# RESULTS OF A MULTI-TOPIC FIELD TEST IN BELIZE 2019 

MICS METHODOLOGICAL PAPERS
Paper No. 10, 2019

## -aMICS unicef

Data and Analytics Section Division of Data, Analytics, Planning and Monitoring
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#### Abstract

About MICS

The Multiple Indicator Cluster Surveys, MICS, is one of the largest global sources of statistically sound and internationally comparable data on children and women. MICS data are gathered during face-to-face interviews in representative samples of households. The surveys are typically carried out by government organizations, with technical support from UNICEF.


Since the mid-1990s, MICS has supported more than 100 countries to produce data on a range of indicators in areas such as health, education, child protection and HIV/AIDS. MICS data can be disaggregated by numerous geographic, social and demographic characteristics.

As of 2019, five rounds of surveys have been conducted: MICS1 (1995-1999), MICS2 (1999-2004), MICS3 (20042009), MICS4 (2009-2012) and MICS5 (2012-2015). The sixth round of MICS (MICS6) is currently taking place in 2016-2020. Survey results, tools, reports, micro-data and information on the MICS programme are available at <mics.unicef.org>.

## About the MICS Methodological Papers

MICS Methodological Papers are intended to facilitate exchange of knowledge and to stimulate discussion on the methodological issues related to the collection, analysis, and dissemination of MICS data; in particular, the papers document the background methodological work undertaken for the development of new MICS indicators, modules, and analyses. The findings, interpretation and conclusions do not necessarily reflect the policies or views of UNICEF.

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Introduction

The Multiple Indicator Cluster Surveys (MICS) often tests new question modules and approaches to ensure that high quality tools are available to countries to monitor the situation of children and women. The sixth round of MICS began in 2017 with a number of new modules added to the standard MICS tools. Many of these changes were included to measure indicators articulated in the Sustainable Development Goals (SDGs). Since the launch of MICS6, methods to collect data on new topics have been refined by the international community. Further, new measurement approaches to certain topics pertinent to UNICEF such as anthropometric data collection and household air quality are taking place and warrant further study.

MICS, working with UNICEF Belize and the Statistical Institute of Belize (SIB), implemented a field test of a number of new questions in two survey regions in Belize in April/May 2019. SIB was selected as the implementing partner as they implemented 4 previous MICS surveys and had extensive experience with MICS methodology. The objectives of the field test were:

- To assess how a number of new questions function in a MICS survey,
- Test new measurement tools for objective measures.

The new questions and measurements include:

- Electronic measuring boards (for anthropometric measurement)
- Discrimination
- Household air quality
- Citizenship
- Not in Employment, Education or Training (NEET for women 15-24)
- Children's time use
- Early Childhood Development -learning domain (ECD)

This report focusses on all but the last 2 topics which are expected to be published in separate reports and papers.

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Methods

## Overview of MICS field test

The field test was carried out in Belize with the collaboration of UNICEF HQ (the MICS team), UNICEF Belize and the Statistical Institute of Belize. The field test used a mixed method design to understand how instruments functioned. The quantitative approach was to implement a household survey based on standard MICS modules and new modules. The qualitative approach involved focus groups of interviewers and analysis of written field notes. The mixed-methods approach allowed simultaneous comparison and triangulation of two different kinds of data to explain complex implementation issues. Data analysis was done simultaneously where quantitative and qualitative data were analyzed at the same time, and the results incorporated as they related to each thematic area under study.

## Quantitative approach-Household survey implementation <br> Study site and sampling methods

The field test was located in two survey regions of Belize: Toledo and Belize City South Side (BCSS). This provided a setting with a mix of urban and rural areas as well as languages and socio-economic statuses. The household survey used the standard multi-stage MICS sampling procedure to generate representative results. In the first stage of sampling, within Toledo and BCSS, enumeration areas (EAs) were selected from a list of EAs provided by SIB. In these two areas, there were several recent household surveys which used probability-based sampling for their EAs. SIB recommended against using the same EAs, citing concerns over non-response due to survey fatigue. As such, the field test selected only EAs not covered in the other surveys. As the selection of EAs for the other surveys were probabilistic, so too is the selection of EAs in the field test. In the second stage of sampling, households were selected. In Toledo, it was decided due to the small number of EAs available, to select 28 households in 10 clusters for a total sample of 280 households. In BCSS, 20 households in 20 EAs were selected, for a combined total of 680 households.

## Questionnaires

Four questionnaires using MICS standard modules were used in the household survey: household survey, questionnaire for individual women age 15-49, questionnaire for children under-5 and questionnaire for children age 5-17. The new topics were:

- Electronic measuring boards (for anthropometric measurement, in the under-5 questionnaire)
- Discrimination (in the questionnaire for individual women age 15-49)
- Household air quality (in the household questionnaire)
- Citizenship (in the household questionnaire)
- Not in Employment, Education or Training (for women 15-24 in the questionnaire for individual women age 15-49)
- Children's time use (questionnaire for children age 5-17)
- Early Childhood Development -learning domain (in the questionnaire for children under-5). This paper covers the results of these modules, with the exception of children's time use and ECD which will be covered in other documents. The relevant questionnaires are shown in Annex 1.


## Fieldwork training and implementation

A total of 24 fieldworkers were trained over a two-week period using the relatively short survey instrument. They were divided into 4 teams of a supervisor, a measurer for anthropometry and 4 interviewers. Fieldwork was implemented in two phases due to a shortage of staff to oversee fieldwork. The first phase was from April $1^{\text {st }}$ to April $12^{\text {th }}$ in Toledo, followed by April $15^{\text {th }}$ to April $30^{\text {th }}$ in BCSS . As BCSS fieldworkers had a break between training and fieldwork, a 1-day refresher was done in prior to fieldwork and the pace of fieldwork was slowed to accommodate any arising issues from the break. Field check tables were run several times to understand implementation problems and allow retraining and reinforcement of key issues. Further to the main fieldwork, various revisits were necessary to raise response rates. These took place until May $10^{\text {th }}$.

## Qualitative approach- Focus groups

## Focus groups

Two focus groups of interviewers were conducted to collect qualitative data on the implementation of the modules. The focus groups prompted interviewers to think about the ease or difficulty of implementing new procedures (such as air quality) and new question modules. Further data were collected on the understanding of respondents to certain questions. Finally, interviewers were asked to provide any other feedback on the exercise to improve fieldwork and any training in the future. The focus groups were implemented after field teams for each region was in the field for about 1 week, allowing the interviewers to accumulate their experiences over the period.

## Field notes

A group of observers mainly from UNICEF and SIB were asked to keep field notes of the interviews they observed. These notes were unstructured and provided a mechanism to note interviewer-respondent dynamics, implementation at the question level and field organization. These notes were collated into a singular document and analysed thematically.

Electronic measuring boards

## Background

MICS has collected anthropometric measures of children, namely height and weight, for nearly all rounds of the survey. Height has been collected using a wooden measuring board where measurers are trained to correctly position the child and then to take a reading of height (or length in the case of very young children) using a built-in measuring tape on the board. This approach has been largely successful when training and measurer quality are good and field supervision have been adequate. Nevertheless, human error in reading and recording measurements has been observed. With advances in technology, new approaches towards better measurements are possible.

UNICEF's Supply Division, in collaboration with the MICS team and Nutrition focal points in UNICEF'S Data and Analytics jointly advised on the development of a prototype of an electronic height board. The board was intended to be used in the field to capture the heights of children under 5 years. The aim of the new board is to provide an electronic reading of height, eliminating human error of reading off a measuring tape on the analogue board. Along the length of the board is a measuring tape which indicates height and a head piece which is raised or lowered onto the head of a child. Within the headpiece of the board, a camera which is powered by a rechargeable battery reads the height of the child based on the tape measure and displays the height in in centimetres, to one decimal place, on a display screen. Measurers and interviewers read this measurement off and manually record this onto paper questionnaires which are later transferred to tablets.

## Methodology

Two electronic boards were used in the field test and assessed using qualitative data from two focus groups and field observations based on field notes of observers from UNICEF.

## Results

## Training on the boards

Overall, interviewers expressed comfort with understanding how to assemble and use the boards pleasure with the lightness and overall visual appeal of the items. The interviewers also pointed out a design issue: the boards were too tall/long as they were designed for adults and children and anticipated that the three parts of the board in the field would be cumbersome to manoeuvre. Experience with charging the boards was good with the boards retaining their charge well though some interviewers indicated that the boards kept a reading of $100 \%$ charged for the duration of the training.

## Field performance

Many observations noted in the training were confirmed during fieldwork. The boards were light and easy to carry though cumbersome and too tall. Readings were easy to detect from the display screen and no interviewer expressed difficulty to read the display in strong sunlight. Generally, readings remained visible on the display screen though with one board, the screen flickered at times. This was solved by turning off and on again. Regarding the charge on the board, the teams noticed that even after extended use, the
battery indicated $100 \%$ charged. On one board, the screw that held the three parts of the boards secure became thread bare quickly under field conditions and was unable to hold the pieces of the board together. Consequently, it was difficult to transport and keep the board.

## Data quality

Of the 214 cases of children under 5 , less than 1 percent of cases were flagged as outliers, and only so among the youngest children (less than 12 months) in Table 3.1. No notable pattern of heaping on 5 and 0 was found (see Table 3.2) and comparing to heaping on weight measurements, differences are none to minimal.


| Table 3.2 Distribution of weight and height/length measurements by decimal digit recorded, Belize MICS field test, 2019 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Weight |  | Height or length |  |
|  |  | Number | Percent | Number | Percent |
| Digits | Total | 201 | 100.0 | 203 | 100.0 |
|  | 0 | 19 | 9.5 | 18 | 8.9 |
|  | 1 | 19 | 9.6 | 21 | 10.2 |
|  | 2 | 23 | 11.3 | 22 | 10.9 |
|  | 3 | 26 | 13.0 | 30 | 15.0 |
|  | 4 | 21 | 10.4 | 19 | 9.6 |
|  | 5 | 19 | 9.4 | 15 | 7.6 |
|  | 6 | 13 | 6.4 | 20 | 9.7 |
|  | 7 | 19 | 9.6 | 17 | 8.2 |
|  | 8 | 21 | 10.7 | 16 | 7.7 |
|  | 9 | 20 | 10.2 | 25 | 12.2 |

## Discussion

The electronic measuring boards proved easy to train on and use. The boards will need further development to ensure durability. During the field test, the boards came with an Android application that could transfer data directly to the tablets used in data collection. As MICS currently uses Windows devices, a new app needs to be developed and tested.

## Discrimination

## Background

In MICS6, a composite question was added to measure an age disaggregate of SDG Indicators 10.3.1 \& 16.b.1. This indicator is the proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law. MICS does not provide a full population estimate but an age disaggregate thusly: the percentage of women and men age 15-49 who have felt discriminated against or harassed in the last 12 months on the basis of ethnic or immigration origin, gender, sexual orientation, age, religion or belief, disability, any other reason. Further development of the indicator by the Office of the United Nations High Commissioner for Human Rights (OHCHR) led to the release of a new set of questions and methodology which were tested as part of the MICS Field Test.

## Methodology

The new approach consists of two composite questions with a show card. In the first question, the interviewer reads an initial introduction to the concept of discrimination and harassment then asks the respondent if she (in the case of the MICS field test) has experienced discrimination or harassment in the previous 5 years on the basis of 12 grounds (See annex 1 for questions, to be inserted later).
Respondents can provide a yes, no or no response option to each individual ground. To aid respondents to understand the specific ground of discrimination, a show card with definitions of each ground was provided to respondents to read.
For each ground of discrimination or harassment that the respondent experienced in the 5 previous years, the respondent is asked if she had such experience in the past 12 months.

## Results

## Training

Definitions provided for training were not sufficient for the interviewers to fully understand the different grounds of discrimination. As such, real life examples were developed at the training to show different aspects of the grounds of discrimination.

## Understanding the question

There was universal agreement that the introduction to the first questions was too long, and often not read out by interviewers who instead paraphrased the ideas, a practice that is not within the confines of the MICS survey protocols. Several interviewers cited that despite asking the question (and at times repeating it), they had to explain what key terms meant. This was true for "discrimination" and certain grounds of discrimination. While some grounds were immediately understood (such as sex, age and migratory status, for example), others such as socio-economic status and place of residence were not. Interviewers tended to give explanations to illustrate the meaning such as socio-economic status referring to "income" or what you owned. The sexual orientation ground was not administered uniformly
by interviewers. Interviewers from one of the surveyed regions had mixed feelings about the sexual orientation ground of discrimination and at times did not ask the question. One interviewer cites that "you don't ask because it is culturally inappropriate" in the Maya communities. Others in a different survey region thought it was "good to ask, as in some places it may be occurring", explaining the need to measure such a practice. Regarding disability or health status, many respondents focussed on the disability aspect of the question and did not reflect on health status. One respondent even went so as far as asking, "do you think I'm disabled?", illustrating the clear focus on this singular aspect. This itself is not incorrect as the "health status" part of the question was added as a means to avoid using the term "disability" if it is stigmatized.

## Use of show cards

Interviewers were quick to point out that women who were being interviewed were unable to understand the concepts shown on the cards, citing that the explanatory language was not on "their level" and that the show card was difficult to read. The perceived lack of clarity of the definitions led to interviewers improvising and providing their own examples of each type of discrimination, which may have created an uneven interpretation of the question. Further, despite being required as per the survey protocol, we note that some interviewers reported not using the cards, citing the lack of clarity and usefulness as reasons for non-use.

## Survey results

Overall, 24 percent of women age 15-49 experienced some form of discrimination or harassment in the previous 5 years (Table 4.1) and 18 percent had such an experience in the past 12 months (Table 4.2). In the 12 months prior to the survey, the least discriminatory ground was on sexual orientation and gender (less than 1 percent) identify while the highest was on ethnicity, colour or language ( 9 percent). Differences by ethnic groups were small with "other" ethnicities at 20 percent, Maya at 19 percent and Creole at 17 percent in the 12 months prior to the survey. Mayan women tended to also experience higher levels of discrimination or harassment than Creole women due to their religion.
Table 4.1 Experience of discrimination or harassment in the previous 5 years, Belize MICS field test, 2019

|  | Percentage of women age 15-49 having personally felt discriminated against or harassed in the previous 5 years: |  |  |  |  |  |  |  |  |  |  |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sex | Age | Disability or health status | Ethnicity, colour, language | Migration status | Socioeconomic status | Geographic location or place of residence | Religion | Marital and family status | Sexual orientation and gender identity | Political opinion | Other grounds | Any ground |  |
| Total | 6.0 | 4.5 | 3.9 | 12.0 | 2.8 | 6.3 | 6.6 | 4.6 | 4.1 | 0.3 | 2.7 | 1.9 | 24.1 | 468 |
| Area |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 5.9 | 3.4 | 4.7 | 13.8 | 1.9 | 4.9 | 8.3 | 0.5 | 5.0 | 0.0 | 1.4 | 2.5 | 23.9 | 279 |
| Rural | 6.1 | 6.2 | 2.8 | 9.4 | 4.2 | 8.3 | 4.1 | 10.7 | 2.7 | 0.8 | 4.6 | 0.9 | 24.5 | 189 |
| District |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Belize City South Side | 6.3 | 3.3 | 5.0 | 13.2 | 1.8 | 4.6 | 8.3 | 0.5 | 5.1 | 0.0 | 1.5 | 2.7 | 23.4 | 259 |
| Toledo | 5.5 | 6.0 | 2.6 | 10.5 | 4.2 | 8.3 | 4.6 | 9.7 | 2.8 | 0.7 | 4.1 | 0.9 | 25.0 | 209 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 5.5 | 5.5 | 3.5 | 9.4 | 2.0 | 7.6 | 0.8 | 6.3 | 0.0 | 0.9 | 0.0 | 1.8 | 20.7 | 68 |
| 20-24 | 6.1 | 4.8 | 1.8 | 6.7 | 3.7 | 4.0 | 5.9 | 3.4 | 1.1 | 0.0 | 0.8 | 1.1 | 15.9 | 80 |
| 25-29 | 7.3 | 8.6 | 4.5 | 10.5 | 0.8 | 11.3 | 9.5 | 8.0 | 10.5 | 0.0 | 4.1 | 0.0 | 26.1 | 82 |
| 30-34 | 13.9 | 7.8 | 3.3 | 16.9 | 5.5 | 9.0 | 11.5 | 2.3 | 3.5 | 0.0 | 3.4 | 2.8 | 30.0 | 62 |
| 35-39 | 2.3 | 1.3 | 0.0 | 14.3 | 2.4 | 6.8 | 6.2 | 4.4 | 3.0 | 0.0 | 2.1 | 1.7 | 26.4 | 67 |
| 40-44 | 3.4 | 0.0 | 0.0 | 12.0 | 0.0 | 1.0 | 2.3 | 2.1 | 1.4 | 0.0 | 2.1 | 1.6 | 21.5 | 63 |
| 45-49 | 1.9 | 1.9 | 19.4 | 17.9 | 7.3 | 1.9 | 11.4 | 5.3 | 10.1 | 1.9 | 7.9 | 6.2 | 32.4 | 46 |
| Education ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pre-primary or none | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 18 |
| Primary | 3.2 | 4.1 | 5.4 | 14.5 | 2.7 | 4.1 | 1.6 | 6.1 | 1.5 | 0.0 | 3.6 | 0.4 | 24.3 | 166 |
| Secondary + | 7.7 | 4.8 | 3.0 | 10.1 | 2.3 | 7.1 | 9.2 | 3.2 | 5.6 | 0.2 | 2.3 | 2.9 | 24.0 | 283 |
| Ethnicity of household head |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Creole | 7.5 | 3.6 | 4.6 | 7.9 | 2.6 | 5.5 | 9.1 | 0.8 | 5.7 | 0.0 | 2.2 | 3.5 | 21.2 | 171 |
| Maya | 5.9 | 6.0 | 2.8 | 9.5 | 4.3 | 8.0 | 5.2 | 11.5 | 3.0 | 0.5 | 5.1 | 0.7 | 24.6 | 170 |
| Other | 4.0 | 3.9 | 4.6 | 21.1 | 1.2 | 5.1 | 5.2 | 0.5 | 3.4 | 0.5 | 0.0 | 1.3 | 27.6 | 125 |
| Wealth index quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Poorest | 4.6 | 6.3 | 1.9 | 7.2 | 2.4 | 5.6 | 1.8 | 9.6 | 1.9 | 0.0 | 3.2 | 0.0 | 18.1 | 87 |
| Second | 6.9 | 6.2 | 4.2 | 13.2 | 5.8 | 9.0 | 7.5 | 11.5 | 3.8 | 1.0 | 5.9 | 1.3 | 35.2 | 89 |
| Middle | 5.3 | 4.8 | 4.7 | 11.1 | 2.3 | 8.1 | 8.3 | 2.8 | 8.8 | 0.6 | 3.4 | 5.6 | 19.0 | 103 |
| Fourth | 4.0 | 4.4 | 2.4 | 13.2 | 1.9 | 4.5 | 6.9 | 0.0 | 4.2 | 0.0 | 1.0 | 0.9 | 24.0 | 97 |
| Richest | 9.0 | 1.0 | 6.4 | 15.2 | 1.9 | 4.1 | 8.3 | 0.0 | 1.1 | 0.0 | 0.0 | 1.1 | 24.9 | 92 |

[^0]${ }^{1}$ One unweighted missing case from Education and Ethnicity of household head is omitted in the table
$\left({ }^{*}\right)$ Figures that are based on fewer than 25 unweighted cases

## Discussion

While these new questions represent an increase in specificity and number of grounds for discrimination studied, the use of these questions revealed a certain level of scepticism from the interviewers about asking these questions and difficulty in implementing them using the show card and question text. These questions have been used in different survey contexts, usually within surveys specifically tailored to discrimination and similar topics. However, our results indicate various issues with importing these questions into the MICS scaffolding.

Within the content of the current MICS Victimization module where these questions were tested, other questions on victimization have an initial 3-year reference period. With an aim to ease the cognitive burden on respondents to recall events, further research on changing the reference period from a 5-year to a 3-year period is needed to understand if this can just as easily capture the intended responses. We also note that while these questions are now the recommended set of SDG questions, they represent more than a doubling of questions and implementation effort compared to the first set of questions in MICS6. The ability of MICS to absorb such changes would need to be studied in tandem with other aspects of the survey through further field tests and using other inclusion and implementation criteria.

The intention of using a show card is to standardize the understanding of respondents to the different grounds of discrimination. We note that the show card did not produce this effect and was at times abandoned during the field test by interviewers. The material on the cards needs further development to match the cognitive levels of respondents and can include examples (in addition to the definitions). The use of examples can also be interwoven into the training component of the interviewers to ensure a standard understanding of the questions. We further note that we interviewed a high literacy population. Use of a show card with text in a non-literate population will be irrelevant. An alternative way to address this is to explain each ground of discrimination individually during the interview though this requires careful training and a great deal more time during the interview process. Regarding the introductory statement in the question which proved to be too long for respondents to focus on, we recommend a shorter and more concise approach though this may have unintended effects on validity of reporting of incidents of discrimination.

In future work, it would be important to address these issues through further field testing. Firstly, examples of discrimination at the national level should be developed which would aid interviewer training. Further sensitization of interviewers on these questions is also necessary to ensure even field implementation. Then, a question module without a show card and a shorter introduction question can be developed and tested against the existing module. This would reveal the differences between the performance of the two approaches.

Air quality testing

## Background

Ambient air pollution (AAP) and household air pollution (HAP) contribute to numerous negative health consequences for children and adults, including respiratory tract infections, preterm birth, low birthweight, stillbirth and infants born small for gestational age (1). Reductions in exposure to HAP can significantly reduce the risk of severe pneumonia and premature deaths (2). MICS currently collects data on the type of cookstove used for cooking, and type of energy used for cooking, heating and lighting in the household- which contribute to HAP. Nevertheless, MICS does not collect any direct estimates of HAP. Keeping in mind that there is no standard approach to collecting measures of indoor air quality in a household survey, UNICEF designed a new module to understand the feasibility of such measurements in MICS.

## Methodology

We developed a new questionnaire module on air quality (AQ). For development, we assumed usual MICS field conditions and agreed that only minor deviations from field work practices would be possible. Usual field conditions imply that interviewers spend a limited amount of time in a household, are unable to perform multiple readings and are unable to return to households. As such, we concluded that a single reading of $A Q$ would be most appropriate for the field test. The module was positioned at the end of the household questionnaire and contained 1 question, 1 reading of $A Q$ and 3 observations. The question asked for consent for the air quality test while the observations asked the interviewer to note where the reading was taken, and at the time of the reading, if cooking, smoking or use of mosquito coils or incense was ongoing.

The air quality test was done using a low-cost air quality monitor (AQM) (Laser Egg 2)(3) that interviewers carried into households. A PM2.5 reading, an indication of the density of particles less than 2.5 microns, was recorded as the indicator of indoor air quality. Fine particulate matter (PM2.5) is the key indicator used in making health estimates of air pollution impacts and is most commonly measured or monitored by governments around the world. Ultrafine pollution particles (particulate matter that is equal or less than 2.5 microns in diameter) pose an especially high risk because they can more easily enter the blood stream and travel through the body to the brain. First, interviewers asked for consent to take the reading using the AQMs. If consent was provided, interviewers removed the devices from their bags, turned them on, adjusted the mode to PM2.5 and proceeded to a suitable location for the reading. Readings could be done in any part of the household, both inside and outside. However, it was strongly recommended that readings were taken in the kitchen. If the reading was done in the kitchen, the protocol provided an approximate location on where to take the reading: 1.5 m from the ground (i.e. about waist level), 1 m away from the main stove (i.e. about arm's length) and 50 cm away from the wall (i.e. about elbow distance). Apart from recording the reading in PM2.5, the location of the reading was also recorded. If a reading fluctuated, interviewers recorded the highest reading. Fact sheets about $A Q$ were also provided to households during the interview and results were given immediately to households.

## Results

## Respondent reactions to $A Q$ testing

During the focus groups, interviewers mentioned that reactions to $A Q$ testing ranged from indifference to curiosity. In BCSS, interviewers pointed out that respondents were sensitive to having anyone from the team in the household and preferred the reading taken outside the home. During the field test, fact sheets were distributed but not universally. This occurred as some interviewers forgot to distribute them or preferred not to do so. While some respondents looked at the fact sheets, others did not review it and one respondent gave it to her daughter to play with. Some interviewers received questions related to the content of the fact sheet and noted that the readability of the material needs improvement to match the ability of respondents. In some cases, translation of the fact sheet into local languages was also suggested by interviewers.

Regarding results of the test, interviewers at times used the fact sheet to indicate the quality of air but respondents often wanted to know in unequivocal terms if the air quality was "good or bad" and what could be done if it was bad. Respondents seemed to indicate some level of expectation that the survey or others will do something to improve air quality or at times asked what they could do themselves.

## Use of the AQ device

Interviewers noted that mechanically, it was an easy process turning on the device, reading and recording the readings. Carrying and storing the device though was somewhat difficult. Interviewers requested to have a cushioned/padded pouch to carry the device or another device which would fit better into their flat carrier bags which housed their tablets used to collect data.

Interviewers stated that AQ readings fluctuated widely. One interviewer recalled that readings "went all the way to 160 and then dropped to 12 " while another noted that her reading "went to 300 and fell to $126 "$. This occurred in households across the two districts and in households with and without open fire hearths, a solid-fuel stove type prevalent in the Toledo district. In Toledo, one interviewer noted that there was "no stable reading" around this stove type. In BCSS, where readings outside the home was more prevalent, the $A Q$ reading proved challenging due to the wind and when there was a lot of smoke in the area, readings took time to stabilize.

Taking measurements did not always conform to expectations and instructions in the training. Field observations noted that cooking may not be ongoing actively while they were conducting the interview though open stoves such as the fire hearth are often left burning at all times, even when cooking was not being done. Further, interviewers were not always granted access to the entire homes of respondents to conduct observations of cooking, use of incense and smoking. In these cases, they may have relied on limited observations and/or asking the respondent.

## Survey results

About 87 percent of households consented to have their air quality measured, with consent rates higher in rural areas ( 92 percent) compared with urban areas ( 85 percent). These differences confirm qualitative findings in the focus group. The consent rate showed a negative correlation with level of education of the head of household. In households where the household head had no or primary education, 93 percent consented while in households with secondary or greater education, 85 percent consented for the test. No clear pattern by household wealth was seen (see Table 5.1).

${ }^{1}$ One missing case from Ethnicity of household head is omitted in the table ${ }^{(*)}$ Figures that are based on fewer than 25 unweighted cases

Figure 5.1 shows the place of the air quality measurement. About four in five readings were done in the household. The two most common places for readings to take place were in the living room (15 percent) and kitchen ( 62 percent). About 12 percent of readings were taken in the porch of households.


Table 5.2 shows PM2.5 levels and disaggregates. For analysis, we group the data into 6 categories, based on the Air Quality Index (4) converted to respective PM2.5 levels (5). These are $0-12 \mu \mathrm{~g} / \mathrm{m}^{3}$ (good air quality), $13-35 \mu \mathrm{~g} / \mathrm{m}^{3}$ (moderate air quality), $36-55 \mu \mathrm{~g} / \mathrm{m}^{3}$ (unhealthy for sensitive groups), $56-150 \mu \mathrm{~g} / \mathrm{m}^{3}$ (unhealthy), $151-250 \mu \mathrm{~g} / \mathrm{m}^{3}$ (very unhealthy) and $251-500 \mu \mathrm{~g} / \mathrm{m}^{3}$ (hazardous). In the table, we use PM2.5 of $13 \mu \mathrm{~g} / \mathrm{m}^{3}$ or greater as the cut-off point. Overall, 76 percent of households had a PM2.5 level of $13 \mu \mathrm{~g} / \mathrm{m}^{3}$ or greater. However, the distribution was highly concentrated in the lower levels; 51 percent of consenting households had a reading of $13-35 \mu \mathrm{~g} / \mathrm{m}^{3}$ and a further 20 percent distributed about equally across the two succeeding bands ( $36-55$ and 56-150). By place of reading, levels are much lower inside the house (away from the kitchen, 56 percent above the threshold) but higher in kitchen ( 83 percent), and outside the household ( 71 percent outside on the porch). In households where cooking was ongoing at the time of the survey, levels were higher compared to households without cooking ( 86 compared to 74 percent). The use of clean fuels for cooking correlated negatively with PM 2.5 readings; households with clean fuels has less particulate matter than those which used non-clean fuel technologies ( 70 vs 91 percent). The same relationship is seen for technologies used for lighting.

|  | Among consenting households, percent distribution of air quality results in $\mu \mathrm{g} / \mathrm{m}^{3}$ |  |  |  |  |  |  |  | Percentage of households with a reading $13 \mu \mathrm{~g} / \mathrm{m}^{3}$ or greater | Number of households consenting for testing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-12 | 13-35 | 36-55 | 56-150 | 151-250 | 251-500 | Missing | Total |  |  |
| Total | 22.8 | 50.8 | 11.9 | 8.8 | 2.0 | 2.3 | 1.4 | 100.0 | 75.8 | 506 |
| Place of reading Inside household |  |  |  |  |  |  |  |  |  |  |
| Living room | 44.2 | 41.3 | 8.0 | 6.6 | 0.0 | 0.0 | 0.0 | 100.0 | 55.8 | 75 |
| Kitchen | 14.7 | 48.9 | 15.2 | 12.3 | 3.2 | 3.7 | 2.1 | 100.0 | 83.2 | 313 |
| Sleeping room | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 100.0 | (*) | 6 |
| Other | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 100.0 | (*) | 3 |
| Outside household |  |  |  |  |  |  |  |  |  |  |
| In doorway | (47.0) | (53.0) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | 100.0 | (53.0) | 27 |
| Garden | (*) | (*) | ${ }^{*}$ ) | (*) | (*) | (*) | (*) | 100.0 | (*) | 11 |
| Porch | 29.0 | 68.8 | 1.0 | 1.1 | 0.0 | 0.0 | 0.0 | 100.0 | 71.0 | 63 |
| Other | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 100.0 | (*) | 7 |
| Cooking during reading |  |  |  |  |  |  |  |  |  |  |
| Yes | 5.2 | 29.8 | 12.3 | 20.9 | 11.1 | 11.6 | 9.1 | 100.0 | 85.7 | 78 |
| No | 25.7 | 54.8 | 11.9 | 6.7 | 0.3 | 0.6 | 0.0 | 100.0 | 74.3 | 427 |
| Not sure | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 100.0 | (*) | 1 |
| Smoking during reading |  |  |  |  |  |  |  |  |  |  |
| Yes | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 100.0 | (*) | 11 |
| No | 23.0 | 50.4 | 12.2 | 8.9 | 1.9 | 2.1 | 1.4 | 100.0 | 75.5 | 494 |
| Not sure | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 100.0 | (*) | 1 |
| Burning mosquito coils or incense during reading |  |  |  |  |  |  |  |  |  |  |
| Yes | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 100.0 | (*) | 5 |
| No | 22.9 | 51.1 | 12.1 | 8.1 | 2.0 | 2.3 | 1.4 | 100.0 | 75.6 | 499 |
| Not sure | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 100.0 | (*) | 2 |
| Primary reliance on clean fuels for cooking |  |  |  |  |  |  |  |  |  |  |
| Yes | 29.4 | 57.3 | 10.0 | 2.5 | 0.2 | 0.4 | 0.2 | 100.0 | 70.4 | 373 |
| No | 4.0 | 32.7 | 17.2 | 26.6 | 7.1 | 7.6 | 4.8 | 100.0 | 91.2 | 133 |
| Primary reliance on clean fuels and technologies for lighting |  |  |  |  |  |  |  |  |  |  |
| Yes | 23.7 | 52.0 | 11.6 | 7.5 | 1.8 | 2.2 | 1.3 | 100.0 | 75.0 | 482 |
| No | (3.7) | (28.3) | (18.8) | (34.9) | (6.5) | (4.2) | (3.6) | 100.0 | (92.7) | 24 |


| Table 5.2 (cont'd) Percent distribution of air quality test results and percentage of households with a reading of $13 \mu \mathrm{~g} / \mathrm{m} 3$ or greater by selected characteristics, Belize MICS field test, 2019 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Among consenting households, percent distribution of air quality results in $\mu \mathrm{g} / \mathrm{m}^{3}$ |  |  |  |  |  |  |  | Percentage of households with a reading $13 \mu \mathrm{~g} / \mathrm{m}^{3}$ or greater | Number of households consenting for testing |
|  | 0-12 | 13-35 | 36-55 | 56-150 | 151-250 | 251-500 | Missing | Total |  |  |
| Total | 22.8 | 50.8 | 11.9 | 8.8 | 2.0 | 2.3 | 1.4 | 100.0 | 75.8 | 506 |
| Area |  |  |  |  |  |  |  |  |  |  |
| Urban | 34.2 | 55.9 | 8.6 | 1.3 | 0.0 | 0.0 | 0.0 | 100.0 | 65.8 | 324 |
| Rural | 2.5 | 41.9 | 17.8 | 22.2 | 5.5 | 6.3 | 3.9 | 100.0 | 93.6 | 182 |
| District |  |  |  |  |  |  |  |  |  |  |
| Belize City South Side | 36.0 | 55.0 | 7.6 | 1.4 | 0.0 | 0.0 | 0.0 | 100.0 | 64.0 | 305 |
| Toledo | 2.7 | 44.6 | 18.5 | 20.0 | 5.0 | 5.7 | 3.5 | 100.0 | 93.8 | 202 |
| Education of household head |  |  |  |  |  |  |  |  |  |  |
| Pre-primary/ none | 7.7 | 44.8 | 13.8 | 16.7 | 7.2 | 5.4 | 4.4 | 100.0 | 87.9 | 51 |
| Primary | 18.9 | 49.6 | 10.8 | 13.6 | 2.4 | 2.6 | 1.9 | 100.0 | 79.1 | 202 |
| Secondary + | 28.9 | 52.6 | 12.8 | 3.5 | 0.6 | 1.1 | 0.4 | 100.0 | 70.6 | 247 |
| Missing/DK | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 100.0 | (*) | 7 |
| Ethnicity of household head |  |  |  |  |  |  |  |  |  |  |
| Creole | 36.2 | 50.7 | 11.0 | 2.1 | 0.0 | 0.0 | 0.0 | 100.0 | 63.8 | 206 |
| Maya | 4.2 | 37.9 | 18.0 | 23.9 | 5.3 | 6.7 | 4.0 | 100.0 | 91.8 | 161 |
| Other ethnicity | 24.3 | 65.9 | 6.3 | 1.5 | 1.1 | 0.5 | 0.5 | 100.0 | 75.2 | 140 |
| Wealth index quintile |  |  |  |  |  |  |  |  |  |  |
| Poorest | 2.5 | 27.8 | 20.4 | 31.5 | 7.3 | 7.6 | 2.9 | 100.0 | 94.6 | 69 |
| Second | 5.5 | 50.6 | 13.6 | 15.8 | 4.0 | 5.7 | 4.7 | 100.0 | 89.8 | 108 |
| Middle | 26.9 | 57.1 | 14.2 | 1.3 | 0.6 | 0.0 | 0.0 | 100.0 | 73.1 | 110 |
| Fourth | 27.7 | 60.7 | 7.3 | 4.3 | 0.0 | 0.0 | 0.0 | 100.0 | 72.3 | 100 |
| Richest | 42.3 | 50.4 | 7.2 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 57.7 | 119 |

( ) Figures that are based on 25-49 unweighted cases
${ }^{(*)}$ Figures that are based on fewer than 25 unweighted cases
Clean technologies for cooking and lighting are much more prevalent in BCSS while in Toledo, use of more traditional fuel types are common. This phenomenon is reflected in levels of PM2.5 over the threshold when examining disaggregates by location of households. As such, more rural households and those in Toledo have much higher levels of PM2.5 than those households in urban areas and in BCSS. Finally, household wealth was negatively correlated with readings of PM2.5 above $13 \mu \mathrm{~g} / \mathrm{m}^{3}$.

## Discussion

The use of AQMs is a novel approach for household surveys that shows both promise and challenge. We intended to examine if taking AQ measurements using an inexpensive AQM was feasible in MICS, without major derivations from standard survey protocols. This field test shows that such readings are for the most part acceptable to the interviewed households, consent was provided in a majority of households and that AQMs were easy to operate.

Nevertheless, interviewers were unable to complete the protocol to full satisfaction and measurement error in readings were apparent. During field observations, interviewers did not always have access to
households to fully assess indicators of smoking, cooking and use of mosquito coils and incense which would eventually serve as a means to calibrate or explain the levels of HAP. More concerning is the error associated with taking a single reading of AQ. Air flow changed rapidly and at times unpredictably in households and an unacceptably large part of readings were done away from the kitchen, despite training procedures. Point estimates of this nature may be generally of limited value and lack meaning to data consumers.

An alternative suggestion to take these readings would be to gather a period estimate taken over a longer time. Such a period estimate can be advantageous as it averages out fluctuations in readings which were common in the field test. AQMs could be left in households and set up to record values over time, following which the survey team can return to the household to collect these devices and the data stored. While this is a clear possibility for some surveys, for MICS, this remains unlikely as survey teams usually spend about 2 days per cluster and do not have enough resources (in terms of time and money) to return to households.

The interpretation and utility of these data can present certain limitations. Even if these data are prefaced as point estimates in a household, data users will probably understand them as a measure of exposure to HAP which they are not. We note that children and adults have differential exposures to HAP as seen in field observations where men were for the most part absent from households and younger children were found in various places in the household, and often not in the kitchen, where AQ readings were taken. Further, these data are closely related to indicators already collected in MICS such as fuel types used in cooking, heating and lighting which are major contributors to child illness. A key question that remains is, taking into consideration that MICS already collects high quality data on the sources of HAP, will the addition of a point estimate of AQ provide significant added value to country monitoring?

## Background

The SDGs set ambitious target for many indicators and included provisions for disaggregating data by a number of background characteristics which would help identify vulnerable groups in a population. One such vulnerable group is international migrants. Currently, MICS round 6 questionnaires do not have any direct questions on international migration though several questions more focused on internal migration (largely adopted from the USAID-supported Demographic and Health Surveys) are included in MICS6.

The UN Expert Group on Migration Statistics recommended several questions for data collection in household surveys and censuses to improve the ability of these mechanisms to collect international migration status. Questions were based primarily on the review of national population and housing censuses from the 2010 round. These were used in the field test.

## Methodology

For this study, questions to distinguish international migrants from non-migrants were included. Within the household roster, two new questions were added to capture the country of birth and citizenship of all household members. Both questions used in the field test were identical to the recommended questions from UN Expert Group on Migration Statistics. However, response categories were tailored to reflect those used in similar questions in the most recent national population and housing censuses in Belize. The first question on country of birth had a single response option (only 1 response allowed per household member) while the second question on citizenship was kept as a multiple response question, allowing to record household members with more than 1 citizenship. The questions were placed in the List of Household Members module in the household questionnaire of MICS and collected from all usual household members.

## Results

Focus group results
Regarding country of birth, interviewers did not cite any specific issues with the question administration or responses from respondents. For the question related to citizenship, in both Toledo and BCSS, respondents were willing to respond. This willingness extended to nationals and migrant families. However, in BCSS, interviewers mentioned issues on understanding the term "citizenship". In Toledo district, if the country of birth was Belize, many interviewers did not ask the citizenship question and filled in the responses as "Belizean", contrary to training procedures. This contrasts with the BCSS fieldwork where both questions were asked as indicated in the questionnaires.

## Survey results

Table 6.1 shows that 7 percent of the household population was foreign born. Among these, about half were born in Guatemala and about one-quarter from Honduras. Logically, the foreign-born population
was most likely to be self-identified as an "other ethnicity", as they did not fit within the usual ethnic groups in Belize. There was no missing data for this country of birth question.

Table 6.2 shows that 3 percent of respondents are not citizens of Belize and 1 percent are citizens of Belize and another country. Among household members who are not citizens of Belize, about half are citizens of Guatemala, about three in ten are of Honduran citizenship and 1 percent did not have a citizenship.

|  | Percentage of foreignborn household population |  | Percent distribution of country of birth among household members born outside Belize |  |  |  |  |  |  |  |  |  | Number of foreignborn household members |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number of household members | Guatemala | EI <br> Salvador | Honduras | USA | Mexico | China | Nicaragua | Canada | Other country | Total |  |
| Total | 7.2 | 2322 | 48.8 | 10.1 | 24.3 | 3.8 | 1.1 | 4.0 | 1.0 | 0.6 | 6.5 | 100.0 | 168 |
| Are |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 6.0 | 1325 | 17.2 | 17.5 | 39.7 | 7.2 | 1.0 | 6.6 | 2.0 | 0.0 | 8.9 | 100.0 | 80 |
| Rural | 8.8 | 997 | 77.5 | 3.3 | 10.2 | 0.8 | 1.2 | 1.6 | 0.0 | 1.2 | 4.3 | 100.0 | 88 |
| District |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Belize City South Side | 6.2 | 1237 | 15.3 | 16.9 | 41.2 | 7.4 | 1.0 | 6.9 | 2.1 | 0.0 | 9.2 | 100.0 | 77 |
| Toledo | 8.4 | 1085 | 77.2 | 4.3 | 9.9 | 0.8 | 1.1 | 1.5 | 0.0 | 1.1 | 4.1 | 100.0 | 91 |
| Ethnicity of household head |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Creole | 0.9 | 857 | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 100.0 | 8 |
| Maya | 6.9 | 864 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 59 |
| Other ethnicity | 16.8 | 597 | 22.7 | 16.2 | 37.1 | 4.7 | 1.8 | 6.7 | 1.6 | 1.0 | 8.3 | 100.0 | 100 |
| Missing/DK | (*) | 4 | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 100.0 | 1 |
| Wealth index quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Poorest | 8.8 | 467 | 90.1 | 0.0 | 0.0 | 0.0 | 2.5 | 0.0 | 0.0 | 2.5 | 5.0 | 100.0 | 41 |
| Second | 8.3 | 460 | (68.8) | (13.1) | (7.3) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | (10.8) | 100.0 | 38 |
| Middle | 8.8 | 461 | (32.9) | (13.5) | (42.3) | (1.8) | (0.0) | (3.4) | (0.0) | (0.0) | (6.2) | 100.0 | 41 |
| Fourth | 6.6 | 460 | (16.1) | (15.8) | (59.9) | (0.0) | (2.6) | (2.8) | (2.8) | (0.0) | (0.0) | 100.0 | 30 |
| Richest | 3.8 | 473 | (3.4) | (9.1) | (14.8) | (31.6) | (0.0) | (24.6) | (4.3) | (0.0) | (12.1) | 100.0 | 18 |

[^1]

## Discussion

The inclusion of these two questions provides new data to the MICS surveys. Customization of these questions did not prove too difficult as census forms were readily available to the survey team. The field test indicated potential for poor data quality if interviewers are not carefully trained and supervised to implement both questions as stated in the questionnaires. During the implementation of the questions, interviewers expressed concern that migrant families would not be willing to participate in the survey due to the sensitive nature of the questions. These fears were not realized in this context. Nevertheless, further piloting at country level would be necessary as these questions come at the start of the MICS interview and has the potential to sway respondents to participate in MICS. Finally, we note that the "ethnicity" response categories typical in Belize did not adequately capture the foreign-born population which for the most part were grouped under the "other" category. This may indicate a need to customize this variable in the questionnaire design when the ethnic categories of foreign born do not coincide with the national definitions and when this proportion is large.

## 7

## Not in Education, Employment or Training (NEET)

## Background

In pursuit of promoting sustained economic growth and full and productive employment, SDG 8.6.1 focuses on youth who are not in education, employment or training. The indicator is important because countries, despite seeing sustained increases in school attendance, observe many children and youth of school age who do not attend school. These children and youth can be a primary focus of social programmes and policy that ensure that they are engaged in productive activities. In the MICS6 round, several countries have expressed interest in collecting data on young people who are out of school to understand how they spend their time and to collect data on SDG 8.6.1.

## Methodology

The standard MICS questionnaires currently provide data on school attendance for the youth population from 15-24 for women and men but do not provide any indications of training or employment. For the field test, we used an existing set of questions designed by the International Labour Organization to measure employment and questions reviewed by the United Nations Educational, Scientific and Cultural Organisation targeting training, combined to measure SDG 8.6.1 (NEET): the percentage of young women 15-24 that are not in education, employment or training. These questions were placed in the Individual Women's questionnaire and asked for girls and women age 15-24. The questions included a total of 19 questions ( 24 including sub-questions). One question was on school attendance, 3 on training and apprenticeships, and the remaining focussed on employment, including absences from work. As the burden of questions was expected to be high, once as a respondent was classified as either attending school or in training or at work, they were skipped out of the module to avoid any further questions.

The set of questions measured 3 indicators. The first is SDG 4.3.1: the percentage of young women 15-24 that are in formal or informal education or training in the last 12 months. The second indicator is NEET and the third is ELET (Early Leavers from Education and Training), which measures the percentage of young women 15-24 have at most a lower secondary education and did not attend formal or non-formal education or training in the previous 4 weeks.

## Results

## Training and fieldwork

Training on this module was difficult. Interviewers found the questions to be too detailed to understand and elicited many questions for the trainers. Interviewers did not find the questions conceptually clear enough to distinguish between the key aspects of one question to the next. To address this, trainers used numerous illustrative examples to distinguish concepts that appear similar though this was of limited success, as seen during observations. The pessimism about the module's performance was seen as a barrier to the rest of the interview, with the MICS team believing that the module would cause unease for respondents and increase non-response. At the time of training, the module was considered as a candidate for removal from the field test, even before it was fielded.

In the field, the questions produced a mixed response. Some respondents found that the questions were "not difficult" while others were annoyed. One respondent expressed frustration, asking why the interviewer kept asking about training and school despite her saying she was "not doing anything". Respondents also indicated that certain questions lacked relevance to their setting. In the rural, inland Toledo district, respondents pointed out that questions on fishing were meaningless. One young woman said, "Fishing on dry land?" and another commented, "Do you see any sea here?". Questions on education proved to be tiresome for respondents and interviewers. One interviewer commented, "Questions on trainings and seminars are like splitting hair; perhaps these can be combined."

## Survey results

Table 7.1 shows three indicators. The first shows that 43 percent of women age 15-24 were in education or in training (formal or informal) in the last 12 months. Levels are higher in urban areas and among women who have never given birth. The table also indicates that about 1 in 2 women age $15-24$ are NEET in the last 4 weeks. NEET is more common in rural areas ( 58 percent) compared with urban areas (40 percent). Further, NEET is much more likely among mothers (63 percent) than non-mothers (36 percent). Finally, 30 percent of young women 15-24 are ELET in the last 4 weeks. ELET was much more common among rural areas and mothers ( 45 percent and 44 percent, respectively) compared with urban areas and non-mothers (18 percent each).

Figure 7.1 shows the percentage of women age $15-24$ that received each question ( $\mathrm{n}=158$ ). Overall, over half of respondents answer questions WB14C to WB14J and less than 10 percent answer the succeeding questions (with the exception of WS14S, about 50\%).


| Table 7.1 Young women's education, employment and training, Belize MICS field test, 2019 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage of women age $15-24$ years who in the previous 12 months: |  |  | Percentage of women age 15-24 years who: |  |  |  | Percentage of women age $15-24$ years who: |  |  |  |
|  | Attended formal education ${ }^{1}$ | Attended non-formal education or training but did not attend formal education | Attended formal or nonformal education or training ${ }^{2}$ | In the previous 4 weeks attended formal education | In the previous 4 weeks, were in training but did not attend formal education | Did not attend formal education or training in the previous 4 weeks, but were employed during the previous week | Were not in education, employment or training (NEET) ${ }^{3}$ |  | Did not attend formal or non-formal education or training in the previous 4 weeks | Completed at most lower secondary, did not attend formal or nonformal education or training in the previous 4 weeks ${ }^{4}$ | Number of young women age 15-24 |
| Total | 30.9 | 12.2 | 43.1 | 25.8 | 10.3 | 10.7 | 48.6 | 49.6 | 56.0 | 30.2 | 149 |
| Ever gave birth |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 11.5 | 17.7 | 29.2 | 3.4 | 16.4 | 12.6 | 62.9 | 50.5 | 71.3 | 43.9 | 71.4 |
| No | 48.8 | 7.1 | 55.9 | 46.5 | 4.7 | 8.9 | 35.5 | 48.9 | 41.8 | 17.5 | 77.3 |
| Area |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 35.2 | 21.6 | 56.8 | 27.7 | 19.2 | 9.6 | 40.4 | 30.8 | 50.0 | 17.7 | 80 |
| Rural | 25.8 | 1.3 | 27.1 | 23.6 | 0.0 | 12.0 | 58.1 | 71.5 | 62.9 | 44.6 | 69 |
| District |  |  |  |  |  |  |  |  |  |  |  |
| Belize City | 35.4 | 22.7 | 58.1 | 28.3 | 20.1 | 9.4 | 38.8 | 32.9 | 48.2 | 19.6 | 72 |
| South Side |  |  |  |  |  |  |  |  |  |  |  |
| Toledo | 26.6 | 2.3 | 28.9 | 23.5 | 1.1 | 11.9 | 57.9 | 65.4 | 63.3 | 40.1 | 77 |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 56.8 | 8.6 | 65.4 | 54.3 | 7.5 | 5.2 | 30.1 | 55.1 | 32.5 | 20.9 | 68 |
| 15-17 | (77.0) | (2.4) | (79.4) | (71.3) | (0.0) | (2.4) | (20.9) | (78.0) | (23.3) | (16.8) | 31 |
| 18-19 | (40.3) | (13.7) | (54.1) | (40.3) | (13.7) | (7.5) | (37.6) | (36.5) | (39.9) | (24.3) | 38 |
| 20-24 | 8.9 | 15.2 | 24.1 | 1.7 | 12.7 | 15.3 | 64.3 | 45.0 | 75.9 | 38.0 | 80 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| Pre-primary/none | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 2 |
| Primary | (16.0) | (2.0) | (18.1) | (0.0) | (0.0) | (26.1) | (61.8) | (100.0) | (83.0) | (83.0) | 36 |
| Secondary + | 36.1 | 15.7 | 51.8 | 34.6 | 13.8 | 5.8 | 43.6 | 32.6 | 46.6 | 12.0 | 111 |


|  | Percentage of women age 15-24 years who in the previous 12 months: |  |  | Percentage of women age 15-24 years who: |  |  |  | Percentage of women age 15-24 years who: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Attended formal education ${ }^{1}$ | Attended non-formal education or training but did not attend formal education | Attended formal or nonformal education or training ${ }^{1}$ | In the previous 4 weeks attended formal education | In the previous 4 weeks, were in training but did not attend formal education | Did not attend formal education or training in the previous 4 weeks, but were employed during the previous week | Were not in education, employment or training $(\text { NEET })^{2}$ | Completed at most lower secondary | Did not attend formal or non-formal education or training in the previous 4 weeks | Completed at most lower secondary, did not attend formal or nonformal education or training in the previous 4 weeks ${ }^{3}$ | Number of young women age 15-24 |
| Total | 30.9 | 12.2 | 43.1 | 25.8 | 10.3 | 10.7 | 48.6 | 49.6 | 56.0 | 30.2 | 149 |
| Marital/union status |  |  |  |  |  |  |  |  |  |  |  |
| Currently married /in union | 9.7 | 12.5 | 22.2 | 1.1 | 11.2 | 14.3 | 65.9 | 55.9 | 76.1 | 47.7 | 68 |
| Never married /in union | 55.9 | 4.3 | 60.2 | 53.4 | 3.2 | 7.6 | 33.2 | 48.8 | 37.7 | 15.9 | 69 |
| Missing/Formerly married/in union | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 13 |
| Ethnicity of household head |  |  |  |  |  |  |  |  |  |  |  |
| Creole | (37.2) | (28.3) | (65.5) | (27.5) | (24.7) | (12.9) | (34.9) | (35.5) | (47.8) | (25.5) | 53 |
| Maya | 21.4 | 3.7 | 25.1 | 18.8 | 2.3 | 12.2 | 58.0 | 67.0 | 63.4 | 43.4 | 60 |
| Other ethnicity | (37.4) | (2.6) | (40.1) | (35.0) | (2.6) | (4.9) | (53.2) | (41.4) | (55.5) | (14.8) | 36 |
| Wealth index quintile |  |  |  |  |  |  |  |  |  |  |  |
| Poorest | (22.2) | (0.0) | (22.2) | (19.6) | (0.0) | (1.8) | (60.4) | (78.0) | (60.4) | (46.9) | 35 |
| Second | (19.7) | (0.0) | (19.7) | (17.4) | (0.0) | (25.1) | (64.7) | (65.6) | (73.7) | (49.6) | 27 |
| Middle | (37.9) | (26.1) | (64.0) | (22.2) | (21.1) | (20.6) | (36.0) | (41.1) | (56.6) | (30.4) | 33 |
| Fourth | (31.2) | (19.3) | (50.4) | (28.2) | (15.2) | (3.0) | (45.1) | (27.3) | (48.1) | (13.1) | 28 |
| Richest | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | 26 |

${ }^{1}$ Attending formal education is defined as attending at any time during the current school year. It is not possible to compute those attending at any time during the previous 12 months, as including those attending at any time in the previous school year would include a period outside 12 months ${ }^{2}$ Participation rate of youth in formal and non-formal education and training in the previous 12 months; SDG indicator 4.3.1 ${ }^{3}$ Proportion of youth not in education, employment or training (NEET); SDG indicator 8.6.1 ${ }^{4}$ Early leavers from education and training (ELET)

## Discussion

Overall, the field test showed difficulty during training and interviewing on this module. Even though most respondents were skipped out of the module at various stages, respondents and interviewers were displeased by the granularity of questions. Considerations for reducing the overall number of questions can improve the training and implementation difficulties experienced along with only including certain questions when their context requires them. Specifically related to education, there are currently two questions on training and courses/seminars (WB14D and WB14E) which may be collapsed into one as the exact details of these are not required for indicator calculation. This can reduce the burden on implementation but possibly provide an underestimate of these concepts. Given the long sequence of questions on labour, further exploratory work on reducing the number of questions in line with recent recommendations for collecting such data in population censuses may be useful to consider (6). These customizations can be aided by comparing with other surveys such as the Labour Force Surveys prior to implementing this module which can identify which questions are not necessary or which are out of context. Finally, the module's content may also be split across different modules in MICS e.g. moving the employment portion to later in questionnaire, as this may reduce repetition of concepts. These changes will require further field testing to understand how they function.

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Annex 1
The household questionnaire and questionnaire for individual women age 15-49 were used to collect data in this report and are shared below.

HOUSEHOLD INFORMATION PANEL

| HH1. Cluster number: |  | HH2. Household number: |  |
| :---: | :---: | :---: | :---: |
| HH3. Interviewer's name and number: NAME $\qquad$ |  | HH4. Supervisor's name and number: NAME |  |
| HH5. Day / Month / Year of interview: , 12019 |  | HH7. Region: <br> BELIZE CITY SOUTH SIDE | .............. 4 |
| HH6. Area: | $\begin{aligned} & \text { URBAN ............ } 1 \\ & \text { RURAL......... } 2 \end{aligned}$ | TOLEDO.................................... | ..... |

> Check that the respondent is a knowledgeable member of the household and at least 18 years old before proceeding. You may only interview a child age $15-17$ if there is no adult member of the household or all adult members are incapacitated. You may not interview a child under age 15.

| HH46. Result of Household Questionnaire interview: | COMPLETED ..................................................................................................................... 01 |
| :---: | :---: |
|  | NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT |
|  | RESPONDENT AT HOME AT TIME OF VISIT ................................................................... 02 |
|  | ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME ................................... 03 |
|  | REFUSED ........................................................................................................................... 04 |
| Discuss any result not completed with Supervisor. | DWELLING VACANT OR ADDRESS NOT A DWELLING ................................................... 05 |
|  | DWELLING DESTROYED................................................................................................... 06 |
|  | DWELLING NOT FOUND .................................................................................................. 07 |
|  | OTHER (specify) _ 96 |


| HH47. Name and line number of the respondent to |
| :--- | :--- |
| Household Questionnaire interview: |
| NAME |
| HOUSEHOLD MEMBERS |
| WOMEN AGE 15-49 |
| CHILDREN UNDER AGE 5 |
| CHILDREN AGE 5-17 |


| To be filled after the Household Questionnaire is completed |  | To be filled after all the questionnaires are completed |  |
| :---: | :---: | :---: | :---: |
| TOTAL NUMBER |  | COMPLETED NUMBER |  |
| HH48 | - |  |  |
| HH49 |  | HH53 |  |
| HH51 | - - | HH55 | - |
| HH52 | - - | HH56 | $\begin{aligned} & \text { ZERO....... } 0 \\ & \text { ONE...... } 1 \end{aligned}$ |




| HOUSEHOLD CHARACTERISTICS |  | HC |
| :---: | :---: | :---: |
| HC1A. What is the religion of (name of the head of the household from HL2)? | ANGLICAN $\qquad$ .01 <br> BAPTIST $\qquad$ 02 <br> JEHOVAH'S WITNESS $\qquad$ .03 <br> MENNONITE. $\qquad$ .04 <br> METHODIST $\qquad$ 05 <br> NAZARENE $\qquad$ 06 <br> PENTECOSTAL $\qquad$ .07 <br> ROMAN CATHOLIC $\qquad$ .08 <br> SEVENTH-DAY ADVENTIST $\qquad$ 09 <br> OTHER RELIGION <br> (specify) $\qquad$ 96 <br> NO RELIGION $\qquad$ .97 <br> DO NOT KNOW $\qquad$ 98 |  |
| HC1B. What is the first language of (name of the head of the household from HL2)? |  |  |
| HC2. To what ethnic group does (name of the head of the household from HL2) belong? |  |  |
| HC3. How many rooms do members of this household usually use for sleeping? | NUMBER OF ROOMS................................-_ - |  |


| HC4. Main material of the dwelling floor. <br> Record observation. <br> If observation is not possible, ask the respondent to determine the material of the dwelling floor. |  |
| :---: | :---: |
| HC5. Main material of the roof. <br> Record observation. |  |


| HC6. Main material of the exterior walls. <br> Record observation. | NO WALLS........................................................ 11 <br> NATURAL WALLS <br> CANE / PALM / TRUNKS .............................. 12 <br> DIRT. $\qquad$ 13 <br> PALMETTO / WILDCANE / STICKS. $\qquad$ 14 <br> RUDIMENTARY WALLS <br> BAMBOO / PALMETTO WITH MUD / $\qquad$ <br> STONE WITH MUD....................................... 22 <br> PLYWOOD ..................................................... 24 <br> CARTON / CARDBOARD............................. 25 <br> REUSED WOOD ............................................ 26 <br> FINISHED WALLS <br> CEMENT / CONCRETE................................. 31 <br> STONE WITH LIME / CEMENT / $\qquad$ $\qquad$ <br> CEMENT BLOCKS ........................................ 34 <br> WOOD PLANKS / SHINGLES ...................... 36 <br> WOOD AND CONCRETE ............................. 37 <br> STUCCO ......................................................... 38 <br> PLYCEM......................................................... 39 <br> METAL / TIN / CORRUGATED ZINC ......... 40 <br> OTHER (specify) $\qquad$ |  |
| :---: | :---: | :---: |
| HC7. Does your household have: | YES NO |  |
| [A] A fixed telephone line? | FIXED TELEPHONE LINE ............... 1 2 |  |
| [B] A radio? | RADIO ............................................ 1 2 |  |
| [C] A gas bar-b-q grill? | GAS BAR-B-Q GRILL...................... 1 2 |  |
| [D] A sofa set? | SOFA SET....................................... 1 2 |  |
| [E] A dining room set? | DINING ROOM SET......................... 1 2 |  |
| [F] A clothes closet? | CLOTHES CLOSET .......................... 1 2 |  |
| HC8. Does your household have electricity? | YES, INTERCONNECTED GRID ....................... 1 <br> YES, OFF-GRID (GENERATOR/ISOLATED $\qquad$ <br> NO $\qquad$ | $3 \Rightarrow H C 10$ |



| HC14. Do you or someone living in this household own this dwelling? <br> If 'No', then ask: Do you rent this dwelling from someone not living in this household? <br> If 'Rented from someone else', record '2'. For other responses, record ' 6 ' and specify. | OWN $\qquad$ <br> RENT. $\qquad$ <br> OTHER (specify) $\qquad$ 6 |  |
| :---: | :---: | :---: |
| HC15. Does any member of this household own any land that can be used for agriculture? | YES .................................................................................................................................... NO | $2 \Rightarrow H C 17$ |
| HC16. How many acres of agricultural land do members of this household own? <br> If less than 1, record '00'. | ACRES $\qquad$ |  |
| HC17. Does this household own any livestock, herds, other farm animals, or poultry? | YES .................................................................................................................................... NO | $2 \Rightarrow H C 19$ |
| HC18. How many of the following animals does this household have? <br> [A] Milk cows or bulls? <br> [B] Other cattle? <br> [C] Horses, donkeys or mules? <br> [D] Goats? <br> [E] Sheep? <br> [F] Chickens? <br> [G] Pigs? <br> [H] Turkeys? <br> [I] Ducks? <br> If none, record ' 00 '. If 95 or more, record ' 95 '. If unknown, record '98'. | MILK COWS OR BULLS $\qquad$ <br> OTHER CATTLE. $\qquad$ <br> HORSES, DONKEYS OR MULES $\qquad$ <br> GOATS $\qquad$ <br> SHEEP $\qquad$ <br> CHICKENS $\qquad$ <br> PIGS $\qquad$ <br> TURKEYS $\qquad$ <br> DUCKS $\qquad$ |  |
| HC19. Does any member of this household have a bank account or credit union account? | YES ................................................................................................................................ |  |


| EU1. In your household, what type of cookstove is mainly used for cooking? |  | $\begin{aligned} & 01 \Rightarrow E U 5 \\ & 02 \Rightarrow E U 5 \\ & 03 \Rightarrow E U 5 \\ & 04 \Rightarrow E U 5 \\ & 05 \Rightarrow E U 5 \\ & 06 \Rightarrow E U 4 \\ & \\ & 09 \Rightarrow E U 4 \\ & 96 \Rightarrow E U 4 \end{aligned}$ |
| :---: | :---: | :---: |
| EU2. Does it have a chimney? | YES.......................................................................................................................................................................................................................................... NO |  |
| EU3. Does it have a fan? |  |  |
| EU4. What type of fuel or energy source is used in this cookstove? <br> If more than one, record the main energy source for this cookstove. |  |  |
| EU5. Is the cooking usually done in the house, in a separate building, or outdoors? <br> If in main house, probe to determine if cooking is done in a separate room. <br> If outdoors, probe to determine if cooking is done on veranda, covered porch, or open air. | IN MAIN HOUSE <br> NO SEPARATE ROOM. $\qquad$ <br> IN A SEPARATE ROOM $\qquad$ <br> IN A SEPARATE BUILDING. $\qquad$ <br> OUTDOORS $\qquad$ <br> ON VERANDA OR COVERED PORCH............. 5 <br> OTHER (specify) $\qquad$ 6 |  |


| EU9. At night, what does your household mainly use to light the household? |  |
| :---: | :---: |

WS1. What is the main source of drinking water used by members of your household?

If unclear, probe to identify the place from which members of this household most often collect drinking water (collection point).


| WS2. What is the main source of water used by members of your household for other purposes such as cooking and handwashing? <br> If unclear, probe to identify the place from which members of this household most often collect water for other purposes. |  | $\begin{aligned} & 11 \Rightarrow W S 7 \\ & 12 \Rightarrow W S 7 \end{aligned}$ $\begin{aligned} & 61 \Rightarrow W S 4 \\ & 71 \Rightarrow W S 4 \\ & 72 \Rightarrow W S 4 \end{aligned}$ |
| :---: | :---: | :---: |
| WS3. Where is that water source located? | IN OWN DWELLING ........................................... 1 <br> IN OWN YARD / PLOT........................................ 2 <br> ELSEWHERE. | $\begin{aligned} & 1 \leftrightharpoons W S 7 \\ & 2 \Rightarrow W S 7 \end{aligned}$ |
| WS4. How long does it take for members of your household to go there, get water, and come back? | MEMBERS DO NOT COLLECT $\qquad$ .000 <br> NUMBER OF MINUTES $\qquad$ <br> DK. $\qquad$ .998 | $000 \Rightarrow W S 7$ |
| WS5. Who usually goes to this source to collect the water for your household? <br> Record the name of the person and copy the line number of this person from the LIST OF HOUSEHOLD MEMBERS Module. | NAME $\qquad$ <br> LINE NUMBER $\qquad$ |  |
| WS6. Since last (day of the week), how many times has this person collected water? | NUMBER OF TIMES <br> DK <br> 98 |  |
| WS7. In the last month, has there been any time when your household did not have sufficient quantities of drinking water? | YES, AT LEAST ONCE........................................ 1 <br> NO, ALWAYS SUFFICIENT $\qquad$ <br> DK $\qquad$ | $\begin{aligned} & 2 \Rightarrow W S 9 \\ & 8 \Rightarrow W S 9 \end{aligned}$ |
| WS8. What was the main reason that you were unable to access water in sufficient quantities when needed? | WATER NOT AVAILABLE FROM SOURCE.... 1 WATER TOO EXPENSIVE.................................. 2 SOURCE NOT ACCESSIBLE............................... 3 <br> OTHER (specify) $\qquad$ 6 <br> DK. $\qquad$ |  |


| WS9. Do you or any other member of this household do anything to the water to make it safer to drink? | YES ........................................................................................................................................... 12 NO....................................................................................... 8 | $\begin{aligned} & 2 \Rightarrow W S 11 \\ & 8 \Rightarrow W S 11 \end{aligned}$ |
| :---: | :---: | :---: |
| WS10. What do you usually do to make the water safer to drink? <br> Probe: <br> Anything else? <br> Record all methods mentioned. |  |  |
| WS11. What kind of toilet facility do members of your household usually use? <br> If 'Flush' or 'Pour flush', probe: <br> Where does it flush to? <br> If not possible to determine, ask permission to observe the facility. | FLUSH / POUR FLUSH <br> FLUSH TO PIPED SEWER SYSTEM............. 11 <br> FLUSH TO SEPTIC TANK.............................. 12 <br> FLUSH TO PIT LATRINE............................... 13 <br> FLUSH TO OPEN DRAIN................................ 14 <br> FLUSH TO DK WHERE .................................. 18 <br> PIT LATRINE <br> VENTILATED IMPROVED PIT $\qquad$ <br> PIT LATRINE WITH SLAB ............................ 22 <br> PIT LATRINE WITHOUT SLAB / <br> OPEN PIT $\qquad$ <br> COMPOSTING TOILET $\qquad$ <br> BUCKET. $\qquad$ <br> HANGING TOILET / <br> HANGING LATRINE $\qquad$ <br> NO FACILITY / BUSH / FIELD. $\qquad$ <br> OTHER (specify) $\qquad$ 96 | $\begin{aligned} & 11 \Rightarrow W S 14 \\ & 14 \Rightarrow W S 14 \\ & 18 \Rightarrow W S 14 \end{aligned}$ |
| WS12. Has your (answer from WS11) ever been emptied? | YES, EMPTIED $\qquad$ <br> NO, NEVER EMPTIED $\qquad$ <br> DK. $\qquad$ | $\begin{aligned} & 4 \Rightarrow W S 14 \\ & 8 \Rightarrow W S 14 \end{aligned}$ |


| WS13. The last time it was emptied, where were the contents emptied to? <br> Probe: <br> Was it removed by a service provider? | REMOVED BY SERVICE PROVIDER <br> TO A TREATMENT PLANT............................. 1 <br> BURIED IN A COVERED PIT .......................... 2 <br> TO DON'T KNOW WHERE.............................. 3 <br> EMPTIED BY HOUSEHOLD <br> BURIED IN A COVERED PIT $\qquad$ TO UNCOVERED PIT, OPEN GROUND, WATER BODY OR ELSEWHERE.................. 5 <br> OTHER (specify) $\qquad$ 6 <br> DK. $\qquad$ |  |
| :---: | :---: | :---: |
| WS14. Where is this toilet facility located? | IN OWN DWELLING............................................................................................................................................... |  |
| WS15. Do you share this facility with others who are not members of your household? | YES .................................................................................................................................... | $2 \Rightarrow E n d$ |
| WS16. Do you share this facility only with members of other households that you know, or is the facility open to the use of the general public? | SHARED WITH KNOWN HOUSEHOLDS <br> (NOT PUBLIC).................................................... 1 <br> SHARED WITH GENERAL PUBLIC.................. 2 | $2 \Rightarrow E n d$ |
| WS17. How many households in total use this toilet facility, including your own household? | NUMBER OF HOUSEHOLDS <br> (IF LESS THAN 10) $\qquad$ 0 <br> TEN OR MORE HOUSEHOLDS $\qquad$ .10 DK $\qquad$ 98 |  |


| HW1. We would like to learn about where members of this household wash their hands. <br> Can you please show me where members of your household most often wash their hands? <br> Record result and observation. | OBSERVED <br> FIXED FACILITY OBSERVED (SINK / TAP) <br> IN DWELLING $\qquad$ <br> IN YARD /PLOT. $\qquad$ <br> MOBILE OBJECT OBSERVED <br> (BUCKET / JUG / KETTLE) $\qquad$ <br> NOT OBSERVED <br> NO HANDWASHING PLACE IN DWELLING / <br> YARD / PLOT. $\qquad$ <br> NO PERMISSION TO SEE $\qquad$ <br> OTHER REASON (specify) $\qquad$ | $\begin{aligned} & 4 \Rightarrow H W 5 \\ & 5 \Rightarrow H W 4 \\ & 6 \Rightarrow H W 5 \end{aligned}$ |
| :---: | :---: | :---: |
| HW2. Observe presence of water at the place for handwashing. <br> Verify by checking the tap/pump, or basin, bucket, water container or similar objects for presence of water. | WATER IS AVAILABLE......................................... 1 <br> WATER IS NOT AVAILABLE $\qquad$ |  |
| HW3. Is soap or detergent present at the place for handwashing? | YES, PRESENT $\qquad$ <br> NO, NOT PRESENT $\qquad$ | $\begin{aligned} & 1 \Rightarrow H W 7 \\ & 2 \Rightarrow H W 5 \end{aligned}$ |
| HW4. Where do you or other members of your household most often wash your hands? | FIXED FACILITY (SINK / TAP) <br> IN DWELLING $\qquad$ <br> IN YARD / PLOT $\qquad$ <br> MOBILE OBJECT <br> (BUCKET / JUG / KETTLE) $\qquad$ <br> NO HANDWASHING PLACE IN <br> DWELLING / YARD / PLOT. $\qquad$ <br> OTHER (specify) $\qquad$ 6 |  |
| HW5. Do you have any soap or detergent in your house for washing hands? | YES ............................................................................................................................................ NO | $2 \Rightarrow E n d$ |
| HW6. Can you please show it to me? | YES, SHOWN $\qquad$ <br> NO, NOT SHOWN. $\qquad$ | $2 \Rightarrow E n d$ |
| HW7. Record your observation. <br> Record all that apply. | BAR OR LIQUID SOAP.......................................A DETERGENT (POWDER / LIQUID / PASTE) ...... B |  |


| AQ1. Take out the Air Quality Monitor from your bag and make sure that it is turned off. While asking the question, show it to the respondent. <br> We would like to take a reading of the air quality in your house using this instrument. This will measure the level of indoor air pollution. <br> Can we take this reading in the area where your household cooks? <br> If the response is ' $N o$ ', probe: <br> Can we take the reading somewhere else? | YES .. 1 <br> NO .. 2 | $2 \Rightarrow$ End |
| :---: | :---: | :---: |
| AQ2. Go to the cooking area if permission is given, turn on the Air Quality Monitor and record the result. Otherwise, record the reading where you are and then record the result. | READING <br> OTHER (specify) $\qquad$ 996 |  |
| AQ3. Record where the reading was taken. | INSIDE HOUSE <br> LIVING ROOM .......................................................... 01 <br> KITCHEN ................................................................. 02 <br> SLEEPING ROOM ..................................................... 03 <br> OTHER INSIDE ROOM. $\qquad$ 04 <br> OUTSIDE THE HOUSE <br> IN DOORWAY ........................................................... 05 <br> GARDEN .................................................................... 06 <br> PORCH...................................................................... 07 <br> OTHER (specify) $\qquad$ 96 |  |
| AQ4. Was anyone in the house cooking at the time of the reading? <br> Check with the respondent if unsure. |  |  |
| AQ5. Was anyone in the house smoking at the time of the reading? <br> Check with the respondent if unsure. |  |  |
| AQ6. Was anyone in the house burning mosquito coils or incense? |  |  |


| HH13. Record the time. | HOUR AND MINUTES ................... _ _ : _ _ |  |
| :---: | :---: | :---: |
| HH18. Check HL6 in the LIST OF HOUSEHOLD MEMBERS and indicate the total number of children age 5-17 years: | NO CHILDREN $\qquad$ <br> 1 CHILD $\qquad$ <br> 2 OR MORE CHILDREN (NUMBER) $\qquad$ | $\begin{aligned} & 0 \Rightarrow H H 29 \\ & 1 \Rightarrow H H 27 \end{aligned}$ |

HH19. List each of the children age 5-17 years below in the order they appear in the LIST OF HOUSEHOLD MEMBERS. Do not include other household members outside of the age range 5-17 years. Record the line number, name, sex, and age for each child.

| HH20 <br> Rank number | HH21. <br> Line number from HLI | HH22. <br> Name from HL2 | HH23. <br> Sex from HLA | HH24. <br> Age from <br> HL6 |
| :---: | :---: | :---: | :---: | :---: |
| RANK | LINE | NAME | M F | AGE |
| 1 | - |  | 2 | - |
| 2 | - - |  | 12 | - - |
| 3 | - - |  | 12 | - - |
| 4 | - |  | 12 | - |
| 5 | - |  | 12 | - - |
| 6 | - - |  | 12 | - - |
| 7 | - |  | 12 | - |
| 8 | - - |  | 12 | - - |

HH25. Check the last digit of the household number (HH2) from the HOUSEHOLD INFORMATION PANEL. This is the number of the row you should go to in the table below.

Check the total number of children age 5-17 years in HH18 above. This is the number of the column you should go to in the table below.

Find the box where the row and the column meet and record the number that appears in the box. This is the rank number (HH2O) of the selected child.

| LAST DIGIT OF <br> HOUSEHOLD NUMBER (FROM HH2) | TOTAL NUMBER OF ELIGIBLE CHILDREN IN THE HOUSEHOLD <br> (FROM HH18) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 | 3 | 4 | 5 | 6 | 7 | 8+ |
| 0 | 2 | 2 | 4 | 3 | 6 | 5 | 4 |
| 1 | 1 | 3 | 1 | 4 | 1 | 6 | 5 |
| 2 | 2 | 1 | 2 | 5 | 2 | 7 | 6 |
| 3 | 1 | 2 | 3 | 1 | 3 | 1 | 7 |
| 4 | 2 | 3 | 4 | 2 | 4 | 2 | 8 |
| 5 | 1 | 1 | 1 | 3 | 5 | 3 | 1 |
| 6 | 2 | 2 | 2 | 4 | 6 | 4 | 2 |
| 7 | 1 | 3 | 3 | 5 | 1 | 5 | 3 |
| 8 | 2 | 1 | 4 | 1 | 2 | 6 | 4 |
| 9 | 1 | 2 | 1 | 2 | 3 | 7 | 5 |

HH26. Record the rank number (HH2O), line number (HH21), name (HH22) and age (HH24) of the selected child.

HH27. (When HH18=1 or when there is a single child age 5-17 in the household):
Record the rank number as ' 1 'and record the line number (HL1), the name (HL2) and age (HL6) of this child from the LIST OF HOUSEHOLD MEMBERS.

RANK NUMBER $\qquad$

LINE NUMBER $\qquad$

NAME $\qquad$

AGE $\qquad$

HH28. Issue a QUESTIONNAIRE FOR CHILDREN AGE 5-17 to be administered to the mother/caretaker of this child.

| HH29. Check HL8 in the LIST OF HOUSEHOLD | YES, AT LEAST ONE WOMAN AGE 15-49........ 1 |  |
| :---: | :---: | :---: |
| MEMBERS: Are there any women age 15-49? | NO ................................................................... 2 | $2 \Rightarrow H H 40$ |

HH30. Issue a separate QUESTIONNAIRE FOR INDIVIDUAL WOMEN for each woman age 15-49 years.
$\left.\begin{array}{|l|l|l|l|}\hline \begin{array}{l}\text { HH31. Check HL6 and HL8 in the LIST OF } \\ \text { HOUSEHOLD MEMBERS: Are there any girls age } \\ 15-17 ? ~\end{array} & \text { YES, AT LEAST ONE GIRL AGE 15-17 .............. } 1 \\ \text { NO ....................................................................... } 2\end{array}\right] 2 \Rightarrow H H 40$

HH33. As part of the survey we are also interviewing women age 15-49. We ask each person we interview for permission. A female interviewer conducts these interviews.

For girls age 15-17 we must also get permission from an adult to interview them. As mentioned before, all the information we obtain will remain strictly confidential and anonymous.

May we interview (name(s) of female member(s) age 15-17) later?
$\square \quad$ 'Yes' for all girls age 15-17 $\Rightarrow$ Continue with HH40.
$\square \quad$ 'No' for at least one girl age 15-17 and 'Yes' to at least one girl age 15-17 $\Rightarrow$ Record '06' in WM17 (also in UF17 and FS17, if applicable) on individual questionnaires for those adult consent was not given. Then continue with HH40.
$\square \quad$ 'No' for all girls age $15-17 \Rightarrow$ Record '06' in WM17 (also in UF17 and FS17, if applicable) on all individual questionnaires for whom adult consent was not given. Then continue with HH40.
HH40. Check HL10 in the LIST OF HOUSEHOLD MEMBERS: Are there any children age 0-4?

YES, AT LEAST ONE $\qquad$
NO
$2 \Rightarrow H H 45$
HH41. Issue a separate QUESTIONNAIRE FOR CHILDREN UNDER FIVE for each child age 0-4 years.
HH45. Now return to the HOUSEHOLD INFORMATION PANEL and,

- Record '01' in question HH46 (Result of the Household Questionnaire interview),
- Record the name and the line number (from the LIST OF HOUSEHOLD MEMBERS) of the Respondent to the Household Questionnaire interview in HH47,
- Fill the questions HH48 - HH52
- Continue with HH60

MICS PLUS CONSENT
HH60. We would like to continue to talk about you and your family over the next 11 months. We wish to call you on the phone every month for 10-15 minutes. Again, all the information you provide will be confidential and anonymous.

Would you like to participate?

| YES ...................................................... 1 |  |
| :---: | :---: |
| NO .......................................................... 2 | $2 \leftrightharpoons$ HH66 |


| HH61. Please give me all phone numbers at which we can easily get in touch with you, starting with your preferred number. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| HH62. <br> Order | HH63. INDICATE IF THIS IS A LANDLINE, BELIZE MOBILE OR TIGO MOBILE | HH63A. Landline or Belize mobile Telephone Number | HH63B. TIGO mobile telephone number | HH64. Is there any preferred or more convenient time of the day we could call you on this number? |
| 1 | 1 LANDLINE <br> 2 BELIZE <br> MOBILE <br> 3 TIGO MOBILE <br> 4 NO PHONE <br> 5 NO MORE <br> PHONE <br> NUMBERS | Belize | TIGO__ _ _ | A MORNINGS <br> B AFTERNOON <br> C EVENINGS <br> D WEEKENDS <br> E ANYTIME <br> X OTHER (specify) $\qquad$ |
| 2 | 1 LANDLINE <br> 2 BELIZE <br> MOBILE <br> 3 TIGO MOBILE <br> 4 NO PHONE <br> 5 NO MORE PHONE NUMBERS | Belize | $\mathrm{TIGO}_{-} \quad \text { _ }$ | A MORNINGS <br> B AFTERNOON <br> C EVENINGS <br> D WEEKENDS <br> E ANYTIME <br> X OTHER (specify) $\qquad$ |
| 3 | 1 LANDLINE <br> 2 BELIZE <br> MOBILE <br> 3 TIGO MOBILE <br> 4 NO PHONE <br> 5 NO MORE PHONE <br> NUMBERS | Belize | TIGO___ | A MORNINGS <br> B AFTERNOON <br> C EVENINGS <br> D WEEKENDS <br> E ANYTIME <br> X OTHER (specify) $\qquad$ |

HH66. Check HH33: Is there any female(s) age 1517 that consent was sought and 'Yes' response was received from this respondent?

```
YES, CONSENT WAS GIVEN
NO, NO FEMALE AGE 15-17 OR
    CONSENT NOT GIVEN
```

$\qquad$

``` .2
```

| HH67. For the same project, may we contact (name) about once a month over the next 11 months? | 'Yes' for all girls age 15-17 $\qquad$ <br> 'No' for at least one girl age 15-17 and 'Yes' to at least one girl age 15-17 $\qquad$ <br> 'No to all girls age 15-17 $\qquad$ |
| :---: | :---: |

HH70. Thank the respondent for his/her cooperation and then

- Proceed with the administration of the remaining individual questionnaire(s) in this household.

If there is no individual questionnaire to be completed in this household thank the respondent for his/her cooperation and move to the next household you have been assigned by your supervisor.

INTERVIEWER'S OBSERVATIONS

SUPERVISOR'S OBSERVATIONS

WOMAN'S INFORMATION PANEL

## WM



| Check woman's age in HL6 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE: If age 15-17, verify in HH33 that adult consent for interview is obtained or not necessary $(H L 20=90)$. If consent is needed and not obtained, the interview must not commence and '06' should be recorded in WM17. |  | WM7. Recor | the time: |
| :---: | :---: | :---: | :---: |
|  |  |  | : MINUTES |
| WM8. Check completed questionnaires in this household: Have you or another member of your team interviewed this respondent for another questionnaire? | YES, INTERVIEWED ALREADY ......... 1 NO, FIRST INTERVIEW ........................ 2 |  | $\begin{aligned} & 1 \Rightarrow W M 9 B \\ & 2 \Rightarrow W M 9 A \end{aligned}$ |
| WM9A. Hello, my name is (your name). We are from Statistical Institute of Belize. We are conducting a survey about the situation of children, families and households. I would like to talk to you about your health and other topics. This interview usually takes about 15 minutes. We are also interviewing mothers about their children. All the information we obtain will remain strictly confidential and anonymous. If you wish not to answer a question or wish to stop the interview, please let me know. May I start now? | WM9B. Now I would like to talk to you about your health and other topics in more detail. This interview will take about 15 minutes. Again, all the information we obtain will remain strictly confidential and anonymous. If you wish not to answer a question or wish to stop the interview, please let me know. May I start now? |  |  |
| YES ................................................................................. 1 | $\begin{aligned} & 1 \Rightarrow W O M A N ' S ~ B A C K G R O U N D ~ M o d u l e \\ & 2 \leftrightharpoons W M 17 \end{aligned}$ |  |  |
| NO / NOT ASKED ............................................................ 2 |  |  |  |

WM17. Result of woman's interview.

Discuss any result not completed with Supervisor.
COMPLETED ..... 01
NOT AT HOME ..... 02
REFUSED ..... 03
PARTLY COMPLETED ..... 04
INCAPACITATED (specify) ..... 05
NO ADULT CONSENT FOR RESPONDENT AGE 15-17 ..... 06
OTHER (specify)96

| WB1. Check the respondent's line number (WM3) in WOMAN'S INFORMATION PANEL and the respondent to the HOUSEHOLD QUESTIONNAIRE (HH47): Is this respondent also the respondent to the Household Questionnaire? | YES, RESPONDENT IS THE SAME, <br> WM3=HH47 $\qquad$ <br> NO, RESPONDENT IS NOT THE SAME, <br> WM3 $\ddagger$ HH47 $\qquad$ $2$ | $2 \Rightarrow W B 3$ |
| :---: | :---: | :---: |
| WB2. Check ED5 in EDUCATION Module in the HOUSEHOLD QUESTIONNAIRE for this respondent: Highest level of school attended: | $\begin{aligned} & \text { ED5=3, } 4 \text { OR 5........................................................................................ } 1 \\ & \text { ED5=0, 1, 2, } 8 \text { OR BLANK............... } \end{aligned}$ | $\begin{aligned} & 1 \Rightarrow W B 14 A \\ & 2 \Rightarrow W B 14 \end{aligned}$ |
| WB3. In what month and year were you born? | DATE OF BIRTH <br> MONTH $\qquad$ <br> DK MONTH $\qquad$ 98 <br> YEAR <br> DK YEAR $\qquad$ 9998 |  |
| WB4. How old are you? <br> Probe: How old were you at your last birthday? <br> If responses to WB3 and WB4 are inconsistent, probe further and correct. Age must be recorded. | AGE (IN COMPLETED YEARS)................. - _ |  |
| WB5. Have you ever attended school or any early childhood education programme? | YES ......................................................................................................................................... | $2 \Rightarrow W B 14$ |
| WB6. What is the highest level and grade or year of school you have attended? | PRESCHOOL ................................................................................................................................................................................................................................................................................................ - <br> INFANT.......  <br> PRIMARY ........  | $000 \Rightarrow W B 14$ |
| WB7. Did you complete that (standard/form/year)? | YES .......................................................................................................................................... |  |
| WB8. Check WB4: Age of respondent: | AGE 15-24 .................................................................................................... 2 | $2 \Rightarrow W B 13$ |
| WB9. At any time during the current school year did you attend school? | YES ......................................................................................................................................... | $2 \Rightarrow W B 11$ |
| WB10. During this current school year, which level and standard/form/year are you attending? |  |  |
| WB11. At any time during the previous school year did you attend school? | YES ..................................................................................................................................... 2 | $2 \Rightarrow W B 13$ |
| WB12. During that previous school year, which level and standard/form/year did you attend? |  |  |
| WB13. Check WB6: Highest level of school attended: | $\begin{aligned} & \text { WB6= 3, } 4 \text { OR } 5 \text {............................................................................................................. } \end{aligned}$ | $1 弓 W B 14 A$ |


| WB14. Now I would like you to read this sentence to me. <br> Show sentence on the card to the respondent. <br> If respondent cannot read whole sentence, probe: Can you read part of the sentence to me? | CANNOT READ AT ALL ................................... 1 <br> ABLE TO READ ONLY PARTS <br> OF SENTENCE. $\qquad$ <br> ABLE TO READ WHOLE SENTENCE ............... 3 <br> NO SENTENCE IN <br> REQUIRED LANGUAGE / BRAILLE <br> (specify language) $\qquad$ 4 |  |
| :---: | :---: | :---: |
| WB14A. Check WB4/HL6: Age 15-24? | YES (WB4/HL6=15-24) .................................................................................. | $2 \Rightarrow W B 15$ |
| WB14B. Check WB9/ED9: Currently attending school? | $\begin{aligned} & \text { YES (WB9/ED9=1) ......................................................................................... } 1 \end{aligned}$ | $2 \Rightarrow W B 14 D$ |
| WB14C. Did you attend school within the last 4 weeks? | YES ..................................................................................................................................... 2 | $1 \Rightarrow W B 15$ |
| WB14D. Did you attend an apprenticeship, internship or work-place training during the last 4 weeks | YES ..................................................................................................................................... 1 NO....... | $1 \Rightarrow W B 15$ |
| WB14E. In the past 4 weeks, did you attend any courses, seminars, conferences or received private lessons or instruction? | YES ................................................................................................................................... 2 | $1 \Rightarrow W B 15$ |
| WB14F. In the last year, that is since (date of interview minus 1 year), did you attend such training? | YES ................................................................................................................................... 2 |  |
| WB14G. Last week, from Monday to Sunday, did you do any work for someone else for pay, even if only for one hour? | YES .................................................................................................................................. 2 | $1 \Rightarrow W B 15$ |
| WB14H. Last week, did you run or do any kind of business, farming or other activity to generate income, even if only for one hour? <br> Probe: Examples of activities include making things for sale, growing produce for sale, buying and reselling things, providing services for pay, raising animals or catching fish for sale. | YES ............................................................................................................................................ NO...... | $1 \Rightarrow W B 14 Q$ |
| WB14I. Last week, did you help with the paid job or business of a household or family member? | YES .................................................................................................................................. 2 | $1 \Rightarrow W B 14 Q$ |
| WB14J. Even though you did not work last week, did you have a paid job or a business? <br> Probe: Absence could be due to leave, illness, seasonality of agricultural activities, strike, etc. | YES .................................................................................................................................... 2 | $2 \Rightarrow W B 14 S$ |


| WB14K. Was the reason for your absence last week any of the following? | YES NO |  |
| :---: | :---: | :---: |
| [A] That you have shift work, flexi time, or similar nature of work? | SHIFT WORK $\qquad$ 12 | $1 \Rightarrow W B 14 Q$ |
| [B] That you were on vacation or holidays? | VACATION.......................................... 12 | $1 \Rightarrow W B 14 Q$ |
| [C] That you were sick, ill, or suffered an accident? | SICK $\qquad$ .1 $2$ | $1 \Rightarrow W B 14 Q$ |
| [D] That you were on (maternity/paternity) leave? | MATERNITY/PATERNITY .................... 1 2 | $1 \Rightarrow W B 14 Q$ |
| WB14L. Was the reason for your absence last week that you are waiting to start new job or business? | YES .................................................................................................................................. 1 NO....... | $1 \Rightarrow W B 14 S$ |
| WB14M. Was the reason for your absence last week that your paid job or business was in low or offseason? | YES ................................................................................................................................... 1 NO....... | $2 \Rightarrow W B 14 O$ |
| WB14N. During the low or off-season, do you continue to do some work for that job or business? | YES ........................................................................................................................... 1 | $\begin{aligned} & 1 \Rightarrow W B 14 Q \\ & 2 \Rightarrow W B 14 S \end{aligned}$ |
| WB140. Including the time that you have been absent, will you return to that same job or business in 3 months or less? | YES .............................................................................................................................................. 12 NO................................................................................................... | $1 \Rightarrow W B 14 Q$ |
| WB14P. Do you continue to receive an income from your job or business during this absence? | YES ............................................................................................................................................. 12 NO............. 2 DK............................................................................. 8 | $\begin{aligned} & 2 \Rightarrow W B 14 S \\ & 8 \Rightarrow W B 14 S \end{aligned}$ |
| WB14Q. Was this work that you mentioned in: | YES NO |  |
| [A] Farming or rearing farm animals? | FARMING ............................................ 1 2 |  |
| [B] Fishing or fish farming? | FISHING.............................................. 112 |  |
| [X] Another type of job or business? | OTHER ............................................... 1 2 |  |
| At least one 'yes' must be recorded in question [A], [B] or [X]. |  |  |
| WB14R. Check WB14Q: Is $[X]=1$ ? | YES (WB14Q[X]=1) ............................................................................ 1 NO (WB14Q[X]=2) .............. | $\begin{aligned} & 1 \leftrightharpoons W B 15 \\ & 2 \Rightarrow W B 14 T \end{aligned}$ |
| WB14S. Last week did you do any work in farming, rearing animals, fishing or fish farming? | YES ................................................................................................................................... 1 | $2 \Rightarrow W B 15$ |
| WB14T. Thinking about the products from (farming and/or fishing) you worked on, are they intended only for sale, mainly for sale, mainly for family use or only for family use? |  | $\begin{aligned} & 1 \leftrightharpoons W B 15 \\ & 2 \Rightarrow W B 15 \\ & 3 \leftrightharpoons W B 14 V \\ & 4 \leftrightharpoons W B 14 V \end{aligned}$ |
| WB14U. In general, in the past have these products been only sold, mainly sold, mainly kept or only kept for family use? | ONLY SOLD ......................................................... 1 MAINLY SOLD ............................................................. 2 MAINLY KEPT FOR FAMILY USE .............. 3 ONLY KEPT FOR FAMILY USE ......................... 4 | $\begin{aligned} & 1 \Rightarrow W B 15 \\ & 2 \Rightarrow W B 15 \end{aligned}$ |


| WB14V. Were you hired by someone else to do this work? | YES .................................................................................................................................... 2 |  |
| :---: | :---: | :---: |
| WB15. How long have you been continuously living in (name of current city, town or village of residence)? <br> If less than one year, record '00' years. | YEARS <br> ALWAYS / SINCE BIRTH ................................. 95 | 95 $\Rightarrow$ End |
| WB16. Just before you moved here, did you live in a city, in a town, or in a rural area? <br> Probe to identify the type of place. <br> If unable to determine whether the place is a city, a town or a rural area, write the name of the place and then temporarily record ' 9 ' until you learn the appropriate category for the response. |  |  |
| WB17. Before you moved here, in which region did you live in? | COROZAL............................................................ 01 <br> ORANGE WALK. $\qquad$ <br> BELIZE (EXCLUDING BELIZE CITY <br> SOUTH SIDE) $\qquad$ <br> BELIZE CITY SOUTH SIDE................................ 04 <br> CAYO $\qquad$ 05 <br> STANN CREEK $\qquad$ 06 <br> TOLEDO $\qquad$ .07 <br> OUTSIDE OF BELIZE <br> (specify) $\qquad$ 96 |  |


| CM1A. Now I would like to ask about births you have had during your life. Have you ever given birth? <br> This module should only include children born alive. Any stillbirths should not be included in response to any question. | YES ............................................................................................................................................... NO | $1 \Rightarrow C M 15 C$ |
| :---: | :---: | :---: |
| CM8. Have you ever given birth to a boy or girl who was born alive but later died? <br> If 'No' probe by asking: I mean, to any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time? | YES ............................................................................................................................................. | $2 \Rightarrow$ End |
| CM15C. In what month and year was your (last) child born? <br> Month and year must be recorded. | DATE OF LAST BIRTH <br> MONTH $\qquad$ <br> YEAR $\qquad$ |  |
| CM17. Check CM15C: Last birth occurred within the last 2 years, that is, since April in 2017? <br> If the month of interview and the month of birth are the same, and the year of birth 2017, consider this as a birth within the last 2 years. | NO LIVE BIRTHS IN THE LAST <br> 2 YEARS $\qquad$ <br> ONE OR MORE LIVE BIRTHS IN <br> THE LAST 2 YEARS $\qquad$ | $0 \Rightarrow E n d$ |
| CM18. Ask for the name of the last-born child. <br> If the child has died, take special care when referring to this child by name in the following modules. | NAME OF LAST-BORN CHILD |  |


| MN1. Check CM17: Was there a live birth in the last 2 years? <br> Copy name of last birth listed in the birth history (CM18) to here and use where indicated: <br> Name $\qquad$ | YES, CM17=1 $\qquad$ <br> NO, CM17=0 OR BLANK ...................................... 2 | $2 \Rightarrow$ End |
| :---: | :---: | :---: |
| MN2. Did you see anyone for antenatal care during your pregnancy with (name)? | YES ..................................................................................................................................... 1 | $2 \leftrightharpoons$ MN19 |
| MN3. Whom did you see? <br> Probe: Anyone else? <br> Probe for the type of person seen and record all answers given. | HEALTH PROFESSIONAL <br> DOCTOR..............................................................A <br> NURSE / MIDWIFE $\qquad$ B <br> OTHER PERSON <br> TRADITIONAL BIRTH ATTENDANT $\qquad$ F COMMUNITY HEALTH WORKER. $\qquad$ G <br> OTHER (specify) $\qquad$ X |  |
| MN4. How many weeks or months pregnant were you when you first received antenatal care for this pregnancy? <br> Record the answer as stated by respondent. If "9 months" or later, record 9. | WEEKS $\qquad$ $1$ $\qquad$ <br> MONTHS $\qquad$ 20 $\qquad$ DK $\qquad$ .998 |  |
| MN5. How many times did you receive antenatal care during this pregnancy? <br> Probe to identify the number of times antenatal care was received. If a range is given, record the minimum number of times antenatal care received. | NUMBER OF TIMES $\qquad$ <br> DK $\qquad$ .98 |  |
| MN6. As part of your antenatal care during this pregnancy, were any of the following done at least once: <br> [A] Was your blood pressure measured? <br> [B] Did you give a urine sample? <br> [C] Did you give a blood sample? | YES NO <br> BLOOD PRESSURE ................................. 1 2 <br> URINE SAMPLE ........................................ 1 2 <br> BLOOD SAMPLE ...................................... 1 2 |  |


| MN19. Who assisted with the delivery of (name)? <br> Probe: Anyone else? <br> Probe for the type of person assisting and record all answers given. | HEALTH PROFESSIONAL <br> DOCTOR..............................................................A <br> NURSE / MIDWIFE .............................................B <br> OTHER PERSON <br> TRADITIONAL BIRTH ATTENDANT ............. F <br> COMMUNITY HEALTH WORKER ..................G <br> RELATIVE / FRIEND. $\qquad$ <br> OTHER (specify) $\qquad$ X <br> NO ONE. $\qquad$ .Y |  |
| :---: | :---: | :---: |
| MN20. Where did you give birth to (name)? <br> Probe to identify the type of place. <br> If unable to determine whether public or private, write the name of the place and then temporarily record '76' until you learn the appropriate category for the response. <br> (Name of place) | HOME <br> RESPONDENT'S HOME.................................. 11 <br> OTHER HOME $\qquad$ 12 <br> PUBLIC MEDICAL SECTOR <br> GOVERNMENT HOSPITAL............................ 21 GOVERNMENT CLINIC / <br> HEALTH CENTRE $\qquad$ 22 <br> OTHER PUBLIC (specify) $\qquad$ 26 <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL........................................ 31 <br> PRIVATE CLINIC.............................................. 32 <br> PRIVATE MATERNITY HOME ....................... 33 <br> OTHER PRIVATE MEDICAL <br> (specify) $\qquad$ 36 <br> DK PUBLIC OR PRIVATE. $\qquad$ 76 <br> OTHER (specify) $\qquad$ 96 | $\begin{aligned} & 11 \leftrightharpoons M N 36 \\ & 12 \leftrightharpoons M N 36 \end{aligned}$ $96 \leftrightharpoons M N 36$ |
| MN21. Was (name) delivered by caesarean section? That is, did they cut your belly open to take the baby out? | YES ...................................................................................................................................... |  |
| MN36. Did you ever breastfeed (name)? | YES ........................................................................................................................................ NO | $2 \Rightarrow M N 39 B$ |
| MN37. How long after birth did you first put (name) to the breast? <br> If less than 1 hour, record '00' hours. <br> If less than 24 hours, record hours. <br> Otherwise, record days. | IMMEDIATELY................................................ 000 HOURS ......................................................... 1 - - DAYS .............................................................. 2 - - DK / DON'T REMEMBER ................................. 998 |  |
| MN38. In the first three days after delivery, was (name) given anything to drink other than breast milk? | YES ................................................................................................................................... 1 | $\begin{aligned} & 1 \leftrightharpoons M N 39 A \\ & 2 \leftrightharpoons \text { End } \end{aligned}$ |



## ATTITUDES TOWARD DOMESTIC VIOLENCE

DV1. Sometimes a husband is annoyed or angered by things that his wife does. In your opinion, is a husband justified in hitting or beating his wife in the following situations:
[A] If she goes out without telling him?
[B] If she neglects the children?
[C] If she argues with him?
[D] If she refuses to have sex with him?
[E] If she burns the food?

|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  | YES | NO | DK |
| GOES OUT WITHOUT |  |  |  |
| TELLING................................. 1 | 2 | 8 |  |
| NEGLECTS CHILDREN .............. 1 | 2 | 8 |  |
| ARGUES WITH HIM................... 1 | 2 | 8 |  |
| REFUSES SEX .............................. 1 | 2 | 8 |  |
| BURNS FOOD .............................. 1 | 2 | 8 |  |


| VT20. Check for the presence of others. Before continuing, ensure privacy. <br> How safe do you feel walking alone in your neighbourhood after dark? |  |  |
| :---: | :---: | :---: |
| VT21. How safe do you feel when you are at home alone after dark? |  |  |

VT30. Let me assure you again that your answers are completely confidential.
I will now ask you about discrimination. Discrimination happens when you are treated less favourably compared to others or harassed because of the way you look, where you come from, what you believe or for other reasons. You may be refused equal access to work, housing, healthcare, education, marriage or family life, the police or justice system, shops, restaurants or any other services and opportunities. You may also encounter comments, gestures or other behaviours that make you feel offended, threatened or insulted, or have to stay away from places or activities to avoid such behaviours.

VT31. In Belize, do you feel that you have personally experienced any form of discrimination or harassment during the last 5 years, namely since April 2014 (or since you have been in the country), on the following grounds?

Show the attached card (Showcard) to the respondent or read it if the respondent has difficulty to read.

Go through the list of grounds one by one. If necessary, help the respondent to establish the recall period and make sure that you allow adequate time for the recall.

You may reassure: "It can be difficult to remember this sort of incidents, so please take your time while you think about your answers".
[A] Sex?
[B] Age?
[C] Disability or health status?
[D] Ethnicity, colour or language?
[E] Migration status?
[F] Socio-economic status?
[G] Geographic location or place of residence?
[H] Religion?
[I] Marital and family status?
[J] Sexual orientation or gender identity?
[K] Political opinion?
[L] Other grounds?

SEX $\qquad$ 128

AGE. $\qquad$ 128

DISABILITY OR HEALTH STATUS $\qquad$ 128

ETHNICITY, COLOUR, LANGUAGE $\qquad$ 128

MIGRATION STATUS $\qquad$ 128

SOCIO-ECONOMIC STATUS .. 1 8

GEOGRAPHIC LOCATION OR PLACE OF RESIDENCE ...... 1 2 8

RELIGION $\qquad$ 128

MARITAL AND FAMILY STATUS $\qquad$ 128

SEXUAL ORIENTATION OR GENDER IDENTITY $\qquad$ 128

POLITICAL OPINION ............... 1 2

OTHER GROUNDS ................... 1 2

VT32. Check VT31 [A] to [L]: Is there at least one 'Yes' recorded?
$2 \Rightarrow$ End

VT33. Only for the ground(s) to which the respondent said (YES) in VT31, ask the question repeating the ground(s) mentioned by the respondent and then record the answer. For ground(s) recorded as "NO" in VT31 do not record any answers.

In Belize, do you feel that you have personally experienced any form of discrimination or harassment during the past 12 months, namely since (month of interview) 2018, on any of these ground(s) you identified under the preceding question?
[A] Sex?
[B] Age?
[C] Disability or health status?
[D] Ethnicity, colour or language?
[E] Migration status?
[F] Socio-economic status?
[G] Geographic location or place of residence?
[H] Religion?
[I] Marital and family status?
[J] Sexual orientation or gender identity?
[K] Political opinion?
[L] Other grounds?

| YES | NO | DK |
| :---: | :---: | :---: |
| SEX ....................................... 1 | 2 | 8 |
| AGE....................................... 1 | 2 | 8 |
| DISABILITY OR HEALTH STATUS $\qquad$ | 2 | 8 |
| ETHNICITY, COLOUR, <br> LANGUAGE. $\qquad$ 1 | 2 | 8 |
| MIGRATION STATUS ............. 1 | 2 | 8 |
| SOCIO-ECONOMIC STATUS .. 1 | 2 | 8 |
| GEOGRAPHIC LOCATION OR PLACE OF RESIDENCE ...... 1 | 2 | 8 |
| RELIGION .............................. 1 | 2 | 8 |
| MARITAL AND FAMILY STATUS $\qquad$ .1 | 2 | 8 |
| SEXUAL ORIENTATION OR GENDER IDENTITY $\qquad$ 1 | 2 | 8 |
| POLITICAL OPINION .............. 1 | 2 | 8 |
| OTHER GROUNDS ................. 1 | 2 | 8 |

## SHOWCARD

Discrimination happens when you are treated less favourably compared to others or harassed because of the way you look, where you come from, what you believe or for other reasons. You may be refused equal access to work, housing, healthcare, education, marriage or family life, the police or justice system, shops, restaurants or any other services and opportunities. You may also encounter comments, gestures or other behaviours that make you feel offended, threatened or insulted, or have to stay away from places or activities to avoid such behaviours.

1. SEX: such as being a woman or a man
2. AGE: such as being perceived to be too young or too old
3. DISABILITY OR HEALTH STATUS: such as having difficulty in seeing, hearing, walking or moving, concentrating or communicating, having a disease or other health conditions or no reasonable accommodation provided for it
4. ETHNICITY, COLOUR OR LANGUAGE: such as skin colour or physical appearance, ethnic origin or way of dressing, culture, traditions, native language, indigenous status, or being of African descent
5. MIGRATION STATUS: such as nationality or national origin, country of birth, refugees, asylum seekers, migrant status, undocumented migrants or stateless persons
6. SOCIO-ECONOMIC STATUS: such as wealth or education level, being perceived to be from a lower or different social or economic group or class, land or home ownership or not
7. GEOGRAPHIC LOCATION OR PLACE OF RESIDENCE: such as living in urban or rural areas, formal or informal settlements
8. RELIGION: such as having or not a religion or religious beliefs
9. MARITAL AND FAMILY STATUS: such as being single, married, divorced, widowed, pregnant, with or without children, orphan or born from unmarried parents
10. SEXUAL ORIENTATION OR GENDER IDENTITY: such as being attracted to person of the same sex, self-identifying differently from sex assigned at birth or as being either sexually, bodily and/or gender diverse
11. POLITICAL OPINION: such as expressing political views, defending the rights of others, being a member or not of a political party or trade union
12. OTHER GROUNDS

| MA1. Are you currently married or living together with someone as if married or in a visiting partner relationship? | YES, CURRENTLY MARRIED............................ 1 YES, LIVING WITH A PARTNER ........................ 2 YES, IN A VISITING PARTNER RELATIONSHIP..................................................................................................... | $3 \leftrightharpoons M A 5$ |
| :---: | :---: | :---: |
| MA2. How old is your (husband/partner/visiting partner)? <br> Probe: How old was your (husband/partner/visiting partner) on his last birthday? | AGE IN YEARS <br> DK | $\begin{aligned} & \Rightarrow M A 7 \\ & 98 \Rightarrow M A 7 \end{aligned}$ |
| MA5. Have you ever been married or lived together with someone as if married or been in a visiting partner relationship? |  | $3 \Rightarrow E n d$ |
| MA6. What is your marital status now: are you widowed, divorced or separated? |  |  |
| MA7. Have you been married or lived with someone or been in a visiting partner relationship only once or more than once? | ONLY ONCE....................................................................................... 2 | $\begin{aligned} & 1 \Rightarrow M A 8 A \\ & 2 \Rightarrow M A 8 B \end{aligned}$ |
| MA8A. In what month and year did you start (living with your husband/partner) (your visiting partner relationship)? <br> MA8B. In what month and year did you start (living with your first husband/partner) (your first visiting partner relationship)? | DATE OF (FIRST) UNION <br> MONTH. <br> DK MONTH $\qquad$ <br> YEAR. <br> DK YEAR ...................................................... 9998 |  |
| MA9. Check MA8A/B: Is 'DK YEAR' recorded? | YES, MA8A/B=9998......................................................................................... | $2 \Rightarrow E n d$ |
| MA10. Check MA7: In union only once? | YES, MA7=1 ................................................................................................................. | $\begin{aligned} & 1 \leftrightharpoons M A 11 A \\ & 2 \leftrightharpoons M A 11 B \end{aligned}$ |
| MA11A. How old were you when you started (living with your husband/partner) (your visiting partner relationship)? <br> MA11B. How old were you when you started (living with your first husband/partner) (your first visiting partner relationship)? | AGE IN YEARS .........................................._- |  |

LS1. I would like to ask you some simple questions on happiness and satisfaction.

First, taking all things together, would you say you are very happy, somewhat happy, neither happy nor unhappy, somewhat unhappy or very unhappy?

I am now going to show you pictures to help you with your response.

Show smiley card and explain what each symbol represents. Record the response code selected by the respondent.

LS2. Show the picture of the ladder.

Now, look at this ladder with steps numbered from 0 at the bottom to 10 at the top.

Suppose we say that the top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you.

On which step of the ladder do you feel you stand at this time?

Probe if necessary: Which step comes closest to the way you feel?

LS3. Compared to this time last year, would you say that your life has improved, stayed more or less the same, or worsened, overall?

LS4. And in one year from now, do you expect that your life will be better, will be more or less the same, or will be worse, overall?


VERY HAPPY........................................................... 1
SOMEWHAT HAPPY............................................... 2
NEITHER HAPPY NOR UNHAPPY ....................... 3
SOMEWHAT UNHAPPY ........................................ 4
VERY UNHAPPY ..................................................... 5
-
,
$\left.\begin{array}{|l|l|l|} & & \\ \text { VERY HAPPY................................................................................................................. } 3\end{array}\right)$
Very

happy $\quad$ Somewhat happy \begin{tabular}{r}
Neither happy, <br>
nor unhappy

$\quad$

Somewhat <br>
unhappy <br>
unhappy
\end{tabular}

## Best Possible Life



Worst Possible Life

MICS PLUS CONSENT

| WM11A. Check HH60.Was consent for MICS Plus previously asked from this respondent? | YES, CONSENT ALREADY ASKED ................ 1 <br> NO, NOT ASKED............................................... 2 | $1 \Rightarrow W M 15$ |
| :---: | :---: | :---: |
| WM11A1. Check HH67. Was consent for MICS Plus previously given for this respondent in the HH questionnaire? | YES ................................................................................................................. 1 | $2 \Rightarrow W M 15$ |
| WM11A2. Was consent for MICS Plus previously asked from this respondent in any other questionnaire (U5Q or 5-17Q)? | YES, CONSENT ALREADY ASKED ................ 1 <br> NO, NOT ASKED $\qquad$ | $1 \Rightarrow W M 15$ |
| WM11B. We would like to continue to talk about you and your family over the next 11 months. We wish to call you on the phone every month for $10-15$ minutes. Again, all the information you provide will be confidential and anonymous. <br> Would you like to participate? | $\begin{aligned} & \text { YES ............................................................................................................................. } 2 \\ & \text { NO ............ } \\ & \text { OTHER (specify) } \end{aligned}$ | $\begin{aligned} & 2 \Rightarrow W M 15 \\ & 6 \Rightarrow W M 15 \end{aligned}$ |


| WM11C. Please give me all phone numbers at which we can easily get in touch with you, starting with your preferred number. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| WM11D. <br> Order | WM11E. <br> Indicate IF THIS IS A LANDLINE, BELIZE MOBILE or tigo mobile | WM11F1. Landline or Belize mobile Telephone Number | WM11F2. TIGO mobile telephone number | WM11G. Is there any preferred or more convenient time of the day we could call you on this number? |
| 1 | 1 LANDLINE <br> 2 BELIZE <br> MOBILE <br> 3 TIGO MOBILE <br> 4 NO PHONE <br> 5 NO MORE <br> PHONE <br> NUMBERS | Belize | TIGO__ _ _ | A MORNINGS <br> B AFTERNOON <br> C EVENINGS <br> D WEEKENDS <br> E ANYTIME <br> X OTHER (specify) $\qquad$ |
| 2 | 1 LANDLINE 2 BELIZE MOBILE <br> 3 TIGO MOBILE <br> 4 NO PHONE <br> 5 NO MORE PHONE NUMBERS | Belize | TIGO___ | A MORNINGS <br> B AFTERNOON <br> C EVENINGS <br> D WEEKENDS <br> E ANYTIME <br> X OTHER (specify) $\qquad$ |
| 3 | 1 LANDLINE <br> 2 BELIZE <br> MOBILE <br> 3 TIGO MOBILE <br> 4 NO PHONE <br> 5 NO MORE PHONE <br> NUMBERS | Belize $\qquad$ | TIGO___- | A MORNINGS <br> B AFTERNOON <br> C EVENINGS <br> D WEEKENDS <br> E ANYTIME <br> X OTHER (specify) $\qquad$ |

WM15. Check columns HL10 and HL20 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE:
Is the respondent the mother or caretaker of any child age 0-4 living in this household?
$\square$ Yes $\Rightarrow$ Go to WM17 in WOMAN'S INFORMATION PANEL and record '01'. Then go to the QUESTIONNAIRE FOR CHILDREN UNDER FIVE for that child and start the interview with this respondent.
$\square$ No $\Rightarrow$ Check HH26-HH27 in HOUSEHOLD QUESTIONNAIRE: Is there a child age 5-17 selected for QUESTIONNAIRE FOR CHILDREN AGE 5-17?
$\square Y e s \Rightarrow$ Check column HL20 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE: Is the respondent the mother or caretaker of the child selected for QUESTIONNAIRE FOR CHILDREN AGE 5-17 in this household?
$\square$ Yes $\Rightarrow$ Go to WM17 in WOMAN'S INFORMATION PANEL and record '01'. Then go to the QUESTIONNAIRE FOR CHILDREN AGE 5-17 for that child and start the interview with this respondent.
$\square N o \Rightarrow$ Go to WM17 in WOMAN'S INFORMATION PANEL and record ' 01 '. Then end the interview with this respondent by thanking her for her cooperation. Check to see if there are other questionnaires to be administered in this household.
$\square N o \Rightarrow G o$ to WM17 in WOMAN'S INFORMATION PANEL and record '01'. Then end the interview with this respondent by thanking her for her cooperation. Check to see if there are other questionnaires to be administered in this household.

For information on the report, please contact:

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[^0]:    One missing case from Education is omitted in the table
    $\left(^{*}\right)$ Figures that are based on fewer than 25 unweighted cases

[^1]:    ( ) Figures that are based on 25-49 unweighted cases
    ${ }^{(*)}$ Figures that are based on fewer than 25 unweighted cases

