and relevance of AHIES to respondents at the household level.

These strategies were adopted with the aim of reducing non-response rate and promoting respondents' cooperation and active participation

1.8. Instruments and Procedures

AHIES utilised one composite questionnaire with the following modules: demographic characteristics, migration, education, health, economic activity, household food insecurity, housing, household income and expenditure, non-farm enterprise, asset ownership, remittances, and mortality. As an E-Survey, a Computer Assisted Personal Interviewing (CAPI) questionnaire was produced. However, for training purposes, a Paper Assisted Personal Interviewing (PAPI) copy was also produced. A field officers' manual was also produced for both training and the field work.

1.9. Information Technology (IT)

1.9.1. IT Operations

The AHIES, being an E-Survey, demanded the full deployment of technology in all aspects of implementation: use of interactive maps, CAPI, asset management, data transmission and storage, data quality management, data processing, and data monitoring. Electronic data capture required use of tablets programmed with the Computer Assisted Personal Interview (CAPI) application.

1.9.2. Tablet Provisioning

Tablets provisioning involved the testing and the uploading of all required content materials for the survey onto the tablets. The provisioning process involved four stages. The first involved an inventory of all tablets for the survey. The second stage, preprovisioning, involved the basic configuration such as the resetting of dates and times, checking for the required specifications and validating functionality. The third stage involved the actual provisioning of the tablets by uploading the requisite content which were the questionnaire, Field Officer's Manual, Supervisory Area (SA) and Enumeration Area (EA) maps. The final post-provisioning stage was for the labelling, preparation, and distribution of tablets to field officers.

1.9.3. Assets Retrieval

After fieldwork for the year is completed, all tablets and accessories will be retrieved from field officers and transported back to the head office. There, checks will be conducted to document whether all the tablets, with the specific labels that were deployed have been retrieved.

1.10. Map Orientation

AHIES utilised both analogue and interactive maps for field officers to identify, locate and travel within their assigned enumeration areas. The maps, with their attached

descriptive forms, provided information on localities, geographical boundaries, and other notable landmarks.

1.11. Recruitment, Training and Deployment of Teams

1.11.1. Recruitment

Qualified applicants were drawn from the Enumerators' Bureau as well as seasoned field officers which included those who took part in GLSS/IBES/PHC2021/PES. The Enumerators' Bureau is a database of certified and experienced field officers who have participated in censuses and surveys organised by GSS. The initial screening, which was done electronically, considered educational qualifications (minimum qualification of a Higher National Diploma), previous experience with data collection, districts or locality of residence, and local language(s) spoken of applicants. During the shortlisting stage, gender dimension was considered. Shortlisted applicants were invited for online interviews to further assess their suitability for the role. At least 20% of those recruits were females. The best candidates during the training were appointed as supervisors.

1.11.2. Training

There were two levels of trainings: one for the pre-test exercise and the other for the main field data collection. Training of field officers for the main field work was implemented in three phases comprising virtual and face-to-face sessions. An initial two-day virtual training was organised to introduce trainees to the survey and the economic activity module, and for the latter, with emphasis on occupation and industry classifications. This was followed by a 17-day face-to-face training, then a two-day virtual refresher training for only selected field officers. In addition, an orientation programme was organised for supervisors and team drivers before they were deployed to the field. Facilitators for the training consisted of GSS staff and subject experts.

The training involved PowerPoint presentations, discussion of the questionnaires, mock interviews, translation of questions into local languages and field practice. The AHIES Field Officer's Manual was used to guide the training.

As part of the training, a paper-based questionnaire was used for the first pre-test to assess whether the questions were comprehensible, responses were exhaustive and clear, and questions in each module flowed in a logical manner. Pre-testing of the questionnaire using Computer Assisted Personal Interviewing (CAPI) followed with data quality management guidelines to evaluate coverage and validation of real-time data from the field officers.

The pre-tests enabled the PIT to fine-tune the interviewing procedures and determine the duration of an average interview to estimate the recommended number of interviews to be completed daily by each interviewer in order to minimise respondent fatigue and to ensure data quality.

The interviewers were also educated on the Statistical Service Act (Act 1003), the legal

responsibilities of field officers and the sanctions for violating any of the stipulations of the Act.

There were four assessments to evaluate trainees comprising written assessments, field practice and observations.

Overall, 291 trainees were invited and trained for the data collection. Trainees were divided into five classes with four facilitators per class and a maximum of 60 trainees in a class.

At the end of the training, 200 interviewers, 40 supervisors and six data quality monitors were selected based on performance on class assessments (50%), field practice (30%) and class participation (20%).

1.11.3. Deployment of Teams

The selected 240 field officers were grouped into 40 teams, each comprising five interviewers, a supervisor and in addition, a driver and these teams were deployed to the field. Each team was assigned 15 clusters to complete in 33 days for each cycle. Field officers who needed to travel across water bodies were provided life jackets.

Two IT Support Officers and six Data Quality Monitors were assigned to assist all the teams for real-time data quality monitoring. Additionally, each team had a field monitor who reported on adherence to data quality procedures.

In adherence to the dictates of Act 1003, all field officers took an Oath of Secrecy to protect the confidentiality of respondents before the start of the field work.

1.12. Data Quality Management

The use of CAPI and tablets was the first data quality control mechanism. The CAPI allowed internal consistency checks and daily syncing of data for daily review and feedback during data collection by the Data quality management teams (DQMTs) at HQ. In addition, DQMT checked the data for errors, inconsistencies, missing values and duplicates. Where any challenge was identified, it was reported to the supervisor who was expected to investigate and effect the necessary correction, if need be.

1.13. Data Transmission and Storage

Dual approaches were utilised for transmission and storage of data. First, interviewers transmitted data collected daily to their supervisors via Bluetooth (horizontal approach) and to the GSS central server via internet (vertical approach). Second, supervisors transmitted data received from their interviewers to the central server at HQ via the internet. This was done to ensure back-up of data.

1.14. Quality Assurance, Monitoring and Evaluation

Quality assurance, monitoring and evaluation were integrated into every aspect of the AHIES. The structure consisted of the national monitoring team at the apex and comprised management and staff of GSS. Next was the PIT. To ensure effective

monitoring and evaluation, each PIT member was assigned several teams to monitor for the identification and resolution of challenges in a timely manner. This was followed by the regional monitoring team, made up of the Regional Statistician who supervised activities in their areas of jurisdiction. At the enumeration level were the field monitors who ensured effective data collection, reviewed daily work, investigated identified challenges and were responsible for effecting changes where the need arose.

2. MPI REPORT BACKGROUND INFORMATION

Poverty measures, until recently, focused solely on income deprivation as an assessment of the living conditions and general wellbeing of any population. Although, monetary poverty is closely associated with socioeconomic status, it is now widely recognized that poverty is multifaceted or multidimensional (Sen, 1999; Oshiro and Kan, 2014; Su-Jung, 2020).

Statistics on multidimensional poverty are essential to guide national development. It is a valuable source of information about the distribution and changes in the general wellbeing of the population for decision-makers and other stakeholders. It helps to examine its association with the multiple dimensions that deny individuals of their capabilities and dignity. Multidimensional poverty also captures overlapping deprivations faced by the poor. This aids in identifying deprived people and their location for policy interventions to enhance their quality of life. Further, apart from capturing multiple indicators, The Handbook on Poverty and Inequality states four reasons why measuring poverty through the lenses of MPI is crucial (Haughton & Khandker, 2009). These are keeping the underprivileged at the forefront of political and economic discussions, allocating development funds to areas with high rates of poverty, monitoring and assessing the success of initiatives designed to lift people out of poverty, and assessing the efficiency of institutions in the fight against poverty.

Ghana has experienced a continuous reduction in its monetary poverty over 25 years from 52.7 percent in 1991 to 23.4 percent in 2016 (GSS, 2007; 2018). Similarly, severe poverty has also declined from 9.0 percent to 4.3 percent over the same period. Nonetheless comparing with the incidence of multidimensional poverty over the same period the latter seems much higher at 45.6 percent (GSS, 2020). This implies a more deprived population through a non-monetary measure of poverty. Measuring poverty through a multidimensional process provides a more detailed exposition of the populations, which can complement monetary poverty statistics (Alkire, 2020).

The Sustainable Development Goal (SDG) 1, which aims to "End poverty in all its forms everywhere," is multidimensional in form and definition. In addition, target 1.2 aims to at least halve the incidence of men, women, and children of all ages living in poverty in all its dimensions.

As part of its agenda to end poverty and bring prosperity to its citizenry, the Government of Ghana over the years has committed to developing policies that would help achieve this. Recent policies include the Coordinated Programme of Economic and Social Development Policies, 2017-2024, An Agenda for Jobs: Creating Prosperity and Equal Opportunity for All; Livelihood Empowerment Against Poverty (LEAP); Exemption from National Health Insurance premium payment for pregnant women, indigents, persons with mental disorders, pensioners, elderly (above 70 years) and differently-abled persons.

This report presents the results of the Multidimensional Poverty Index (MPI) using the quarter one and two data from the 2022 Ghana Annual Household Income and

Expenditure Survey (AHIES). This is a nationally representative panel data covering over 10,000 households in Ghana. This current survey, for the first time in the history of Ghana, allows poverty indicators to be monitored quarterly, and the same individuals are followed, hence transitions of people in and out of poverty would be identified and tracked.

The study adopts the Alkire-Foster methodology in measuring MPI, briefly explains it, as well as provides definition of some concepts. The main highlights from the quarters one and two analyses are presented with their associated tables and charts.

Generally, measurement of MPI is country specific. Hence, dimensions and indicators used, though comparable to the 2020 Ghana MPI, may not be comparable to other countries' MPI.

3. DEFINITION OF CONCEPTS

3.1. Multidimensional Poverty Index (MPI)

People are counted as multidimensionally poor if they are deprived in one-third or more of 12 indicators (nutrition, health insurance coverage, school attendance, school attainment, school lag, cooking fuel, sanitation, drinking water, electricity, housing, assets and overcrowding). Multidimensional poverty considers the many overlapping deprivations that poor people experience and provide a more detailed exposition of the various dimensions of people's living standards to complement monetary poverty statistics.

3.2. Incidence (Who is Poor?)

Incidence is the percentage of people who are described as poor using the multidimensional poverty index. This percentage is sometimes called the headcount ratio, incidence of poverty or the poverty rate.

3.3. Intensity (How Poor Are They?)

Intensity refers to the severity or depth of poverty experienced by individuals or households. It quantifies how much worse off someone is compared to the poverty cutoff. It is also a measure of how poor the poor people are.

3.4. Censored Headcount Ratio (CHR)

The censored headcount ratio of an indicator is the percentage of the total population – or one of its subsets – who are deprived in that indicator. The weighted sum of the censored headcount ratios constitutes MPI. This means that a decrease in any deprivation of any poor person will decrease poverty as measured by the MPI. The censored headcount ratios only count a deprivation when the person who experiences it is also multidimensionally poor.

3.5. Uncensored Headcount Ratio

The "uncensored headcount ratio" of each indicator represents the proportion of the total population who are deprived in that indicator, irrespective of their poverty status: That is, the percentage of all people – poor and non-poor – who are deprived in that indicator.

3.6. MPI (Adjusted Headcount Ratio)

The MPI or adjusted headcount ratio is the product of incidence and intensity. It shows the share of possible deprivations that poor people experience. MPI ranges from zero to one, and a higher number signifies greater multidimensional poverty.

3. Composition of Poverty

The percentage contribution of an indicator shows how much it contributes to the overall MPI of a given population. It depends on both the censored headcount ratio and the weight of that indicator. This measure – often visualized as a striped bar – provides

immediately comparison of the contribution of each indicator to the MPI for different population groups within a country.

3.7. School Lag

In formal education, a school lag occurs if a child is attending school, but s/he is two or more years behind compared to the expected age/grade relationship.

4. HIGHLIGHTS OF RESULTS

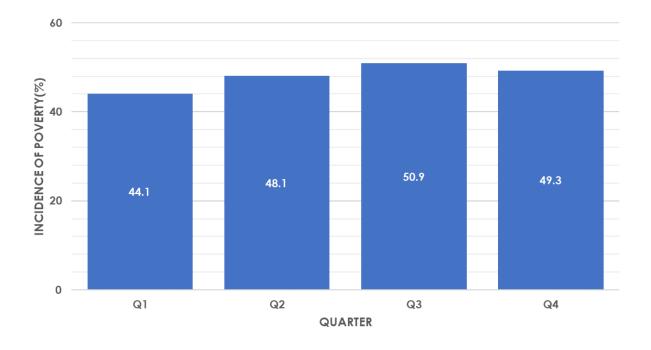
4.1. SCOPE

This section provides the highlights of multidimensional poverty report for 2022 Quarters 1-4. The highlights cover the multidimensional poverty population, contribution of dimension and indicator to multidimensional poverty and deprivation in each indicator. In addition, the statistics on multidimensional poverty transitions across the three quarters have been highlighted.

The statistics highlighted in this section are at both the aggregate and disaggregated levels. Consistent with internationally recommended guidelines, the multidimensional poverty statistics reported and highlighted are for the entire population. It is important to note that the statistics presented in this report are not seasonally adjusted. No attempt has been made to eliminate the influence of seasonal fluctuations on the poverty rates. Thus, users are encouraged to take cognizance of the fact that the multidimensional poverty statistics presented here may contain seasonal swings.

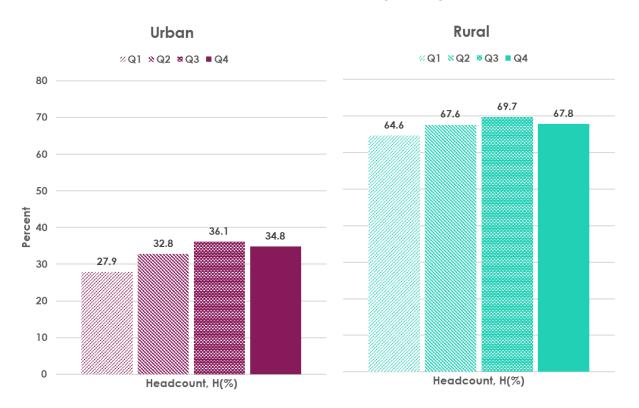
The incidence of multidimensional poverty showed a steady increase in the first three quarters in 2022 but declined marginally in quarter four. The 1.6 percentage points reduction from Q3 to Q4 represented a decline of 0.49 million people out of poverty.

FIGURE 4.1: INCIDENCE OF MULTIDIMENSIONAL POVERTY (PERCENT)



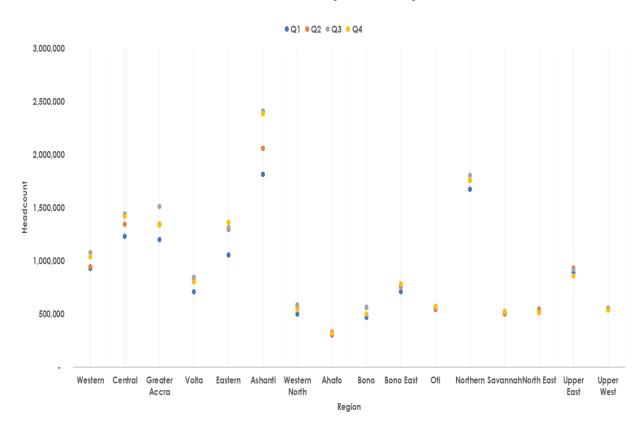
Multidimensional poverty in rural areas (67.6% in Q2, 69.7% in Q3 and 67.8% in Q4) was about twice that of urban areas in all quarters (32.8% in Q2, 36.1% in Q3 and 34.8% in Q4).

FIGURE 4.2: MULTIDIMENSIONAL POVERTY BY TYPE OF LOCALITY (PERCENT)



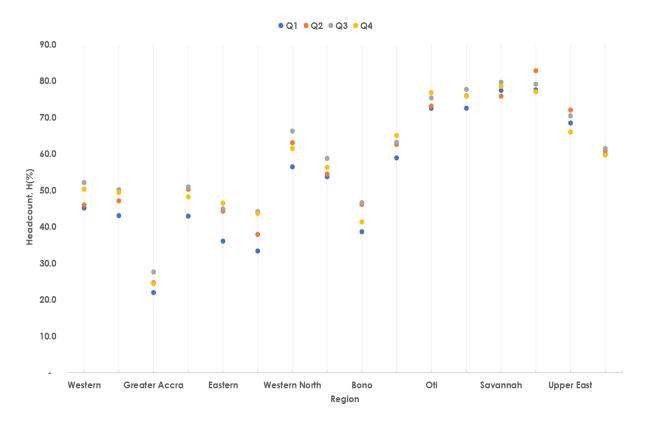
Thirteen regions recorded reductions in the multidimensionally poor population between Q3 and Q4. However, three regions recorded an increase: Eastern (from 1.32 million in Q3 to 1.36 million in Q4), Bono East (from 0.76 million in Q3 to 0.78 million in Q4), and Oti (from 0.56 million in Q3 to 0.57 million in Q3).

FIGURE 4.3: MULTIDIMENSIONALLY POOR POPULATION (HEADCOUNT) BY REGION



Eleven regions had multidimensional poverty above the national average of 49.3 percent in Q4, with Savannah recording the highest (78.6%).

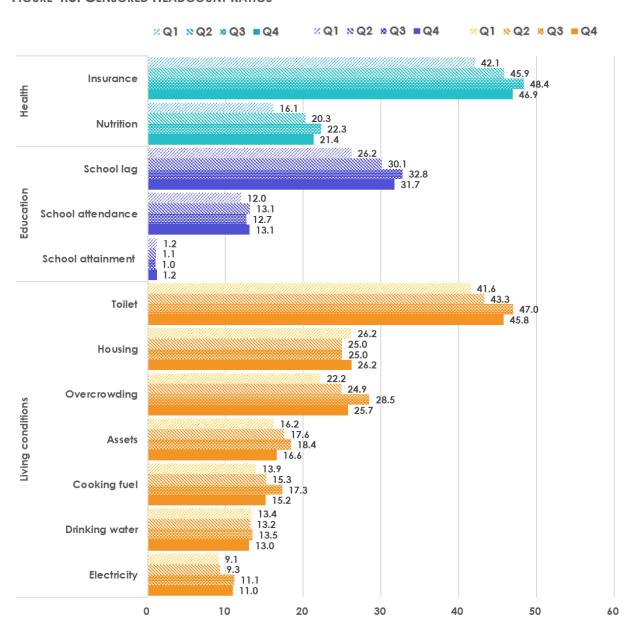
FIGURE 4.4: INCIDENCE OF MULTIDIMENSIONAL POVERTY BY REGION (PERCENT)



The increase in the quarterly intensity of poverty in all the three dimensions reduced in the fourth quarter of 2022.

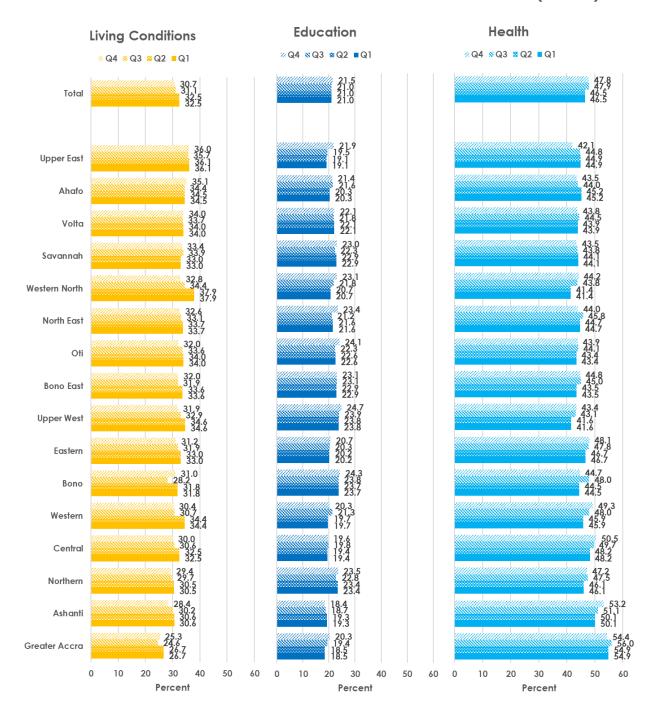
Thus the quarterly increase in the number of poor persons who did not have health insurance declined in the fourth quarter from 0.24 million in Q3 to 0.23 million in Q4.

FIGURE 4.5: CENSORED HEADCOUNT RATIOS



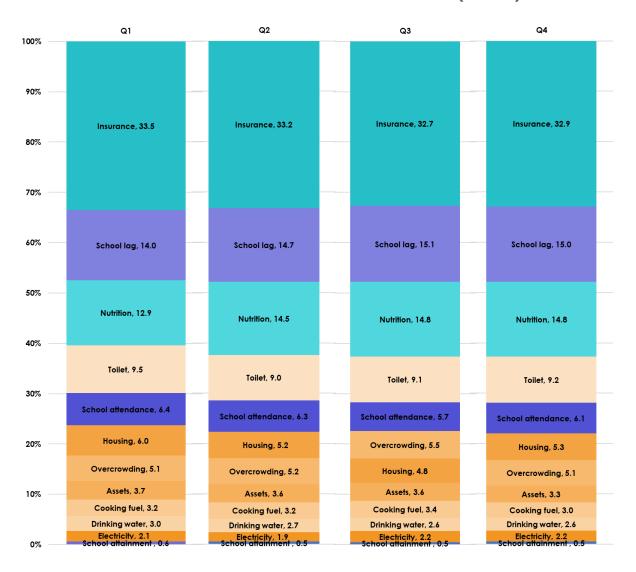
The health component was the highest contributor to the multidimensional poverty across all quarters and regions with 47 percent, followed by the Living Conditions with 31%, and the least was Education with 21%.

FIGURE 4.6: CONTRIBUTION OF DIMENSION TO MULTIDIMENSIONAL POVERTY BY REGION (PERCENT)



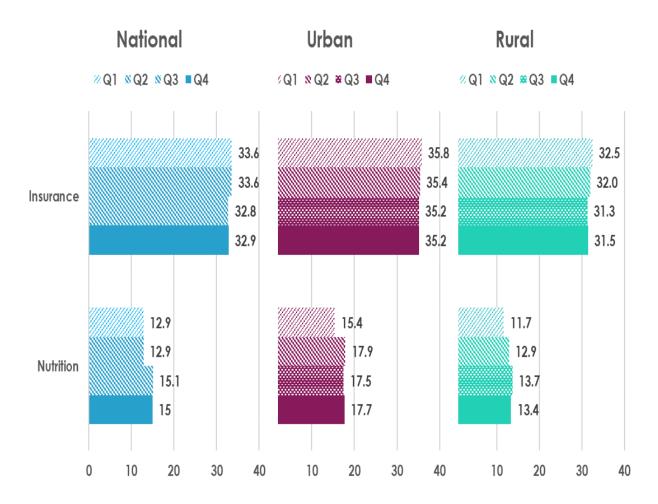
Health insurance, school lag and nutrition continued to be the three leading contributors to multidimensional poverty in Q4 with 32.9 percent, 15 percent and 14.8 percent contributions, respectively.

FIGURE 4.7: CONTRIBUTION OF INDICATOR TO MULTIDIMENSIONAL POVERTY (PERCENT)



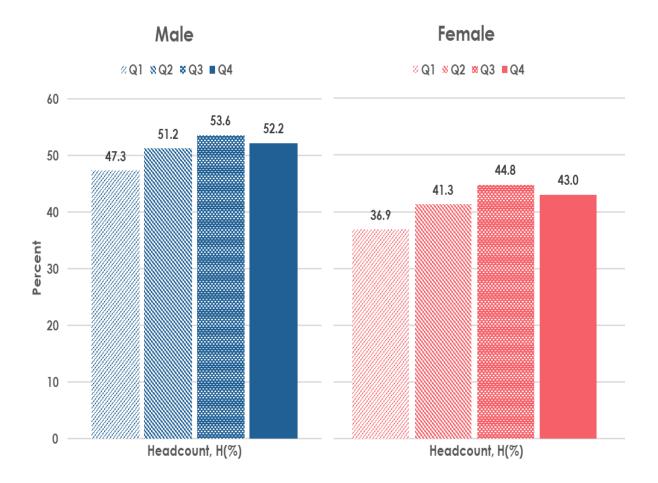
Health insurance coverage continued to contribute about a third of all the MPI indicators. Nutrition contributes a higher proportion of deprivation among under five children in urban areas (15.4% in Q1, 17.9% in Q2, 17.5% in Q3 and 17.7% in Q4) than rural (11.7% in Q1, 12.9% in Q2, 13.7% in Q3 and 13.4% in Q4).

FIGURE 4.8: CONTRIBUTION OF HEALTH DIMENSION TO POVERTY BY TYPE OF LOCALITY (PERCENT)



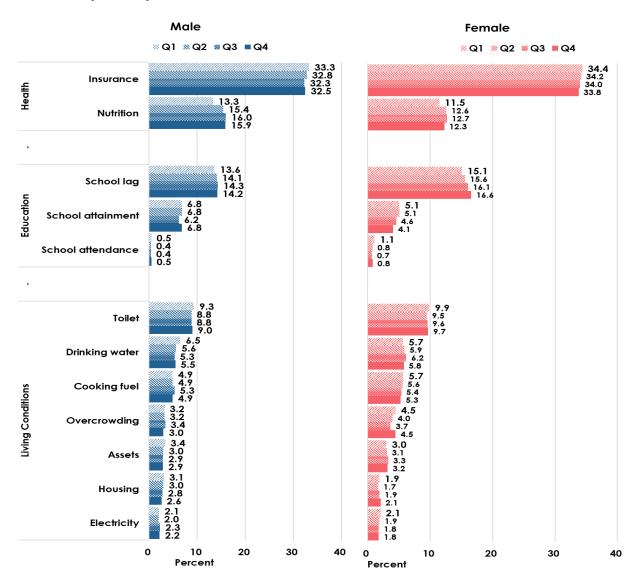
In all four quarters, multidimensional poverty was higher in male-headed households, with five in every 10 (53.6% for Q3 and 52.2% for Q4) households than in female-headed households, with four in every 10 (44.8% for Q3 and 43.0% in Q4) households.

FIGURE 4.9: MULTIDIMENSIONAL POVERTY BY SEX OF HEAD OF HOUSEHOLD (PERCENT)



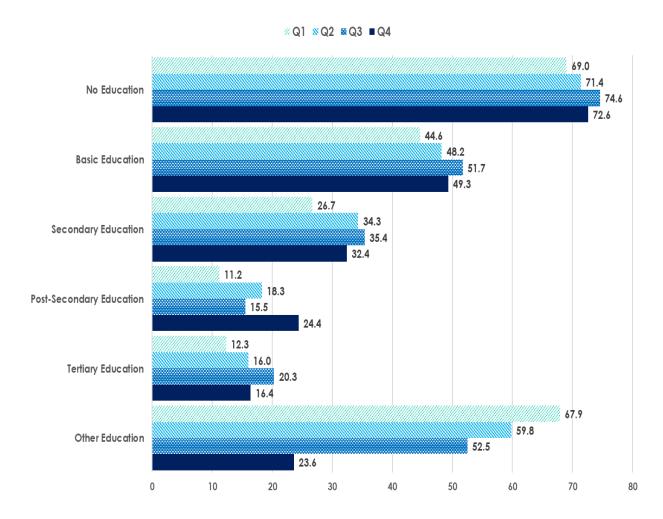
The contribution of insurance continued to be the highest factor in MPI, with about 33 percent in both male- and female-headed households across all quarters. While school lag followed with about 16 percent in female-headed households, nutrition followed that of the male-headed households, with about 14 percent across all quarters.

FIGURE 4.10: CONTRIBUTION OF INDICATOR TO MULTIDIMENSIONAL POVERTY BY SEX OF HEAD OF HOUSEHOLD (PERCENT)



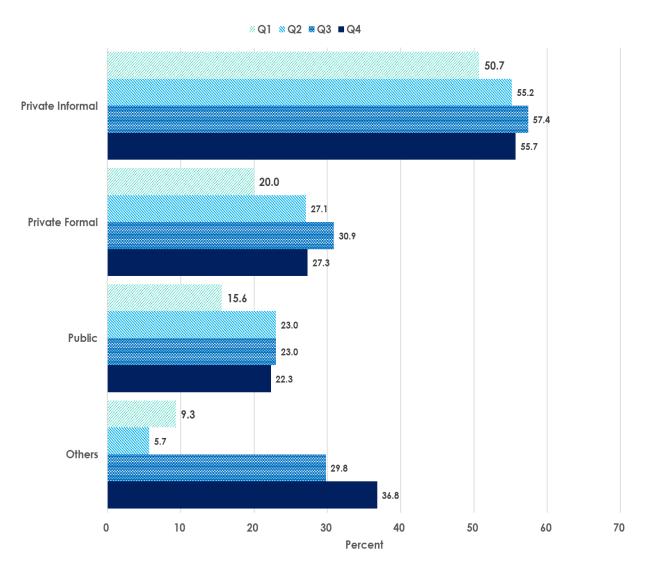
Heads of households with basic or no education continued to lead in multidimensional poverty, with 72.6 percent and 49.3 percent, respectively, which are higher than the other categories in Q4.

FIGURE 4.11: MULTIDIMENSIONAL POVERTY BY EDUCATIONAL LEVEL OF HEAD OF HOUSEHOLD (PERCENT)



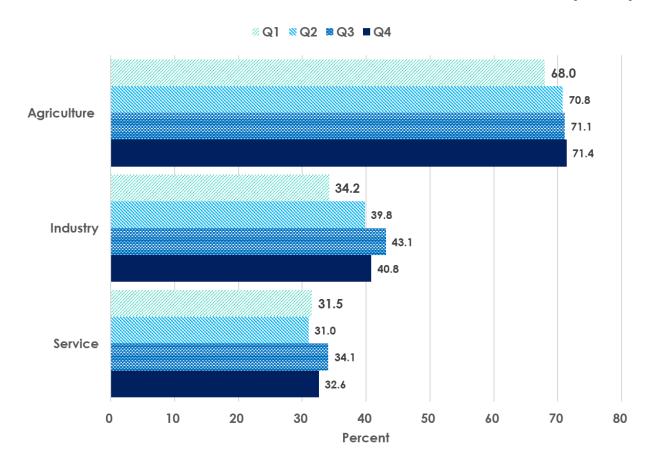
Multidimensional poverty is highest among household heads who work in the private informal sector (57.4% in Q3 and 55.7% in Q4).

FIGURE 4.12: MULTIDIMENSIONAL POVERTY BY SECTOR OF EMPLOYMENT OF HEAD OF HOUSEHOLD (PERCENT)



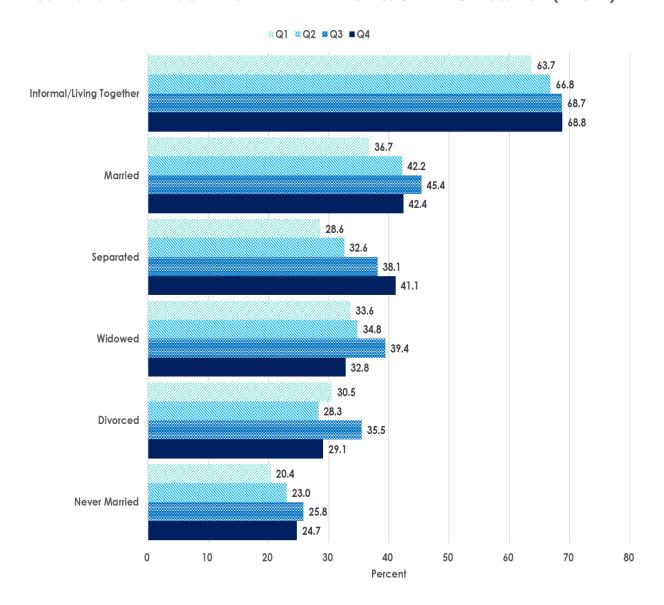
Households with heads in the agriculture sector had higher multidimensional poverty than those in the other sectors. Over six in every 10 households headed by persons in the agriculture sector were poor (68% in Q1 to 71.4% in Q4) while those in the industry and services were in the region of about 3 out of 10.

FIGURE 4.13: MULTIDIMENSIONAL POVERTY BY ECONOMIC SECTOR OF HEAD OF HOUSEHOLD (PERCENT)



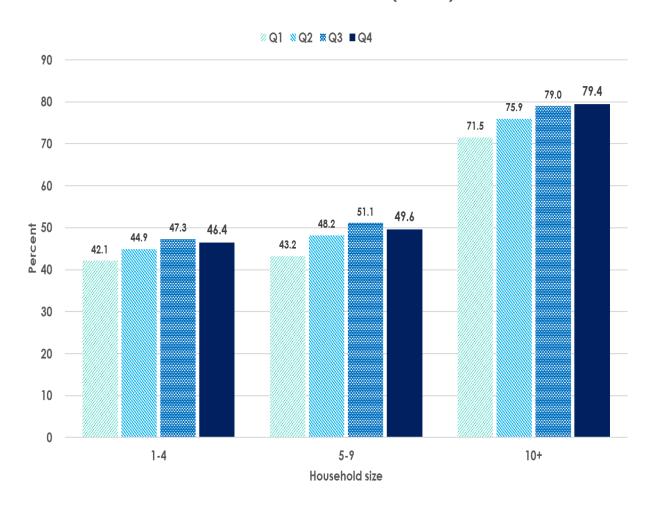
Households with heads in informal union are poorer in all quarters (63.7% in Q1 to 68.8% in Q4) compared to the other forms of marital status.

FIGURE 4.14: MULTIDIMENSIONAL POVERTY BY MARITAL STATUS OF HEAD OF HOUSEHOLD (PERCENT)



The larger the household size, the higher the multidimensional poverty in all quarters. Over seven in every 10 (79.0% in Q3 and 79.4% in Q4) households with 10 or more members were more poor than households with four or fewer household members (42.1% in Q1 to 46.4% in Q4).

FIGURE 4.15: MULTIDIMENSIONAL POVERTY BY HOUSEHOLD SIZE (PERCENT)



5. MAIN TABLES

TABLE 5.1: NATIONAL UNCENSORED AND CENSORED HEADCOUNT RATIOS

		Uncens	ored			Censo	red	
Indicator	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Electricity	10.9	10.9	12.8	12.9	9.1	9.3	11.1	11.0
Housing	35.1	31.1	31.0	33.6	26.2	25.0	25.0	26.2
Assets	27.2	28.5	27.8	26.3	16.2	17.6	18.4	16.6
Overcrowding	36.3	37.8	40.7	37.4	22.2	24.9	28.5	25.7
Cooking fuel	22.9	23.5	26.1	23.1	13.9	15.3	17.3	15.2
Drinking water	16.8	15.8	15.8	15.5	13.4	13.2	13.5	13.0
Toilet	80.2	76.9	80.0	79.1	41.5	43.3	47.0	45.8
School attendance	13.0	14.8	13.9	15.0	12.0	13.1	12.7	13.1
School attainment	1.9	1.7	1.6	2.0	1.2	1.1	1.0	1.2
School lag	34.4	38.9	43.2	42.7	26.2	30.1	32.8	31.7
Insurance	74.1	77.9	77.7	73.4	42.1	45.9	48.4	46.9
Nutrition	18.5	22.7	24.9	24.5	16.1	20.3	22.3	21.4

TABLE 5.2: INCIDENCE, INTENSITY AND MULTIDIMENSIONAL POVERTY INDEX (MPI)

	Quar	rter 1			Quar	ter Q2		Quar	ter Q3		Quar	ter Q4	
				95%			95%			95%			95%
Poverty cut-			Conf	idence		Con	fidence		Con	fidence		Cor	nfidence
off (k)	Index	Value	i	nterval	Value		interval	Value		interval	Value		interval
	MPI	0.209	0.206	0.211	0.23	0.228	0.233	0.246	0.244	0.249	0.238	0.235	0.241
k-value=33%	Headcount ratio (H, %)	44.1	43.6	44.6	48.1	47.6	48.7	50.9	50.4	51.4	49.3	48.8	49.9
	Intensity (A, %)	47.4	47.2	47.3	47.8	47.9	47.8	48.3	48.4	48.4	48.3	48.2	48.3

TABLE 5.3: MPI, HEADCOUNT RATIO AND INTENSITY BY REGION

		Quarter 1			Quarter 2			Quarter 3			Quarter 4	
Region	MPI	Headcount, H (%)	Intensity, A (%)									
National	0.209	44.10	47.39	0.230	48.10	47.82	0.246	50.90	48.33	0.238	49.3	48.3
Western	0.210	45.20	46.46	0.217	46.00	47.17	0.253	52.20	48.47	0.238	50.3	47.3
Central	0.199	43.10	46.17	0.218	47.10	46.28	0.233	50.20	46.41	0.232	49.4	47.0
Greater Accra	0.095	22.00	43.18	0.105	24.70	42.51	0.118	27.60	42.75	0.107	24.4	43.9
Volta	0.198	42.90	46.15	0.238	50.30	47.32	0.240	50.90	47.15	0.228	48.2	47.3
Eastern	0.165	36.10	45.71	0.201	44.30	45.37	0.216	44.90	48.11	0.214	46.5	46.0
Ashanti	0.150	33.40	44.91	0.177	37.90	46.70	0.207	44.20	46.83	0.207	43.7	47.4
Western North	0.279	56.50	49.38	0.315	63.10	49.92	0.334	66.30	50.38	0.308	61.5	50.1
Ahafo	0.262	53.70	48.79	0.274	54.50	50.28	0.296	58.80	50.34	0.279	56.3	49.6
Bono	0.180	38.60	46.63	0.215	46.20	46.54	0.218	46.60	46.78	0.192	41.3	46.5
Bono East	0.281	58.90	47.71	0.300	62.60	47.92	0.320	63.20	50.63	0.329	65.0	50.6
Oti	0.366	72.50	50.48	0.375	73.20	51.23	0.387	75.30	51.39	0.397	76.8	51.7
Northern	0.368	72.50	50.76	0.391	76.00	51.45	0.408	77.70	52.51	0.392	75.9	51.6
Savannah	0.391	77.50	50.45	0.392	75.80	51.72	0.413	79.60	51.88	0.410	78.6	52.2
North East	0.396	77.60	51.03	0.431	82.90	51.99	0.414	79.10	52.34	0.403	77.1	52.3
Upper East	0.341	68.50	49.78	0.361	72.00	50.14	0.342	70.50	48.51	0.321	66.0	48.6
Upper West	0.286	59.90	47.75	0.300	60.90	49.26	0.305	61.50	49.59	0.291	59.6	48.8

TABLE 5.4: MPI, HEADCOUNT RATIO, INTENSITY AND SHARE OF POOR BY REGION

		Qua	rter 1			Qua	rter 2			Qua	rter 3			Quai	rter 4	
Region	MPI	Headcount, H	Share of Poor Q1	Intensity, A	MPI	Headcount, H	Share of Poor Q2	Intensity, A	MPI	Headcount, H	Share of Poor Q2	Intensity, A	MPI	Headcount, H	Share of Poor Q2	Intensity, A
National	0.209	13,596,766	100.0	14,611,834	0.230	14,831,615	100.0	14,744,367	0.246	15,748,597	100.0	14,953,451	0.238	15,262,516	100.0	14,945,459
Western	0.210	930,858	6.8	956,810	0.217	947,643	6.4	971,827	0.253	1,078,286	6.8	1,001,183	0.238	1,039,038	6.8	977,400
Central	0.199	1,232,616	9.1	1,320,463	0.218	1,346,719	9.1	1,323,402	0.233	1,441,443	9.2	1,332,742	0.232	1,419,679	9.3	1,349,660
Greater Accra	0.095	1,200,326	8.8	2,356,011	0.105	1,347,744	9.1	2,319,545	0.118	1,511,042	9.6	2,340,671	0.107	1,337,376	8.8	2,403,576
Volta	0.198	711,771	5.2	765,757	0.238	834,342	5.6	784,847	0.240	846,893	5.4	784,521	0.228	802,166	5.3	787,236
Eastern	0.165	1,056,254	7.8	1,337,327	0.201	1,297,613	8.7	1,329,027	0.216	1,315,410	8.4	1,409,361	0.214	1,363,566	8.9	1,349,535
Ashanti	0.150	1,817,264	13.4	2,443,523	0.177	2,061,009	13.9	2,539,655	0.207	2,412,381	15.3	2,556,064	0.207	2,386,696	15.6	2,587,049
Western North	0.279	497,712	3.7	434,996	0.315	555,996	3.7	439,869	0.334	586,044	3.7	445,297	0.308	544,060	3.6	443,045
Ahafo	0.262	303,086	2.2	275,371	0.274	307,357	2.1	283,531	0.296	333,710	2.1	285,697	0.279	319,362	2.1	281,107
Bono	0.180	466,517	3.4	563,593	0.215	559,144	3.8	563,220	0.218	565,523	3.6	567,721	0.192	501,204	3.3	564,177
Bono East	0.281	708,522	5.2	573,891	0.300	753,467	5.1	576,816	0.320	762,835	4.8	611,148	0.329	784,739	5.1	611,074
Oti	0.366	541,770	4.0	377,242	0.375	544,909	3.7	381,358	0.387	561,489	3.6	383,233	0.397	573,516	3.8	386,023
Northern	0.368	1,675,237	12.3	1,172,865	0.391	1,758,528	11.9	1,190,417	0.408	1,806,039	11.5	1,220,521	0.392	1,764,489	11.6	1,200,664
Savannah	0.391	506,832	3.7	329,942	0.392	499,510	3.4	340,794	0.413	527,059	3.3	343,545	0.410	520,438	3.4	345,388
North East	0.396	511,433	3.8	336,326	0.431	548,402	3.7	343,928	0.414	525,760	3.3	347,884	0.403	512,466	3.4	347,425
Upper East	0.341	891,329	6.6	647,756	0.361	933,503	6.3	650,067	0.342	918,875	5.8	632,273	0.321	860,224	5.6	633,912
Upper West	0.286	539.906	4.0	430.359	0.300	547.460	3.7	442.832	0.305	556.433	3.5	448.706	0.291	539.510	3.5	441,977

TABLE 5.5: DEPRIVATION IN EACH INDICATOR BY REGION

Region	Electricity	Housing	Assets	Overcrowding	Cooking fuel	Drinking water	Toilet	School attendance	School attainment	School lag	Insurance	Nutrition
						Quarter 1						
Total	9.1	26.2	16.2	22.2	13.9	13.4	41.5	12	1.2	26.2	42.1	16.1
Western	1.9	24.7	19.3	30.2	20	11.6	43.6	7.3	1.1	28.8	43.7	14.1
Central	2.3	18.9	25.4	27.9	16.4	4.1	40.5	5.6	1.3	27.8	41.6	15.8
Greater Accra	1.3	3.2	9.9	14.9	3.1	1.7	18.8	3	0.7	12	21.9	9.2
Volta	9.3	24.6	17.5	21.4	14.3	13.1	41.4	8.8	1.8	28.9	39.9	12.3
Eastern	5.7	20.4	14.6	17.3	13.1	9.2	34.3	7.2	1	21.9	34.5	11.7
Ashanti	2.3	13.2	13.5	22	11.4	3.4	30.7	5.9	0.9	19.3	32.1	13
Western North	14.5	44.8	26.3	34.1	24.5	28.9	48.8	14	1.1	36.8	54.5	14.8
Ahafo	18	30.5	26.7	30.5	16.7	15.4	52.4	11.3	1.4	35.2	50.9	20.2
Bono	12.8	17.1	10.8	21.6	12.2	8.6	37.1	10.5	1	26.7	34.6	13.3
Bono East	21.8	46.1	11.3	29.3	6.7	24.6	58.2	21.3	2.2	34.5	55.1	18
Oti	18.3	56.6	21.4	32.7	33.3	31	68.3	30.8	1.2	42.4	70	25.2
Northern	18	57.1	17.7	21.6	9.2	40.9	71.3	33.8	1.4	42.4	69.4	32.3
Savannah	22.3	56.8	22.5	29.9	20.8	41.9	76.6	47.2	2.1	31.1	77	26.2
North East	13	70.8	23.8	19.3	29.1	49.1	74.9	30.2	0.9	45.9	70	36.1
Upper East	38.4	55.7	14.8	16.9	40.4	25.3	66.8	21.8	1.7	35	63.7	28.1
Upper West	29.6	54.2	18.8	20.3	15.6	17	52.1	19	2.5	39.9	55.4	15.9
						Quarter 2						
Total	9.3	25	17.6	24.9	15.3	13.2	43.3	13.1	1.1	30.1	45.9	20.3
Western	2.7	20.8	23.2	33.3	21.7	10.8	41.7	7.8	1.1	30.8	43	16.6
Central	3.7	17.1	22.3	32	16.4	6	42	6.9	1.3	30.5	46.6	18.4
Greater Accra	0.8	1.3	7.6	16	3.6	1.6	19.7	3.2	0.6	13.8	24.5	12.3
Volta	11.7	25.3	18.6	27.2	20.8	18.3	48.6	10.7	1.5	33.6	47.5	15.8

Region	Electricity	Housing	Assets	Overcrowding	Cooking fuel	Drinking water	Toilet	School attendance	School attainment	School lag	Insurance	Nutrition
Eastern	4.2	21	17.2	24.1	15.6	10.3	41.5	7.6	1.2	29.1	41	16
Ashanti	3.4	10.1	16.7	26.3	12.9	3.8	29.6	7.3	0.7	23.6	36.5	19.2
Western North	18.3	42.8	28.3	36.5	36.5	26.1	54.3	16.9	0.7	42.8	61.3	18.1
Ahafo	19.1	26.2	27.5	32.1	21.7	16.1	50.5	14.6	1.3	39	53	19.5
Bono	9.7	17.3	18.3	26.5	11.3	6.5	39.2	12.6	1.3	31.6	44.5	17.4
Bono East	18.9	45.2	11.8	28.3	9.8	26.9	60.5	23.1	2.2	38.6	58.5	21.1
Oti	20	59	21	32	33.6	29.6	68.4	31.5	1	44.1	69.8	28.9
Northern	17.4	57.7	18.4	21.3	6.3	40.2	73.5	35.5	1.1	45.7	72.1	40.4
Savannah	39.2	57.4	20.5	29	15.1	51	74.6	46.3	2	32.4	72.6	27.1
North East	18.9	74.9	27.4	17.4	41.4	40.3	77	32.4	0.9	52.7	75.5	40.7
Upper East	36.8	58.1	19.7	19.2	37.6	15.6	68.9	23.8	1.2	41.5	67.8	31.5
Upper West	15.4	51	28.8	20.3	14.8	12.6	58.6	19.8	1.7	44.1	54.9	23.8
						Quarter 3						
Total	11.1	25	18.4	28.5	17.3	13.5	47	12.7	1	32.8	48.4	22.3
Western	2.6	19.8	22.3	37.3	24	9.4	48.2	9.9	1	37.6	50.7	22.3
Central	3.2	15.8	25.6	34.8	17.8	5.5	47	5.1	1.2	35.1	50.1	19.3
Greater Accra	1	1.4	11.3	18.9	5.6	1.1	21.7	3.5	0.7	16.3	26.8	12.7
Volta	13.5	23.6	17.8	29.2	21.9	15.5	48.3	11.6	1.4	34.2	48	16.2
Eastern	6.7	21.4	17.8	23.9	19.9	12.9	42.3	8.5	1.1	29.8	42.9	19
Ashanti	5.5	12.6	21.3	30.8	17.1	3.6	40.2	6.2	0.8	27.7	42.9	20.5
Western North	19	45.3	23.5	41.8	34.1	22.8	54.5	17.1	0.9	47.5	63	24.7
Ahafo	25.8	25.8	22.1	37.5	28.3	18.7	55.8	13.7	1.3	42.7	56.1	22
Bono	15	17	10.7	31.4	7.3	5.5	42.2	12.5	0.5	33.5	43.1	19.6
Bono East	21.3	45.1	14.9	31.7	13	27	61.7	24.2	2	40.4	57.7	28.7
Oti	19.3	57.8	21	38.5	34.2	30.2	71.8	30.7	0.7	46.5	72.7	29.7
Northern	23.4	56.3	17.2	29.4	10.5	43.5	74.5	33.3	1.1	49.3	73.5	42.7
Savannah	37.7	57.1	29	32.7	13	47.2	78.1	48	2.2	32.7	77.2	31.3
North East	18.1	70.8	23.1	19.3	36	42.5	77.7	27	0.7	51.1	68.2	45.4

Region	Electricity	Housing	Assets	Overcrowding	Cooking fuel	Drinking water	Toilet	School attendance	School attainment	School lag	Insurance	Nutrition
Upper East	38.1	56.4	15	20.7	35.7	21.7	68.6	18.5	1.2	40.2	61.6	30.2
Upper West	24.4	52.3	18	25.1	19.3	13.1	58.9	22.2	1.4	42.1	56	22.9
						Quarter 4						
Total	10.95	26.21	16.63	25.75	15.19	13.01	45.77	13.12	1.17	31.73	46.93	21.36
Western	2.9	20	17.1	34.4	21.8	9.7	46.4	10.8	1	31.8	48.4	22
Central	4.2	21.9	18.4	32.8	17.7	4.7	45.9	6.3	1.2	33.3	49.2	20.9
Greater Accra	1.1	1.4	10.5	16.7	4.5	0.8	21.5	4.3	0.7	14.5	24.4	10.4
Volta	14.3	24.3	21.1	23	16.6	18.2	45.2	10.2	1.5	33.7	45.2	14.6
Eastern	7.6	21.3	16.4	23.6	19	10.4	42.1	7.6	1.2	31.1	43.1	18.8
Ashanti	5.2	13.2	18.9	28.5	16.5	3.1	38.2	6.2	1	27.1	42.8	23.4
Western North	20.9	40.5	16.7	33.8	23.5	24	52.6	17.1	1.3	45.6	58.2	23.4
Ahafo	26.7	30.2	25.1	33.5	19	17.5	53.5	11.9	1.1	40.7	52.8	19.9
Bono	14.8	21.6	9	23.6	11.8	4.9	39	11.6	0.8	29.4	37.6	13.7
Bono East	21.7	45.6	16.9	30	14.7	30.2	62.2	21.5	2.2	44.7	62.5	25.9
Oti	19.5	64.5	19.9	29.5	29.5	29.4	74.6	32.2	1.2	52.7	74	30.6
Northern	16.9	56.1	17.7	27.2	7	42.5	74.2	37.1	1	44.6	71.6	39.3
Savannah	31.9	60.1	24	29.1	14.3	50.6	78.1	47.5	2.1	35.3	77.6	29.5
North East	20.4	72.8	22	18.3	31.4	36.2	75	33.9	1.3	49.8	68.2	38.3
Upper East	39.4	59	14.8	19.9	25.8	19.7	64.3	17.2	2.1	43.9	56.9	24.2
Upper West	25.2	51	18	22.6	10.9	10.2	56.7	22.6	2.1	39.9	52.2	23.6

TABLE 5.6: CONTRIBUTION OF DIMENSION TO MPI BY REGION (PERCENT)

		Quarter 1			Quarter :	2		Quarter 3			Quarter 4	
Region	Living Conditions	Education	Health									
Total	32.5	21.0	46.5	30.7	21.4	47.9	31.1	21.0	47.9	30.7	21.5	47.8
Western	34.4	19.7	45.9	33.9	20.3	45.8	30.7	21.3	48.0	30.4	20.3	49.3
Central	32.5	19.4	48.2	30.5	19.8	49.8	30.6	19.8	49.7	30.0	19.6	50.5
Greater Accra	26.7	18.5	54.9	22.9	18.7	58.4	24.6	19.4	56.0	25.3	20.3	54.4
Volta	34.0	22.1	43.9	34.2	21.4	44.4	33.7	21.8	44.5	34.0	22.1	43.8
Eastern	33.0	20.2	46.7	31.7	21.0	47.3	31.9	20.3	47.8	31.2	20.7	48.1
Ashanti	30.6	19.3	50.1	27.7	19.8	52.5	30.2	18.7	51.1	28.4	18.4	53.2
Western North	37.9	20.7	41.4	36.7	21.3	42.0	34.4	21.8	43.8	32.8	23.1	44.2
Ahafo	34.5	20.3	45.2	33.6	22.3	44.1	34.4	21.6	44.0	35.1	21.4	43.5
Bono	31.8	23.7	44.5	28.5	23.5	48.0	28.2	23.8	48.0	31.0	24.3	44.7
Bono East	33.6	22.9	43.5	32.0	23.7	44.3	31.9	23.1	45.0	32.0	23.1	44.8
Oti	34.0	22.6	43.4	33.5	22.7	43.8	33.6	22.3	44.1	32.0	24.1	43.9
Northern	30.5	23.4	46.1	28.6	23.4	48.0	29.7	22.8	47.5	29.4	23.5	47.2
Savannah	33.0	22.9	44.1	34.8	22.8	42.4	33.9	22.3	43.8	33.4	23.0	43.5
North East	33.7	21.6	44.7	32.9	22.2	45.0	33.1	21.2	45.8	32.6	23.4	44.0
Upper East	36.1	19.1	44.9	33.7	20.4	45.8	35.7	19.5	44.8	36.0	21.9	42.1
Upper West	34.6	23.8	41.6	32.0	24.3	43.7	32.9	23.9	43.1	31.9	24.7	43.4

TABLE 5.7: CONTRIBUTION OF INDICATOR TO MULTIDIMENSIONAL POVERTY BY REGION (PERCENT)

Indicator	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Western North	Ahafo	Bono	Bono East	Oti	Northern	Savannah	North East	Upper East	Upper West	Tota
indicator	Western	Central	Accia	VOILA	Lastern	Asilaliu		Quarter 1	DOILO	Bollo East	Oli	Northern	Savailliali	NOITH East	Opper Last	Opper west	Tota
Electricity	0.4	0.6	0.7	2.2	1.6	0.7	2.5	3.3	3.4	3.7	2.4	2.3	2.7	1.6	5.4	4.9	2.1
Housing	5.6	4.5	1.6	5.9	5.9	4.2	7.7	5.5	4.5	7.8	7.4	7.4	6.9	8.5	7.8	9	6
Assets	4.4	6.1	4.8	4.2	4.2	4.2	4.5	4.8	2.9	1.9	2.8	2.3	2.7	2.9	2.1	3.1	3.7
Overcrowding	6.9	6.7	7.5	5.1	5	7	5.8	5.5	5.7	5	4.3	2.8	3.6	2.3	2.4	3.4	5.1
Cooking fuel	4.5	3.9	1.6	3.4	3.8	3.6	4.2	3.1	3.2	1.1	4.3	1.2	2.5	3.5	5.6	2.6	3.2
Drinking water	2.6	1	0.9	3.2	2.6	1.1	4.8	2.8	2.3	4.2	4	5.3	5.2	5.9	3.5	2.8	3
Toilet	9.9	9.7	9.5	9.9	9.9	9.7	8.3	9.5	9.8	9.9	8.9	9.2	9.3	9	9.3	8.7	9.5
School attendance	3.8	3.1	3.5	4.9	4.8	4.4	5.6	4.8	6.5	8.4	9.4	10.2	13.4	8.5	7.1	7.4	6.4
School attainment	0.6	0.7	0.9	1.1	0.7	0.7	0.5	0.7	0.6	0.9	0.4	0.5	0.7	0.2	0.5	1	0.6
School lag	15.3	15.5	14.2	16.2	14.7	14.3	14.7	14.9	16.5	13.7	12.8	12.8	8.9	12.9	11.4	15.5	14
Insurance	34.8	34.9	38.5	33.6	34.9	35.6	32.6	32.3	32.2	32.7	31.8	31.4	32.9	29.5	31.2	32.3	33.6
Nutrition	11.2	13.3	16.3	10.3	11.9	14.5	8.8	12.8	12.4	10.7	11.5	14.6	11.2	15.2	13.7	9.3	12.8
								Quarter 2									
Electricity	0.6	8.0	0.4	2.3	1	0.9	2.8	3.3	2.1	3	2.5	2.1	4.8	2.1	4.8	2.4	1.9
Housing	4.6	3.7	0.6	5.1	5	2.7	6.5	4.6	3.8	7.2	7.5	7	7	8.3	7.7	8.1	5.2
Assets	5.1	4.8	3.4	3.7	4.1	4.5	4.3	4.8	4.1	1.9	2.7	2.2	2.5	3	2.6	4.6	3.6
Overcrowding	7.3	7	7.2	5.5	5.7	7.1	5.5	5.6	5.9	4.5	4.1	2.6	3.5	1.8	2.5	3.2	5.2
Cooking fuel	4.8	3.6	1.6	4.2	3.7	3.5	5.5	3.8	2.5	1.6	4.3	8.0	1.8	4.6	5	2.4	3.2
Drinking water	2.4	1.3	0.8	3.7	2.4	1	3.9	2.8	1.4	4.3	3.7	4.9	6.2	4.5	2.1	2.1	2.7
Toilet School	9.1	9.2	8.9	9.7	9.8	8	8.2	8.8	8.7	9.6	8.7	8.9	9.1	8.5	9.1	9.3	9
attendance	4	3.5	3.4	5	4.2	4.6	5.9	5.9	6.5	8.6	9.3	10.1	13.1	8.4	7.3	7.3	6.3
School attainment	0.6	0.7	0.7	0.7	0.7	0.5	0.3	0.5	0.7	8.0	0.3	0.4	0.6	0.2	0.4	0.6	0.5
School lag	15.7	15.6	14.6	15.7	16.1	14.7	15.1	15.8	16.3	14.3	13.1	13	9.2	13.6	12.7	16.3	14.5
Insurance	33	35.7	38.9	33.3	34	34.4	32.4	32.3	34.5	32.5	31	30.8	30.7	29.2	31.3	30.5	33.2
Nutrition	12.8	14.1	19.5	11.1	13.3	18.1	9.6	11.8	13.5	11.7	12.8	17.2	11.5	15.8	14.5	13.2	14.7

Indicator	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Western North	Ahafo	Bono	Bono East	Oti	Northern	Savannah	North East	Upper East	Upper West	Total
mulcator	Western	Ochilai	Accia	Voita	Lastern	Asilalia		Quarter 3	Dono	Dono Last	Oti	Northern	Ouvailliail	HOITH LUST	оррег цазт	оррег незс	Total
Electricity	0.5	0.7	0.4	2.7	1.5	1.4	2.7	4.1	3.3	3.2	2.4	2.7	4.3	2.1	5.3	3.8	2.2
Housing	3.7	3.2	0.6	4.7	4.7	2.9	6.5	4.2	3.7	6.7	7.1	6.6	6.6	8.1	7.9	8.2	4.8
Assets	4.2	5.2	4.6	3.5	3.9	4.9	3.3	3.6	2.3	2.2	2.6	2	3.3	2.7	2.1	2.8	3.6
Overcrowding	7.1	7.1	7.5	5.8	5.3	7.1	6	6	6.9	4.7	4.7	3.4	3.8	2.2	2.8	3.9	5.5
Cooking fuel	4.5	3.6	2.3	4.3	4.4	3.9	4.8	4.5	1.6	1.9	4.2	1.2	1.5	4.1	5	3	3.4
Drinking water	1.8	1.2	0.4	3.1	2.8	0.8	3.3	3	1.2	4	3.7	5.1	5.4	4.9	3	2	2.6
Toilet School	9	9.6	8.8	9.6	9.3	9.2	7.8	9	9.2	9.2	8.8	8.7	9	8.9	9.6	9.2	9.1
attendance	4.3	2.4	3.3	5.4	4.4	3.3	5.7	5.1	6.4	8.4	8.8	9.1	12.9	7.2	6	8.1	5.7
School attainment	0.4	0.6	0.7	0.6	0.6	0.5	0.3	0.5	0.3	0.7	0.3	0.4	0.7	0.3	0.4	0.6	0.5
School lag	16.5	16.8	15.4	15.8	15.3	14.9	15.8	16	17.1	14	13.3	13.4	8.8	13.7	13.1	15.3	14.8
Insurance	33.3	35.8	38	33.3	33.1	34.6	31.5	31.6	33	30.1	31.3	30	31.1	27.5	30.1	30.6	32.7
Nutrition	14.7	13.8	18	11.2	14.7	16.5	12.3	12.4	15	14.9	12.8	17.4	12.6	18.3	14.7	12.5	15.1
								Quarter 4									
Indicator	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Western North	Ahafo	Bono	Bono East	Oti	Northern	Savannah	North East	Upper East	Upper West	Total
Electricity	0.6	0.9	0.5	3	1.7	1.2	3.2	4.6	3.7	3.1	2.3	2.1	3.7	2.4	5.8	4.1	2.2
Housing	4	4.5	0.6	5.1	4.7	3	6.3	5.2	5.4	6.6	7.7	6.8	7	8.6	8.8	8.4	5.2
Assets	3.4	3.8	4.7	4.4	3.6	4.3	2.6	4.3	2.2	2.4	2.4	2.2	2.8	2.6	2.2	3	3.3
Overcrowding	6.9	6.7	7.5	4.8	5.2	6.6	5.2	5.7	5.9	4.3	3.5	3.3	3.4	2.2	3	3.7	5.1
Cooking fuel	4.3	3.6	2	3.5	4.2	3.8	3.6	3.3	2.9	2.1	3.5	0.8	1.7	3.7	3.8	1.8	3
Drinking water	1.9	1	0.4	3.8	2.3	0.7	3.7	3	1.2	4.4	3.5	5.2	5.9	4.3	2.9	1.7	2.6
Toilet School	9.3	9.4	9.6	9.5	9.4	8.8	8.1	9.1	9.7	9	8.9	9	9.1	8.9	9.5	9.3	9.2
attendance	5	3	4.4	5	4	3.3	6.2	4.7	6.8	7.3	9	10.5	12.9	9.3	6	8.6	6.1
School attainment	0.5	0.6	0.7	0.7	0.6	0.5	0.5	0.4	0.5	0.7	0.3	0.3	0.6	0.4	0.7	0.8	0.5
School lag	14.8	16	15.1	16.5	16.1	14.5	16.4	16.2	17	15.1	14.8	12.7	9.6	13.7	15.2	15.3	14.8
Insurance Nutrition	33.9 15.4	35.4 15.1	38.2 16.2	33.1 10.7	33.5 14.6	34.4 18.8	31.5 12.7	31.6 11.9	32.7 11.9	31.7 13.1	31.1 12.9	30.5 16.7	31.6 12	28.2 15.8	29.5 12.6	29.9 13.5	32.9 15

TABLE 5.8: MULTIDIMENSIONAL POVERTY BY SEX OF HEAD OF HOUSEHOLD

		Quarter 1			Quarter 2			Quarter 3			Quarter 4	
	Male	Female	Total									
Н	47.30	36.9	44.1	51.2	41.3	48.1	53.6	44.8	50.9	52.2	43.0	49.3
M0	0.226	0.169	0.209	0.248	0.191	0.230	0.262	0.210	0.246	0.255	0.200	0.238
Α	47.78	45.8	47.4	48.4	46.2	47.8	48.9	46.9	48.3	48.9	46.5	48.3

TABLE 5.9: CONTRIBUTION TO MULTIDIMENSIONAL POVERTY BY SEX OF HEAD OF HOUSEHOLD

	Quarter	1	Quarter	· 2	Quarter	3	Quarter	4
	Male	Female	Male	Female	Male	Female	Male	Female
Н	74.2	25.8	73.3	26.7	72.7	27.3	73.0	27.0
M0	0.749	0.251	0.742	0.258	0.735	0.265	0.740	0.260

TABLE 5.10: CONTRIBUTION TO POVERTY BY SEX OF HEAD OF HOUSEHOLD AND DIMENSION (PERCENT)

Quarter 1			Quarter 2			Quarter 3			Quarter 4			
Dimension	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Living												
Conditions	32.4	32.9	32.5	30.4	31.7	30.7	30.9	31.8	31.1	30.2	32.2	30.7
Education	21.0	21.0	21.0	21.3	21.5	21.4	20.9	21.4	21.0	21.4	21.6	21.5
Health	46.7	46.0	46.5	48.3	46.9	47.9	48.3	46.8	47.9	48.4	46.2	47.8

TABLE 5.11: CONTRIBUTION OF INDICATOR TO MULTIDIMENSIONAL POVERTY BY SEX OF HEAD OF HOUSEHOLD (PERCENT)

		Quarter 1			Quarter 2			Quarter 3			Quarter 4	
Indicator	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Electricity	2.10	1.90	2.10	2.00	1.70	1.90	2.30	1.90	2.20	2.2	2.1	2.2
Housing	6.50	4.50	6.00	5.60	4.00	5.20	5.30	3.70	4.80	5.5	4.5	5.2
Assets	3.00	5.70	3.70	3.00	5.60	3.60	2.90	5.40	3.60	2.6	5.3	3.3
Overcrowding	4.90	5.70	5.10	4.90	5.90	5.20	5.30	6.20	5.50	4.9	5.8	5.1
Cooking fuel	3.20	3.00	3.20	3.20	3.10	3.20	3.40	3.30	3.40	3.0	3.2	3.0
Drinking water	3.40	2.10	3.00	3.00	1.90	2.70	2.90	1.80	2.60	2.9	1.8	2.6
Toilet	9.30	9.90	9.50	8.80	9.50	9.00	8.90	9.60	9.10	9.0	9.7	9.2
School attendance	6.80	5.00	6.40	6.80	5.10	6.30	6.20	4.60	5.70	6.8	4.1	6.1
School attainment	0.50	1.00	0.60	0.40	0.80	0.50	0.40	0.70	0.50	0.5	0.8	0.5
School lag	13.60	15.10	14.00	14.10	15.60	14.50	14.30	16.10	14.80	14.2	16.6	14.8
Insurance	33.30	34.40	33.60	32.80	34.20	33.20	32.30	34.00	32.80	32.5	33.9	32.9
Nutrition	13.30	11.60	12.90	15.40	12.60	14.70	16.00	12.80	15.10	15.9	12.3	15.0

TABLE 5.12: MULTIDIMENSIONAL POVERTY BY EDUCATIONAL LEVEL OF HEAD OF HOUSEHOLD

	Quarter 1		Quarter 2	2	Quarter 3	3	Quarter 4	
Educational Level	Н	MO	Н	MO	Н	M0	Н	MO
No Education	69.0	0.344	71.4	0.362	74.6	0.382	72.6	0.366
Basic Education	44.6	0.206	48.2	0.226	51.7	0.247	49.3	0.235
Secondary Education	26.7	0.120	34.3	0.155	35.4	0.160	32.4	0.149
Post-Secondary Education	11.2	0.049	18.3	0.081	15.5	0.071	24.4	0.102
Tertiary Education	12.3	0.052	16.0	0.068	20.3	0.083	16.4	0.070
Other Education	67.9	0.348	59.8	0.338	52.5	0.253	23.6	0.107
Total	44.1	0.209	48.1	0.230	50.9	0.246	49.3	0.238

TABLE 5.13: CONTRIBUTION TO MULTIDIMENSIONAL POVERTY BY EDUCATIONAL LEVEL OF HEAD OF HOUSEHOLD (PERCENT)

	Quarter 1			Quar	ter 2		Quarter 3			
Educational Level	Living Conditions	Education	Health	Living Conditions	Education	Health	Living Conditions	Education	Health	
No Education	33.50	23.40	43.10	32.30	24.20	43.50	32.60	24.00	43.40	
Basic Education	32.60	20.30	47.10	30.90	20.50	48.50	30.40	20.70	48.80	
Secondary Education	30.70	16.10	53.20	27.20	17.30	55.50	26.90	17.10	56.00	
Post-Secondary Education	29.70	20.80	49.40	22.70	19.00	58.30	27.80	18.90	53.30	
Tertiary Education	21.10	13.50	65.40	20.70	13.00	66.40	21.80	15.40	62.90	
Other Education	37.90	26.20	35.90	27.40	31.90	40.70	30.80	9.40	59.70	
Total	32.50	21.00	46.50	30.70	21.40	47.90	30.70	21.50	47.80	

TABLE 5.14: CONTRIBUTION OF INDICATOR TO MULTIDIMENSIONAL POVERTY BY EDUCATIONAL LEVEL OF HEAD OF HOUSEHOLD (PERCENT)

Indicator	No Education	Basic Education	Secondary Education	Post-Secondary Education	Tertiary Education	Other Education	Total
			Quarter	1			
Electricity	2.9	1.7	0.9	1.1	0.7	6.1	2.1
Housing	7.2	5.3	5.1	6.6	3.2	3.6	6
Assets	3.4	4	3.6	1.8	1.7	7.5	3.7
Overcrowding	3.7	6	6.2	3.3	4.7	7.5	5.1
Cooking fuel	2.8	3.5	3	3.6	2.1	0.8	3.2
Drinking water	4.2	2.4	2.2	2.4	1.6	3.2	3
Toilet	9.2	9.7	9.8	10.9	7.1	9.3	9.5
School attendance	9.2	4.9	3	6.2	3	16.1	6.4
School attainment	0.9	0.6	0.1	0	0	0	0.6
School lag	13.3	14.8	13	14.7	10.5	10.1	14
Insurance	32.1	34.4	35.3	35.7	37.1	29.6	33.6
Nutrition	11.1	12.7	17.8	13.7	28.3	6.2	12.8
			Quarter	2			
Electricity	2.9	1.5	0.8	0.7	0.4	2.1	1.9
Housing	6.8	4.5	3.6	3.6	2	3.2	5.2
Assets	3.6	3.9	3.2	1.3	1.2	6.3	3.6
Overcrowding	3.6	6	6.3	4.5	6	6.3	5.2
Cooking fuel	2.7	3.6	2.6	2.6	2.3	1.1	3.2
Drinking water	3.8	2.2	1.6	2.3	1.8	0	2.7
Toilet	8.8	9.2	9.1	7.6	6.9	8.4	9
School attendance	9.3	4.9	3.5	5.7	2.7	19.7	6.3
School attainment	0.8	0.5	0.1	0	0	0	0.5
School lag	14.2	15.2	13.8	13.3	10.2	12.2	14.5
Insurance	31.2	34	35	35.9	38	29.5	33.2
Nutrition	12.3	14.5	20.4	22.5	28.5	11.2	14.7
			Quarter				
Electricity	3.4	1.7	1.1	0.8	0.4	2.3	2.2
Housing	6.5	4.2	3.3	4.2	1.6	3.4	4.8

Indicator	No Education	Basic Education	Secondary Education	Post-Secondary Education	Tertiary Education	Other Education	Total
Assets	3.4	3.8	3.1	1.2	2.3	7.6	3.6
Overcrowding	4.1	6.2	6.5	5.6	5.6	7.6	5.5
Cooking fuel	2.8	3.8	3.2	3.5	2.9	7.6	3.4
Drinking water	3.8	2.1	1.6	2.2	1.2	2.3	2.6
Toilet	9	9.3	9.2	8.3	7.4	3.4	9.1
School attendance	8.4	4.6	3.1	5.1	3.4	8	5.7
School attainment	0.7	0.4	0.1	0	0	0	0.5
School lag	14.4	15.6	13.7	12	10	15.1	14.8
Insurance	30.7	33.5	34.4	32	38.8	34.6	32.8
Nutrition	12.8	14.8	20.7	25.1	26.4	8.1	15
			Quarter	4			
Electricity	3.3	1.7	0.9	0.4	0.7	0	2.2
Housing	6.9	4.5	3.4	3.3	2.5	6.1	5.2
Assets	3.5	3.5	2.4	2.5	1.6	10	3.3
Overcrowding	3.7	6	6.1	5.7	6.1	6.1	5.1
Cooking fuel	2.4	3.5	3.2	1.9	1.9	0	3
Drinking water	3.8	2	1.6	4.7	1.1	2	2.6
Toilet	9	9.3	9.3	9.3	7.9	6.6	9.2
School attendance	9.1	4.7	3	4.8	2.8	0	6.1
School attainment	0.8	0.5	0	0	0	0	0.5
School lag	14.1	15.6	14	14.1	12.5	9.4	14.8
Insurance	31.3	33.5	34.8	34	36	36.9	32.9
Nutrition	12.1	15.3	21.2	19.3	26.8	22.8	15
Insurance	31.3	33.5	34.8	34	36	36.9	32.9
Nutrition	12.1	15.3	21.2	19.3	26.8	22.8	15

TABLE 5.15: MULTIDIMENSIONAL POVERTY BY SECTOR OF EMPLOYMENT OF HEAD OF HOUSEHOLD

	Quarter 1		Quarter 2		Quarter	3	Quarter 4	
Sector of Employment	Н	M0	Н	M0	Н	M0	Н	MO
Public	15.6	0.068	23.0	0.100	23.0	0.088	22.3	0.094
Private Formal	20.0	0.086	27.1	0.114	30.9	0.099	27.3	0.115
Private Informal	50.7	0.243	55.2	0.268	57.4	0.137	55.7	0.271
Others	9.3	0.035	5.7	0.026	29.8	0.280	36.8	0.160
Total	44.1	0.209	48.1	0.230	50.9	0.174	49.3	0.238

TABLE 5.16: CONTRIBUTION TO MULTIDIMENSIONAL POVERTY BY SECTOR OF EMPLOYMENT OF HEAD OF HOUSEHOLD

		Quarter 1		Quarter 2	Qı	uarter 3	Quarter 4		
Sector of Employment	Н	M0	Н	M0	Н	M0	Н	M0	
Public	2.3	0.021	2.8	0.025	3.0	0.027	2.3	0.021	
Private Formal	3.5	0.032	4.1	0.036	4.2	0.038	3.5	0.030	
Private Informal	77.3	0.781	80.8	0.820	84.5	0.854	82.1	0.829	
Others	0.1	0.001	0.0	0.000	0.3	0.003	0.3	0.003	
Total	100.0	1.000	100.0	1.000	100.0	1.000	100.0	1.000	

TABLE 5.17: CONTRIBUTION OF DIMENSION TO MULTIDIMENSIONAL POVERTY BY SECTOR OF EMPLOYMENT OF HEAD OF HOUSEHOLD (PERCENT)

	Quarter 1				Quarter 2			Quarter 3			Quarter 4		
Sector of Employment	Living Conditions	Education	Health										
Public	25.90	16.8	57.4	22.7	16.1	61.2	25.0	17.7	57.3	20.8	17.8	61.4	
Private Formal	27.80	15.7	56.6	24.9	16.9	58.2	26.4	17.6	56.0	25.1	17.2	57.7	
Private Informal	32.60	21.4	45.9	31.4	21.7	46.9	31.4	21.4	47.3	31.2	21.8	47.0	
Others	28.60	7.4	63.9	25.4	38.1	36.5	32.2	23.0	44.8	23.9	25.5	50.6	
Total	32.50	21.0	46.5	30.7	21.4	47.9	31.1	21.0	47.9	30.7	21.5	47.8	

TABLE 5.18: CONTRIBUTION OF INDICATOR TO MULTIDIMENSIONAL POVERTY BY SECTOR OF EMPLOYMENT OF HEAD OF HOUSEHOLD (PERCENT)

Indicator	Public	Private Formal	Private Informal	Others	Total
		Quarter 1			
Electricity	0.8	0.6	2.2	0	2.1
Housing	2.8	3.6	6.1	3.2	6
Assets	3.1	4	3.5	7.2	3.7
Overcrowding	5.8	7	5	4	5.1
Cooking fuel	3.2	2.8	3.2	7.2	3.2
Drinking water	1.8	1.7	3.2	0	3
Toilet	8.3	8.2	9.5	7.2	9.5
School attendance	4	3	6.7	0	6.4
School attainment	0.1	0.3	0.6	0	0.6
School lag	12.7	12.3	14.2	7.4	14
Insurance	36.2	36.3	33.2	44.4	33.6
Nutrition	21.2	20.2	12.6	19.4	12.8
		Quarter 2			
Electricity	0.6	0.3	2.1	2.3	1.9
Housing	2.5	1.8	5.5	0	5.2
Assets	1.4	2.9	3.5	0	3.6
Overcrowding	5.9	7.1	5.1	10.4	5.2
Cooking fuel	3.1	2.1	3.3	2.3	3.2
Drinking water	1.6	1	2.9	0	2.7
Toilet	7.8	9.7	9.1	10.4	9
School attendance	4	2.9	6.6	19.1	6.3
School attainment	0.2	0.5	0.5	0	0.5
School lag	11.8	13.6	14.6	19.1	14.5
Insurance	35	38.4	32.6	36.4	33.2
Nutrition	26.1	19.7	14.2	0	14.7

Indicator	Public	Private Formal	Private Informal	Others	Total
		Quarter 3			
Electricity	0.5	0.8	2.3	1.2	2.2
Housing	1.8	2	5.1	3.3	4.8
Assets	3.5	2.4	3.5	4.5	3.6
Overcrowding	6.7	7.3	5.4	6.5	5.5
Cooking fuel	2.7	3	3.3	2.5	3.4
Drinking water	1.1	1.5	2.7	4.9	2.6
Toilet	8.7	9.3	9.1	9.4	9.1
School attendance	4.8	3.6	6	4	5.7
School attainment	0.1	0.5	0.4	0	0.5
School lag	12.8	13.6	15	19	14.8
Insurance	36.3	35.5	32.5	22.3	32.7
Nutrition	21	20.5	14.7	22.4	15.1
		Quarter 4			
Electricity	0.3	0.5	2.3	0	2.2
Housing	1.8	2.5	5.6	0.7	5.2
Assets	1.5	2.3	3.1	0.9	3.3
Overcrowding	5.6	6.8	5.1	6.6	5.1
Cooking fuel	2.4	3.2	3.2	4	3
Drinking water	1	0.4	2.8	4.2	2.6
Toilet	8.2	9.5	9.2	7.4	9.2
School attendance	2.7	2.6	6.1	5.2	6.1
School attainment	0.4	0.6	0.5	0	0.5
School lag	14.7	14	15.2	20.3	14.8
Insurance	36.9	37.4	32.5	33.1	32.9
Nutrition	24.5	20.3	14.5	17.5	15

TABLE 5.19: MULTIDIMENSIONAL POVERTY BY ECONOMIC SECTOR OF HEAD OF HOUSEHOLD

Economic	Quarter 1		Quarter 2		Quarter	. 3	Quarter 4	
Sector	Н	M0	Н	M0	Н	M0	Н	MO
Agriculture	68.0	0.333	70.8	0.354	71.1	0.359	71.4	0.359
Industry	34.2	0.158	39.8	0.180	43.1	0.195	40.8	0.185
Service	31.5	0.142	31.0	0.139	34.1	0.154	32.6	0.146
Total	44.1	0.209	48.1	0.230	50.9	0.246	49.3	0.238

TABLE 5.20: CONTRIBUTION TO MULTIDIMENSIONAL POVERTY BY ECONOMIC SECTOR OF HEAD OF HOUSEHOLD (PERCENT)

	Quarter	· 1	Quarter	· 2	Quarter	. 3	Quarter 4	
Economic Sector	Н	М0	Н	М0	Н	M0	Н	MO
Agriculture	52.0	0.538	55.2	0.576	57.0	0.595	55.0	0.573
Industry	11.6	0.113	11.8	0.111	12.9	0.121	12.0	0.113
Service	28.1	0.268	20.7	0.194	22.1	0.206	21.2	0.197

TABLE 5.21: CONTRIBUTION OF DIMENSION TO MULTIDIMENSIONAL POVERTY BY ECONOMIC SECTOR OF HEAD OF HOUSEHOLD (PERCENT)

		Quarter 1			Quarter 2			Quarter 3		Quarter 4			
Economic	Living			Living			Living			Living			
Sector	Conditions	Education	Health	Conditions	Education	Health	Conditions	Education	Health	Conditions	Education	Health	
Agriculture	34.0	22.0	44.0	33.2	22.3	44.5	33.2	21.8	45.0	32.7	22.8	44.6	
Industry	30.8	20.5	48.7	28.6	19.9	51.5	28.9	19.8	51.3	28.6	18.7	52.7	
Service	30.2	19.2	50.6	25.5	19.0	55.5	25.7	19.9	54.4	26.5	19.5	54.0	
Total	32.5	21.0	46.5	30.7	21.4	47.9	31.1	21.0	47.9	30.7	21.5	47.8	

TABLE 5.22: CONTRIBUTION OF INDICATOR TO MULTIDIMENSIONAL POVERTY BY ECONOMIC SECTOR OF HEAD OF HOUSEHOLD (PERCENT)

		Quarter	1			Quarter 2	2			Quarter :	3			Quarter 4	4	
Indicator	Agriculture	Industry	Service	Total	Agriculture	Industry	Service	Total	Agriculture	Industry	Service	Total	Agriculture	Industry	Service	Total
Electricity	2.6	1.7	1.3	2.1	2.6	1.1	0.7	1.9	2.8	1.3	0.7	2.2	2.9	1.3	0.8	2.2
Housing	7.2	4.2	4.6	6.0	6.6	3.0	2.5	5.2	6.3	2.5	2.2	4.8	6.8	3.0	2.7	5.2
Assets	3.2	4.0	4.0	3.7	3.4	3.9	3.1	3.6	3.3	3.8	3.5	3.6	2.9	3.2	3.3	3.3
Overcrowding	4.3	6.6	5.9	5.1	4.4	6.7	6.7	5.2	4.8	7.2	6.5	5.5	4.4	6.9	6.5	5.1
Cooking fuel	3.5	2.7	2.7	3.2	3.7	3.0	2.1	3.2	3.5	3.2	2.7	3.4	3.3	3.1	2.7	3.0
Drinking water	3.8	2.2	1.9	3.0	3.5	1.6	1.2	2.7	3.5	1.4	1.1	2.6	3.4	1.5	1.0	2.6
Toilet	9.3	9.5	9.8	9.5	9.0	9.4	9.2	9.0	9.0	9.6	9.1	9.1	9.0	9.5	9.5	9.2
School attendance	7.4	5.4	5.3	6.4	7.4	4.5	4.5	6.3	6.7	4.0	4.2	5.7	7.3	3.7	3.2	6.1
School attainment	0.6	0.5	0.4	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5
School lag	14.1	14.5	13.5	14.0	14.5	15.0	14.1	14.5	14.6	15.4	15.2	14.8	15.0	14.6	15.8	14.8
Insurance	32.6	34.9	34.7	33.6	31.6	35.2	35.5	33.2	31.2	34.9	35.4	32.7	31.3	35.1	35.7	32.9
Nutrition	11.4	13.8	15.9	12.8	12.8	16.2	20.0	14.7	13.8	16.3	18.9	15.1	13.3	17.6	18.3	15.0

TABLE 5.23: MULTIDIMENSIONAL POVERTY BY EMPLOYMENT STATUS OF HEAD OF HOUSEHOLD

	Quarter 1		Quarter 2		Quarter	3	Quarter 4		
Employment Status	Н	M0	Н	M0	Н	M0	Н	МО	
Paid employee	25.8	0.115	35.4	0.157	33.6	0.149	33.9	0.149	
Non-Agric Workers	32.0	0.145	34.8	0.159	41	0.188	38.8	0.177	
Agric Workers	69.3	0.340	71.4	0.358	71.7	0.363	70.4	0.355	
Others	39.1	0.197	56.8	0.284	29.1	0.128	35.8	0.170	
Total	44.1	0.209	48.1	0.230	50.9	0.246	49.3	0.238	

TABLE 5.24: CONTRIBUTION TO MULTIDIMENSIONAL POVERTY BY EMPLOYMENT STATUS OF HEAD OF HOUSEHOLD

	Quarter 1	Quarter 1			Quarter 3		Quarter 4	
Employment Status	Н	MO	Н	MO	Н	M0	Н	M0
Paid employee	12.9	0.121	15.50	0.144	14.6	0.134	15.0	0.136
Non-Agric Workers	19.8	0.189	18.60	0.177	19.7	0.187	18.8	0.178
Agric Workers	49.8	0.517	47.60	0.497	47.7	0.500	53.3	0.557
Others	0.6	0.006	6.10	0.064	0.2	0.002	1.2	0.011

TABLE 5.25: CONTRIBUTION OF DIMENSION TO MULTIDIMENSIONAL POVERTY BY EMPLOYMENT STATUS OF HEAD OF HOUSEHOLD (PERCENT)

	Quarter 1				Quarter 2		Quarter 3			Quarter 4		
Employment	Living			Living			Living			Living		
Status	Conditions	Education	Health									
Paid employee	28.7	17.2	54.1	26.5	18.6	54.9	27.0	17.9	55.0	27.2	16.9	56.0
Non-Agric Workers	29.9	20.5	49.6	27.1	20.9	52.0	27.1	20.9	52.0	27.8	21.2	51.0
Agric Workers	34.0	22.2	43.8	33.2	22.2	44.6	33.1	22.2	44.8	32.7	22.8	44.5
Others	31.1	17.8	51.1	34.0	21.3	44.7	20.3	17.1	62.6	27.0	18.6	54.5
Total	32.5	21.0	46.5	30.7	21.4	47.9	31.1	21.0	47.9	30.7	21.5	47.8

TABLE 5.26: CONTRIBUTION OF INDICATOR TO MULTIDIMENSIONAL POVERTY BY EMPLOYMENT STATUS OF HEAD OF HOUSEHOLD (PERCENT)

Indicator	Paid employee	Non-Agric Workers	Agric Workers	Others	Total
		Quarter 1			
Electricity	1.2	1.3	2.6	1.1	2.1
Housing	3.7	3.9	7.3	5.6	6
Assets	4	3.8	3.2	6.3	3.7
Overcrowding	6.6	6.5	4.2	5.4	5.1
Cooking fuel	2.4	2.7	3.5	1.4	3.2
Drinking water	1.5	1.9	3.9	2.1	3
Toilet	9.4	9.9	9.3	9.2	9.5
School attendance	3.8	5.4	7.5	8	6.4
School attainment	0.6	0.5	0.6	2.1	0.6
School lag	12.8	14.6	14.2	7.8	14
Insurance	35.6	34.6	32.5	31.4	33.6
Nutrition	18.4	14.9	11.2	19.6	12.8
		Quarter 2			
Electricity	0.8	0.9	2.6	3.2	1.9
Housing	2.4	3.1	6.7	6.2	5.2
Assets	3.1	3.5	3.3	4	3.6
Overcrowding	7.2	6.2	4.4	4.3	5.2
Cooking fuel	2.4	2.5	3.6	4.4	3.2
Drinking water	1.3	1.6	3.7	2.7	2.7
Toilet	9.3	9.3	8.9	9.3	9
School attendance	4.2	5.2	7.4	6.7	6.3
School attainment	0.5	0.4	0.4	0.7	0.5
School lag	14	15.3	14.4	13.9	14.5
Insurance	36.2	34.6	31.6	31.3	33.2
Nutrition	18.6	17.4	13	13.3	14.7

Indicator	Paid employee	Non-Agric Workers	Agric Workers	Others	Total
		Quarter 3			
Electricity	0.7	1	2.9	0.8	2.2
Housing	2	2.5	6.5	3.2	4.8
Assets	3.6	3.6	3.2	2.3	3.6
Overcrowding	7.3	6.6	4.7	3.8	5.5
Cooking fuel	2.9	2.9	3.4	0.6	3.4
Drinking water	1.1	1.4	3.5	0.8	2.6
Toilet	9.5	9.1	8.9	8.8	9.1
School attendance	3.8	4.5	6.9	1.1	5.7
School attainment	0.5	0.4	0.4	1.5	0.5
School lag	13.7	16	14.9	14.5	14.8
Insurance	35.7	34.9	31.1	36.5	32.7
Nutrition	19.2	17.1	13.6	26.1	15.1
		Quarter 4			
Electricity	0.8	1.3	2.9	1.3	2.2
Housing	2.8	3.1	6.8	3.5	5.2
Assets	3.1	3.3	2.9	3.8	3.3
Overcrowding	7.1	6.4	4.3	4.2	5.1
Cooking fuel	2.9	2.9	3.3	3.2	3
Drinking water	1.1	1.4	3.5	1.4	2.6
Toilet	9.6	9.5	9	9.6	9.2
School attendance	2.9	3.8	7.3	5.2	6.1
School attainment	0.5	0.4	0.5	1.1	0.5
School lag	13.5	16.9	15	12.2	14.8
Insurance	36.4	35.2	31.1	31.9	32.9
Nutrition	19.6	15.9	13.3	22.6	15

TABLE 5.27: MULTIDIMENSIONAL POVERTY BY TYPE OF LOCALITY

_	Quarter 1		Quarter 2	2	Quarter	3	Quarter 4		
Locality Type	Н	M0	Н	M0	Н	M0	Н	M0	
Urban	27.9	0.124	32.8	0.148	36.1	0.164	34.8	0.158	
Rural	64.6	0.316	67.6	0.335	69.7	0.351	67.8	0.340	
Total	44.1	0.209	48.1	0.230	50.9	0.246	49.3	0.238	

TABLE 5.28: CONTRIBUTION TO MULTIDIMENSIONAL POVERTY BY TYPE OF LOCALITY

Type of	Quarter 1		Quarter :	2	Quarter 3	3	Quarter 4	
Locality	Н	MO	Н	MO	Н	MO	Н	MO
Urban	35.4	0.333	38.1	0.359	39.8	0.373	39.5	0.371
Rural	64.6	0.667	61.9	0.641	60.2	0.627	60.5	0.629

TABLE 5.29: CONTRIBUTION OF DIMENSION TO MULTIDIMENSIONAL POVERTY BY TYPE OF LOCALITY (PERCENT)

		Quarter 1			Quarter 2			Quarter 3		Quarter 4			
Type of	Living			Living			Living			Living			
Locality	Conditions	Education	Health										
Urban	28.9	20.0	51.2	26.3	20.4	53.3	26.9	20.4	52.8	27.0	20.1	52.9	
Rural	34.3	21.5	44.2	33.2	21.9	44.9	33.6	21.4	45.0	32.9	22.3	44.8	
Total	32.5	21.0	46.5	30.7	21.4	47.9	31.1	21.0	47.9	30.7	21.5	47.8	

TABLE 5.30: CONTRIBUTION OF INDICATOR TO MULTIDIMENSIONAL POVERTY BY TYPE OF LOCALITY (PERCENT)

	Q	uarter 1		Q	uarter 2		Q	uarter 3		Q	uarter 4	
Indicator	Urban	Rural	Total									
Electricity	0.9	2.7	2.1	8.0	2.6	1.9	1.0	2.9	2.2	1.0	2.9	2.2
Housing	3.5	7.2	6.0	2.4	6.7	5.2	2.1	6.5	4.8	2.7	6.7	5.2
Assets	4.2	3.5	3.7	3.7	3.6	3.6	3.7	3.5	3.6	3.5	3.2	3.3
Overcrowding	6.6	4.3	5.1	6.5	4.4	5.2	6.7	4.8	5.5	6.3	4.4	5.1
Cooking fuel	2.5	3.5	3.2	2.4	3.6	3.2	2.8	3.7	3.4	2.7	3.2	3.0
Drinking water	1.3	3.9	3.0	1.2	3.6	2.7	1.2	3.4	2.6	1.3	3.4	2.6
Toilet	9.9	9.3	9.5	9.3	8.8	9.0	9.4	8.9	9.1	9.5	9.0	9.2
School												
attendance	4.7	7.2	6.4	4.9	7.1	6.3	4.4	6.5	5.7	4.5	7.1	6.1
School												
attainment	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.5	0.5	0.5	0.6	0.5
School lag	14.5	13.7	14.0	14.9	14.3	14.5	15.5	14.4	14.8	15.1	14.6	14.8
Insurance	35.8	32.5	33.6	35.4	32.0	33.2	35.2	31.3	32.8	35.2	31.5	32.9
Nutrition	15.4	11.7	12.9	17.9	12.9	14.7	17.5	13.7	15.1	17.7	13.4	15.0

TABLE 5.31: MULTIDIMENSIONAL POVERTY BY MARITAL STATUS OF HEAD OF HOUSEHOLD

	Quarter 1		Quarter 2		Quarter 3		Quarter 4	
Locality Type	Н	M0	Н	MO	Н	MO	Н	MO
Informal/Living Together	63.7	0.312	66.8	0.333	68.7	0.347	68.8	0.342
Married	36.7	0.170	42.2	0.197	45.4	0.215	42.4	0.201
Separated	28.6	0.129	32.6	0.147	38.1	0.171	41.1	0.185
Divorced	30.5	0.137	28.3	0.124	35.5	0.162	29.1	0.130
Widowed	33.6	0.146	34.8	0.156	39.4	0.179	32.8	0.148
Never Married	20.4	0.087	23.0	0.103	25.8	0.114	24.7	0.113
Total	44.1	0.209	48.1	0.230	50.9	0.246	49.3	0.238

TABLE 5.32: MULTIDIMENSIONAL POVERTY BY HOUSEHOLD SIZE

_	Quarter 1		Quarter 2		Quarter 3		Quarter 4	
Locality Type	Н	M0	Н	M0	Н	MO	Н	MO
One-Four Members	42.1	0.201	44.9	0.218	47.3	0.231	46.4	0.224
Five-Nine Members	43.2	0.199	48.2	0.223	51.1	0.240	49.6	0.235
At least 10 Members	71.5	0.364	75.9	0.392	79.0	0.419	79.4	0.427
Total	44.1	0.209	48.1	0.230	50.9	0.246	49.3	0.238

APPENDICES

Alkire-Foster Method for Computing MPI

The Ghana national MPI and all results presented in this report are calculated using the Alkire-Foster (AF) method for multidimensional poverty measurement. The AF method allows for the construction of individual and household level deprivation profiles that can then be used to identify multidimensionally poor people. It first identifies who is poor, by summing up the deprivations each person experiences in a weighted deprivation score, and then aggregates this information into a headline and associated information platform for a given population. There are three key features for any MPI:

- •Incidence or headcount ratio (H) which is the proportion of the population who are multidimensionally poor.
- •Intensity (A) is the share of weighted indicators multidimensionally poor people are deprived in on average.
- •MPI or adjusted headcount ratio is the multidimensional poverty index, which is the product of incidence and intensity (MPI = $H \times A$).

The MPI can be equivalently computed as the weighted sum of censored headcount ratios – which shows the percentage of people who are identified as poor and are also deprived in an indicator.

Structure of the Measure

The MPI has three dimensions – health, education and living standards – and 12 indicators. It uses the same dimensions as the global MPI produced by OPHI and UNDP but adjusts the indicators to better reflect the specific context and priorities of the country.

Unit of Identification and Analysis

The unit of identification refers to the entity that is identified as poor or non-poor – usually the individual or the household. The unit of identification for Ghana's MPI is the household, which considers information of all household members. This acknowledges intra-household caring and sharing – for example, educated household members reading for other members or multiple household members being affected by a child's malnutrition. In addition, it allows the measure to include indicators that are specific to certain age groups (for instance, school attendance).

The unit of analysis which refers to how the results are reported and analysed is the individual person. It forms the basis of the analysis and subsequently informs the reporting of results, as is customary for monetary poverty statistics. This means that, for instance, the headcount ratio is the percentage of people who are identified as poor.

Dimensions, Indicators and Deprivation Cut-offs

Ghana's MPI employs the three dimensions of the global MPI. The choice of indicators reflects the country's context within data constraints. The selection of dimensions, indicators, and cut-offs was determined through a consultative process of the Steering Committee, drawing on expertise from many different sectors and reflecting national plans and priorities. The living standards indicators are largely similar to the global MPI, with the addition of an indicator on overcrowding.

The overcrowding indicator captures households with a large number of people per sleeping room, following the UN-Habitat guidelines. The cooking fuel indicator is intended to highlight the type of fuel and cooking space used, which is linked to the quality of ventilation and respiratory health. The water indicator is based on SDG 6 and the global MPI indicator for drinking water. The assets indicator measures asset ownership, which is indicative of improvement in living standards. The deprivation cut-off (Table 2.1) is similar to that of the global MPI. The housing indicator measures the quality of materials used in the flooring and walls of the house. The cut-off is also similar to the global MPI except that it does not consider roofing materials, as these are not as relevant for identifying poverty in Ghana. The electricity indicator captures households without access to electricity. The sanitation indicator is similar to that of the global MPI and is intended to measure households with inadequate toilet facilities.

The education dimension has three indicators: school attendance, school attainment, and school lag. School attendance measures households in which a school-age child is not attending school. School attainment captures households in which no member has received an educational qualification, equivalent to completing at least basic education. The school lag variable captures pupils who are two or more years behind the grade they should be in, based on their age.

The health dimension has two indicators: nutrition and health insurance. The nutrition indicator measures children under 5 years old who are underweight or stunted or wasting. The health insurance indicator measures households in which any member is not covered by the national health insurance scheme. Members of the household may be registered with the health insurance scheme, but the indicator measures the coverage of the scheme.

TABLE 2.1: GHANA'S NATIONAL MPI - INDICATORS, DEPRIVATION CUT-OFFS AND WEIGHTS

Dimension	Indicator	Deprivation cut-off	Weight	Dimension weight
Education	School attendance	A household is deprived if any school age child is not attending school	0.111	33.3%
	Years of schooling or school attainment	A household is deprived if no member of the household older than (school age-15) has at least 9 years of education	0.111	
	School lag	A household is deprived if a child is attending school but s/he is two or more years behind compared to the expected age/grade relationship	0.111	
Health	Nutrition	A household is deprived if at least one child under 5 is underweight or stunted and wasting	0.167	
	Health insurance	A household is deprived if there is any member who has not registered for health insurance (private or national health insurance) OR is not currently covered under a health insurance		33.3%
Living conditions	Improved Toilet	A household is deprived if household uses bucket/pan, pit latrine, public toilet, no facility or other OR it is shared	0.048	
	Overcrowding	A household is deprived if 3 or more members share a bedroom	0.048	
	Water	A household is deprived if the main source of water is unprotected dug well, unprotected spring, tanker-trunk, with small cart/drum, river/stream and other OR the source of water is more than 30 minutes walking distance		
	Housing	A household is deprived if the main construction materials of outside walls is burnt bricks, mud & wattle, tarpaulin and corrugated iron sheets OR if the main floor material is earth/mud or other	0.048	33.3%
	Electricity	A household is deprived if they have no electric source	0.048	
	Cooking fuel	A household is deprived if the main source of cooking fuel is firewood or charcoal AND the kitchen is indoors	0.048	
	Asset ownership	A household is deprived if it does not own at least 2 small assets or 1 big asset (car)	0.048	

Note for Table 2.1:

- a. Stunting (length/height-for-age) refers to a child who is too short for his or her age. Stunting is the failure to grow both physically and cognitively and is the result of chronic or recurrent malnutrition.
- b. Wasting (weight-for-length/height) refers to a child who is too thin for his or her height. Wasting, or acute malnutrition, is the result of recent rapid weight loss or the failure to

gain weight. A child who is moderately or severely wasted has an increased risk of death, but treatment is possible.

c. Underweight is a composite form of undernutrition that can include elements of stunting and wasting (i.e., an underweight child can have a reduced weight for their age due to being too short for their age and/or being too thin for their height). It is measured as minus two standard deviations of their z-score from the median.

Currently, fewer ill or injured people are consulting a doctor compared to previous years, and since 2005, there has been a continual decline in those who consulted a chemist or pharmacist (GSS, 2018). The foregoing justifies the essence of the 'affordability factor' and the implementation of a national health insurance scheme which ensures that people can access minimum health care services despite their economic background. Hence, the health insurance indicator is currently a critical measure of multidimensional poverty in Ghana.

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