

**Reviewing Methodology Developed for Multi-Indicator Survey on Ageing
(MISA) in sub-Saharan Africa**

New York, 15 - 16 May 2018

Report of the Expert Group Meeting



United Nations

DESA

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I. Background to the Meeting

The Division for Inclusive Social Development in collaboration with the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat organized an expert group meeting on “Review Methodology developed for Multi-Indicator Survey on Ageing (MISA) in sub-Saharan Africa” from 15-16 May 2018 at the United Nations Headquarters in New York. The meeting is convened in the framework of the Development Account Project ‘Data collection methodology and tools for supporting the formulation of evidence-based policies in response to the challenge of population ageing in sub-Saharan Africa’ (Uganda, Kenya and Malawi).

The expert group meeting aimed at reviewing the regional guidelines for the MISA developed within this project, which include: the survey instrument, sampling strategy, survey implementation guidelines, data collection (Computer-Assisted Personal Interviewing - CAPI) and data analysis tools that were developed in the framework of the project. The meeting brought together national experts from sub-Saharan Africa as well as international experts who had contributed to the development of the methodology.

The main objective of the meeting was to review and finalize the MISA survey instruments and to provide feedback for the finalization of the instruments for submission to the Statistical Commission for Africa for endorsement. More specifically, the expert group meeting aimed to (1) review the survey methodology; (2) identify methodological gaps and challenges; and (3) issue suggestions on how to improve the methodology to enhance its efficiency and effectiveness for evidence-based policy making on ageing and older persons in sub-Saharan Africa.

II. Session 1 – Item 2: Presentation of Preliminary Findings

Following a brief introduction and overview of the project and instruments developed (Session 1 – Item 1), Mr. Jesman Chintsanya, consultant on data analysis and national report writing, Malawi, delivered a presentation on the main findings of the pilot survey. The preliminary data collected from older persons and their household, highlighted the situation of older persons in Malawi with regard to family structure and living arrangements, income, assets, employment and work, social protection, food insecurity and hunger, self-reported health status and impairments, access to healthcare services, provision of care, elder abuse, in addition to housing and the living environment.

The expert group meeting discussions highlighted the following issues:

- When reviewing the preliminary findings, it is important to clarify that the pilot survey does not measure prevalence and is not representative at the national level;

- It is important to clearly state that the pilot survey was based on self-reporting of health status, which may entail a possible under-reporting of certain health conditions as cancer and diabetes;
- Participants recommended testing the statistical significance of gender differences, given that data was collected by sex.
- In reporting on the preliminary findings, and since two questionnaires were used – for households and for individuals – it is important to clarify which category does “respondents” refer to;
- There may be a need to harmonize certain terminology, such as “metal roofing” for example, which composition may differ amongst Member States.

III. Session 2: The Questionnaires

Ms. Iliana Kohler, the project’s expert on development of questionnaires delivered a presentation on “Overview of survey instruments, questionnaires and challenges.” The survey addressed data gaps in the three priority areas of the Madrid International Plan of Action on Ageing (MIPAA), namely: older persons and development; advancing health and well-being into old age; as well as ensuring enabling and supportive environments. In order to get appropriate information on these issues, the questionnaire was built in two parts: (1) a household questionnaire, in which one was completed per sampled household by interviewing a selected key informant (ideally the household head) about the members of the household, household finances and living conditions for those in the household. The household questionnaire also aimed at identifying age-eligible respondents who would participate in the second part of the survey; and (2) an individual questionnaire, which would be collected for each household member aged 60 years and over.

The household questionnaire consists of eight sections: (1) section1 collects information on the individual responding to the household questionnaire; (2) section2 collects the household listing; (3) section3 focuses on the housing environment; (4) section4 collects information on household income; (5) section5 asks about the household’s agricultural income and assets; (6) section6 asks questions on the household’s financial and non-financial assets; (7) section7 focuses on access to social programmes and benefits; (8) section8 evaluates the overall economic situation of the household.

The individual questionnaire, on the other ha is more comprehensive and consists of fourteen sections that cover demographics, information on children ever born, step-children and adopted children, different aspects of physical and mental health, intergenerational relationships and transfers among the respondent and family and friend networks, employment history and

current income sources, access to pensions and other social benefits and programmes. The individual questionnaire also collects information on abuse of older people, perception of ageing, loneliness, and day-to-day experience of older people.

Following the presentation of the questionnaires, the meeting discussions highlighted the following:

- Translating the pilot survey questionnaires into local languages is challenging and may require modification of certain parts of the questionnaire to express the same meaning across languages and cultures. Employing bilingual assistants to undertake on-the-spot interpretation of the questions into local languages could lead to potential data quality issues;
- Participants recommended that Member States adapt the questionnaires to meet their particular needs and circumstances.

IV. Session 3: Data Collection – Item 4: CAPI Development

Mr. David Beckles, an expert on data collection delivered a presentation on the development of the Computer-Assisted Personal Interviewing software (CAPI) as well as its applications and guidelines, followed by a presentation by Mr. Medson Makwemba from the National Statistical Office of Malawi on utilizing CAPI and its user manual. CAPI refers to survey data collection by an in-person/face-to-face interviewer who uses a tablet to administer the questionnaire to the respondent, while also recording the responses onto the tablet. The Census and Survey Processing System (CSPro), a public domain data processing software package developed by the U.S. Census Bureau, as utilized to support CAPU in entering, editing, tabulating, and disseminating survey data. CSPro was designed to be user-friendly and could be used by a wide range of people, from non-technical staff assistants to senior demographers and programmers. The familiarity of the Malawi National Statistical Office with the CSPro software package was an additional advantage for its utilization in the pilot survey on older persons. The advantages of a CAPI application include:

- Improvements in data collection and data capture;
- Ease of implementing changes to the questionnaire;
- Improvements in data quality by providing built-in skip patterns and valid value ranges;
- Reduced cost through elimination of paper questionnaire printing and the burden on field teams to have sufficient numbers of blank questionnaires; and
- Ease of data transfer to the central office through the internet.

The CAPI utilized in the MISA pilot survey had two main functions, namely (1) the supervisor menu for assigning interviews to interviewer, receiving data and transferring data to

central office; and (2) the interview menu for conducting household and individual interviews, as well as sending data to the supervisor.

Following the presentation, the meeting discussions highlighted the following issues:

- Questionnaire programming (i.e. developing an appropriate CAPI application based on a written questionnaire) requires full collaboration at the initial stage of questionnaire design. It would be challenging to digitalize surveys without keeping in mind an overview of the content and functionality of the questions when re-written in code;
- Translation of the original questionnaire is challenging from a software development perspective and should be taken into consideration;
- The utilization of CAPI depends on availability of and access to reliable internet services;
- Data encryption was recommended to ensure security of confidential information.

V. Session 3 – Item 5: Sampling Methodology

Mr. David Megill, an expert on sampling discussed the general sampling guidelines for MISA and delivered an overview of the sampling manual, which was developed as a practical tool to assist implementing agencies in designing and selecting effective samples of households and persons aged 60 years and older. The Malawi pilot survey of older persons was conducted in four districts: Mzimba, Lilongwe Rural, Mangochi and Nsanje. While the districts cover different geographic regions, ethnic groups and other characteristics, they are not representative of all older persons in Malawi. The sampling frame was based on the data and cartographic materials from the 2008 Malawi Census. The primary sampling units (PSUs) selected at the first stage were based on the census enumeration areas (EAs), which are small operational area units defined for the census field operations. The boundaries of the EAs were clearly identified on census maps.

The 2008 Census data provided the number of households for each EA, and those with at least one person aged 52 years or older, as well as the corresponding population in this age group. Given that the Census was conducted eight years prior to the pilot survey, surviving persons in that age group were at least 60 years old in 2017. The average number of households per EA varied by district, from 163 in Mzimba to 287 in Manochi. The average number of households with at least one person aged 52+ per EA also varied by EA, from 44 for Mzimba to 77 for Mangochi, with an overall average of 58 households with older persons per EA. Mr. Megill noted that most of the EAs were in the range of 20 to 99 households with persons aged 52+, but there were a few EAs with less than 10 households with older persons, and a few with more than 150 households with older persons. Given this variability in the size of the EAs, it was recommended to select the EAs with probability proportional to size (PPS); the measure of size was based on the number of households in the EA with at least one person aged 52 years or more from the 2008 Malawi Census frame.

The pilot survey adopted a two-stage sampling design in each district to achieve its objective. The initial proposal was to select a sample of 40 EAs within each district at the first stage, using systematic sampling with PPS. A listing was conducted in each sample EA to cover all households within the EA boundaries, with screening questions to identify the households with at least one person aged 60+. Households with at least one older person were eligible for selection at the second sampling stage. Twelve households with persons aged 60+ were selected in each sample EA at the second sampling stage, and all the household members in this age group were interviewed for the pilot survey.

Following the presentation, the meeting discussions highlighted the following issues:

- Some challenges were encountered with the sampling strategy in cases of non-responding households, which ended-up being excluded from the pilot survey. Establishing a larger sampling frame with replacements for non-responding households could be a solution;
- There is a need for an updated roster of households to reduce the risk of under-representation;
- For each household, when asking the question as to whether or not there was a member above the age of 60 years, it is important to clarify that participating in the survey will not entail provision of social benefits, to ensure that the list does not contain persons of ineligible age. The pilot also experienced undercounting of women who tend to say they are younger than 60;
- The option of having household listing and interviews occur simultaneously instead of utilizing central selection was discussed. Participants noted that this option would pose more responsibility on team leaders in terms of quality and call backs.

VI. Session 5 – Survey Implementation

Mr. Medson Makwemba from the National Statistical Office of Malawi delivered presentations on the interviewer training, the preparation of fieldwork, as well as the challenges, opportunities and lessons learned from the Malawi pilot survey implementation. Preparation for the field work entailed: finalizing the survey sample; translating questionnaires into two local languages (Chichewa and Chitumbuka); supporting CAPI development and programming; providing a list of human resources required for undertaking the pilot survey; organizing training on household listing; conducting household listing; selecting the sample of eligible households to interview; organizing interviewer training; and conducting fieldwork on data collection. Mr. Makwemba highlighted several challenges faced during the implementation of the pilot survey, including challenges related to preparation of fieldwork; to data collection; and to the interviewees themselves.

Following the presentation, the meeting discussions highlighted the following issues:

- Given that the Malawi survey, as a pilot test, received the minimum requirement for its implementation, the provision of additional time and resources could contribute to further improvements of the survey;
- High quality questionnaire translations are vital for data quality. This requires additional time and resources;
- The pilot survey did not provide information on why an older person is no longer at an eligible household. Follow-up questions could be incorporated to inquire on the reason for that whether it is death, migration or an error in the listing;
- Interviewers administering the questionnaires require adequate training and clear distribution of roles and responsibilities. CAPI could support the establishment of a more standardized relationship between the assistant and interviewee. This will also allow team leaders, in cases of low responses, to request conducting resurveys following the original interviews;
- Participants highlighted challenges in collecting information on mental health. A more in-depth review is needed on the set of questions related to perceived mental health conditions.

VII. Conclusion

In 2017, older persons accounted for a total number of 69 million people in Africa. Between 2017 and 2050, the number of older persons is expected to grow fastest in Africa, with a projected 229 per cent increase. This will have profound implications for many facets of life; affecting everything from economies, labour markets to health and social care. As we work to achieve the Sustainable Development Goals and to realize the pledge to leave no-one behind and ensure that people can age with security and dignity, we must address the many gaps in ageing-related statistics and data, which affect our ability to better understand the implications and opportunities presented by ageing societies.

The Multi-Indicator Survey on Ageing (MISA) in sub-Saharan Africa presents a vital initial step in developing a standard methodology to produce a database of reliable and harmonized indicators on the situation of older persons in sub-Saharan Africa. The pilot was unique in ensuring the participation of all relevant stakeholders at the national and regional levels. The pilot survey results can inform feasibility and identify modifications needed in the design of a larger survey, taking into account the recommendations listed in the report to further enhance and finetune the instrument towards a standardized approach for data collection on older persons in sub-Saharan Africa.

Agenda

Day 1: Tuesday, 15 May 2018

9:30 – 10:00 **Opening and Welcome**
Ms. Rosemary Lane, Focal Point on Ageing and Senior Social Affairs Officer,
UNDESA

Session 1: Introduction and Overview of the project and instruments developed

10:00 – 10:50 **Item 1: Overview of the Project and Instruments Developed**
Mr. Salvatore Favazza, Social Affairs Officer, Technical Cooperation Unit, UNDESA
Ms. Karoline Schmid, Chief of Fertility and Family Planning Section, Population
Division, UNDESA

Item 2: Presentation of Preliminary Findings

Mr. Jesman Chintsanya, consultant on data analysis and national report writing,
Malawi

Session 2: Questionnaires

10:50 – 11:20 **Item 3: Household and Individual Questionnaires**
Chaired by Ms. Yumiko Kamiya, Statistics Division, UNDESA

Overview of survey instruments used to develop questionnaires, and overview of questionnaires/challenges

Ms. Iliana Kohler, expert on development of questionnaires, USA

Discussion and Feedback

11:20 – 11:40 *Coffee break*

Session 3: Data Collection

11:40 – 13:00 **Item 4: CAPI Development (Applications and Guidelines)**
Chaired by Mr. Salvatore Favazza

Development of CAPI, presentation of instrument and challenges with development

Mr. David Beckles, expert on CAPI development, United Kingdom

Presentation on use of CAPI and present CAPI user manual

Mr. Medson Makwemba, National Statistics Office, Malawi

Discussion and Feedback

13:00 – 14:00 *Lunch break*

14:00 – 15:00 **Continue Session 3**

Session 4: Methodology

15:00 – 17:00

Item 5: Sampling Methodology

Chaired by Ms. Hayoi Chen, Statistics Division, UNDESA

Sampling methodology and sampling manual

Mr. David McGill, expert on sampling, USA

Discussion and Feedback

Day 2: Wednesday, 16 May 2018

Session 5: Survey Implementation

9:30 – 11:00

Item 6: Field Work

Chaired by Ms. Iliana Kohler

Field supervisor and interviewer manuals including interviewer training programme

Ms. Karoline Schmid

Survey planning guidelines (survey costing manual)

Presentation: Interviewer training

Presentation: Preparation of fieldwork

Presentation: Survey implementation – challenges, opportunities and lessons learnt

Mr. Medson Makwemba

Discussion and Feedback

11:00 – 11:20 *Coffee break*

11:20 – 13:00

Item 7: Data Collection and Data Quality

Chaired by Mr. Michael Murphy, Project consultant on data analysis/global report writing, United Kingdom

Presentation on data collection and quality

Mr. Medson Makwemba and Mr. Jesman Chintsanya

Discussion and Feedback

13:00 – 14:00 *Lunch break*

Session 6: Overview and Feedback on the Process

14:00 – 16:00 **Item 8: Overview and feedback**

Chaired by Mr. Salvatore Favazza

Discussion and feedback on overall approach, survey instruments, manuals and data quality. What changes/improvements are needed to enhance the instrument?

Session 7: Follow up and closing.

16:00 – 16:30 **Item 9: Follow up**

Chaired by Mr. Oleg Serezhin

Item 10: closing

Mr. Oleg Serezhin, Chief, Capacity Development and Parthenership Coordination Section, DISD, UNDESA