

**Information Needs for Research, Policy and Action on
Ageing and Older Adults in Africa**

**REPORT OF A WORKSHOP ON CREATING A
MINIMUM DATA SET (MDS) FOR RESEARCH, POLICY AND ACTION
ON AGEING AND THE AGED IN AFRICA**

**Harare, Zimbabwe
20-22 January 2000**



World Health Organization

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International

Leading global action on ageing

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FOREWORD

In 1999, the Ageing and Health Programme^a of the World Health Organization (WHO) launched the ‘Minimum Data Set’ (MDS) Project in four countries of sub-Saharan Africa. An initial objective was to bring together key stakeholders and interested collaborators to discuss the situation (i.e., various aspects, including dimensions of health, mental, social, and economic well-being) of older persons in Africa, and more specifically, to focus on the issue of ageing-related data for the continent. As a result, this MDS Workshop was held in Harare, Zimbabwe in January 2000, and the following report presents the summary of its activities.

As the global population of older persons grows, even the comparatively ‘young’ population (compared to more developed countries) of the African continent is growing ‘old’. The population of sub-Saharan Africans aged 60 years and older in the year 2000 is projected to be approximately 30 million (4.6%)(1). By 2050, that figure is projected to rise to 130 million (8.1%). However, while the numbers of this population group are increasing, little is known of their situation, their needs or their contributions. What we do know is that their health and social support requirements are undoubtedly *changing*, not only because of population ageing but also because of the associated shifts in disease patterns. These changing disease patterns for the continent include a double burden of disease (continuing high communicable disease rates and increasing noncommunicable disease rates) in addition to the pressing issues of AIDS and poverty.

One of the principal problems for issues of ageing in Africa is an almost total lack, or scarcity, of sound data. This means that accurately assessing exactly how the situation of older persons in Africa has altered, what might be the critical issues to focus on now and in the near future, and how adequate or inadequate the current health and social systems are for this unique group - is almost impossible. Within this context, the MDS Project was established. The primary aims are to establish *what* are the most vital indicators a country should collect to ascertain the well-being of its ageing population, *why* those indicators are relevant, *how* those data should be collected and by *whom*.

This report presents the outcomes of the Harare Workshop. Its aim was to bring together the key stakeholders in Ghana, South Africa, the United Republic of Tanzania and Zimbabwe, as well as interested collaborators and international organizations working in Africa, to discuss the situation of older persons in Africa and the issue of ageing-related data for the continent.

^a The Ageing and Health Programme has now been integrated into the Department of Health Promotion, NCD Prevention and Surveillance, following an organizational restructuring at WHO Headquarters in the Noncommunicable Diseases and Mental Health Cluster. The project managers at WHO have subsequently moved and continue their work in WHO’s Evidence and Information for Policy Cluster.

EXECUTIVE SUMMARY

A workshop on Creating Minimum Data Sets (MDS) for research, policy and action on ageing and the aged in Africa was held in Harare, Zimbabwe from 20 to 22 January 2000. The workshop was organized by WHO with the assistance of HelpAge International and with financial support from the U.S. National Institute of Aging and WHO.

The health status of adult populations in developing countries will not be understood until sufficient and valid information is available. We know that ill-health in childhood and adulthood impacts on the contributions and needs of the older adult population. A void in information exists in part because investigations into adult health are more difficult. Without this specific knowledge to inform policy targeted at public health issues, no systematic interventions to prevent and/or control non-infectious disease among adults in sub-Saharan Africa can begin. This project aims to provide the needed information, starting in Ghana, South Africa, the United Republic of Tanzania and Zimbabwe. In line with the insistence of WHO Constitution (1946) that “health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity”, the primary purpose of the workshop was to ‘specify a comprehensive, reliable data source specifically focused on the physical, psychological, social and economic well-being of older persons in Africa.’

Workshop participants strongly endorsed the MDS Project with the following recommendations regarding the necessary future steps:

1. Focal person(s) for each country, nominated at the MDS Workshop, will:
 - a. Outline the project direction and plans of action, and indicate necessary steps to implement the project objectives in-country.
 - b. Establish broader stakeholder involvement and partnerships.
 - c. Facilitate communications between stakeholders, partners and WHO.
 - d. Provide expertise and in-country project management.
2. WHO, as recommended at the MDS Workshop, will:
 - a. Facilitate communications between in-country stakeholders, and between countries and other partner agencies through monthly or bi-monthly newsletters and website development.
 - b. Work with all MDS collaborators and partners to obtain and disburse needed funding for the project. Joint efforts to obtain funding should be encouraged as appropriate.
 - c. Provide technical assistance and overall project management.
3. Finalize the list of indicators and data to be included in the MDS.
4. Produce a directory of current ageing research in sub-Saharan Africa.
5. Collate available data. This will entail working closely with African universities, research institutes, statistics offices and focal persons.
6. Evaluate database management systems that could provide a common data platform.
7. Assist countries that desire to develop and conduct comprehensive ageing studies.

SECTION I: The MDS Project

1.1 *The Rationale behind the MDS Project*

Routine Data Collection and Systems

Information on older adults currently collected by routine sources throughout the African Continent is fragmented, incomplete or not specific to older populations. For example, vital and health care-generated statistics or population-based surveys carried out by governmental or external agencies, for instance by Macro International's Demographic and Health Surveys (DHS), do not usually include mortality, morbidity or risk factor measures applicable to older adult populations. Instead, they collect data that focuses primarily on maternal and child health indicators. The only use for this in the context of older populations is in studies of 'life-course determinants of diseases' at older ages (for example, one could assess the overall cost-effectiveness of hepatitis B immunization interventions in young age groups for reducing the incidence of disease in older age groups).

Other routine sources of data are health alert surveillance systems, which focus primarily on timely reporting of infectious diseases. Surveillance systems of diseases of special national importance, especially HIV+ prevalence and AIDS, also provide incidence, prevalence and mortality data for pertinent age groups. These surveillance systems, however, require a constant lifeline of resources to keep them functioning and capable of collecting and delivering high quality data.

Non-Routine Data Collection and Systems

Non-routine data sources provide data relevant to the health status of older populations, but again may not be comprehensive or representative. Demographic, economic and social surveys provide data on such proximate causes of impaired function as individual and household wealth and earnings, family and household size and structure, and social and economic roles culturally assigned by age and gender. However, these data exist for relatively few countries in the African Region (see Appendix 2).

Aggregate data are found in social and economic account data and health care delivery statistics routinely reported by national governmental agencies. Unfortunately, a preliminary review of some of the currently available data raises concerns about the paucity and quality of data (for more detail see Section III). In addition, much of this data is not current. Thus, while some data on the health status of populations at all ages may be available, *quality* data on the situation of the population over 60 years of age is relatively scarce throughout the African Region.

1.2 *Primary Goals & Background*

In recent years, there has been a growing recognition that measuring diseases in populations and subsequent policy decisions need to be based on sound information and reliable data. The push for 'evidence-based decision-making' was based on the recognition of the need for standardized information on a problem using comparable methods(2). Ultimately, the purpose is to foster an independent evidence-based approach to public health policy formulation.

It was with this in mind that the MDS Project was envisaged and launched with its primary goal to

provide a comprehensive, reliable data source specifically focused on the physical, psychological, social and economic well-being of older persons in Africa in “data poor” countries.

“Data poor” here refers to situations where the data available cannot provide the needed evidence for decision-making, either because of complete or partial absence of the relevant data, or inadequate quality of that data which is available.

Motivation for the MDS Project stems from the fact that the current data on ageing in Africa are fragmented, incomplete and/or of questionable quality. There are clearly multiple, far-reaching and practical advantages to be gained from explicitly documenting and agreeing upon the criteria for how use of currently available data can be maximized, for what data should be collected, and for standardizing how it is collected. For example, without reliable data, policy-makers are vulnerable to making decisions based on biased, incomplete or incorrect information. Data from monitoring and surveillance systems tracking the health of populations are rarely comparable between countries. This can result in duplicated or unnecessary research efforts in areas that are inaccurately prioritized, and may waste scarce financial and human resources.

1.3 Proposed Definition of an Older Person in Africa

Most developed world countries have accepted the chronological age of 65 years as a definition of ‘elderly’ or older person, but like many westernized concepts, this does not adapt well to the situation in Africa. While this definition is quite arbitrary, it is associated with the age at which one can begin to receive pension benefits. Realistically, if a definition in Africa is to be developed, it should be either 50 or 55 years of age, but even this is somewhat arbitrary and introduces additional problems of data comparability across nations. The more traditional African definitions of an elder or ‘elderly’ person correlate with the chronological ages of 50 to 65 years, depending on the setting, the region and the country. Adding to the difficulty of establishing a definition, actual birthdates are quite often unknown because many individuals in Africa do not have an official record of their birthdate. In addition, chronological or “official” definitions of ageing can differ widely from traditional or community definitions of when a person is older. We will follow the lead of the developed worlds, for better or worse, and use the pensionable age limit often used by governments to set a standard for the definition. In many African countries this official age is 60 years and older. As in many countries of the world, this may not be an optimal method to determine or define older age, yet is commonly employed. For this project, we will use 60 years of age and older as the general definition of an older or elderly person. Having stated this and acknowledging the somewhat arbitrary nature of the chosen definition, some of our indicators will still look at the population aged 50+ years because many of the demographic and health surveys exclude sections of the population age 49 and older (see We feel this data is necessary to fully inform policy makers and programme planners. The accumulated evidence and resulting information will be able to more accurately determine the health status of the older population.

1.4 Objectives of the MDS Project

- To define the key indicators that compose a minimum data set for understanding the determinants of well-being of older persons in Africa;
- To determine, for each collaborating country, the optimal way to assemble and disseminate these indicators in such a way that stakeholders have access to a comprehensive, reliable and continually updated source of high quality data;
- To clarify where any additional data collection and dissemination efforts should be focused;
- To articulate and develop appropriate methods of analysis of the indicators that will assist in the development of policy and interventions to aid the well-being of older persons; and,
- To determine what actions/resources are needed in sub-Saharan Africa to move decisively toward an improved situation for older persons in Africa.

1.5 Definition of a Minimum Data Set

What is a ‘Minimum Data Set’? Although several examples do exist (see Appendix 3 for examples), in the context of the population under study, the term needs to be well-defined. Accordingly, workshop participants reviewed the following:

“A necessary and sufficient set of potentially available information which is compiled for some defined entity (e.g., a country or age group) and permits the conclusive examination of predetermined sets of research, policy and planning issues at desired levels of disaggregation, and which can be used for planning, development, monitoring and evaluation of policy.”

The MDS will contain core indicators for all countries, but at its own direction, each country may choose to include additional information.

1.6 Country Selection

The project commenced in Ghana, South Africa, the United Republic of Tanzania, and Zimbabwe. For the purposes of rapid project development, Anglophone countries were chosen because of the primary language of the project managers. Countries were also chosen to provide adequate regional representation (eastern, western and southern sub-Saharan Africa).

Selection of the initial countries for participation was based on the following criteria:

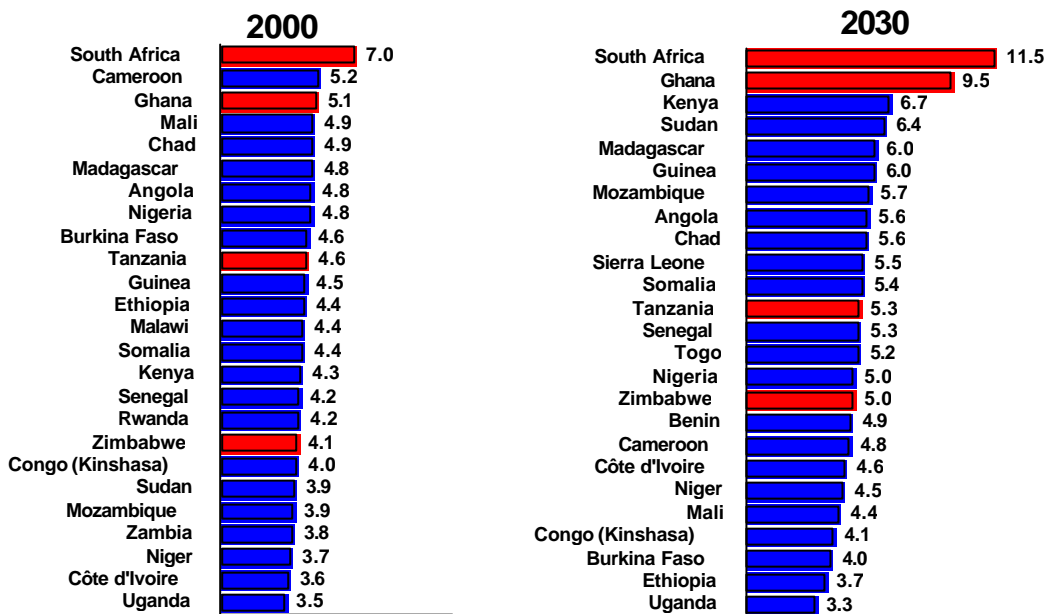
Population Structures (see Figures^b 1 and 2, and Table 1)

Population structures with a defined ageing population clearly had to be one of the most important criteria for inclusion. Figures 1 and 2 present the percentages of persons aged 60 years and older in selected countries of Africa. Table 1 presents the percentages of older persons in the four participating countries and their respective regions. The data in these figures and tables were compiled from two different reliable sources (US Bureau of the Census and the UN Population Division) whose models differ, which explains the discrepancy in values for 2000 and provides justification for the need to harmonize data (see Section III). The available population projections from each country may differ slightly from the data in the table. Reviewing the data from different sources in the figures and table below reveals higher, medium and lower percentages of older persons

^b The figures are courtesy of Dr Victoria Velkoff from the U.S. Census Bureau’s IDB, 1999.

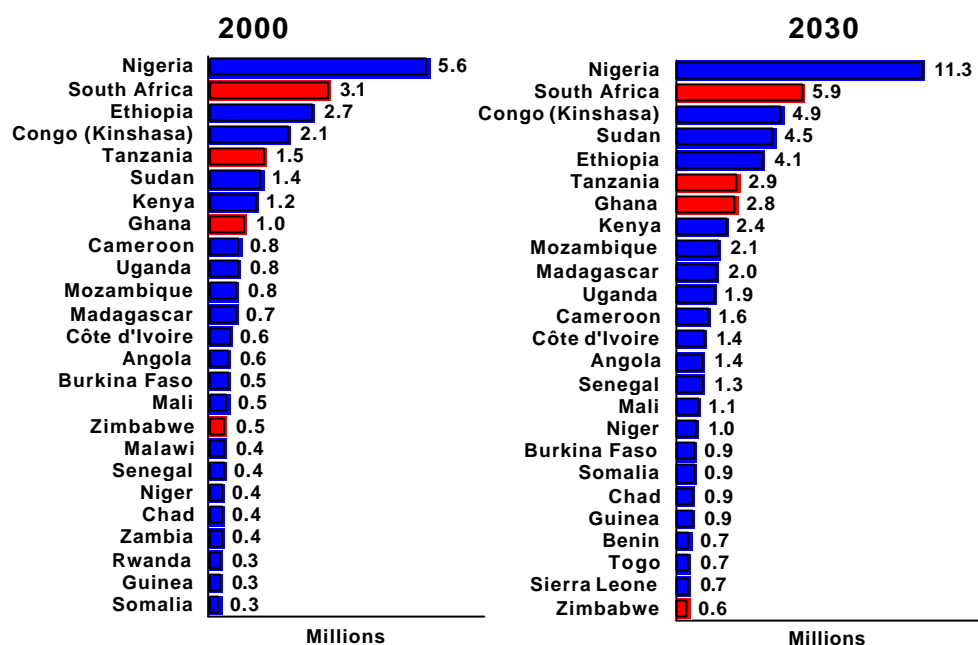
as a proportion of the current and projected future total population. Nigeria was to be one of the initial countries because of the large numbers of older persons, but the political difficulties within the country at the time of initiating the project delayed our work within the country.

Figure 1: Percentage of the Population Aged 60+: 2000 & 2030



Source: U.S. Census Bureau, International Data Base, 1999.

Figure 2: Population Aged 60+: 2000 & 2030



Source: U.S. Census Bureau, International Data Base, 1999.

Table 1. Percentage(3) and Number (,000)(1) of Older Persons of the Total Country Population in Persons Aged 60+ and 80+ Years in Selected Regions and Countries for the Years 2000 and 2050

Region*/Country	Year							
	2000**				2050			
	60+		80+		60+		80+	
	%	N	%	N	%	N	%	N
Eastern Africa	3.9		0.7		9.4		1.8	
UR of Tanzania	3.8	1,582	0.6	152	9.7	7,915	1.9	984
Zimbabwe	3.9	600	0.7	59	14.5	1,000	2.8	188
Southern Africa	4.7		0.6		12.1		2.2	
South Africa	4.6	3,125	0.6	356	12.1	5,228	2.2	1,173
Western Africa	4.4		0.7		10.6		2.1	
Ghana	4.6	1,030	0.8	85	12.1	5,101	2.7	711
Sub-Total		6,337		651		19,243		3,056
Sub-Saharan Africa		30,408		2,231		129,880		14,367

*Regions based on UN Population Division categorization

**Values for UN Population Division and US Census Bureau estimates and projections may differ

Regional and Language Representation

We had chosen countries that would represent different regions of sub-Saharan Africa. It was clearly envisaged from the outset that the MDS Project would be designed to make the work, the process and the lessons learnt both accessible and replicable for other countries in the region.

When the methodologies to create, evaluate and implement the MDS are fully developed in these four countries, we plan to expand to other countries of sub-Saharan Africa and Southern Asia (Table 2). The combined older populations of these countries are projected to represent over 75% of the elderly population in sub-Saharan Africa in the year 2020(4).

Table 2. Currently Participating Countries and Proposed Countries for Expansion of the MDS Project by UN Region*

Western Africa	Eastern Africa	Middle Africa	Southern Africa	South-Central Asia
Benin Côte d'Ivoire Gambia Ghana Guinea Nigeria Senegal	Ethiopia Kenya Madagascar Malawi Mozambique Uganda United Republic of Tanzania Zambia Zimbabwe	Cameroon Gabon	Botswana Lesotho Namibia South Africa	Bangladesh Nepal India

(Note: Countries in **Bold Italics** indicate the first four participating countries).

* Regions are based on UN Population Division categorization.

Data availability or accessibility

A preliminary literature search was conducted and project managers visited each country to identify available data. Equally important, however, was an assessment of the capacity to access data and what infrastructure exists to analyze it; both are integral to the MDS Project.

And/or an expressed interest by the countries

Discussions with members of WHO's Expert Committee on Ageing began in Geneva during a meeting on the Determinants of Healthy Ageing in December 1998. These members assisted with identification of countries. These countries requested assistance from WHO for coordinating ageing research efforts and/or for formulating ageing policy.

1.7 Information Needed for the MDS Project

The types of data that will be incorporated into the MDS will be epidemiologic, social, economic, management, health, demographic and other types of data (quantitative and qualitative) obtained or derived from multiple sources (routinely collected data from surveillance systems, registries, Demographic and Health Surveys (DHS), and censuses; and non-routine sources such as surveys and studies), each at specified levels of aggregation (individual, household, regional and/or national). In the effort to develop indicators appropriate for Africa, data from previously untapped sources will be explored whenever possible. Examples include: poverty indicators by region as used by governmental and nongovernmental agencies; health conditions, medication use and service utilization from medical aid schemes; pension records and health insurance provision from trade unions and/or local health or social service coordinators; and elder abuse and violence reports from police service records.

Data use and methodologies for data analysis require comparable data. Harmonization and co-ordination of data sets dealing with the same indicators from different sectors of a national information

system, and/or of the same indicators based on qualitative and quantitative measurement systems, will be especially important in Africa. Data harmonization (see Section III for explanation) will have implications both for existing and future data. Two examples illustrate this point:

- In countries where multiple measures of functional limitations for the same population subgroup exist, measured either by using qualitative methodologies, such as the Participatory Rural Appraisal (PRA)/Participatory Learning and Assessment (PLA) methodologies(5-7) used by HelpAge International (HAI), or more quantitative measures, such as the International Classification of Impairments, Activities and Participation (formerly Disabilities and Handicaps), Version 2 (ICIDH-2) methodology(8) used by many gerontological disability surveys, the resulting data need to be validated and harmonized; and,
- In the particular situation of Africa, cultural norms, insufficient reporting mechanisms and the urban/rural division contribute to low death registration rates. The majority of deaths occur at home and, consequently, accurate information on cause-specific mortality is scarce. Verbal autopsy techniques to ascertain cause-of-death information could be a sustainable alternative to conventional vital registration in Africa. Verbal autopsy validation, using the International Classification of Disease (ICD-9 or ICD-10) coding(9, 10) and other efforts to improve and standardize data collection, will go some way towards providing the standardized information needed to enhance the evidence base.

1.8 Additional Data Analysis

In addition to standard data analyses where data are available, the proposed analytical objectives of the MDS project will be to:

- develop tools for eliciting expert opinion and strategies for quantifying qualitative data as means to fill in data gaps and complement quantitative data;
- develop strategies for expert opinion-based imputation of missing data;
- collaborate with ongoing data collection/field studies to extend capacity and capability;
- identify and critically evaluate potential common data platforms and/or data management systems; and,
- provide training in project methodology, statistics and data management.

WHO will offer assistance in undertaking these additional data analyses as requested.

1.9 MDS Project Areas of Responsibility & Ownership

Establishing *in-country databanks* is one of the primary goals of the MDS project and it is therefore critical that the *ownership* of such databases also resides within those countries. A central repository for data and a strategy for sustainable data management will also be needed. The full involvement of all key stakeholders and institutions in Africa in all aspects of the MDS Project activities is intended to ensure that they do not only have a stake in continuing the project, but that its activities and products are relevant to their needs and goals.

WHO will provide assistance to those countries which wish to develop a common data platform, using a coordinated approach with integrated data collection/analysis systems at community, district, regional and national levels. The effective use of these data rests primarily in making the data pertinent and useful to decision-makers and technical advisers. Focal person(s) or groups in each country are responsible for work plans and activities, joint fundraising efforts, in-country project management and communication with WHO. WHO will provide general project management, will seek and distribute project support, will communicate with and between countries, and will respond to specific requests for technical

assistance.

SECTION II: The MDS Workshop

2.1 Workshop Design

The Workshop on Creating a Minimum Data Set (MDS) for Research, Policy and Action on Ageing and Older Persons in Africa was held in Harare, Zimbabwe from 20 to 22 January 2000. It consisted of discussions focused on specific subjects, smaller working group discussions tailored to single issues, panel discussions on data needs and country presentations (see Appendix 4 for the full workshop agenda). Dr Sambo and Dr Belhocine from WHO's Regional Office for Africa gave the introductory addresses (full text of these presentations are available upon request). Papers outlining the current situation and needs of older populations were requested from certain participants before the conference, and these four country reports were presented immediately following the opening address.

Two separate breakout sessions were part of the workshop; firstly participants were grouped by country for focused discussions about the project and ageing in their respective countries, and secondly, they assembled in small topic-specific working groups for critical evaluation of the provisional list of MDS Indicators. Throughout, the workshop was designed to encourage and maximize the opportunity for each of the four countries to discuss common data needs, and ways in which they might collaborate together and coordinate the project as it progresses.

2.2 Workshop Objectives

The objectives of the workshop were as follows:

- To define the terms, goals, objectives and desired outcomes of the MDS Project;
- To identify available information, data sources, and needed data;
- To identify the focal person(s) or group in each country for the project;
- To critically evaluate the proposed indicators for the MDS and establish a standard MDS which is adaptable to specific country situations;
- To discuss barriers and impediments to the MDS and research on ageing in Africa, and develop strategies to overcome them;
- To develop a plan for future activities and support for the development of the MDS project; and
- To raise bilateral awareness between international institutions and country participants, and of the resources each could contribute to the MDS project.

2.3 Workshop Participants

The Workshop was attended by 40 participants plus staff from WHO Headquarters, the WHO Regional Office for Africa (AFRO), the WHO Regional Office for the Americas (AMRO/PAHO) (see Appendix 1). These participants were:

- Representatives from governmental agencies, academia, and nongovernmental organizations in Ghana, South Africa, the United Republic of Tanzania and Zimbabwe who conduct or support research and/or policy on older persons in Africa;
- Individuals from international agencies including the African Census Analysis Project (at the University of Pennsylvania, USA), HelpAge International (HAI; London, UK, Nairobi, Kenya and country offices), Macro International, Inc. (which conducts the Demographic and Health Surveys, USA), the Population Council (USA), the U.S. Agency for International Development (USAID), and the U.S. Bureau of the Census (U.S. Census Bureau);
- Individuals with expertise in research on ageing or older persons in Africa or in data development and/or

analysis methods and techniques.

2.4 Country Presentations and Reports

The following table summarizes the content of the workshop presentations and reports from each country. Table 3 summarizes a number of key issues described in these presentations about definitions of 'elderly', ageing policies, and support and responsibility for the older population.

SECTION III: DATA DEVELOPMENT AND MANAGEMENT ISSUES

3.1 *Insights into Data Development and Management*

Discussions were held on issues such as where the data is to be stored, what data is currently available, how the data should be managed, and how the data is to be disseminated. The “ideal” database would have complete indicators on all individuals in the older population at all times; would integrate various sources of data in a harmonious manner; has reliable data; and is easily accessible, useable and updateable. The reality is far from this ideal, and consequently many challenges and opportunities remain. The tasks ahead for developing and managing the MDS can be grouped into several broad categories:

- Data identification. What are the appropriate indicators to include?
- Data acquisition. This entails finding out what data is available; how it can be obtained; assessment of data quality; determining how the data should be managed to maintain integrity of source attribution and comparability of sources; and identifying priorities for future data collection activities.
- Data synthesis. Includes standardization of data from different sources; statistical integration (enhancing the information content of separate data sources); development and use of statistical methods to fill in data gaps, and methods to aggregate and disaggregate data.
- Data dissemination. Selection of data dissemination protocols; choosing and advocating data analysis methods.

At the workshop, an overview of these issues was presented, and four presentations (see Section VI) illustrated the experiences other international organizations have had in dealing with similar problems. What was discovered was that many of the tools and strategies for dealing with aspects of the tasks outlined above have a direct relevance to ageing populations in Africa.

To illustrate the types of data issues that will be faced in the MDS project, specific examples of data deficiencies in each country and possible ways to address them were discussed. These are summarized below.

Ghana

The issue of *data reliability* will need to be addressed in all sectors. Data produced for specific purposes, such as World Bank reports, are known to have inconsistencies. In Ghana, this became particularly evident as data collected at later time periods, using more transparent methods, highlighted such inconsistencies. But this does not necessarily mean that the “unreliable” data cannot be used; rather, these data may be used if methods are employed that account for the specific ways in which they are unreliable.

South Africa

Multiple (and sometimes repetitive) data collection mechanisms may not individually provide complete coverage of the situation of the elderly in South Africa but, in combination, these studies may provide a fairly comprehensive set of information. Not all the indicators collected in different studies, however, are on the same scale, or are even measuring the same quantity; so methods are needed that *combine* the various sources of information in a sensible way, and that harmonize the information so that it is comparable across the different studies.

United Republic of Tanzania

A data gap in the United Republic of Tanzania is the non-existence of age, cause and sex-specific mortality rates throughout the country. Because the majority of deaths are not recorded in the vital records system, and since the deaths that are registered are not thought to be a representative sample of deaths throughout the country, mortality rates cannot be generalized from these rates alone. The Adult Morbidity and Mortality Project (AMMP) in Tanzania have been collecting complete information on deaths in three regions of the country using verbal autopsy methods. Statistical techniques, such as elicited expert opinion, indirect demographic estimation and Bayesian methods, can be used in concert to construct the desired national mortality rates.

Zimbabwe

Zimbabwe lacks population projections and trends that account for the current situation *vis-à-vis* the impact of AIDS, and the last census is considerably outdated. To do population projections, however, requires the availability of (reliable) base populations and vital rates (fertility, mortality and migration). The use of stochastic Bayesian population projection techniques provides a way to account for the uncertainty inherent in all the inputs into the projection.

Statistical Methods

There are several “modern” statistical tools that are useful when dealing with situations where data is absent (partially or fully) or is of unsatisfactory quality. A selection of tools was briefly introduced at the workshop with an eye to how they may be of use in the *development* of data for the MDS. This becomes important when limited resources are available for new data collection efforts, so that it is more essential to extract the maximum amount of information from what data is available.

One of these tools is “elicitation”. This is a systematic process to quantify or codify qualitative knowledge. Eliciting expert opinion is a helpful way to integrate qualitative and quantitative data, since the elicitation process can help to provide insight into how the qualitative and quantitative measures relate to one another. Elicitation can be used when data are absent or insufficient, and also for statistical integration of various data sources. Data integration is possible because on the basis of probability, the opinion of experts can be used to synthesize related, but not completely overlapping, sources of complementary information. Eliciting opinion can also be helpful in filling in missing data, where the indicators that are desired have not been collected, or have been collected incompletely.

Varieties of other tools are also available to deal with missing data, including ‘multiple imputation’ and the use of ‘surrogate markers’. Using elicited expert opinion in the imputation of missing data can be particularly beneficial, since this would be relatively easier, cheaper and quicker than either (a) ignoring data sets that have missing values, or (b) collecting new data. Also, the *de facto* incorporation of historical information in the elicitation process gives a greater understanding of the underlying phenomena that the data were meant to study initially. Elicitation can also provide insights into how to account for the uncertainty generated by unreliable data sources.

Overall, these techniques are merely tools to help achieve a specific end goal: to establish sources of valid, reliable data for analysis that will lead to a greater understanding of the situation of older people. One clear message that emerges is that it is important to account for the uncertainty that is involved in any data analysis when dealing with data that exhibit any of the deficiencies described.

Data Management Systems

In addition to tools for data development and analysis, the MDS project will require the use of data management systems. Discussions during the workshop indicated that the choice of data management/dissemination systems may not be uniform across the different countries, but that it will be important for the collective group of participants from each country to choose an appropriate data management tool. WHO's *HealthMapper* was discussed in detail as an example of one prototype data management system, but many of the participant countries are engaged in investigations of appropriate tools. While the selection of a tool that can be used both for data management and collection may be appropriate, in the interests of moving the project forward, countries may wish to use interim measures (such as establishing websites and/or links to a WHO/MDS website) while evaluations of appropriate tools such as those mentioned below are carried out.

Some possible data management systems with GIS capabilities:

- HealthMapper (WHO/UNICEF). A geographic data management and dissemination system, primarily used at the moment for communicable disease surveillance. Details available from Ms Kathy O'Neill at WHO (oneillk@who.int).
- Health Resource Systems – HRS (Population Council). Data collection/dissemination tool, also geographically based. See <http://www.popcouncil.org/hrs/hrs.html>.
- EpiInfo 2000 and EpiMap (US Centers for Disease Control and Prevention (CDC)). EpiInfo is an analysis system, and EpiMap is a geographical data surveillance system. See <http://www.cdc.gov/epiinfo/>.
- CSPro 2.0 (US Census Bureau). A public domain package for entering, tabulating and mapping census and survey data. See <http://www.census.gov/ipc/www/cspro/index.html>.
- Others – See <http://www.paho.org/English/SHA/shasig.htm> and <http://www.who.int/whosis/> for some useful links.

3.2 Combining Qualitative and Quantitative Data

Eliciting expert opinion is just one example of using qualitative data to fill data gaps using prior knowledge. As was demonstrated in Section 3.1, combining qualitative and quantitative data usually provides a richer and more meaningful picture. In Africa, and by extension for this project, inclusion of qualitative data would add depth to the information provided by the MDS. This methodology presents an opportunity to gain insight into non-quantitative issues surrounding the complex lives of older people while adding depth to the quantitative data. The benefits of qualitative research methods in Africa, specifically their adaptability and flexibility in situations of high illiteracy and low resources, and their ability to describe multifaceted issues in fuller detail combined with on-the-spot analysis and feedback, are particularly attractive.

Yet, historically, qualitative data have been more difficult to summarize and analyse. Many new qualitative data analyses software are now available, making these data easier to analyse and use. In part, because of improved analysis techniques and an increasing knowledge about how to use qualitative data, the distinctions between quantitative and qualitative research methods and the quality of the resulting information are becoming blurred.

Qualitative research can be either exploratory or directed. The research methods utilized can be objective and at the same time more participatory than quantitative research, but the basic design and methods are similar. A commonly used qualitative research method is the participatory approach. Some of these participatory

methods include: Participatory Rural Appraisal (PRA); Beneficiary Assessments (BA); Self-esteem, Associative Strength, Resourcefulness, Action Planning and Responsibility (SARAR); Recherche-Action and Participatory Learning and Action/Analysis (PLA).

Here we describe a practical example of three research projects that used the PRA/PLA methodology,(11) after which we analysed the results using qualitative data analysis software. Small-scale qualitative appraisals using PRA/PLA methods have been tested in collaboration with older Ghanaian, South African and Tanzanian populations (see Table 4).(12-14) These studies generated information about the perceptions and practices of older persons in a relatively short time.

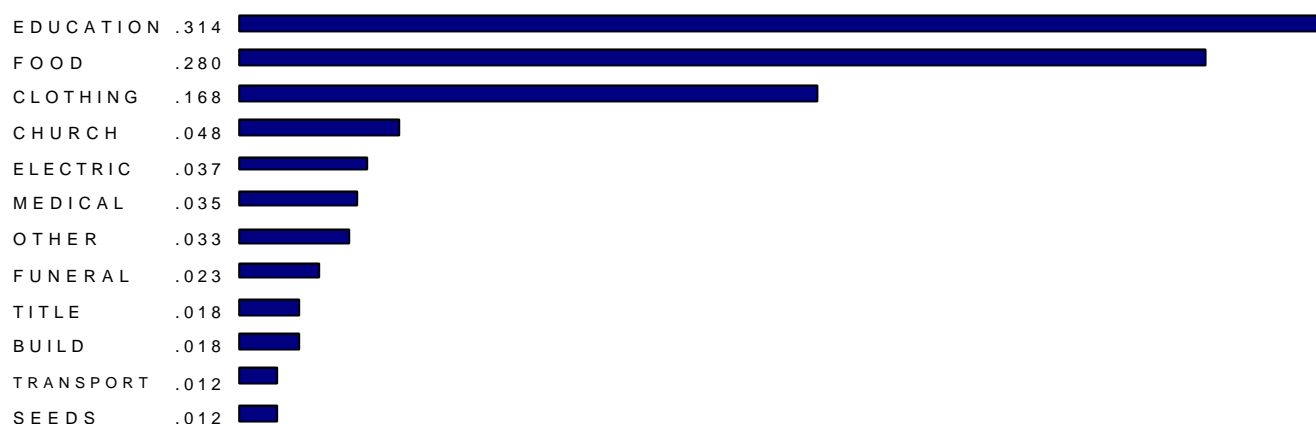
Table 4. Example of Participatory Methods and Tools Used by Older Persons to Define their Situation(15)

Issue	Methods
Definitions of aged	Social (local) definitions, local attributes
Perceptions and indicators of wealth, well-being, poverty, vulnerability, powerlessness	Semi-structured interviewing Wealth/Well-being grouping and ranking Ranking and weighting (scoring) of income/expenditure and other livelihood options
Access to and use of services	Institutional diagramming
Perceptions of services, including views (or awareness) of recent change	Trend analysis of services, e.g. health, pension, marketing
Seasonal stress: food security, health, general livelihoods	Seasonal calendar (health, food security, food intake, access to fuel, water, etc.). Comparative seasonal calendars: good, bad and/or average years

Adapted from: Agyarko RD. Influencing Policy through Participatory Poverty Assessments: IDS, University of Sussex, UK, 1997 and HelpAge International, 1998 (unpublished document).

Using information from the South African study mentioned above reveals the utility of one of these software packages. The chart in Figure 3 below illustrates one screen capture of analysis of data collected in South Africa using the software. These data give each region an equal weighting. This clearly displays how, across provinces, the key expenditures for older people were for education and provision of food for their grandchildren. The research process was generally as follows: groups of older persons in three areas of South Africa were asked to ‘score’ (i.e. they provided relative weights to expenditures) their expenditures using seeds and stones; the results were then calculated for each person and totaled for all participants. Despite the fact that the defined expenses were not the same in each group, by using the analysis software we can interactively view the spending priorities across the three regions simultaneously by selecting different weights for aggregating the spending judgements across the regions.

Figure 3. Composition of Financial Contributions to Family Expenditure by Older Family Members: Participatory Results



Data from: Mohatle T, Agyarko RD. Contributions of Older People to Development: The South African Study, HelpAge International, UK. 1999.

Integration of these research approaches by a number of development agencies is becoming more frequent, especially in recent poverty assessment research (see <http://worldbank.org/gender/transport/Tools/quanqual.htm>). Poverty analyses have revealed that mainstream income/consumption models are inadequate to define certain dimensions of poverty. These dimensions include issues of well-being, powerlessness, social exclusion, physical weaknesses, vulnerability, isolation, security and self-respect that are difficult to extract from quantitative data alone. These concerns about the deficiencies of quantitative data have led to the evolution of mixing qualitative and quantitative methods to assess and analyse the reality in which the poor and the older populations survive.

A growing body of field experience with multi-method research, integrating quantitative and qualitative data, has begun to demonstrate the potential feasibility and benefits of mixing these data and data collection techniques. A review of multiple qualitative data analysis software packages is available at <http://www.york.ac.uk/inst/ctipysch/dir/qualitative.html>. Some of the most common software are easily accessible through the internet. (*Expert Choice 9.5 Trial Version* was demonstrated during workshop discussions and was used to create Figure 3 above. A trial version sufficient for most elementary analyses can be obtained for free at <http://www.expertchoice.com/>; while *QSR NUD*IST* at <http://qsr.latrobe.edu.au/> and *ATLAS/Ti* at <http://www.atlasti.de/> are other common analysis packages).

While we plan to use qualitative data, specific concerns about the use of qualitative data in an MDS must be addressed. Care must be taken to address certain issues such as:

- How will qualitative information be incorporated into the MDS?
- How do we achieve standard indicators within these methodologies that result in data that can be compared across groups and countries?
- What are the training, resources and other needs required to effectively include these data?
- How will locally specific indicators be “scaled up” for regional and/or national comparisons?

SECTION IV: MDS DIMENSIONS & INDICATORS

4.1 *MDS Dimensions*

The provisional list of MDS indicators presented to workshop participants were divided into four dimensions: health, policy, socioeconomics and data. Workshop participants separated into four working groups, one based on each of these dimensions, to critically and constructively evaluate the list. The working groups contained individuals from each country and internationals with experience in the particular dimension. Working group chairpersons were asked to solicit from participants what are the available data, the possibilities for collecting desired data, the available and accessible data sources, and the data gaps.

Participants were particularly concerned about the level of the data for each indicator: would the data be assembled at the micro and/or macro level? In other words, would it be individual, household or national level data? As mentioned in Section III, the ideal data elements would be at the individual level, but this may not be feasible in some situations in the near future. Additionally, some data are necessarily aggregated. Clear distinctions need to be made about the desired level within each of the MDS Indicators.

The last and possibly most important concern is the recognition of the need to create indicators that are appropriate for Africa. Focal persons and groups will need to identify and incorporate appropriate methods and tools to accomplish this task.

4.2 *Preliminary evaluations of potential indicators*

Participants in each working group (see Appendix 4) were asked to critically evaluate each item of their assigned portion of the provisional list of indicators. The aim of the working groups was to recommend a 'short-list' of indicators. A summary of comments is listed in Table 5.

WHO has collated the recommendations and comments from the working groups. This has resulted in a shortened list to be resubmitted to focal persons and groups for further discussions and evaluation. The recommended criteria for evaluating these indicators and generating the final selections are described in the next section.

Table 5. Summary Statements from the Small Working Group Sessions**Creating African appropriate MDS Indicators**

- “The data elements and indicators must be appropriate for Africa and should not be ‘over-medicalized’.”
- “Locally, culturally and linguistically appropriate indicators are preferred. For example, when discussing disability free life expectancy (DFLE) and disability adjusted life years (DALYs), the measure that is used in the West may not be appropriate for use in Africa. These specific items may be too demanding for many African situations; it requires too much information and too many resources at this time, but may be a longer-term option.”
- “There is a need for indicators which trigger the formulation of imaginative solutions to the problems of older persons in Africa, such as community-based integrated care for elderly persons needing care services.”
- “Traditional healers are care providers often consulted by older persons. Information about use of these providers by this population, as well as about practices and outcomes, needs to be incorporated into any MDS in Africa or Asia.”

Indicators appropriate for older persons in Africa

- “Indicators should measure gaps and inequalities between age groups, gender and race.”
- “Indicators focusing on health of older persons should include the contributions of traditional medicine and/or the provision of traditional medicine by elderly persons to communities.”
- “The indicators should focus on the attributes of elderly persons with respect to demographic, social and economic variables: many of the measurement scales and tools used are imported from the West and need to be adapted to African realities and/or use African appropriate scales (particularly in QOL, disability and well-being).”
- “Critical need to address rights of older persons in Africa; this affects attitudes towards older people across all sectors and dimensions.”
- “Indicators should address the impact of AIDS on families and communities, the consequences for elderly people and orphans, and the disintegration of the family.”

Project management

- “Focal person(s) and groups, along with the WHO project managers, will need to work to ensure broad stakeholder ownership and easy accessibility.”
- “Many programmes in Africa are now donor-financed, creating situations where expenditures are much higher and not sustainable without that support. Feasible methods for sustainability must be sought.”

Sources of information

- “Reliable data documentation and standardization methods are required.”
- “Cause of death data are available in most countries but the quality of these data is suspect. Cancer and vital registries, routine collection of HIV/AIDS data in certain sites, hospital records and small surveys on a variety of issues such as nutrition, violence, functional status and environmental factors related to health are examples of available data sources, but must be checked for quality if possible.”
- “The Project should find ways to promote surveys, records and censuses to include age disaggregated data, linkages with other data bases and research institutions, and use of opinion polls and qualitative methods. Older people must be included as participants in research and research must include all sectors and stakeholders.”

Uses

- “Dissemination of information must occur across many sectors (e.g. local government, media, tribal authorities and national governmental departments) and data should be used locally and nationally. MDS focal persons must find ways to make the information accessible to all audiences (different languages, large print, audio and visual media, and written). Dissemination methods should include websites, mass media and workshops with parliamentarians.”

Research

- “Two important question for African research are: 1) how do we get researchers more interested in ageing? and 2) how do we make donors interested in the area of ageing in Africa? Four proposed strategies were presented: 1) advocacy and awareness campaigns; 2) a dedicated national desk for older persons; 3) significant lobbying efforts; and 4) an explicit policy on the aged.”
- “Researchers and decision makers need to determine the effect of the HIV/AIDS pandemic on the current situation of and future projections for elderly populations.”

4.3 MDS Indicators

At the end of the process described above, the provisional list decreased from a total of 117 items in eight categories to a total of 24 indicators in five categories (see Appendix 5). This abbreviated list will be reviewed one final time using the criteria described below.

Indicators under consideration represent different approaches and data levels to describe the situation of older persons in Africa. These will include enumerating events, describing the prevalence of an individual's or population's characteristics, and enumerating and describing institutions and/or systems. As in most MDSs, a collective set of indicators will be used to assess needs, monitor and assess the impact of any interventions, and trigger actions; therefore, indicators should have specific attributes that must be reconsidered during the final indicator selection process(16). Ideally, an indicator will be accessible, ethical, representative, understandable, scientifically robust and useful. Although few indicators meet all these criteria, the criteria are nonetheless good standards for critical evaluation. These criteria should also be used to re-evaluate the current indicators, when required, and when adding new indicators. A brief summary of these criteria follows (as outlined in WHO, 1997)(17).

The desired indicators are ones that:

- have the required data readily available, or easily obtainable by validated methods. These are **accessible** indicators.
- require data that are **ethical** to collect, process and present in terms of an individual's rights.
- adequately encompass all the issues or population groups it is expected to cover and are **representative** of, in this case, the older population.
- are *valid* (actually measure the issue or factor they are supposed to measure), *specific* (only measure that issue or factor), *sensitive* (reflect changes in the issue or factor being measured), and *reliable* (would give the same value if they were re-assessed on the same population at the same time). These are **scientifically robust** indicators.
- are **understandable**, simple to define and interpret.
- can effectively measure progress or performance, either as a direct or proxy measure. **Useful** data are also aggregatable.

SECTION V: POLICY INTERVENTIONS FOR AGEING POPULATIONS

5.1 Selected Issues for Consideration in Policy Development

While older persons have been shown to make substantial contributions to African families and communities(12-14), this population is often viewed as a drain on resources. This becomes especially true since a large proportion of African society survives on low incomes. In both the family and community, minimal resources are allocated for older persons, so increases in longevity or in the numbers of older persons can cause stresses in society. Moreover, the public sector is not sufficiently able, capable or willing to provide those resources either in many instances. Evidence for this is clear: no explicit or comprehensive ageing policies exist in the four participating nations. Some provisions for care of older persons are outlined in a piecemeal fashion in other general policies, but these provisions usually focus on ‘the family’ as the key to responding to ageing in Africa. Enabling conditions must be created to allow older persons to have maximal autonomy, thereby placing less pressure on scarce social resources. African societies want to continue to recognize and respect older persons as dynamic contributors to families and society, but acknowledge the need for a policy model that also accounts for them as recipients of care and services.

There is no doubt of the need to preserve the traditional informal system of social welfare and support, while at the same time building a public social security system. Unfortunately, very few widely available published documents exist about these traditional systems, and not enough support has been provided to implement the thoughts about how traditional informal systems might be transformed to meet modern demographic requirements(18). Such data are critical in developing policies to protect and support older persons, but no evidence base or detailed research programme exists. This leaves policy analysts with insufficient information about important cultural arrangements.

Policies and programmes for older persons cannot be developed in isolation of existing social systems, social-economic policies or the way these are implemented. Ageing is an intersectoral concern linked to health, welfare, human rights and development. Greater consideration may be given to problems related to ageing if older persons are included in the planning processes. To improve the situation of this population, there is a need to build a body of evidence on the available and desired social and economic support systems for ageing and older persons in Africa. A systematic and comprehensive review of potential policy options for African governments, development agencies and communities is recommended.

➤ Overview of Existing or Proposed Policies and Programmes

While each country is at a slightly different stage in their policy development, none has a functioning or implemented policy specifically for older persons, but do make some provisions for older persons within general public policies. Ghana’s National Ageing Policy has not been implemented, South Africa has a proposed framework for a policy, the United Republic of Tanzania is in the policy development process and Zimbabwe is at a legislative standstill with its proposed bill. The United Nations provides an overview of existing policies, programmes and measures at <http://www.seniorweb.nl/un/search.asp>. Table 6 is a summary of existing or proposed general or ageing-specific policies using the UN framework for assessment.

Table 6. Overview of Existing or Proposed Policies or Policy Frameworks**

G*	SA	T	Z	Issues
	✓	✓	✓	Legislation on rights of older persons
	✓	✓		Basic needs provision and poverty reduction among older persons
		✓		The situation of older women
✓	✓	✓	✓	Retirement (pension) system(s) for older persons
	✓	✓		Insurance for long-term care
✓	✓	✓		National health plan
	✓	✓	✓	Integrated primary health care programmes for older persons
✓	✓	✓	✓	Caregiving assistance for older family members
✓		✓	✓	Age-integrated (multigenerational) housing and living environments
	✓	✓	✓	Employment promotion for older persons
	✓	✓		Support for income-generating activities for older persons
	✓	✓	✓	Education of the general public for late life and strengthening of multigenerational solidarity
✓				Education of children and youth for longevity

* G = Ghana, SA = South Africa, T = United Republic of Tanzania, Z = Zimbabwe

** Ghana has a newly released National Ageing Policy, but it has not been implemented. South Africa has a draft policy framework, Tanzania is in the midst of the consultative process for an ageing policy and Zimbabwe has a “Care of the Aged Bill” that has not yet been approved in the parliament. Information in the table was compiled from the UN website stated in section 5.1 above and workshop participants.

5.2 National Policy Perspectives

• Ghana

The principal measures of the National Ageing Policy in Ghana are still under consideration. The proposed policy will cover formal income and social security for the elderly and informal mechanisms of income security in older age. The ageing policy will focus on ways to secure and improve a family’s capacity to continue providing support, to strengthen the ability of older persons to participate in their family activities, to promote intergenerational cohabitation of elderly and young persons, and to give equal opportunities to women as a means to support older Ghanaians.

• South Africa

While no comprehensive ageing policy exists, the Aged Persons Amendment Act of 1998 covers homes for the aged and concerns about elder abuse. Other pieces of legislation ensure that all older South Africans are eligible for pension benefits. South Africa’s government is concerned about the status of elderly persons and restoration of their respect. Several governmental agencies have embarked on ambitious projects to examine certain aspects and concerns of the older population.

• United Republic of Tanzania

Explicit policy on ageing is yet to come out of an ongoing consultative process, but some governmental guidelines on care of the elderly do exist in Tanganyika and the islands of Zanzibar. However, activities and programmes are very limited by lack of resources and high rates of poverty amongst older Tanzanians. NGOs are very active in the community, where a majority of the responsibility for care of the elderly resides.

• Zimbabwe

The National Council for the Aged is currently revising a bill on aged persons that was previously rejected

by the parliament. The government supports the position that older people should remain an integrated and vital part of the community, yet very limited public pension benefits are available.

SECTION VI: PARTNER PERSPECTIVES

A number of organizations were invited to contribute their perspectives on older populations and to relate their organizational objectives to those of the project with workshop participants. We will continue and expand our work with these and other organizations and individuals.

6.1 HelpAge International (HAI)

HelpAge International's mission is to work with and for disadvantaged older people worldwide to achieve lasting improvement in the quality of their lives. The current HAI network in Africa includes nine member organizations and eight programmes of work in separate countries (see <http://www.helpage.org/members/index.html>). The network has four main aims: 1) to include practical projects with older people; 2) to support older people in emergency situations; 3) to promote advocacy by and for older people; and 4) to develop the HAI network. Their collective work is increasingly driven by the recognition that sustainable change should be backed by quality information, and that advocacy and policy development should include older persons in the process.

The HAI Regional Development Centre offices in Nairobi, Kenya and Johannesburg, South Africa facilitate activities amongst HAI's 12 member organizations on the continent and the multitude of African countries with partner organizations. In addition, HAI offices are working with partners and directly implementing programmes in four countries.

➤ **Examples of HAI Research Projects**

A number of projects were undertaken in Ghana and South Africa in 1998/99. Each project used participatory methodologies and resulted in qualitative data. The objectives for HAI were to:

- identify the livelihood strategies, perceptions of well-being and contributions of older people to the family and community;
- influence social policy discussion and decision-making on issues which concern older people; and
- develop a methodology for enhancing participation of older persons in decisions which affect their lives.

This research had high potential for impacting policy development, establishing commonalities and providing a framework for pursuing these issues at a broader level. Table 7 contains the summary results of the studies, presented as key policy and ageing research issues. HAI and WHO are investigating the methodologies to quantify these qualitative data for the MDS Project. HAI believes that if older persons participate in research and policy formulation processes, these methods have greater potential to contribute to social and economic development.

Table 7. Opportunities and Challenges Identified by HAI for Policy Discussion and Research

Sector	Key Policy and Research Issues
Social Welfare	Pension/income support Community and institutional care Other social services
Health	Adequate health care Training of health workers
Education	Literacy and training needs Valuing older people/self-esteem
Family support	Flexible payment system for health costs during lean period of agricultural season when resources are low (Ghana)
Public Safety and Security	Protection against crime and abuse Training for police and community counsellors
Economy/Labour Markets	Payment for provision of child care Micro-credit schemes (agricultural and credit services)

6.2 U.S. Agency for International Development (USAID)

The agency works in six principle areas in sub-Saharan Africa crucial to achieving both sustainable development and advancing U.S. foreign policy objectives. These are: economic growth and agricultural development; population, health and nutrition; environment; democracy and governance; education and training; and humanitarian assistance. USAID has no *direct* programmes on ageing but works in the area of ageing through the life course perspective. A number of points were raised pertaining to how USAID could utilize an MDS and work in country. The MDS Project would benefit from greater USAID involvement and other support if it could highlight what is it about older age that is unique compared with other vulnerable groups. These questions and issues include:

- What problem (s) are we trying to address that would require input from an MDS specific to ageing and older persons in Africa? Is there a cause and effect relationship between problems (or more to the point: a problem with a viable short- and long-term solution)?
- What are the proposed solutions and strategies to achieve the desired outcomes? Are these solutions and strategies cost-effective? What are the barriers to achieving these outcomes?
- What are the country priorities?
- What is the proposed time frame and maintenance strategy?
- What is the role of USAID? How can they respond effectively?

A joint proposal needs to be submitted for deliberations to begin on the topic area. This proposal would be more readily and warmly received by USAID if it took a broader approach, that is, the life course perspective.

6.3 The African Census Analysis Project (ACAP)

The African Census Analysis Project (ACAP) is a joint initiative of the University of Pennsylvania and multiple African institutions (see <http://www.acap.upenn.edu/>). The project pursues three specific aims: 1) to archive African Census data; 2) to strengthen demographic data analysis and researcher capacity in Africa; and 3) to analyse African Census data using modern demographic and statistical technique within a collaborative network of African researchers. ACAP has many collaborating centres in Africa, including the Universities of Pretoria and Natal, University of Zimbabwe, StatsSA and the Navrongo Health Research Centre.

The African Census Analysis Project is currently attempting to build an African census data collection, but

most micro-data from African censuses in the last 30 years are found irretrievable. However, ACAP has developed a mechanism which enable the collection and retrieval of African census micro-data files. These data are an invaluable source of information for understanding demographic processes in Africa. Currently, ACAP has on-going activities in a number of countries, including Gambia, South Africa, Sudan and Swaziland.

Five teams had been created within ACAP to deal with specific African issues and include: 1) the fertility transition, 2) mortality differentials during the HIV/AIDS era; 3) household and family structure; 4) migration and urbanization challenges; and 5) ageing and older persons in Africa.

6.4 Macro International, Inc., Demographic and Health Surveys (DHS)

MEASURE *DHS+* assists developing countries worldwide in the collection and use of data to monitor and evaluate population, health and nutrition programmes. The DHS provides information on family planning, maternal and child health, child survival, HIV/AIDS/STIs (sexually transmitted infections) and reproductive health. More important for the MDS Project, *DHS+* will also assist with improving on-going data collection efforts, such as health information systems, to efficiently meet information needs in a cost-effective manner.

Derived from past fertility surveys and starting in 1984, DHS 1 (1984-1990), DHS 2 (1988-1993), DHS 3 (1992-1999) and currently *DHS+* (1997-2002) have been collecting data described below in developing countries. More details about the survey contents and the dates of fieldwork can be found at <http://www.measuredhs.com/>.

The current DHS tool (*DHS+*), contains a total of 293 core questions with additional optional modules that include pill-taking behaviour, consanguinity and verbal autopsy. Newly added modules include: HIV/AIDS; children's education; women's status; domestic violence; malaria; and health expenditures. Newly introduced developments for *DHS+* include: anaemia testing; potential for AIDS testing; inclusion of other biomarkers; utilization of economic information; computer-aided personal interviewing; use of global positioning systems; and ability surveys.

Modules or questions specific to ageing could potentially be added. The MDS Project and countries would need to work together with *DHS+* to develop this possibility.

6.5 The Population Council

The Population Council is a research organization that has historically focused on fertility and family planning. However, in the last decade the Council has also focused on reproductive health and is in the formative stage of drawing up programmes to address the ageing issues. Future programmes on ageing by the Council may have the following characteristics:

- to view older people as an integral part of society; and
- to highlight macro- and micro- population issue distinctions:
 - Macro issues could focus on age structure and the shifts in this growing population of older people in relation to programme implications.
 - Micro issues could focus on family demography, i.e. an individual's life experiences in the family, changes in kinship configuration, how many years of their lives they envisage to spend with children < 5 years and with adults > 60 years and grandchildren, years of widowhood, intergenerational relationships and familial experiences.

Related to ageing and longitudinal studies, the Population Council now offers a software program, the Household Registration System (HRS), for analyzing longitudinal data generated by demographic surveillance systems. The software, HRS2[®], is available free of charge for noncommercial use directly from the Population Council's Web site at <http://www.popcouncil.org/hrs/hrs.html>.

6.6 WHO Regional Office for the Americas (AMRO/PAHO)

While different in many ways, Africa and Latin America do have similar concerns about ageing. Latin America (LA) had once faced the same problems of how to collect and analyse data on ageing. A project was initiated in LA to address population ageing, increase the capacity of LA researchers and provide information on ageing in the continent. The study had as its principal aim to identify the equity and the health conditions of older persons, and it addressed the following issues:

- to understand the nature and magnitude of the health problems of the aged;
- to evaluate the seriousness of inequities in the health and well-being of older persons;
- to identify the social institutions that will bear the costs;
- to ensure that policies implemented in the future translate into acceptable levels of well-being without further erosion of equity standards; and
- to evaluate the health status of those who are elders now, and equally important, of those who will become elders in the near future.

➤ Study Development

First a preliminary protocol was written and seed money was obtained from PAHO, then criteria for selection of countries were prepared and a request for teams of university-based researchers to compete for the study was sent to these countries and, finally, an advisory group to the project was selected.

➤ Study Design

The design was in three stages: 1) selection of a representative sample of approximately 1,800 persons aged 60 years and above and an over-sample of persons aged 80 years and above in one central urban area in Argentina, Barbados, Brazil, Chile, Costa Rica, Cuba, Mexico and Uruguay; 2) follow-up interview with at least a one-year lag with the survivors or close relatives of the deceased; and 3) expansion of the study to the national level with a panel follow-up.

➤ Data collection instruments

The survey targeted individuals and their spouses. It used anthropometric measures as well as simple tests to assess flexibility and mobility. An optional module of physical tests was available.

➤ Study questionnaire

The questionnaire had questions on the following: personal information; cognitive evaluation; health status covering self-perception of health, vision, hearing, oral health, mini-nutritional status, history of reproductive health, tobacco and alcohol consumption, physical and social activity; mental health; functional status; medication use; use, accessibility and cost of services; inter-generational transfers and social network; work history and sources of income; and housing characteristics.

➤ Sampling Frames and Sampling Stages

Use was made of pre-existing sample frames such as household surveys and urban employment surveys. There was stratification by age and measures of socioeconomic status. In addition, there was a meeting of all project statisticians with a consultant to review all sampling procedures.

➤ **Data analyses**

The data could support analysis in areas such as: life tables; active and disability free life expectancy; multivariate analyses of illnesses and physical limitations; risk profiles and disability, morbidity and mortality forecasts; morbidity and functional limitations; and models for understanding family support.

The structure, design, data analyses and impact on policy could be of significant benefit to the MDS Project, particularly in the areas where this workshop's participants have identified data gaps. PAHO is willing to collaborate and provide technical assistance for the work in Africa on ageing and the aged populations.

6.7 U.S. Bureau of the Census

The U.S. Bureau of the Census's International Programs Center (IPC) conducts demographic and socioeconomic studies, and strengthens statistical development around the world through technical assistance, training and software products. The Bureau's Aging Studies Branch of the IPC is willing to provide technical advice, assistance and data from the International Data Base (IDB). The IDB is a computerized data bank containing statistical tables of demographic and socioeconomic data for 227 countries and areas of the world (<http://www.census.gov/ipc/www/idbnew.html>). This data base provides quick access to specialized information, with emphasis on demographic measures, for individual countries or selected groups of countries. It combines data from country sources (especially censuses and surveys) with the Bureau's estimates and projections to provide information dating from 1950 through to 2050.

The major types of data available in the IDB include: population by age and sex; vitality rates, infant mortality and life tables; fertility and child survivorship; migration; marital status; family planning; ethnicity, religion and language; literacy; labour force, employment and income; and households.

SECTION VII: THE FUTURE OF THE MDS PROJECT

7.1 *Continuation of the MDS Project*

WHO will continue to collaborate with the four participating countries. Within the framework established by the project goals, the project will progress along three main lines of work to:

- create a Directory of Ageing Research and Information on Older Persons in Africa;
- create an MDS with a sustainable data management system; and,
- in countries that request assistance, develop and conduct a Survey on Health, Mental, Social and Economic Well-Being and Ageing in Africa.

As a result of discussions during and following the workshop, a major emphasis of the MDS Project will be placed on research specific to data gaps and MDS updating, data analysis projects, and information dissemination activities that have the potential to influence strategic and resource allocation decisions at local, regional, sub-regional and country levels. While a timely and reliable MDS can be used to inform local and national policy development and to guide research efforts on ageing in each country, a lack of financial and human resources can threaten the sustainability of the project. Separate and joint WHO and country fundraising efforts will be needed if we are to succeed in creating sustainable projects.

As mentioned previously, available methods not specific to Africa may be useful as a guide, but indigenous approaches must be sought to address current and future information needs. The following are several common elements and needs identified by participants from each country:

- *Training.* A well trained pool of in-country ageing and data management researchers and teachers will ensure a sustainable source of high quality data to be contained in the MDS through training in proper data collection, analysis, use and dissemination techniques.
- *Capacity Building.* While routine data sources (for example, DHS, census and vital registration) are easily identifiable, work needs to be done on incorporating specific elements of the MDS into these routine data collection mechanisms, and on improving micro-level information reporting and transfer. Additionally, non-routine data sources need to be identified and supported.
- *Financial Support.* Some human and financial capacity exists within each country, but questions remain about who would bear the burden of the cost of developing and maintaining the MDS, and any related data-collection and maintenance efforts. Funding and sustainable resources are urgently needed. Broader intersectoral and stakeholder involvement could be a means to address the lack of funds through increased awareness and attention.
- *Data Management.* Questions regarding how data will be collected, warehoused, accessed and updated were discussed. Each country has an existing system or a patchwork of programmes with different capacities and levels of adequacy. Critical evaluation of these systems and of future needs is needed.
- *Data Dissemination and Sharing.* A common data platform would be beneficial for all stakeholders involved. This would be easily accessible and would facilitate data collection, sharing, transfer and dissemination.

7.2 *Country Plans of Action*

Workshop participants recognized the need to make a collective effort that complements the actions being developed and executed at the national level to improve the economic well-being and the quality of life of older persons in Africa. These plans of action constitute a body of concrete initiatives intended to promote

the overall development of ageing issues and research and to ensure access to and improvement of the quality of information. We have adopted these plans of action with the awareness that all initiatives are interrelated and equally important to the attainment of our common endeavour.

➤ **Strategies**

Each country will be at different stages of progress in any of the project areas, but all can collate and review existing data, revise and coordinate research activities, develop and implement targeted and intersectoral ageing policies and, as necessary, develop specific programmes for 'hot topics'. Two specific 'hot topics' have been funded as separate WHO projects, and contribute to the data needs of the MDS Project: 1) elder abuse and rights of older persons; and 2) the impact of AIDS on older persons in Africa. In-country coordinators and/or focal persons will organize collaborators and partners to prioritize activities and make decisions. Moderate amounts of funding will also be made available from project funds when possible. The mechanism to distribute the funding will most likely take the form of a request for proposals submitted to WHO and issued from WHO. Intersectoral programmes will be encouraged, inasmuch as they contribute to sustainable projects. As successful fund-raising increases the MDS Project budget, in-country funding will increase for both common project and country-specific needs. Each country outlined short- and longer term plans of action as summarized in Table 8.

Table 8. Country Focal Persons and Strategies for Plans of Action

	Ghana	South Africa	United Republic of Tanzania	Zimbabwe
Nominated MDS Focal Person(s)/ Contact(s)	Prof. Nana Araba Apt; MDS Secretariat Ghana	Dr. Lindiwe Makubalo; MDS Task Team	Mr. C. P. B Mkai and Dr. I.F. Ngalinda	Mrs. N. Madzingira, Mr. W. Mapeta, Mrs. L. Kanyowa, Mr. D. Mhizha, Mrs. Chin'ano (media), Mrs. Mujuru, and Mr. Mhiribidi
Post-workshop follow-up meetings	February and 06 March 2000	19 July 2000	30-31 May and 01 July 2000	28 January and 07 February 2000
Suggested Project Strategies	<ul style="list-style-type: none"> • Promote ageing research and advocacy; • Create inter-sectoral network of ageing research 	<ul style="list-style-type: none"> • Establish reference group on ageing and/or a Nat'l Office for Older Persons; • Include ageing in the DoW's 10-Year Plan; • Increase priority of and encourage ageing research; • Incorporate dedicated services for elderly people within primary care health services; • Encourage inter-sectoral and ministerial resource utilization* 	<ul style="list-style-type: none"> • Sensitize data collection agencies on data gaps especially on the older population; • TSED secretariat to establish and promote sharable datasets of indicators and microdata 	<ul style="list-style-type: none"> • Identify capacity and resource needs for project implementation and broaden stakeholder participation and contributions; • Plan national workshop and a longer-term training data analysis programme. • Funding Opportunities Committee to review donor sources to meet the project resource and training needs
Project Linkages	Identify and engage key stakeholders: academics, from ministries, civil society organizations and from private research institutions	Broaden stakeholder involvement and political activism to include legal, social security, agriculture, and other civil society organizations	Create linkages with stakeholders through workshops and by establishing and promoting sharable databases	Include all organizations dealing with the elderly and draw on network of the National Council of the Aged. Involve media for outreach programmes

*Additional South African strategies: • Create a national register on elder abuse. • Routinely document health and welfare service utilization by, and evaluate quality of, services provided to older patients (health information systems need to be set in place). • Establish role of traditional medicine and integrate into policy decisions. • Develop, test and evaluate community-based programmes for the elderly (especially in light of the move away from funding institutionalized care). Pilot sites needed before national policy is drawn up. • Pursue opportunities to include poverty alleviation, development and nutrition programmes, and health promotion strategies into coordinated research agendas. • Develop South African-appropriate assessment and management tools (ADL/IADL/cognitive function) for both research and practice. • Improve the interface between health and welfare in terms of provision of services, collection of information, future planning, evaluation of programmes and training. • Increase training capacity and training in the field of ageing using multiple groups from all disciplines including gerontology and geriatric medicine, development, social services, economics and other professionals, laypersons, home-care providers, and community health workers (NGOs). Improve implementation of

existing programmes, examples include the Chronic Diseases Directorate (Department of Health) and the National Strategy on Abuse (intersectoral).

SECTION VIII: SUMMARY AND RECOMMENDATIONS

8.1 SUMMARY

The primary purpose of the MDS Project is to provide a comprehensive, reliable data source specifically focused on the physical, psychological, social and economic well-being of older persons in Africa. The MDS Workshop was held to bring together key stakeholders for focused discussions about the MDS Project and Indicators. Workshop participants strongly endorsed the continuation and extension of collaborative activities between WHO Headquarters and the WHO Regional Office for Africa (AFRO); Ghana, South Africa, United Republic of Tanzania, Zimbabwe and other interested African countries; and HelpAge International and other organizations for the purpose of continuing the development of a “Minimum Data Set” and this project.

In a continent with a growing older population, it was shown that few data exist to inform ageing policy development. While no comprehensive policies exist in these four countries, each has pieces of legislation that protect older persons, such as the constitution, inheritance laws, Social Welfare Assistance Act and others. Ageing policies that are being developed need to be based on sound evidence and, once created, the implementing agency must have sufficient resources available to carry out its duties.

Participants suggested that future policy development should consider adopting a life course perspective on ageing that promotes active ageing within the continent. All workshop participants recognized the need to move from rhetoric to realities and to convert good intentions into practicalities. This can be facilitated by workshop participants, WHO and its partners, MDS Focal Persons, and the wider scope of stakeholders in each country and throughout the region.

The workshop helped to move the project from rhetoric into concrete plans. As stated earlier, the future plans for the MDS Project will include:

- creating a Directory of Ageing Research and Information on Older Persons in Africa;
- creating an MDS with a sustainable data management system; and,
- in countries that request assistance, developing and conducting a Survey on Health, Mental, Social and Economic Well-Being and Ageing in Africa.

As a part of these plans, WHO will assist countries that wish to have a common data platform. This will consist of developing standardized methods and data with integrated data collection/analysis systems. The project priorities are to strengthen capacities, facilitate communications and coordination, and improve the use of quality, timely data for decision-making at each level of health and social services (community, district, provincial, national and regional).

WHO will initially focus on providing technical assistance for the general project. WHO will also assist with locating and providing funding for activities that generate data (because of missing, poor quality or insufficient data) for the data sets and/or that improve the use of archived data. This will be in the form of data management and standardization, fieldwork, in-country workshops and training sessions, and working with the key stakeholders on statistical methodologies related to the project.

8.2 RECOMMENDATIONS

➤ Short-Term

- **Release MDS Workshop Report.**

WHO will publish a workshop report in printed and electronic form after extensive consultation with workshop participants.

- **Create an MDS Project Website.**

As a means to facilitate regular communications, post information, provide a central data repository and share methodologies, the WHO will create a project website and encourage country websites. We will encourage increased and improved internet access through USAID (Leland Initiative). The project will also have a parallel system of distributing printed communications for those without internet access.

- **Finalize selection of the MDS Indicators.**

Each country will rely on its MDS Focal Person(s) to finalize the list of MDS Indicators. A short-list for consideration is included in this Report. This short-list, plus a detailed description of the indicators and proposed selection criteria (as briefly described in this report), will be available to all focal persons, focal groups and collaborators. Intensive review and critique will be needed to finalize the selections. WHO, if funding allows, will attempt to provide moderate amounts of funding to bring the participants in each country together for a final round of discussions. WHO will assist focal persons in contacting stakeholders and in finalizing the indicators.

- **Publish a Monthly or Bi-Monthly MDS Project Newsletter.**

The WHO will produce a monthly or bi-monthly newsletter to provide a source of regular communications. This will be especially useful as the project develops and expands. It may be in electronic and print form. It is the responsibility of all participants to notify WHO of changes in personal information and, postal and email addresses.

➤ Longer-Term

- **Establish close working partnerships.**

Every effort will be made to share data, information, methodologies and planning that will decrease duplication of research and increase efficiency in creating an evidence base. There is a need to plan collaborative work between the countries and the international organizations attending the workshop. The MDS Project also needs to establish broader linkages and intersectoral involvement. It will be the responsibility of all national focal persons to identify and build collaborative arrangements with other interested stakeholders. Project participants will also seek to collaborate with existing networks. These collaborations should include plans for in-country training and capacity building.

- **Create an ageing research and data directory.**

WHO will assist focal persons in creating a directory of ongoing ageing research and available data (as well as access to that data), maximizing the utility of the available data, establishing a list of data needs (collation, imputation, standardization and analysis methods) and providing a mandate for what additional data collection efforts are needed.

- **Evaluate database management systems and access.**

Country collaborators will need to critically evaluate database management systems. An ideal system will be able to import and export data, work independently or linked to existing systems, and provide easy access at all levels, locally to nationally. MDS focal persons should pursue and encourage connection to reliable internet access which then allows easier data sharing and transferring. If separate websites are created for posting information, they can be linked to the MDS Project Website.

- **Data entry into a database management system.**

Currently available data may not be in a form to import into the preferred database management system.

Data standardization efforts will hopefully minimize the difficulty of this problem with data sources over time. WHO, African universities and other universities will guide and coordinate valuable human resources in the task of standardizing and inputting, importing and/or combining data.

- **Create a sustainable system of maintaining and updating data.**

Strategies to regularly and systematically collect and disseminate information will be needed to secure continued funding and to ensure data maintenance. Timely and accurate information need to be delivered to the end users, both locally and nationally. Workshop participants stated that if the project is developed so that it incorporates examples of successful indigenous approaches, a sustainable project would be more likely. This could decrease the dependence on outside funding and could increase the capacity of local human resources.

- **Develop and conduct ageing studies.**

WHO will assist countries which determine that a comprehensive ageing study is needed. Separate and joint efforts by WHO and the country will be required to secure funding for development and implementation of the surveys. WHO will provide technical assistance to countries. Depending on amount of funding available

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